

Construction Traffic Management Plan

New Catherine Field Primary School
O'Keefe Drive, Oran Park

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Table of Contents

1	INTRODUCTION.....	1
1.1	Overview	1
1.2	Statutory Requirements.....	1
1.3	Site Location	2
1.4	Road Hierarchy	2
2	OVERVIEW OF WORKS	4
2.1	Staging and Duration of Works.....	4
2.2	Hours of Operation	4
2.3	Proposed Site Access	4
2.4	Construction Vehicle Access Routes	5
2.5	Fencing Requirements	7
2.6	Materials Handling.....	7
3	ASSESSMENT OF TRAFFIC AND TRANSPORT IMPACTS	8
3.1	Construction Vehicle Traffic Generation and Impacts	8
3.2	Vehicle Management – Principles.....	8
3.3	Employee Parking	9
3.4	Pedestrian and Cyclist Access	9
3.5	Public Transport	9
4	TRAFFIC CONTROL	10
4.1	Traffic Control.....	10
4.2	Authorised Traffic Controller	10
5	MONITORING AND COMMUNICATION STRATEGIES	11
5.1	Development of Monitoring Program	11
5.2	Communications Strategy	11
6	RECOMMENDED MITIGATION MEASURES.....	12
7	CONCLUSIONS.....	13

Appendices

Appendix A: Driver Code of Conduct Proforma

Appendix B: Traffic Control Plans

1 Introduction

1.1 Overview

Ason Group has been engaged by Hansen Yuncken (HY) to prepare a high-level Construction Traffic Management Plan (CTMP) for the New Catherine Field Public School development at O'Keefe Drive, Oran Park (the Site). This CTMP has been prepared to support the State Significant Development application and, as such, relevant conditions of consent have not yet been provided. Notwithstanding, as is standard practice, it is expected that the final CTMP shall:

The preparation of a preliminary Construction Traffic and Pedestrian Management Plan to demonstrate the proposed management of the impact in relation to construction traffic addressing the following:

- a) assessment of cumulative impacts associated with other construction activities (if any)
- b) an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity
- c) details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process
- d) details of anticipated peak hour and daily construction vehicle movements to and from the site
- e) details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle and
- f) details of temporary cycling and pedestrian access during construction

Having regard for the above, the purpose of this report is establish the broad traffic principles for construction that would minimise traffic impacts on the surrounding road network, ensure safety and efficiency for workers, pedestrians and road users, and provide information regarding construction vehicle access routes and any changed road conditions (if applicable).

It is expected that this plan will be updated should any necessary changes to the currently proposed arrangements arise in the future. Any special events (if required) would be subject to a separate request for a specific permit not covered by this report.

Please note, Ason is responsible for the preparation of this Plan only and not for its implementation, which is the responsibility of the Contractor.

1.2 Statutory Requirements

Following SSD approval, it is expected that this Plan shall be updated to include a comprehensive list of requirements.

1.3 Site Location

The Site is legally referenced as Lot 1001 in DP1234527, with a street address of O'Keefe Drive, Oran Park. The Site has an area of approximately 2 hectares and is currently zoned SP2 - Education Establishment. The Site lies within the Catherine Field (Part) Precinct (CFPP), and is currently bordered by O'Keefe Drive to the west; in the future, local roads will form the eastern and southern borders of the Site, while a minor access road (to the adjacent sporting fields) will border the Site to the north.

1.4 Road Hierarchy

The key roads surrounding the Site are as shown in Figure 1 and are described as the following:

- **Camden Valley Way:** Camden Valley Way performs a regional classified road under the care and control of Campbelltown City Council. It generally northeast/southwest in its alignment, providing a link between Bringelly Road in the north and The Northern Road in the south. Camden Valley Way is a 4 lane divided carriageway with 2 lanes in each direction, and a posted speed limit of 80km/hr, and no provision of footpath on either side of the road.
- **O'Keefe Drive:** O'Keefe Drive is a collector road that currently runs in a generally north-south direction between South Circuit (as Fifth Avenue) to the north and a terminus just south of the Site; however, in the future O'Keefe Drive will be extended further south to connect to Seidler Parade and then (as O'Keefe Drive) to Catherine Park Drive. In the vicinity of the Site, it provides 2 wide traffic lanes for two-way flows, as well as indented parking lanes on both sides of the road, and has a posted speed limit of 60km/h. A shared path will be provided on both the eastern and western sides of the road, i.e. a shared path will be provided directly adjacent to the Site.
- **Banfield Drive:** Banfield Drive is a local road that runs in a generally east-west and then south direction between O'Keefe Drive to the east and Stoneham Circuit to the south. It provides 2 traffic lanes for two-way flows, as well as indented parking lanes on both sides of the road, and has a nominal speed limit of 50km/h. Footpaths are provided on sides of the road.
- **Perkins Drive:** Perkins Drive is a local road that runs in a generally east-west direction between Peter Brock Drive to the north-east and O'Keefe Drive / Fifth Avenue to the west. It provides 2 traffic lanes for two-way flows, as well as indented parking lanes on both sides of the road, and has a posted speed limit of 50km/h. A shared path and footpath are provided on the southern and northern sides of the road respectively. Like O'Keefe Drive, these flows are primarily northbound in the AM peak and southbound in the PM peak.

- **South Circuit:** South Circuit is a collector road that runs from Civic Way north of the Site to the south and the west to an intersection with Oran Park Road, and then north again to an intersection with Holden Drive. It provides 2 traffic lanes for two-way flows, as well as indented parking lanes on both sides of the road, and has a posted speed limit of 60km/h. In the vicinity of the Site, it provides shared path on one side of the road and a footpath on the other side of the road.

With regard for the above, the site is ideally located to disperse construction traffic onto the arterial road network and direct access can be achieved via Oran Park Drive and Peter Brock Drive to either The Northern Road and/or Camden Valley Way



Figure 1: Location Plan

2 Overview of Works

2.1 Staging and Duration of Works

Recognising the purpose of this CTMP, the total duration of construction works is currently unknown. Notwithstanding, it is expected that the following outlines the key aspects of the construction stages:

- Stage 1: General earthworks and benching, and the construction of the temporary access. This is to prepare a temporary construction entrance to the Site for the main construction of the School. It is proposed that this construction access will be within the same location as the final access, which is via O'Keefe Drive.
- Stage 2: The general construction and associated landscape works will occur during Stage 2. During this stage, the primary access to the site will be restricted to construction vehicles only.

2.2 Hours of Operation

The type of work being undertaken may vary depending on the phase of construction and associated activities and includes both construction and design personnel. However, all works will be in accordance with standard construction working hours, which are likely to be as follows:

- Monday to Friday (other than Public Holidays): 7:00AM – 6:00PM.
- Saturday: 8:00AM – 1:00PM.
- Sunday and Public Holidays: No works to be undertaken.

2.3 Proposed Site Access

All access to the site by construction personnel is proposed via the access in the location of future connections to O'Keefe Drive.

Emergency vehicle access to and from the Site will be available at all times 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.



Figure 2: Construction Site Plan

2.4 Construction Vehicle Access Routes

It is proposed that all construction vehicles shall enter and exit the site via the routes shown in Figure 2. The routes shown are to be utilised by all construction vehicles travelling to and from the site and represents the shortest route between the local and regional road network - hence minimising the impacts of the construction process. An on-site turning area shall be provided within the future car park area so that access site access is undertaken in a forward direction, at all times.

It is expected that a copy of the approved routes will be distributed by the Lead Contractor to all drivers by before their arrival to site. All vehicles shall enter and leave the site in a forward direction.

Any vehicles required to access the Site that do not comply with the mass, dimension or operating requirements as specified by the National Heavy Vehicle Regulator (NHVR) will need to apply for a class 1 Oversize Overmass (OSOM) permit. Permits may be issued with conditional restrictions that limit the time and days that these vehicles are allowed to access the Site. Additionally, specific TCPs may be required to facilitate safe manoeuvring of these vehicles.

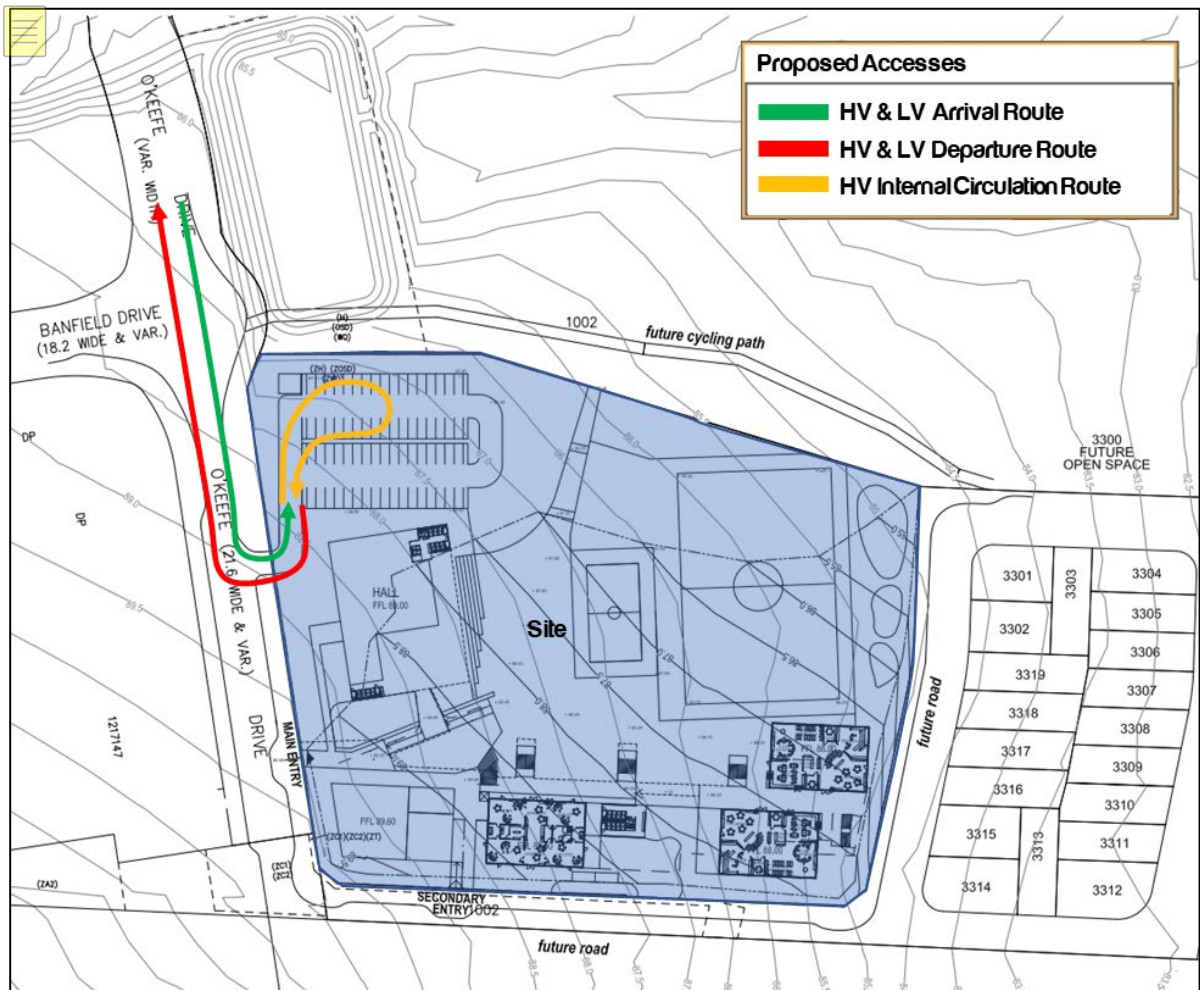


Figure 3: Construction Vehicle Route

2.5 Fencing Requirements

Temporary exclusion fencing will be erected along the entire boundary of the site as shown in **Figure 2** and will be maintained for the duration of the construction program. The fencing is to ensure unauthorised persons are kept out of the Site. Site access gates would be provided within O'Keefe Drive and will be closed at all times outside of the permitted construction hours.

Any control points — operational during work hours — shall be sufficiently setback so that no queuing will occur on-street.

2.6 Materials Handling

Handling of all materials throughout the construction shall adhere to the following;

- It is proposed that all material loading will occur within the construction site boundary.
- No loading is proposed to occur outside of the provisioned areas.
- Equipment, materials and waste will be kept within the construction site boundary.

During latter stages of construction, tie in works will be required within the kerbside of O'Keefe Drive. All materials handling shall be undertaken off public roadways, however in the event materials handling is required from a public roadway, then prior approval shall be sought and obtained from the relevant Authorities. If required Works Zones may be required.

3 Assessment of Traffic and Transport Impacts

3.1 Construction Vehicle Traffic Generation and Impacts

Light Vehicle traffic generation would be generally associated with construction staff movements to and from the Site. Staff would be comprised of project managers, various trades and general construction employees. Over the full period, the peak workforce represents the worst-case scenario for vehicle movements during the morning or evening road network peak hour. The workforce arrival and departure periods (6:30-7:00AM and 6:00-6:30PM) represent the peak construction traffic periods.

It is expected that the Heavy Vehicles would generally arrive outside of peak periods, therefore not contribute to the estimated peak hour volumes.

Whilst the construction traffic volumes are yet to be determined (these volumes will be finalised post SSD Approval), it is expected that these volumes will not exceed to the proposed operational volumes. In this regard, it is noted that the school when operational, is expected to generate far less traffic.

As mentioned in section 2.4, any vehicles required to access the Site that do not comply with the mass, dimension or operating requirements as specified by the National Heavy Vehicle Regulator (NHVR) will need to apply for a class 1 Oversize Overmass (OSOM) or Special Purpose Vehicle (SPV) permit and comply with restrictions limiting access to the Site to reduce the impact on traffic management and safety.

Accordingly, the estimated construction traffic flows for the proposed construction activities would not result in any adverse impact on the operational capacity of the surrounding road network.

3.2 Vehicle Management – Principles

All vehicles transporting loose materials will have the entire load covered and/or secured to prevent any large items, excess dust or dirt particles depositing onto the roadway during travel to and from the site. Drivers are to be familiar with the Driver Code of Conduct before attending the Site – A copy of the Code is included in **Appendix A**.

All subcontractors must be inducted by the Contractor to ensure that the procedures are met for all vehicles entering and exiting the construction site. The Head Contractor will monitor the roads leading to and from the site and take all necessary steps to rectify any road deposits caused by site vehicles.

Vehicle movements to, from and within the site shall do so in a manner, which does not create unreasonable or unnecessary noise or vibration.

No tracked vehicles will be permitted or required on any paved roads. Public roads and access points shall not be obstructed by any materials, vehicles, refuse skips or the like, under any circumstances.

A review of the crash history surrounding the site indicates that there is no crash history.

3.3 Employee Parking

It is intended that all contractor and construction light vehicle parking utilise the designated construction access gate as shown in **Figure 2**. At no time shall parking be permitted on the public roadway.

Contractors are also encouraged to carpool or utilise public transport service within the area, thereby further reducing the minimal parking demand. The Site's accessibility to public and active transport is discussed in Sections 3.4 and 3.5.

3.4 Pedestrian and Cyclist Access

Some External construction activities will occur on O'Keefe Drive at some point during the build. Accordingly, the pedestrian footpath shall be managed by an accredited Traffic Controller during crossover works and deliveries to site.

During construction of the temporary and final driveway crossovers, pedestrians will be directed around the construction site by the installation of temporary fencing and management of an accredited Traffic Controller.

The existing footpaths shall remain open at all times as the construction site does not interfere with pedestrians or cyclists, with efforts to minimise impacts where possible. This may include staged construction of driveway crossovers to maintain the availability of suitable pedestrian connectivity.

3.5 Public Transport

There is minimal existing public transport on surrounding roads. A single service travels between Campbelltown and Oran Park via Gregory Hills and is the 896 bus route. The frequency of this service runs between 20 min and 40 min during morning and evening periods, Monday to Friday.

The construction activities will have no impact on the existing public transport services with all bus services to continue as is.

4 Traffic Control

4.1 Traffic Control

The RMS guide “Traffic Control at Worksites” (TCAW) manual contains standard traffic control plans (TCPs) for a range of work activities, with the objective to maximise safety by ensuring traffic control at worksites complies with best practice.

The RMS TCAW outlines the requirement for a Vehicle Movement Plan (VMP), where Heavy Vehicles movements exceed 20 in a single shift (or day), or 10 trucks per day (1 truck = 2 movements)

A VMP is a diagram showing the preferred travel paths for vehicles associated with a work site entering, leaving or crossing the through traffic stream. A VMP should also show travel paths for trucks at key points on routes remote from the work site such as places to turn around, accesses, ramps and side roads.

4.2 Authorised Traffic Controller

An authorised Traffic Controller is to be present on-site throughout the construction stage of the project. Responsibilities include:

- Supervision of all construction vehicle movements into and out of site at all times,
- Supervision of all loading and unloading of construction materials during the deliveries in the construction phase of the project, and
- Pedestrian management, to ensure that adverse conflicts between vehicle movements and pedestrians do not occur, while maintaining radio communication with construction vehicles at all times.

5 Monitoring and Communication Strategies

5.1 Development of Monitoring Program

The development of a program to monitor the effectiveness of this CTMP shall be established by the lead contractor. It is not anticipated that the monitoring of the processes will have any material cost implications.

This CTMP shall be subject to ongoing review and will be updated accordingly. Regular reviews will be undertaken by the on-site coordinator. As a minimum, review of the CTMP shall occur monthly, however a weekly review would be preferred.

- All and any reviews undertaken should be documented, however key considerations regarding the review of the CTMP shall be:
- Tracking deliveries against the estimated volumes.
- To identify any shortfalls and develop an updated action plan to address issues that may arise during construction (Parking and access issues)
- To ensure TCP's are updated (if necessary) by "Prepare a Work Zone Traffic Management Plan" card holders to ensure they remain consistent with the set-up on-site.
- Regular checks undertaken to ensure all loads are leaving site covered as outlined within this CTMP.

5.2 Communications Strategy

A communications strategy shall be prepared by the Head Contractor and will outline the most effective communication methods to ensure adequate information within the community and assist the project team to deliver the traffic changes with minimal disruption to the road network.

Surrounding resident and landowners shall be notified of any work that is deemed disruptive to the surrounding network prior to commencement. Ongoing communication is also proposed so that all key stakeholders are kept up to date of works and potential impacts.

Nearby property owners that may be affected directly by the construction works shall be included within the communications strategy.

6 Recommended Mitigation Measures

Referencing the above information, it is proposed that the following mitigation measures be undertaken in order to offset any construction impacts:

- Construction:
 - Planning of all appropriate routes to travel to and from site,
 - Discussions with Council, and RMS will be undertaken to identify all (if any) roads of interest to be assessed in order to quantifiably measure the condition of the road before and after construction.
 - Providing options for workers to carpool to and from site,
 - Ensuring that gates to and from site are locked at all times outside of construction hours.
 - Continual review of the CTMP to identify any shortfalls and develop an updated action plan to address said issues.
- Road occupancy:
 - In order to reduce the impact on any and all roads, it is proposed to complete the work in the shortest reasonable duration,
 - To improve road safety, TCPs are to be prepared for all works to be undertaken,
 - Prior to travel, drivers must be aware of the Driver Code of Conduct, which is to be handed to all construction employees,
 - Public roads and access points will not be obstructed by any materials, vehicles, skips or the like, under any circumstance,
 - All loads travelling to and from the site shall be covered at all times,
- Notification processes:
 - Notification of any adjoining residents or businesses will be undertaken prior to construction. It is proposed that all affected properties will be notified at least 14 days in advance of any impacts (including road closures),
 - Appropriate approvals must be obtained prior to construction in the relevant area from private residences, road authorities, utility providers and any other stakeholder requiring preapproved access.

7 Conclusions

Ason Group has been commissioned by Hansen Yuncken to examine the access, traffic and parking characteristics of the proposed Catherine Field Public School at O'Keefe Drive, Oran Park. Further to our assessment Ason Group has concluded that:

- The construction staff arrival and departure periods (6:30-7:00AM and 6:00-6:30PM) represent the peak construction traffic periods and it is expected that the Heavy Vehicles would also generally arrive outside of peak periods, therefore not contribute to the estimated peak hour volumes.
- All construction vehicles will use dedicated construction routes between the site and the regional road network.
- With reference to all applicable road capacity guidelines, the introduction of the site construction traffic will have no significant impact on the operation or capacity of key regional, urban, local or unsealed roads and intersections providing access to the site.
- Appropriate mechanisms – including site-specific TCPs - can be established to monitor the condition of the roads providing access to the construction site such that access is maintained (for public and construction vehicles) at all times.
- All light and heavy vehicle parking throughout the construction phase will be provided on-site to minimise the impact to on-street parking.
- Appropriate management conditions can be introduced to ensure that all roads are maintained to an appropriate standard throughout and after construction.
- A detailed Construction Traffic Management Plan will be formalised prior to the commencement of the pipeline development construction for approval by the relevant Local and State Government authorities.

Appendix CTMP-A

Driver Code of Conduct



- Driver Code of Conduct -

Drivers Code of Conduct

Safe Driving Policy for Catherine Field Public School

Objectives of the Drivers Code of conduct

- To minimise the impact of earthworks and construction on the local and regional road network;
- Minimise conflict with other road users;
- Minimise road traffic noise; and
- Ensure truck drivers use specified routes

Code of Conduct

All vehicle operators accessing the site must:

- Take reasonable care for his or her own personal health and safety.
 - Not adversely, by way of actions or otherwise, impact on the health and safety of other persons.
 - Notify their employer if they are not fit for duty prior to commencing their shift.
 - Obey all applicable road rules and laws at all times.
 - In the event an emergency vehicle behind your vehicle, pull over and allow the emergency vehicle to pass immediately.
 - Obey the applicable driving hours in accordance with legislation and take all reasonable steps to manage their fatigue and not drive with high levels of drowsiness.
 - Obey all on-site signposted speed limits and comply with directions of traffic control supervisors in relation to movements in and around temporary or fixed work areas.
 - Ensure all loads are safely restrained, as necessary.
 - Drive over cattle grids – located at the Site's access – to vibrate off any loose material attached to construction vehicles.
 - Operate their vehicles in a safe and professional manner, with consideration for all other road users.
 - Hold a current Australian State or Territory issued driver's licence.
-

- Notify their employer or operator immediately should the status or conditions of their driver's license change in any way.
- Comply with other applicable workplace policies, including a zero tolerance of driving while under the influence of alcohol and/or illicit drugs.
- Not use mobile phones when driving a vehicle or operating equipment. If the use of a mobile device is required, the driver shall pull over in a safe and legal location prior to the use of any mobile device.
- Advise management of any situations in which you know, or think may, present a threat to workplace health and safety.
- Drive according to prevailing conditions (such as during inclement weather) and reduce speed, if necessary.
- Have necessary identification documentation at hand and ready to present to security staff on entry and departure from the site, as necessary, to avoid unnecessary delays to other vehicles.

Crash or Incident Procedure

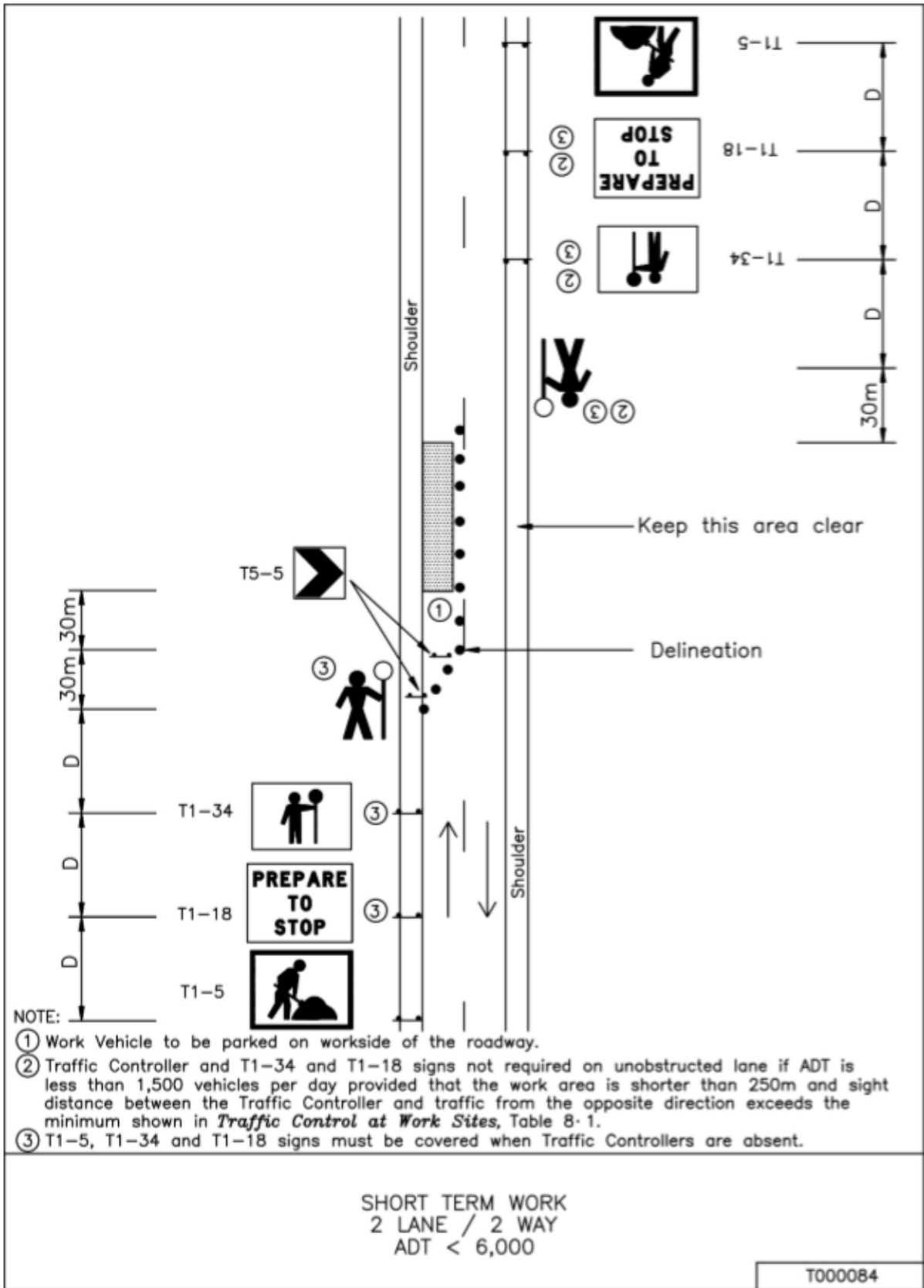
- Stop your vehicle as close to it as possible to the scene, making sure you are not hindering traffic. Ensure your own safety first, then help any injured people and seek assistance immediately if required.
 - Ensure the following information is noted:
 - Details of the other vehicles and registration numbers
 - Names and addresses of the other vehicle drivers
 - Names and addresses of witnesses
 - Insurers details
 - Give the following information to the involved parties:
 - Name, address and company details
 - If the damaged vehicle is not occupied, provide a note with your contact details for the owner to contact the company.
 - Ensure that the police are contacted should the following circumstances occur:
 - If there is a disagreement over the cause of the crash.
 - If there are injuries.
 - If you damage property other than your own.
 - As soon as reasonably practical, report all details gathered to your manager
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Appendix CTMP-B

Traffic Control Plan(s)



TCP 84



TCP 195

