

Construction Traffic Management Plan (CTMP)

Ivanhoe Estate Stage 1B Civil Works

Development Application: SSD 8903 CTMP Version: 1.0 LGA: City of Ryde Date: 11 March 2022

CTMP Prepared for: Christie Civil Pty Ltd

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	Stage 1B Civil Works
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Revision	Date	Modifications to content	Author	Signature
1.0	11/3/2022	Initial Submission	Kyle Fieg	K. Fíeg

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Date:	11/3/2022

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1. Introduction

The Traffic Planner has been commissioned by Christie Civil Pty Ltd to prepare a Construction Traffic Management Plan (CTMP) to be implemented during the construction project located at Ivanhoe Estate Stage 1B Civil Works. This TMP is required to be submitted and approved by City of Ryde prior to the commencement of works.

This Construction Traffic Management Plan (CTMP) and associated Traffic Control Plans (TCP) includes the provision for the safe movement of vehicular and pedestrian traffic, the protection of workers from passing traffic, the provision for access to properties located within the limits of the project, the provision of traffic controllers and traffic control measures, the installation of temporary signs and safety devices as required at Ivanhoe Estate Stage 1B Civil Works.

This Construction Traffic Management Plan (CTMP) & associated Traffic Control Plans (TCP) describes and illustrates the locations of proposed Ingress & Egress points for Construction Vehicles, standing of delivery vehicles, Standing of Plant (if required) and Traffic Control and Pedestrian Control measures for the site.

This Construction Traffic Management Plan (CTMP) & associated Traffic Control Plans (TCP) have been prepared to satisfy all conditions relating to a CTMP as set in the approved Development Application, SSD 8903, relating to this project.

1.1 Purpose of this Plan

The purpose of this CTMP is to satisfy City of Ryde consent conditions and describe how The Applicant proposes to manage construction vehicles, traffic and pedestrian movements safely whilst carrying out their respective activities.

The objectives with respect to the Construction Traffic Management Plan ("CTMP") are to:

- Ensure the safety of staff, the general public, pedestrians, cyclists and traffic,
- To satisfy Council's conditions related to Traffic, Transport and Access.
- To actively monitor traffic impacts related to the construction works so that information can be applied to the planning and implementation of traffic control plans
- Keep all site traffic delays to a minimum,
- Maintain satisfactory property access,
- Minimise disturbance to the environment and
- Meet the requirements of relevant Australian Standards (specifically AS1742.3), TFNSW G10 Traffic Management and the TFNSW Traffic Control at Worksites Manual V6.0.

1.2 Abbreviations and Terminology

The following terms, abbreviations and definition are used in this plan:

Terms	Explanation	
ITCP	Implement Traffic Control Plans	
PWZTMP	Prepare Work Zone Traffic Management Plan	
ROL	Road Occupancy Licence	
SWMS	Safe Work Method Statement	
TfNSW	Transport for New South Wales	
TGS	Traffic Guidance Scheme	
ТМР	Traffic Management Plan	
TTM	Temporary Traffic Management	
VMP	Vehicle Movement Plan	

1.3 Legislative Requirements

This Construction Traffic Management Plan (CTMP) complies with Australian Standard 1742.3-2019 Manual of uniform traffic control devices, Part 3: Traffic control for works on roads. All TCP's have been drawn to the TFNSW Traffic Control at Worksites Manual V6.0 standards,

All personnel dealing with traffic control, being either contractors or sub-contractors are to have the following current accreditation, for the management of each item listed below:

Qualification	Requirements	Restrictions
Traffic Controller This qualification provides the necessary certification to control traffic with a prescribed traffic control device.	 Persons holding this qualification are permitted or required to: Stop or direct road users using a STOP/SLOW bat or other accepted traffic control device; Maintain traffic incident reports; Operate a 2-way radio; Understand the TGSs for the site; Check traffic control signs are installed in accordance with the relevant TGS; Assess and respond to changes in the environment, e.g., traffic volumes, weather conditions, road conditions, WHS and operational requirements; and 	 Persons holding this qualification must not: Select or adjust a site suitable TGS; Implement a TGS; Modify a TGS; or Design a TGS.

	 Carry out risk assessments for personal safety. 	
Implement Traffic Control Plans This qualification allows for qualified personnel to set up and work with TGSs at a work site and complete safety inspections.	 Persons holding this qualification are permitted to: Set up, monitor, and close down traffic control devices according to nominated TGS; Identify safety implications of traffic control at roadworks; Check, clean and store equipment on completion of work and close down a 	 Persons holding this qualification must not: Control traffic with a STOP/SLOW bat or other traffic control device; Make adjustments to an existing TGS which exceeds the tolerances specified in <u>Section 7.10.3</u> <u>Tolerances on</u> <u>positioning of signs</u> <u>and devices in the</u> <u>TCWSM V6;</u> or Design a TGS.
Prepare Work Zone Traffic Management Plan This qualification allows for qualified personnel to design and modify Traffic Management Plans (TMPs), Vehicle Movement Plans (VMPs) and traffic guidance schemes (TGSs).	 permitted to: Prepare a Work Zone TMP; Collect all required information about a given roadwork project to enable the preparation of a TGS; Design a TGS, based on risk assessment, statutory and regulatory requirements, standards, road authority requirements and project brief; Select and modify a TGS based on risk assessment, statutory and regulatory regulatory requirements, standards, road authority regulatory regulatory regulatory regulatory and regulatory regulatory regulatory and regulatory regulatory and regulatory regulators and project brief; 	 Persons holding this qualification must not: Control traffic with a STOP/SLOW bat or other traffic control device; or Implement a TGS.

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 Determine the recommended spacing between signs and traffic control devices in line with standards, measure width of trafficable surface and calculate edge clearances to barriers, cones and clearance to work personnel; 	
 Undertake safety inspections/checks on the effectiveness of TMPs and TGSs; 	
• Conduct an onsite check and inspection of the plan and to identify any hazards or risks; and	
 Seek approvals required for a TMP and TGS 	

Table 1. Traffic Management Qualifications

In accordance with City of Ryde all traffic control work, excavation, demolition and construction activities must be undertaken in accordance with the approved conditions of consent.

The CTMP needs to specify, but not limited to, the following:

Prior to the commencement of any works, a Construction Pedestrian and Traffic Management Plan (CPTMP) prepared by a suitably qualified person shall be endorsed by TfNSW (Sydney Coordination Office) and submitted to the Certifier. The CPTMP must be prepared in consultation with Council, TfNSW (Sydney Coordination Office), and TfNSW (RMS). The CPTMP shall address (but not be limited to):

a) location of the proposed work zone;

b) haulage routes;

c) construction vehicle access and traffic control arrangements;

d) proposed construction hours;

e) estimated number of construction vehicle movements;

f) any changes required to on-street parking;

g) construction program;

h) any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the construction;

i) cumulative construction impacts of projects considering any traffic and pedestrian management plans prepare for these projects to ensure that work activities are coordinated and managed to minimise impacts on the road network. Information relating to cumulative construction impacts to be sourced from TfNSW (Sydney Coordination Office);

j) measures to ensure construction vehicles do not arrive at the site or surrounding areas outside approved hours;

k) measures proposed to mitigate any associated general traffic, public transport, pedestrian access and cyclist impacts/conflicts;

I) measures to encourage public transport use and other non-car travel options by construction workers.

Prior to the commencement of works, a copy of the CPTMP demonstrating compliance with the above must be submitted to TfNSW and the Planning Secretary.

Please note that the provision of any information in this CTMP will not exempt the Applicant from correctly fulfilling all other conditions relevant to the development conditions of consent for the project.

2 Development and Construction Dataile		
2. Development and Construction Details		
NOTICE OF DETERMINATION - APPROVAL		
	onmental Planning and Assessment Act, 1979	
Development Application No.	SSD 8903	
Applicant	NSW Land and Housing Corporation	
Land to be developed	Ivanhoe Estate comprising Ivanhoe Place,	
	Wilcannia Way, Nyngan Way, Narromine	
	Way and Cobar Way (Lot 100 DP1262209),	
	part of 2-4 Lyonpark Road (Lot 1	
	DP859537) and portions of Shrimptons	
	Creek adjacent to Lot 1 DP859537 to the	
	centre line of the creek, Macquarie Park	
Approved development	Stage 1 development application for the	
	redevelopment of the Ivanhoe Estate,	
	including:	
	 site preparation works, including removal 	
	of trees, demolition, bulk earthworks and	
	excavation	
	 construction of new roads, bridge over 	
	Shrimptons Creek and new road	
	connection to Lyonpark Road	
	 construction of two residential 	
	apartment buildings (Building A1 and	
	Building C1) with basement car parking:	
	- Building A1 with 269 apartments, 233 car	
	parking spaces and a child centre	
	 Building C1 with 471 apartments and 346 	
	car parking spaces	
	 landscaping and public domain works 	
	 amalgamation and subdivision. 	

Project Plans and Diagrams are located in Appendix C – Project Plans and Diagrams.

2.1 Proposed Stages of Work

• TBC – Staging and Methodology to be provided by the contractor.

2.2 Hours of Work

Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:

- a) between 7.00 am and 7.00 pm, Mondays to Fridays inclusive; and
- b) between 8.00 am and 4.00 pm, Saturdays.

No work may be carried out on Sundays or public holidays.

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Activities may be undertaken outside of these hours if required:

- a) by the Police or a public authority for the delivery of vehicles, plant or materials; or
- b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm.

Notification of such activities must be given to affected residents before undertaking the activities or as soon as is practical afterwards.

Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours:

- a) 9.00 am to 12.00 pm, Monday to Friday;
- b) 2.00 pm to 5.00 pm Monday to Friday; and
- c) 9.00 am to 12.00 pm, Saturday.

2.3 Daily Workforce

Average daily workforce of approximately 20-30 people during different stages of the development.

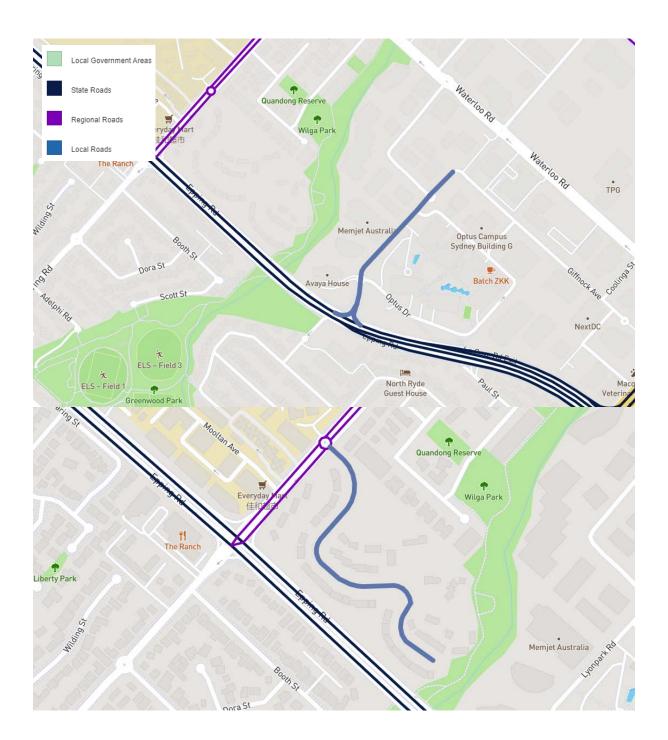
2.4 Existing Conditions

At the time of developing this CTMP, there are no existing works or events that have been identified in the area that will affect the plans detailed in this CTMP. During the course of the project, this may change. Consultation will occur between all parties and any conditions outlined in any Council and or TFNSW approval must be implemented and adhered to.

Road Name	Road Type	Restrictions	Authority
Herring Road	Regional Road	50km/h	TfNSW
Epping Road	State Road	70km/h	TfNSW
Lyonpark Road	Local Road	50km/h	City of Ryde

2.5 Surrounding Road Classifications

Table 2. Road Classification



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2.6 Site Aerial View



3. Proposed Development Traffic Impact

3.1 Construction Access

All construction works will be completed within the project boundary. Construction access into the site will be from Lyonpark Road. The maximum size vehicle accessing the site will be a **19m Truck and Dog Trailer**. Refer Appendix B for Vehicle Movement Routes.

No queuing or marshalling of trucks is permitted on any public road. If there is not adequate space on-site, trucks will be turned away and must not queue in the surrounding areas. All construction vehicles will be coordinated to site only when sufficient space is available. Circulating construction vehicles on the network will not be tolerated.

Where used, Traffic Controllers are not to stop traffic on the public street(s) to allow trucks to enter or leave the site. They must wait until a suitable gap in traffic allows them to assist trucks in entering or exiting the site.

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3.2 Hoardings and Site Fencing

Site fencing will be used to secure the work areas from unauthorised access.

3.3 Loading / Unloading

All loading and unloading associated with construction will be accommodated on site

If a Works Zone is warranted an application must be made to the relevant road authority at least 8 weeks prior to commencement of works on the site. Consent for a Works Zone may be given for a specific period and certain hours of the days to meet the particular need for the site for such facilities at various stages of construction. The consent will be reviewed periodically for any adjustment necessitated by the progress of the construction activities.

All demolition and construction vehicles will be wholly contained within the site and vehicles must enter the site before stopping.

3.4 Site Accommodations

All site accommodations will be located wholly within the site compound on not on public lands or the road reserve.

3.5 Site Parking

All site staff, workers and contractors related to the project are to park in a designated offstreet parking or encouraged to use public transport.

No truck pooling/parking will be permitted at any time during the project at any frontage to the project or any other roadway within the City of Ryde Local Government Area.

3.6 Material, Plant and Spoil Bin Storage Areas

These areas will be allocated within the construction site boundary. Skip bins will be contained wholly within the site boundary. No storage of materials, plant or spoil will be allowed on public land or public roads. All waste/material will be collected on site in a position for easy access for both use on site and removal by trucks. All removal trucks will have the load covered by tarpaulin or other means to secure the load and will adhere to the approved travel routes as described in this CTMP.

It is noted the Contractor must obtain a permit from the City of Ryde regarding the placing of any plant/equipment on public ways, should this ever be required.

3.7 TfNSW Road Occupancy Approvals

Any works requiring authorisation by the TfNSW network such as full road closures, works on a state road or works within 100m of traffic signals require an ROL and will need to be approved by the TfNSW prior to works starting.

ROL's will be approved by TfNSW to specify TCP requirements. All works under an ROL approval are to be undertaken in accordance with all TfNSW conditions of approval outlined on the ROL.

This includes approval for times and days when each TCP can be operated. Approved ROLs will accompany the TCP to which it applies to during the operation of each TCP.

3.8 Local Council Permit Approvals

Any use of Council property for construction purposes shall require the appropriate approvals prior to such work commencing. This includes occupying Council property for storage or other non-construction activities.

Permit approvals must be obtained from the City of Ryde and need to be lodged and approved prior to works proceeding. Any proposed occupation of the roadway or footway will need to be referred to the City of Ryde. Additional approvals may be required for authorities such as Transport for NSW and the State Transit Authority. Emergency services will also need to be notified.

3.9 Transport Management for Service, Delivery, and Garbage Vehicles

No impact on existing services is expected during the works. Stakeholder consultation will occur throughout the project should this change.

3.10 Impacts on Public Transport

This project is not expected to have any significant impact on public transport timetables.

Existing access arrangements and services will be maintained comparable to the existing conditions.

The continual consultation will occur throughout the project. Notification of these changes will be made to the public and stakeholders with the use of notification signage and Roads and Maritime accredited traffic controllers.

3.11 Emergency Services

Police will be notified of any works on the road reserve that block or change the direction of travel of the road reserve, such as full road closures.

A 3m isle is to be maintained at all times during any road works to ensure emergency vehicle can pass if required. If a full road closure is in place, alternative routes will be used.

3.12 Pedestrians

A permit application and approval will be obtained from City of Ryde prior to any occupation of the footway or any footway closures. Consideration will be taken when planning for disabled persons, and in general, routes should be as short of a distance as possible.

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Pedestrian Ramps may be required where a smooth transition from the kerb is not available.

The proposed signage for pedestrian management will comply with AS1742.3 and AS1742.10, inclusive of pram ramps.

It is noted that Pedestrians may be held only for very short periods to ensure safety when trucks are leaving or entering, but pedestrians will not be stopped in anticipation, i.e. at all times, the pedestrians have the right-of-way on the footpath, not the trucks.

3.13 Cyclists

Cyclists will be subject to the same Traffic Management Controls as registered road users and will always have the right of way over construction works and vehicles accessing the site.

4. Development Access Management Arrangements

Dedicated temporary construction site driveway entrances and exits will be signposted. This will remain in place to safely manage pedestrians and construction-related vehicles to the Site frontage's roadways and footpaths.

If required, Authorised Traffic Controllers will be in place to assist with vehicle and pedestrian access.

4.1 Vehicle Movement Plan

A vehicle movement plan has been developed for this project and is located in Appendix B.

4.2 Impact to Residents, Businesses and the Public

This project is not expected to have any significant impact on public transport and cyclists. Existing access arrangements and services to other transport modes will be maintained comparable to the existing situation.

Adequate provision for pedestrians and cyclists will be made for current movements along all frontages and intersecting streets.

4.3 Neighbouring Properties

Access to neighbouring properties will be maintained at all times. Local community notification will be undertaken with all stakeholders prior to any changes to and/or impact on the road network.

Notifications will be provided to all impacted stakeholders at least 3 days prior to works starting. The notification will include contact details of the Traffic Control Management and the Site Management.

4.4 Construction Traffic and Heavy Vehicles

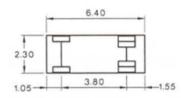
Typically, the most high-risk movement for construction vehicles occurs when vehicles are entering or exiting the construction site to and from the external road network. The management of construction access will include the following:

- Installation of truck warning signs on temporary construction access road;
- Where practicable, heavy vehicles will avoid using local roads;
- Authorised Traffic Controllers will be utilised to assist with safe access and egress of public vehicles around the work area where required.

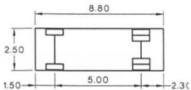
4.5 Types of Trucks Approaching Site

There will be a combination of small rigid vehicles (SRV's 6.4m), medium rigid vehicles (MRV's 8.8m), heavy rigid vehicles (HRV's 12.5m), Articulated Vehicles (AV 19m) and Truck and Dog Trailer (19m) accessing and egressing from the site.

Vehicle Sizes by Type

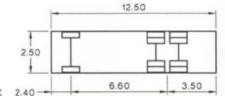


(a) Small rigid vehicle Clearance height 3.50 Design turning radius 7.1

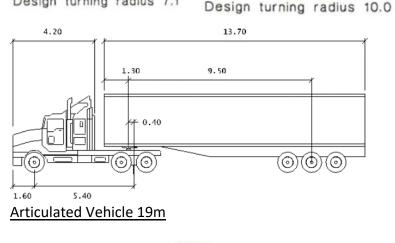


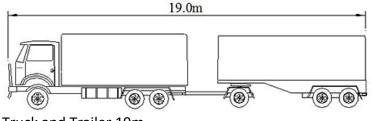
(b) Medium rigid vehicle

Clearance height 4.50



(c) Heavy rigid vehicleClearance height 4.50Design turning radius 12.5





Truck and Trailer 19m

4.6 Estimated Daily Volume:

The estimated number of daily truck movements is 10-15 per day, with a peak of up to 50 movements per day during large concrete pours.

4.7 Abnormal and Oversize/Overmass Loads

Oversize and over-mass vehicles are not allowed to travel on Local Roads (unless approval for a one-off occasion is obtained from the City of Ryde Traffic Operations Unit).

Requests to use these vehicles must be submitted to City of Ryde 28 days prior to the vehicle's scheduled travel date. Specific Traffic Management Plans will be developed for each abnormal movement and will be submitted for assessment to the relevant local and regulatory authorities on a case-by-case basis.

This is not expected to be required on this project.

For more information, please contact the National Heavy Vehicle Regulator (NHVR) on 1300 696 487 or <u>www.nhvr.gov.au</u>.

4.8 Vehicle Cleansing

Prior to the commencement of work and during construction works, suitable measures are to be implemented to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the Site.

All waste/material will be collected on site in a position for easy access for both use on site and removal by trucks. All removal trucks will have the load covered by tarpaulin or other means to secure the load and will adhere to the approved travel routes as described in this CTMP.

5. On-Site Traffic Management

5.1 Site Traffic Control

Traffic Management measures will be implemented on site to ensure the safe use of the roadway and surrounding areas; these will include but not be limited to;

- Authorised Traffic Controllers will be posted at the entry and exit points, if required.
- Advanced Warning Signs will be erected and or mounted as required. Refer to Appendix A for relevant TCP and associated signage requirements.
- All works associated with control or redirection of traffic must have an approved TCP associated with the works, and any relevant permits must be in place and available for view on site at all times.
- All construction vehicles must follow the instruction of the Authorised Traffic Controllers. This will be outlined in the site safety induction. The approved truck route plan shall form part of the contract and must be distributed to all truck drivers.
- Authorised Traffic Controllers must be inducted into the site prior to the start of the shift. Authorised Traffic Controllers must be trained on the conditions outlined in this TMP and associated planning documents.
- This TMP and all associated planning documents must be available for view on site at all times.

5.2 Traffic Control Signs and Devices

Traffic control devices are an important tool for influencing the safety of road users, in particular where temporary traffic controls are implemented at work sites.

The following traffic control details shall be strictly adhered to during this project:

- Advance Warning Signs shall be erected accordingly on each approach to the job site.
- Work for the shift shall be discussed with the team during the toolbox talk and SWMS Induction prior to commencement.
- All signs shall be of a size appropriate for residential streets with approach speeds of no more than 60km/hr.
- Sign spacing shall be within -10% to +25%.
- Contradictory signs to be covered.
- Do not cross open lanes to set out signs.
- Cones to be 700mm in height and reflective.
- Stop traffic at times when there is not enough lateral clearance.
- Allow for cyclists and parked cars in setting out T/C equipment.
- Need an escape route for traffic controllers.
- Prevent other vehicles following when Construction Vehicles are turning into site.
- All personnel, plant and equipment to keep a minimum of 1.2m from traffic.
- Record and initial any changes to TCP.
- Complete TCP checklist prior to implementation of TCP

All signposting installed throughout the project will comply with the requirements outlined in the TFNSW's TCWS Manual V6.0 AUSTROADS Guide to Traffic Engineering Practice, Part 8 – Traffic Control Devices and the Relevant parts of Australian Standard 1742.3-2009.

Temporary signposting will be implemented as per the detailed traffic plans. As documented in Appendix A – Traffic Control Plans.

5.3 Sequence for erection and removal of signs and devices

General

The sequence for installation and removal of signs and devices must be considered in the TMP and documented on the TGS or another site document such as a SWMS. The installation and removal of signs and devices must:

- Be undertaken in accordance with the procedures shown on the TGS or another document;
- Be planned to be in the direction of normal traffic flow;
- Not require workers to cross roads or carriageways on foot; and
- Be undertaken with a work vehicle with a flashing arrow or rotating or flashing light(s) is positioned between the workers and approaching traffic.

Special consideration must be given for the removal of signs on central medians and barriers on multi-lane divided carriageways, i.e., a site-specific TGS or use of a work convoy etc.

Before work commences, signs and devices at the work site must be installed in a sequence that is safe and efficient. After the work area has been located, via the use of a GPS, survey, landmarks, side streets or chainage, setting up a site to install signs and devices should be in accordance with the general procedures described below:

2-lane, 2-way roads

For 2-lane, 2-way roads, installation should occur in the following order:

- 1. Install termination signs (if no side roads).
- 2. Install on side streets.
- 3. Install in the non-working lane (unaffected direction).
- 4. Install in the working lane (affected direction).

Figure below provides an example sign installation sequence for a 2-lane, 2-way road.

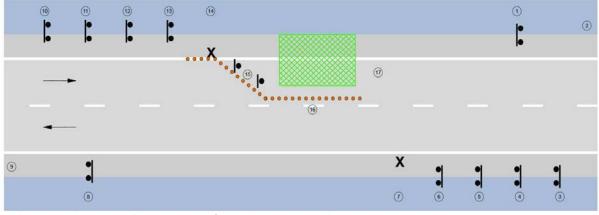


Table 3. Example sign installation sequence for a 2-lane, 2-way road

Multi-lane roads

For multi-lane roads, installation should occur in the following order:

- 1. Install signs and devices for the non-working lane (un-affected direction).
- 2. Install signs and devices for the working lane (affected direction).

Special consideration must be given to the installation of signs on central medians and barriers on multi-lane divided carriageways. In such cases, a site-specific TGS or use of a convoy may be required.

Figure below provides an example sign installation sequence for a multi-lane road.



Table 4. Example sign installation sequence for a multi-lane road

A different implementation sequence may need for site specific circumstances, e.g., install End Roadwork and reinstate the existing permanent speed limit first.

Where a work area is moving progressively along the road, relocation of the signs ahead should take place in accordance with the sequence described above. Those behind should be relocated in the reverse sequence.

For long-term or recurring short-term sites, consideration should be given to marking the desired location of each sign or device on the road for easy placement.

Removal

Removal of traffic control signs and devices should be undertaken in the reverse order of installation, progressing from the work area out toward the approaches. On motorway type carriageways, the removal of signs can be difficult in this sequence, in which case, signs should be removed in the same order that they were installed. The work vehicle should be positioned between the workers and approaching traffic when removing signs in this manner.

When removing delineation devices, such as cones, bollards or barrier boards used to close a lane, an advanced warning vehicle should be used to warn road users of workers on foot and a work vehicle must also be positioned between the workers and approaching traffic.

A work vehicle must only proceed in a forward direction towards approaching traffic along the closed roadway if it is determined by the PWZTMP or ITCP qualified person that it is safe to do so. This should not occur at night time where it may create motorist confusion or distraction, such as headlight glare.

5.4 Communications Strategy

Worksite Communications

There will be two-way communications throughout the worksite to assist with traffic management of vehicles travelling into, through and/or around the worksite.

Stakeholder Works Notifications

Notifications will be provided to all impacted stakeholders. Local community notification and consultation processes will be undertaken with all stakeholders prior to any changes to or impact on the road network. The builder's direct contact number will be provided to businesses adjoining or impacted by the construction work and the Transport Management Centre and Sydney Coordination Office within Transport for NSW to resolve issues relating to traffic, public transport, freight, servicing and pedestrian access during construction in real time. The applicant is responsible for ensuring the builder's direct contact number is current during any stage of construction.

Emergency Services Notifications

Emergency Services will be informed in a timely manner of relevant activities proposed within this CPTMP that affect the use of the roadway. Approval from the local area command will be required for all temporary full road closures including changes to road network configurations.

5.5 Site Contact Details

Name	Position	Contact #
Martin Carey	Construction Manager	0412 004 164
		02 9552 3077
Table 5. Key Contacts		

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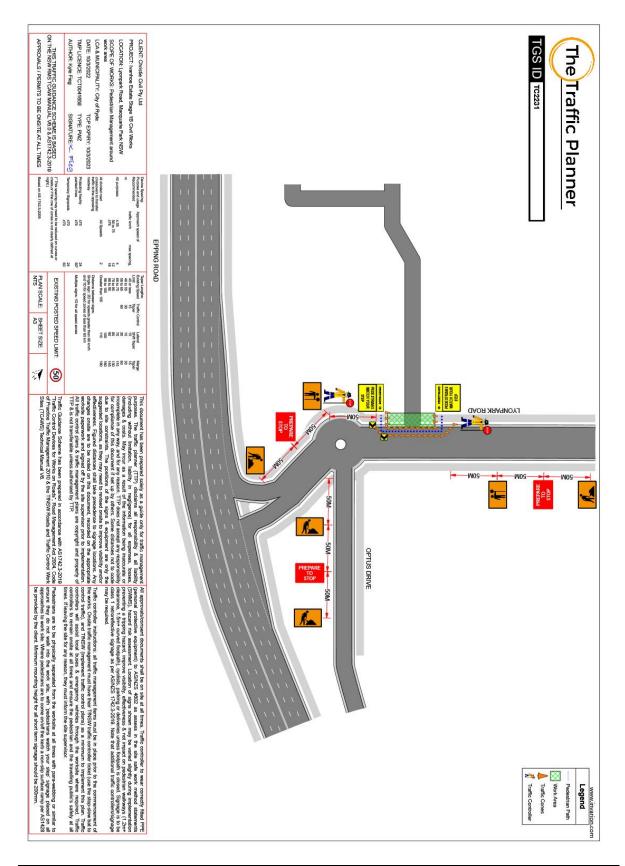
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6. APPENDIX A – TRAFFIC CONTROL PLANS

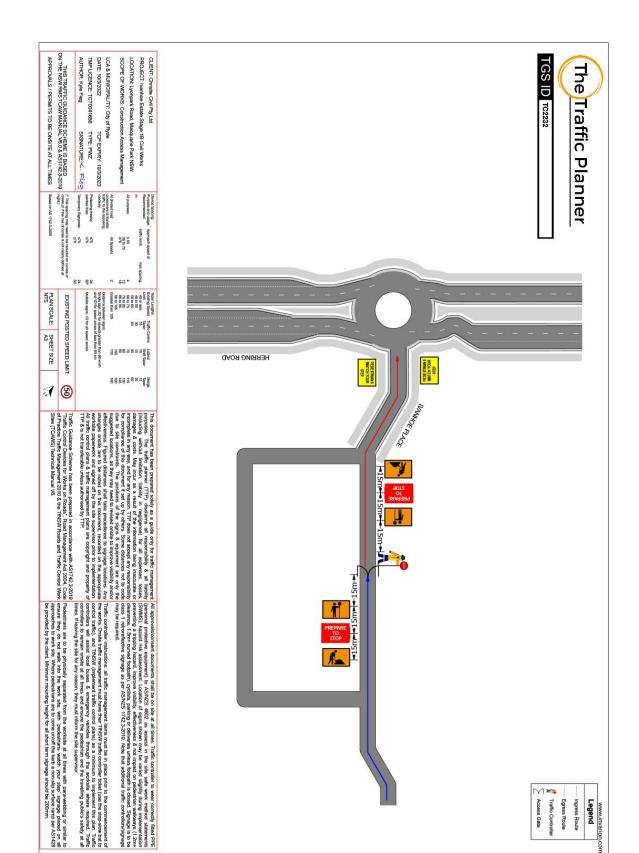
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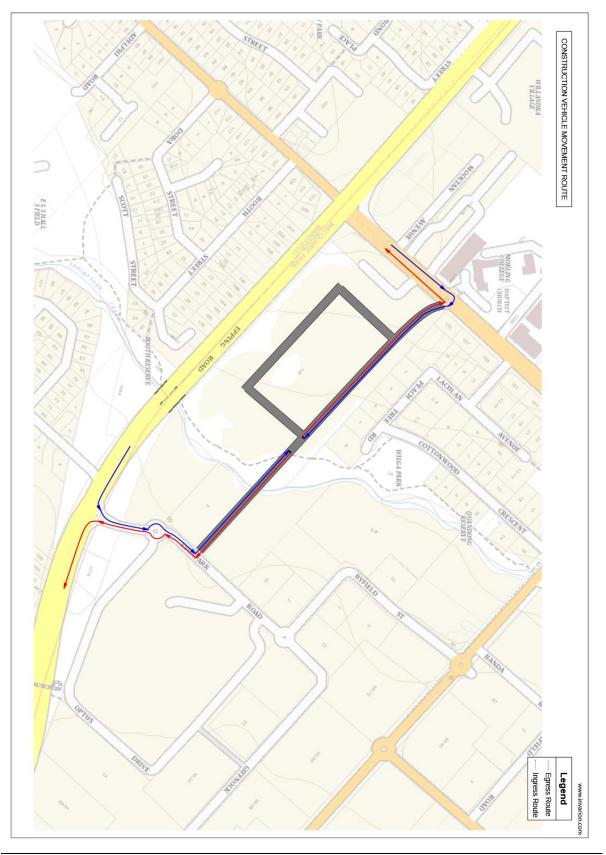
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7. APPENDIX B – VEHICLE MOVEMENT ROUTES

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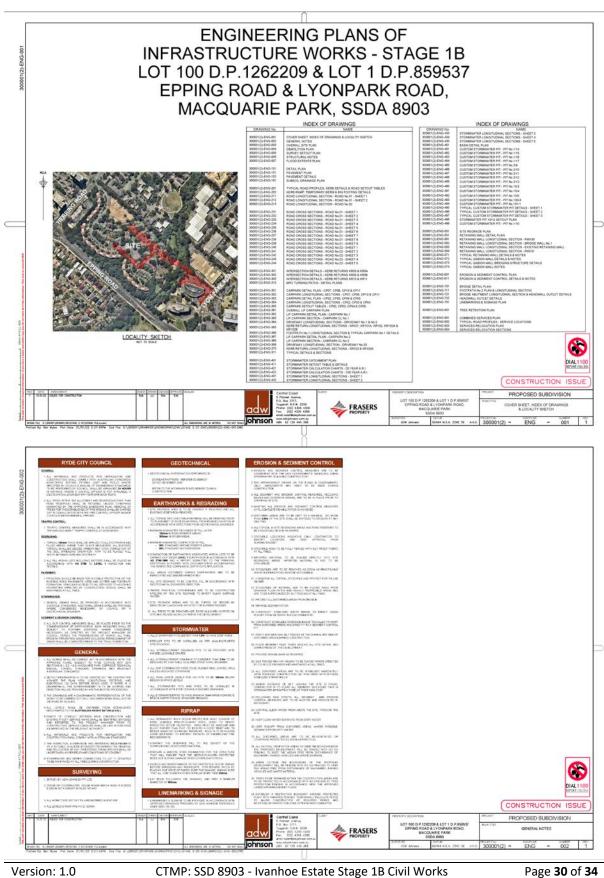


8. APPENDIX C – PROJECT PLANS AND DIAGRAMS

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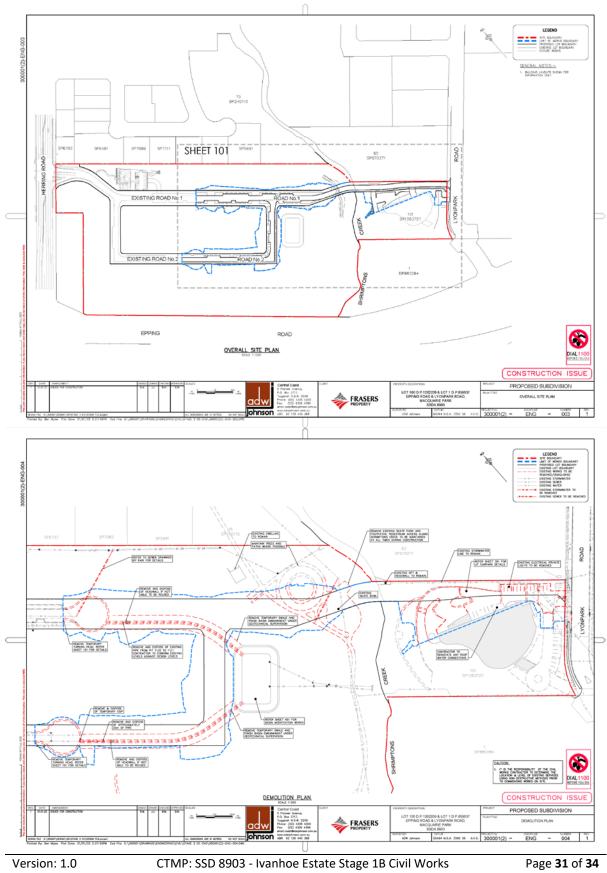
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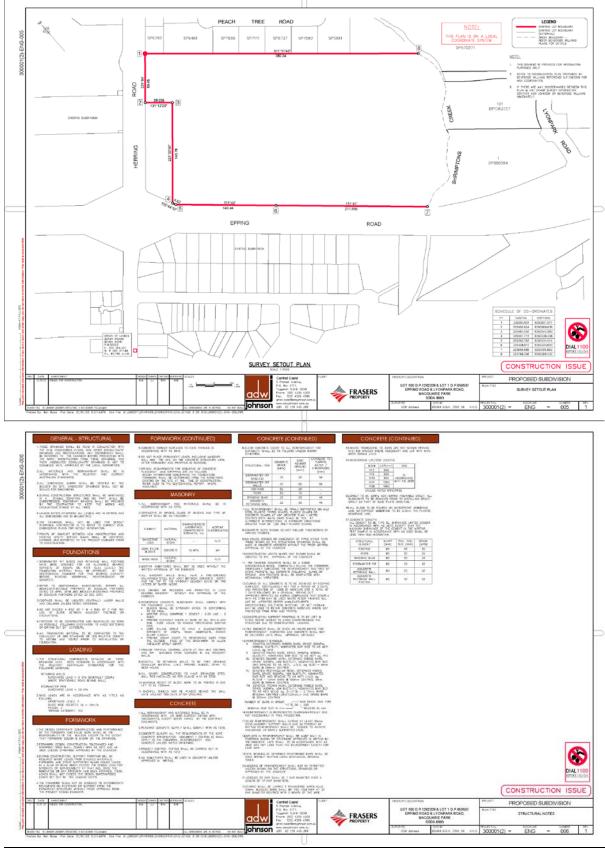


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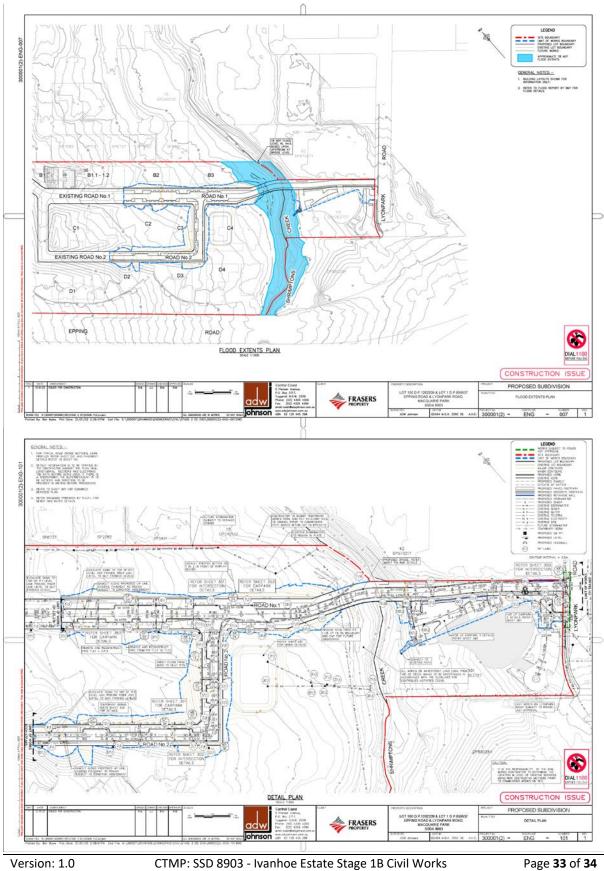


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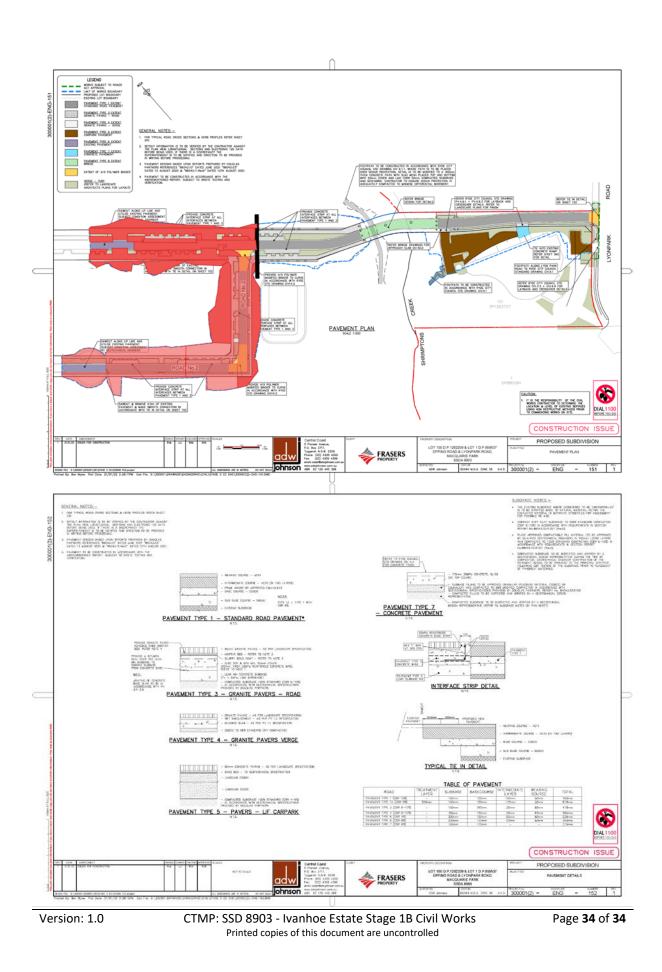


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