Construction Traffic Management Plan

Sydney Business park

Stage 3

Warehouse 1

Revision control:

Revision	Date	Description	Approved
Draft	01 DEC 2020	First Draft – Tori Curtin	
A	24 DEC 2020	Rev 001 – Tori Curtin	
B	19 FEB 2021	Rev 002 – Tori Curtin	
C	23 FEB 2021	Rev 003 – Tori Curtin	
D			

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Contents

1.0 Scope of Works

This Construction Traffic Management Plan (CTMP) facilitates the safe implementation of a Traffic guidance scheme prepared to address traffic access and safety issues associated with FDC' the construction of a new Distribution Centre Warehouse.

This TMP has been prepared to provide details of the management of the traffic, plant and site compound activities associated with the proposed works. The primary purpose of this Plan is to provide traffic and plant management measures to be incorporated into the operational management of the works to ensure that all traffic and plant activity associated with work occurs with minimal interaction with adjoining public road traffic movements as well as ensuring the safe working conditions for construction crews. The traffic management plan is designed to be consistent with the overall construction plan for the project.

2.0 Location of Works

This TMP will be implemented for the proposed works associated with FDC' new construction situated at Astoria St, Marsden Park. The site is situated Approx. 1km West of Harris Ave, Approx. 370m East of South St. A location map is presented below.

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3.0 Project Scope & Context

FDC are undertaking the construction of a new 41,000sqm Warehouse 1 & 3 storey office. The project is anticipated to have a construction period of eight months beginning in February 2021 & completing approx. October 2021. Warehouse 1 will be a highly efficient facility that has the capacity to accommodate approx. 290 staff. Warehouse 1 will also have the following features:

Provision of a high quality and efficient Distribution Centre

Cross dock solution

Flexible Design Solution and Storage Requirements

Potential for operating hours to be 24 hours a day, 7 days a week without limitation

Environmentally sensitive design principles to be adopted

Office and amenities which are both functional and modern and commercial standard

Accessibility and direct access to main arterial road network

Separate truck entry/exit to car parking

Entry/exit egress to service road to accommodate for Super "B" double trucks

No restrictions for noise, planning covenants, use, zoning, or residential uses

Full height, un-obstructed racking provisions

Storage capacity provided through racked & bulk stacking

Truck movements based on Super B-Doubles inclusive of internal access roads and hardstand areas.

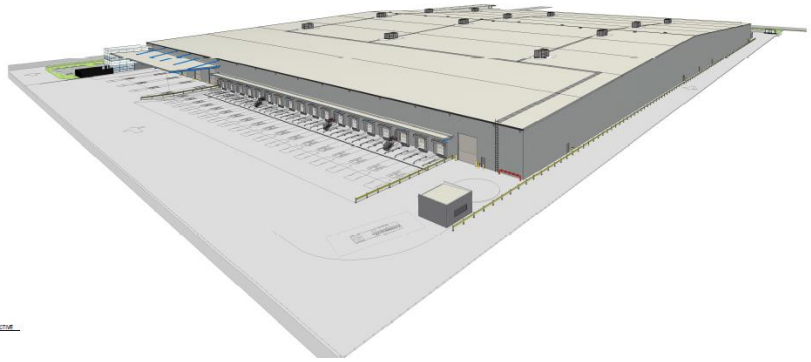
Developer to provide evidence of surrounding roads being rated for Super B – Double access.

Building to be designed and constructed to FM Global requirements.

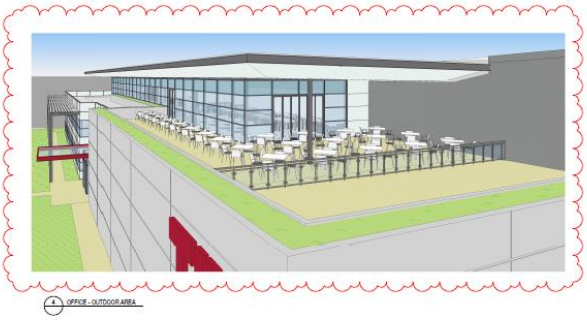
Distribution Facility primarily for storage of the following:

- Food Products
- Paper Products
- Retail Goods
- Apparel

Extract from architectural plans



Extract from architectural plans



4.0 Impact Assessment

Existing Road Network

Richmond Rd – A classified RMS State Road that generally runs in a Northern & Southern direction to the East of the Site. The road is a dual carriageway and is subject to an 80km/h speed zoning. The road carries approximately 35,915 vehicles per day (Station 71059)

Hawthorne Ave – A Local Council Road that generally runs in an Eastern & Western direction to the North-East of the Site. It connects to Richmond Rd in the East and Harris Ave to the West and generally carries four lanes of traffic in each direction and is subject to a speed limit of 50 km/h.

Harris Ave – A Local Council Road that generally runs in a Northern & Southern direction to the East of the site. It generally carries two trafficable lanes in each direction with and is subject to a speed limit of 50 km/h.

Astoria St– A Local Council Road that generally runs in an Eastern & Western direction the site is located on this road, it carries one lane of traffic in each direction and is subject to a speed limit of 50 km/h.

Image of Key Intersections

The impact on the traffic flow on the adjacent and surrounding road network from construction traffic will be minimal & intersections will have the capacity to handle construction vehicles

Site access

The sites construction vehicle access point will be located at Gate B, which is located on Astoria St, the construction vehicles exit point will also be located on Astoria St Via Gate A.

Contractor parking would be provided within site on Astoria St Via Gate B, until the proposed North/South Collector Rd is constructed, then all contractor parking will be located via Gate D.

Pedestrians attempting to cross the site's heavy vehicle accesses are to be managed through signage, pedestrian barriers, and traffic controllers. For all pedestrian access to the site, Gate C will be located next to Gate D on the proposed North/South Collector Rd, once construction for the proposed North/South Collector Rd begins all pedestrian access will be via a pedestrian gate adjacent to Gate B.

Emergency vehicle access to and from the site will always be available while the site is occupied by construction workers. This process would be implemented through emergency protocols on the site which will be developed by the contractor.

As a safety precaution the use of safety barriers is recommended to ensure that appropriate separation of workers, plant and construction traffic is maintained. All oversized deliveries will occur as per RMS guidelines and council restrictions.

Extract from site establishment Plan

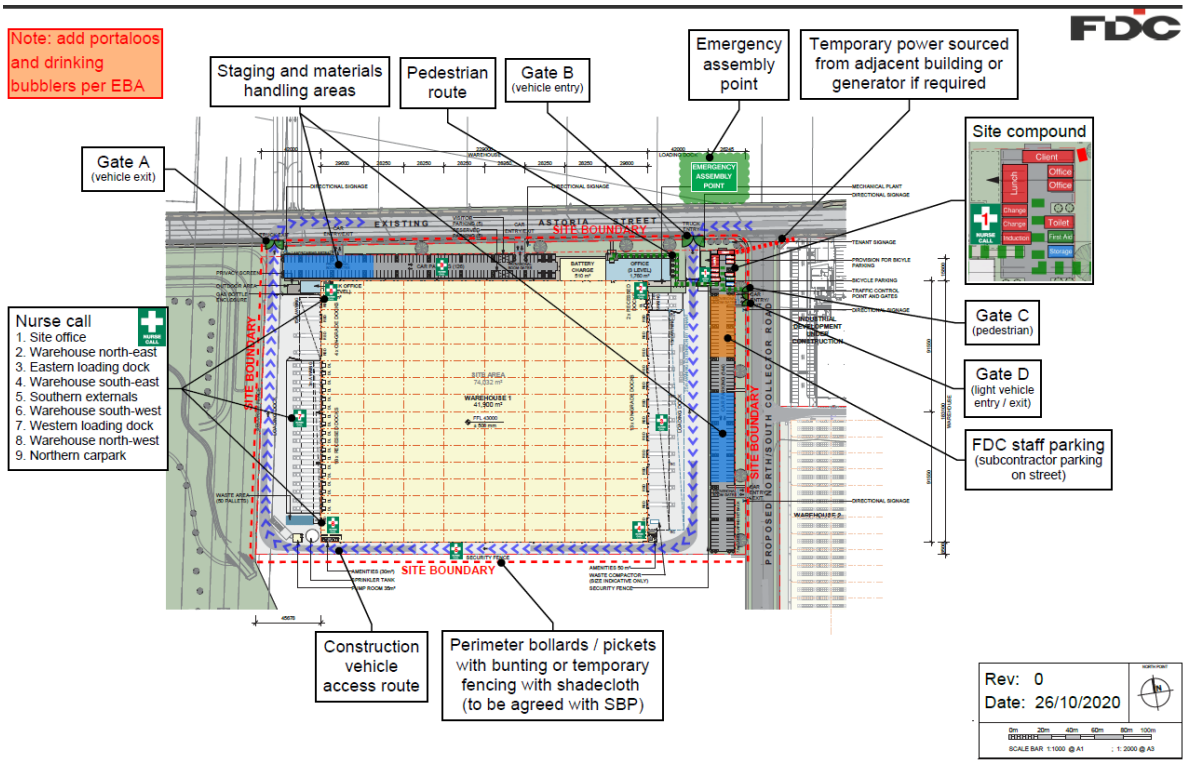


Image of Eastbound direction to the site

Image of Westbound direction to the site

Image of typical access point

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Hours of Operation

Standard hours of construction for the duration of the project are anticipated to be between 7:00 am – 6:00 pm, Monday to Friday & 8:00am – 1:00pm on Saturday. It is not anticipated that activities during the construction program will have to be completed outside of these hours. However, any such works will be coordinated and notified as required.

Construction Vehicles

Construction vehicles likely to travel to and from site are likely to include:

- Floats for Earthwork and Piling machines
- Heavy and medium rigid trucks for construction spoil removal
- Heavy and medium rigid trucks for construction material delivery
- Mobile cranes and concrete pumps
- Concrete Agitators: and
- Trade vehicles

During the construction period, the construction vehicle movement activities are set out in the below table.

Task	Duration	Vehicle movement per day
Excavation	8 weeks	10
General construction	8 weeks	10
Landscaping	8 weeks	10
Touch up	8 weeks	10

Vehicle Dimensions

SRV – Small rigid vehicle-load capacity of 4 tonnes, typically single rear axle, are 6 m long

MRV – Medium rigid vehicle-load capacity of 8 tonnes, typically single rear axle, are 8.8 m long

HRV – Heavy rigid vehicle-load capacity of 12-16 tonnes, typically dual rear axle, up to 12.5 m long

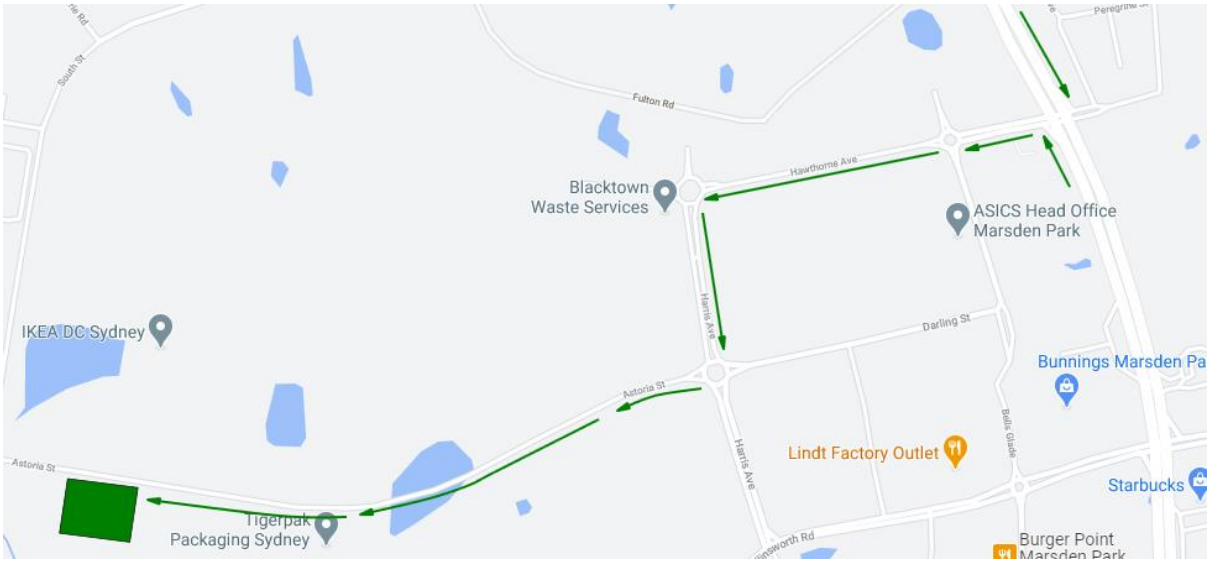
AV – Truck and dog combinations, typically an MRV with a trailer

Construction Routes

Construction vehicles will travel to and from site on arterial road suitable to their vehicle type. The main routes are illustrated in the figure below.

The construction access points to the site will be on Astoria St and the proposed North/South Collector Rd. This is accessible from Harris Ave, Via, Hawthorne Ave and Richmond Rd, this will connect all construction vehicles to the wider road network

Construction Travel Routes



5.0 Traffic Control

Each work task has different requirements, these will be identified individually, and management plans put into place, the site TCP will include more detail of this implementation and how the controls put in place will minimize disruption whilst maintain a safe work area for construction crews. These Traffic Control Plans are drawn in line with Australian Standard 1742.3 and RMS Traffic Control at Work Sites Guidelines, the Austroads Guides to Temporary Traffic Management (AGTTM), and will be produced in consultation with Council and RMS.

Each work site will have a TCP which will address the following:

Traffic flow. All traffic will be managed by a TCP which will comply with AS 1742.3 and the RMS Traffic Control at Work Sites manual (TCWSM). Please refer to the Traffic Control Plans attached.

Pedestrian movement. All pedestrian movement including entry, egress and movement around the work area will be in accordance with RMS TCWSM Section 9.3 – Pedestrians. All work areas will be secured with barriers and fencing to ensure that no unauthorized entry for pedestrians is possible.

Plant movement. All plant movement including entry, egress and movement within the work area in accordance with RMS TCWSM Section 7 – Providing for works traffic.

Cyclist movement. All cyclist movement including around or adjacent to the work area will be in accordance with RMS TCWSM Section 9.4 – Cyclist.

Stakeholder Authority. The work site will require the authority of the stakeholder – Blacktown City Council which will be onsite at all times.

5.1 Vehicle Access

Vehicle access will be via Astoria St until the proposed North/South Collector Rd is constructed. There are no existing residential properties within the surrounding area, the site is located within Sydney Business Park. Vehicle access to all properties within the surrounding area are to remain unaffected.

5.2 Pedestrian Access

Most construction activities would occur off-street. Although construction activities occur off road, the pedestrian and cycle connections would be managed by traffic controllers, barriers & signage during construction activities.

Pedestrians and cyclists using the footpath fronting the Site or Work Zone will be halted by an accredited Traffic Controller while construction vehicles are entering & exiting the Site. An expandable barrier would be installed on both sides of the footpath and to be operated when construction vehicles are on approach / ready to depart from the Site. Once the construction vehicles are clear from the footpath, the Traffic Controller can allow the pedestrians and cyclists to continue along their journey. Warning signs will be put in place where pedestrians and construction vehicles interact.

5.3 Signage

The TMP introduces new regulatory and advice signage designed to provide motorists and pedestrians the clearest notification of the potential hazards created by the new work site. Parking restrictions signs will also be used for construction zones.

Additional static signs to inform motorist and pedestrians will be put on the approach to works. Please refer to Traffic Control Plans/Traffic Guidance Schemes for further information.

5.4 Barriers

A number of barriers may be installed as required. FDC may deploy appropriate temporary barrier system compliant with AS 3845. A work site exclusion zone will be created to cater for this deflection distance where appropriate.

6.0 Maintaining Network Performance

6.1 Road Occupancy

If Required FDC will obtain an approval from Blacktown City Council and TfNSW prior to the commencement of any works on the road except in the case of an emergency, or when directed by Police or Emergency services, FDC will endeavour to reinstate road as soon as practicable.

All applications will be forwarded to Blacktown City Council and TfNSW with an allowance for the Traffic Committee to approve the application (if required). Associated works (utilities) may require ROLs, as required the traffic control subcontractor (Roadwork Solutions) will obtain ROL's and carry out works as per ROL conditions.

All ROL's will comply with the overarching road safety and traffic management principles, objectives and targets outlined in the Project Construction Management Plan.

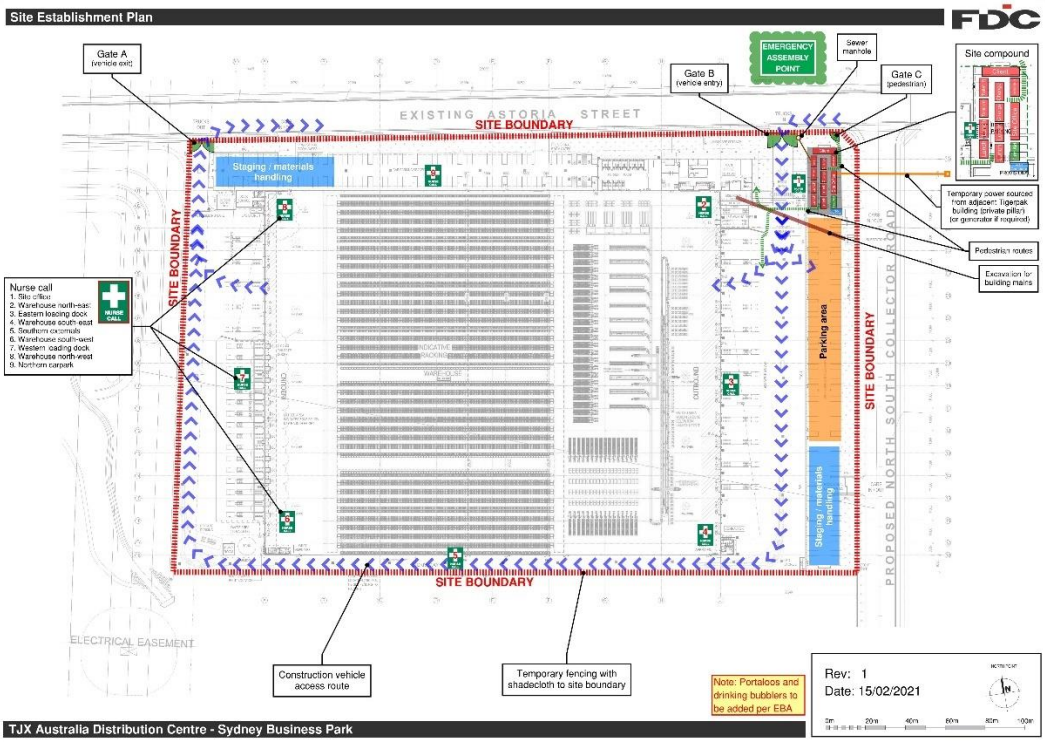
6.2 Surrounding Parking Modifications

There will be No Stopping Zone created on the Southern side of Astoria St to allow enough room for Heavy vehicle ingress & egress from the site. Temporary no stopping signage to be erected along this area for the duration of the construction.

6.3 Construction Workers Parking

Temporary Key contractor & staff parking will be located within the site on Astoria St Via gate B until the proposed North/South Collector Rd is constructed, then parking will be located at Gate D.

Extract from site establishment Plan



6.4 Unplanned Events (Incident Response)

FDC will manage all incidents which may contribute to congestion, aggravate the free flow of traffic, or threaten the wellbeing of any road user within the Project boundaries.

6.5 Planned Events

Blacktown City Council and Transport for NSW events calendar will be considered when programming this work, to ensure there are no conflicts with local events or other motorway works. Consultation will continue with the council regarding any issues working during proposed times.

6.6 Public Transport

No public transport services or networks will be affected by works.

6.7 Property Access

All property accesses adjacent to, and the surrounding area will be maintained wherever possible. Any restrictions to property access will be extensively communicated to stakeholders prior to works commencing.

6.8 Emergency Services

This arrangement will result in minimal impact on emergency vehicles. Emergency Services will be provided advance notice of any changes via the site management team and email updates.

6.9 Monitor the effectiveness of control measures

The use of an inspection checklist will be implemented to monitor the effectiveness of the traffic control measures in place. A traffic control safety inspection will be completed at least once per month, with any minor modifications completed as required. Any major modifications will be assessed and implemented by a suitably qualified person.

6.10 Tree Protection Management

All street trees and trees on private property that are protected under Blacktown City Council's controls, shall be retained and protected in accordance with AS 4970 - 2009 ‘Protection of Trees on Development Sites’ during demolition and construction works except where Council's prior written consent has been obtained.

7.0 Community/Advertising/Consultation

In order for any construction traffic management strategy to work effectively, continuous communication is required between all parties, which may be potentially impacted upon, the builder and the regulatory authority. This establishes a dynamic response process which allows for the adjustment of control methods and criteria for the benefit of all parties.

The objective in undertaking a consultation process is to:

- Inform and educate the groups about the project and the noise controls being implemented.
- Increase understanding of all acoustic issues related to the project and options available.
- Identify group concerns generated by the project, so that they can be addressed; and
- Ensure that concerned individuals or groups are aware of and have access to a Constructions Complaints Register which will be used to address any construction noise related problems should they arise.

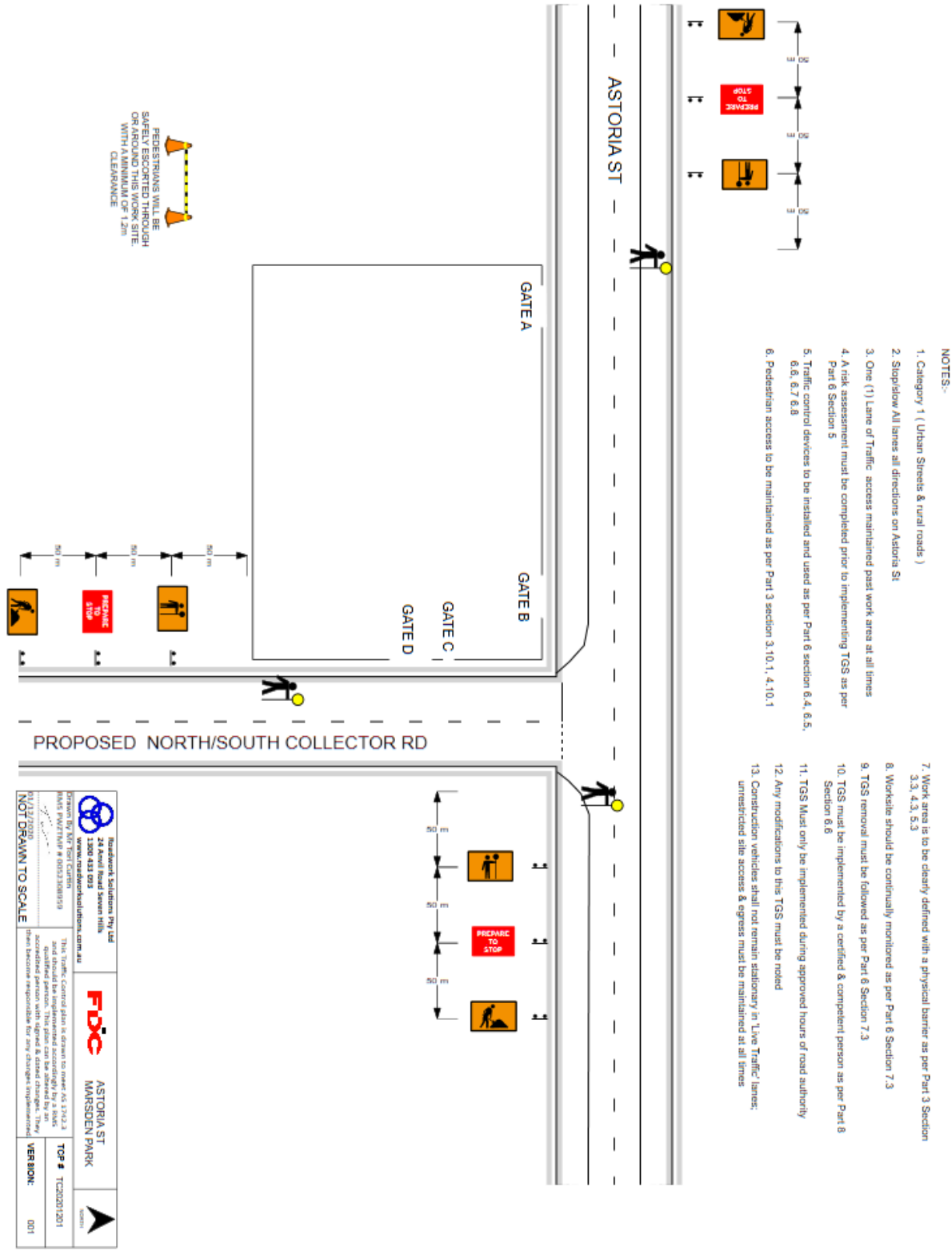
Community consultation is recommended prior to any works commencing on site, with letterbox notifications to all identified surrounding sensitive receivers.

8.0 Contacts

Contact	Position	Mobile No.
Jack Jenner-Taylor	FDC Contracts Administrator, Construction	0434 606 736
Edward Gregory	FDC Cadet, Construction	02 8117 5242
David Saczko	FDC Design Manager	
Tori Curtin	Roadwork Solutions Traffic Consultant	0423 289 786
Transport Management Centre	Operations Centre	1 800 679 782

9.0 Traffic Control Plan/Traffic Guidance Scheme

Astoria St – Stop/Slow



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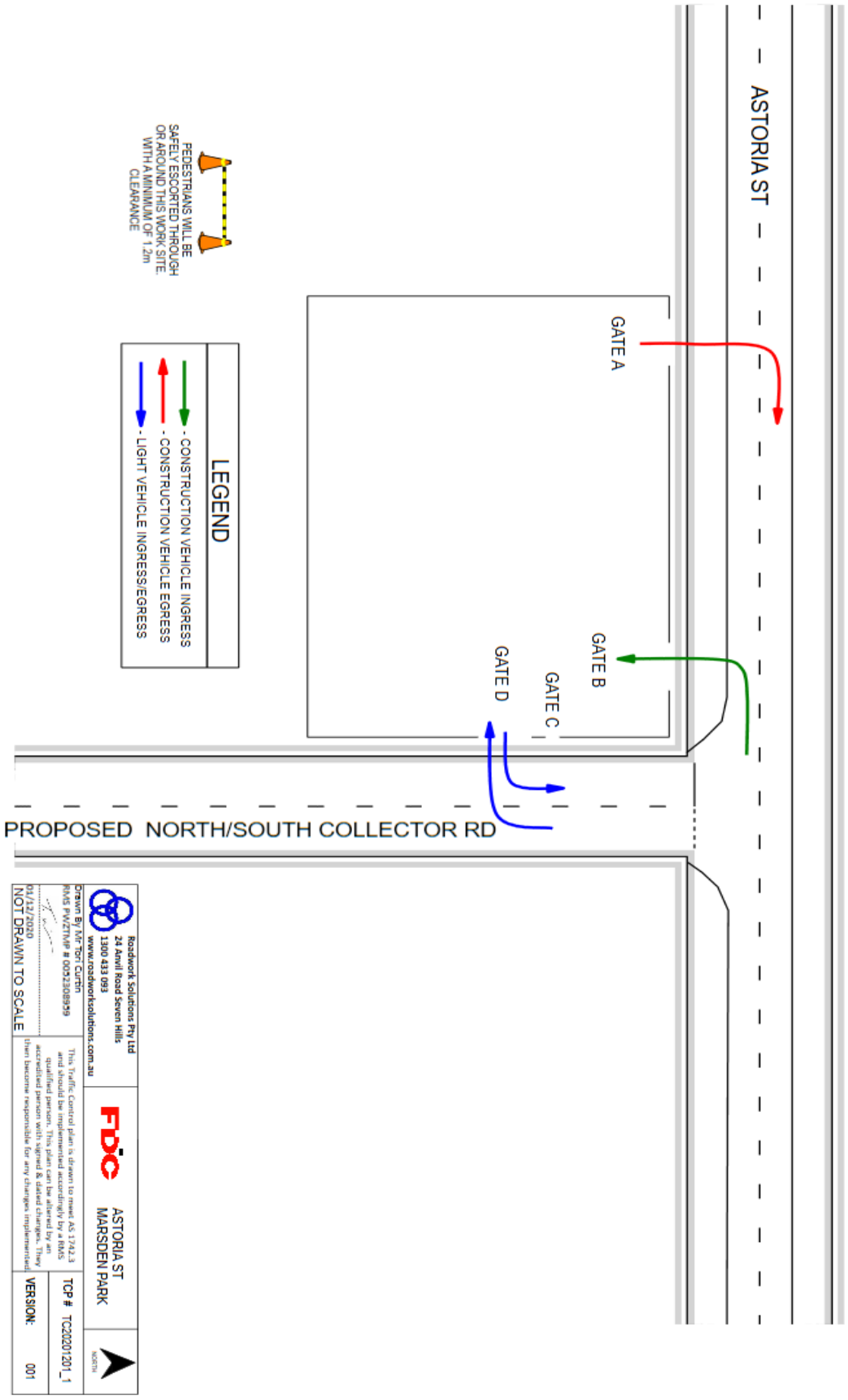
Astoria St – VMP



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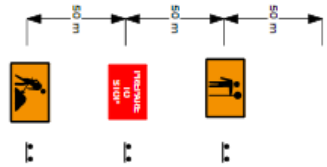
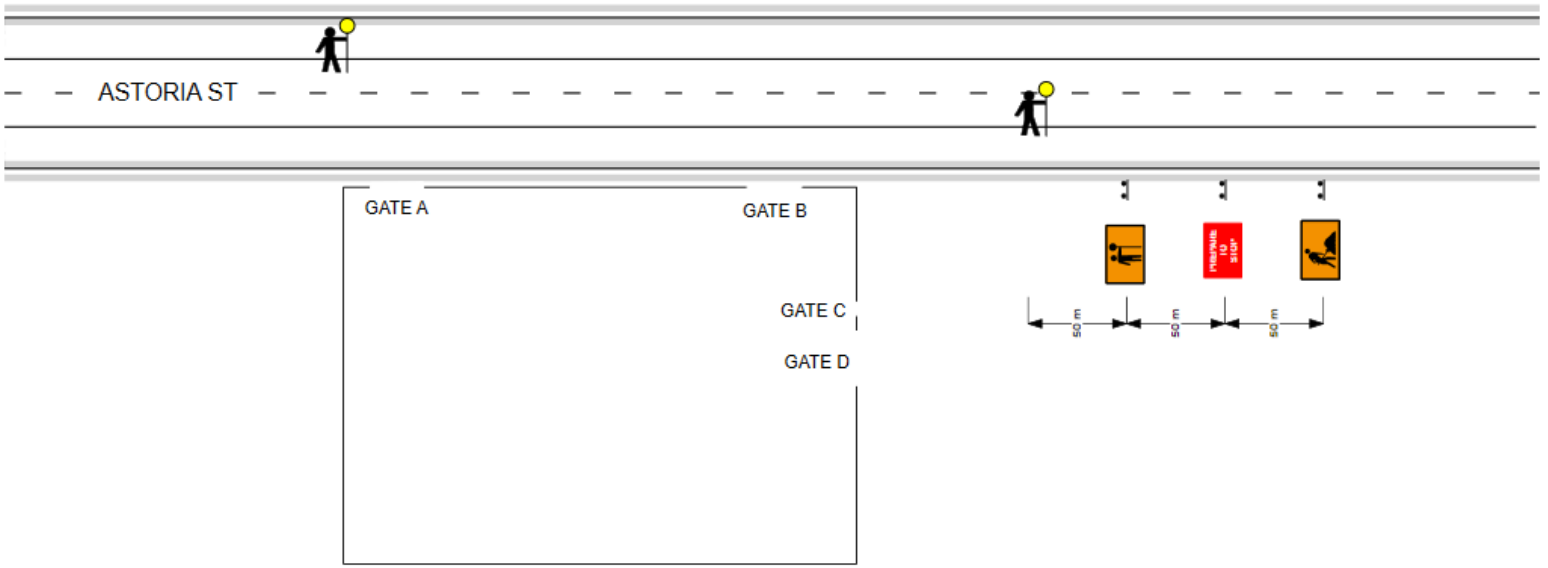
NOTES:-

1. Category 1 (Urban Streets & rural roads)
2. Stop/slow All lanes all directions on Astoria St
3. One (1) Lane of Traffic access maintained past work area at all times
4. A risk assessment must be completed prior to implementing TGS as per Part 6 Section 5
5. Traffic control devices to be installed and used as per Part 6 section 6.4, 6.5, 6.6, 6.7 6.8
6. Pedestrian access to be maintained as per Part 3 section 3.10.1, 4.10.1
7. Work area is to be clearly defined with a physical barrier as per Part 3 Section 3.3, 4.3, 5.3
8. Worksite should be continually monitored as per Part 6 Section 7.3
9. TGS removal must be followed as per Part 6 Section 7.3
10. TGS must be implemented by a certified & competent person as per Part 8 Section 6.6
11. TGS Must only be implemented during approved hours of road authority
12. Any modifications to this TGS must be noted
13. Construction vehicles shall not remain stationary in 'Live Traffic' lanes; unrestricted site access & egress must be maintained at all times





PEDESTRIANS WILL BE SAFELY ESCORTED THROUGH OR AROUND THIS WORK SITE. WITH A MINIMUM OF 1.2m CLEARANCE

Roadwork Solutions Pty Ltd
24 Anvil Road Seven Hills
1300 433 093
www.roadworksolutions.com.au

FDC

ASTORIA ST
MARSDEN PARK

NORTH

Drawn By Mr Tori Curtin
RMS PWZTMP # 0052308959

24/12/2020
NOT DRAWN TO SCALE

This Traffic Control plan is drawn to meet AS 1742.3 and should be implemented accordingly by a RMS qualified person. This plan can be altered by an accredited person with signed & dated changes. They then become responsible for any changes implemented.

TCP # TC20201224

VERSION: 001

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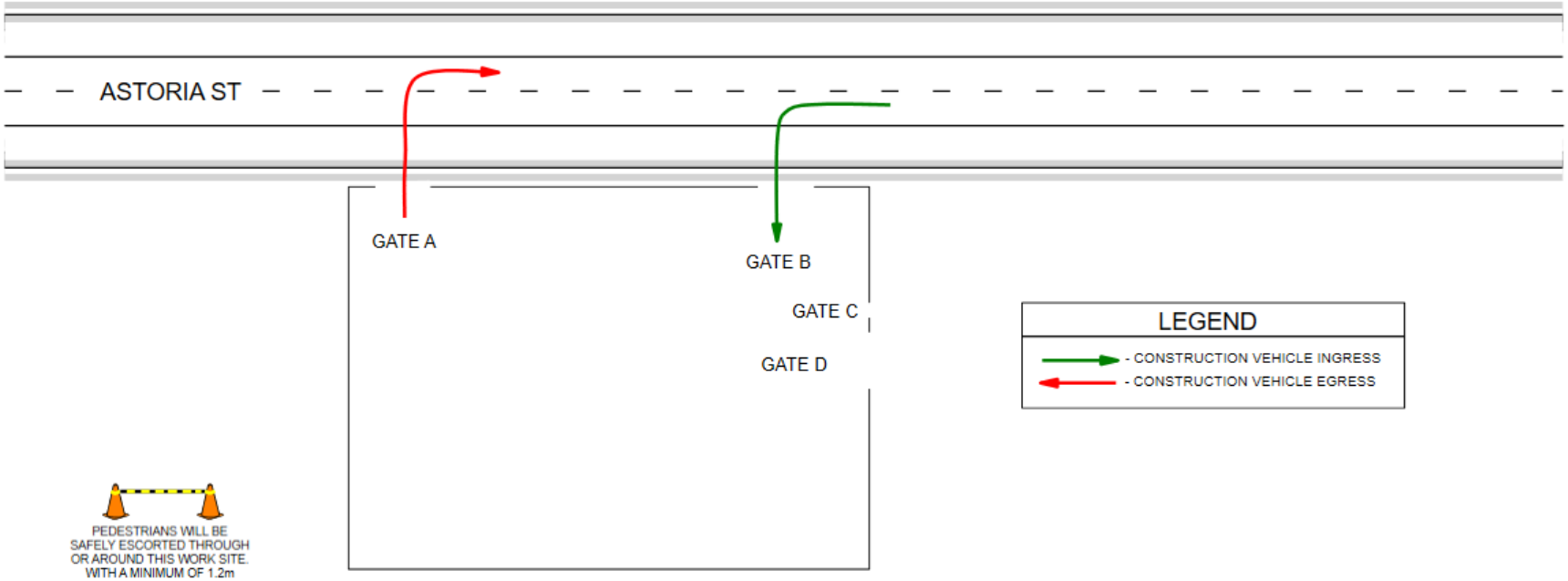

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ASTORIA ST
MARSDEN PARK

Drawn By Mr Tori Curtin
RMS PWZTMP # 0052308959

24/12/2020
NOT DRAWN TO SCALE

This Traffic Control plan is drawn to meet AS 1742.3 and should be implemented accordingly by a RMS qualified person. This plan can be altered by an accredited person with signed & dated changes. They then become responsible for any changes implemented.

TCP # TC20201224_1

VERSION: 001

10.0 CTMP Approval

FDC representative to sign off

The Project Manager will verify the long term TMP is completed and suitable for consideration by the approval authorities:

Name and signature:	**Date:**

Road Authority representative to sign off

The Road Authority Project Manager will email confirmation that this TMP is approved for implementation to the Confluence Water Project Manager. The signature box below will record a note confirming receipt of that email. A copy of the email will be attached as an Appendix to this document.

Name and signature:	**Date:**

11.0 Driver Code of Conduct

General Requirements

Construction vehicle drivers travelling to and from the site must:

- Have undertaken a site induction carried out by an approved member staff or suitably qualified person under the direction of management.
- Hold a valid driver's licence for the class of vehicle that they operate.
- Operate the vehicle in a safe manner within and external to the quarry site.
- Comply with the direction of authorised site personnel when within the site.

Heavy Vehicle Speed

Increased speed means not only an increased risk of crashing but also increased severity if an accident occurs. A study undertaken for the Australian Transport Safety Bureau found that travelling 10 km/h faster than the average traffic speed can more than double the risk of involvement in a casualty accident. (Source Roads and Maritime Services (RMS) previously known as Roads and Traffic Authority (RTA)).

There are two types of speeding:

- Where a heavy vehicle travels faster than the posted speed limit; and
- Where a driver travels within the speed limit but because of road conditions (e.g. fog or rain) this speed is inappropriate. (Source RMS).

Drivers and truck operators are to be aware of the "Three Strikes Scheme" introduced by the Roads and Maritime Services which applies to all vehicles over 4.5 tonnes. When a heavy vehicle is detected travelling at 15 km/h or more over the posted or relevant heavy vehicle speed limit by a mobile Police unit or fixed speed camera, the Roads and Maritime Services will record a strike against that vehicle. If three strikes are recorded within a three-year period, the Roads and Maritime Services will act to suspend the registration of that vehicle (up to three months).

More information is available from the Roads and Maritime Services website.

Vehicle speed on public roads is enforced by the NSW Police Service.

The speed limit within the quarry site is 20 km/h which is to be strictly maintained.

Heavy Vehicles Driver Fatigue

Fatigue is one of the biggest causes of accidents for heavy vehicle drivers. The Heavy Vehicle Driver Fatigue Reform was therefore developed by the National Transport Commission (NTC) and approved by Ministers from all States and Territories in February 2007.

The heavy vehicle driver fatigue law commenced in NSW on 28 September 2008 and applies to trucks and truck combinations over 12 tonne GVM (however there are Ministerial Exemption Notices that can apply).

Under the law, industry has the choice of operating under three fatigue management schemes:

- Standard Hours of Operation
- Basic Fatigue Management (BFM)
- Advanced Fatigue Management (AFM)

Heavy Vehicle Compression Braking

Compression braking by heavy vehicles is a source of irritation to the community generating many complaints especially at night when residents are especially sensitive to noise.

In some instances, compression braking is required for safety reasons however when passing through or adjacent to residential areas or isolated farmsteads a reduction in the speed of the vehicle is recommended to reduce the instances and severity of compression braking.

Heavy Vehicle Noise

The operating hours for transportation of materials to and from site are:

Monday – Saturday (except Public Holidays) 7:00 am to 6:00 pm

Sundays and Public Holidays No activities

The following activities may be carried out on the site outside these hours of operation.

- delivery or dispatch of materials as requested by Police or other authorities; and
- Emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

At the commencement of the working day it is not unusual for drivers to arrive early and wait for opening. If this occurs drivers are to wait with engines turned off.

Vehicle Departure and Arrival

Heavy Vehicles travelling in close proximity on single lane public roads can be of concern to light vehicle drivers as well as increasing noise through or adjacent to residential areas. To alleviate public concern and increase road safety, heavy vehicles leaving the site should be separated by a minimum two-minute interval.

It is difficult to schedule arrivals to the site (except at the commencement of work for the day), however, when a driver becomes aware, through visual contact or two-way contact between trucks, that they will arrive at approximately the same time then they are to ensure that there is a suitable gap between vehicles.

12.0 Traffic Control Inspection Checklist

SITE AUDIT CHECKLIST

Date…… Time…… Completed by……
Name of Supervisor:…… Project:……
Name of Client…… Foreman ……..
Location…… TCP No……

				Tick or cross in the appropriate box:
No.	**Conditions**	**Acceptable**	**Not Acceptable**	**Not Applicable**
1	**Traffic Control Plan**			
1.1	Is an approved TCP on site & has it been modified by an authorized person?			
1.2	Have signs & devices been correctly implemented as per the TCP?			
1.3	Could the worksite be set out differently to minimize the impact on traffic, pedestrians &/or cyclists?			
1.4	Is the clearance between workers & traffic adequate for worksite?			

ANY COMMENTS, IMPROVEMENT?

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2	**Signs & Devices**	**Acceptable**	**Not Acceptable**	**Not Applicable**
2.1	Has a site check been completed?			
2.2	Are signs present & in good condition?			
2.3	Are the signs in a clear position & not affected by other contradictory signs, plant, vegetation, shade, etc?			
2.4	Are the correct sign sizes being used?			
2.5	Have the needs for pedestrians & cyclists been provided for?			
2.6	Is all property access to the site controlled?			
2.7	Is the taper length correct?			
2.8	Is there an adequate buffer zone?			

ANY COMMENTS, IMPROVEMENT?

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……
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3	Traffic Controllers	Acceptable	Not Acceptable	Not Applicable
3.1	Are the correct number of Traffic Controllers being used?			
3.2	Have their Traffic Control Certifications been sighted & are they current? (WHS Card? Blue ticket? Client/Project Induction?)			
3.3	Are all staff using a two-way radio?			
3.4	Are they wearing high visibility clothing?			
3.5	Are the TC's getting adequate breaks?			
3.6	Do the TC's have a clear escape route?			

ANY COMMENTS IMPROVMENTS?

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4	Record Keeping	Acceptable	Not Acceptable	Not Applicable
4.1	Has a Job Safety Analysis been completed & signed?			
4.2	Does the Job Safety Analysis cover the risks & hazards associated with the worksite?			
4.3	Has a service delivery docket been completed & recorded?			

ANY COMMENTS, IMPROVEMENT?

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