

Construction Traffic Management Plan Stage 1B and Stage 2 Following Ason Group Construction Traffic Management Plan 27 July 2020 - Ref: 1417r01v2 Brickworks Plant 2 Upgrade

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1. Introduction

This Construction Traffic Management Plan has been prepared to meet all the requirements of the Development Consent (Application Number SSD-9601) for the upgrade of Brickworks Horsley Park Plant 2 facility. The Consent Conditions being addressed are Items C2, C3(a), B14 and B15.

This brief introductory section (prepared by Claus Environmental Engineering following the concepts developed by Ason Group) is primarily a preface to the Ason Group Construction Traffic Management Plan submitted for Stage 1A of the Plant 2 Upgrade. The full Ason Construction Traffic Management Plan is included in the Appendices of this introductory section.

Ason Group prepared their Construction Traffic Management Plan to address all the requirements of Stage 1A, Stage 1B and Stage 2 of the Plant 2 Upgrade. It was necessary to do that to meet the full requirements the DPIE Conditions of Consent and to meet the requirements of Fairfield City Council.

2. Consent Conditions

2.1 General

On 18 May 2020, Anthea Sargeant, Executive Director, Regions, Industry and Key Sites Assessments for the NSW Department of Planning, Industry and Environment issued a Development Consent under Section 4.38 of the Environmental Planning and Assessment Act 1979 for Application Number SSD-9601. The Development is defined in part as “Upgrade works to the Horsley Park Brickworks Plant 2 facility.”

Items B14 and B15 deal specifically with the Construction Traffic Management Plan. Items C2 and C3(a) refer to the Construction Environmental Management Plan.

2.2 Items B14 and B15

Construction Traffic Management Plan

B14. Prior to the commencement of construction, the Applicant must prepare a Construction Traffic Management Plan for the development to the satisfaction of the Planning Secretary. The plan must form part of the CEMP required by condition C2 and must:

- (a) be prepared by a suitably qualified and experienced person(s);
- (b) be prepared in consultation with Council;
- (c) detail the measures that are to be implemented to ensure road safety and network efficiency during construction;
- (d) detail heavy vehicle routes, access and parking arrangements;
- (e) include a Driver Code of Conduct to:
 - (i) minimise the impacts of earthworks and construction on the local and regional road network;
 - (ii) minimise conflicts with other road users;

- (iii) minimise road traffic noise; and
- (iv) ensure truck drivers use specified routes;
- (f) include a program to monitor the effectiveness of these measures; and
- (g) if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.

B15. The Applicant must:

- (a) not commence construction until the Construction Traffic Management Plan required by condition B14 is approved by the Planning Secretary; and
- (b) Implement the most recent version of the Construction Traffic Management Plan approved by the Planning Secretary for the duration of construction.

2.3 Items C2 and C3(a)

- C2. The Applicant must prepare a Construction Environmental Management Plan (CEMP) in accordance with the requirements of condition C1 and to the satisfaction of the Planning Secretary.
- C3. As part of the CEMP required under Condition C2 of this consent, the Applicant must include the following:
 - (a) Construction Traffic Management Plan (see Condition B14);

3. Suitably Qualified and Experienced Persons

Ason Group is an experienced Traffic management consultant. The following is from their website:

Ason Group is a specialist traffic and transportation planning and engineering firm providing consultancy services to both the private and public sectors. We provide services related to all aspects of transportation planning and specialise in development approvals and construction certification.

<https://www.asongroup.com.au/>

Director Andrew Johnson has a Bachelor of Civil Engineering and has been working in the field of Traffic Engineering and Transport Planning since 2003, establishing Ason Group, a company specialising in Traffic and Transport Planning, in 2014.

Rebecca Butler-Madden the principal author of the Assessment has an MSc in Transport and Planning and five years professional experience in traffic management and transport.

Another valuable contributor to the traffic analysis is James Laidler James has a Bachelor of Civil Engineering (University of Technology, Sydney) and has been working in traffic engineering in the transport planning and transport construction industries for over eight years. During this time, James has been involved in numerous projects for both private organisations and government agencies, including CPB Samsung John Holland Joint Venture (WestConnex M4 Extension project) and The Hills Shire Council.

4. Consultation with Council

Ason Group provided Willow Tree Planning a letter dated 18 December responding to four questions from Fairfield City Council regarding Ason Group's Transport Assessment Report submitted as Appendix 5 of the EIS. It is assumed that Ason Group's responses to the Council questions were sufficient because none of the specific issues raised by Council were added to the Conditions of Consent. A summary of the four questions is as follows (responses in Red):

1. 18 paved car parking spaces is not enough for 35 staff. **Unpaved parking areas have at least 50 spaces which is how Plant 2 operates now.**
2. What is the largest vehicle anticipated to service the site? **26m B-Double.**
3. What types of vehicles will use the loading docks. **12.5m HRV's no change from the existing loading dock usage.**
4. Any changes to the existing service arrangement. **No changes.**

On 27 July Kerren Ven, Strategic Planner | Strategic Land Use Planning, sent the following email to Austral Brick's Project Manager, Jeremy Foster.

Council's Traffic Branch has reviewed the submitted Construction Traffic Management Plan (CTMP) prepared by Ason Group dated 21 July 2020 ref. 1417r01v1 for the proposed upgrade of Plant 2 at the Austral Brick site and no issued regarding the CTMP, subject to the following comments:

1. Queuing on Ferrers Road will not be permitted.
2. Request for provision of "Work Zone" on Ferrers Road will not be supported.
3. Any oversize or over-mass vehicle travelling to and/ or from the site will require a permit from National Heavy Vehicle Regulator.

Please keep this email upon lodgement of the CTMP to the Department to satisfy Condition B14 of SSD-9601 consent.

If you have any questions, please do not hesitate to contact me on 9725 0878.

5. References

Ason Group, Construction Traffic Management Plan, Proposed Plant 2 Refurbishment, 780 Wallgrove Road, Horsley Park, Ref: 1417r01v2 (Project Number), 27/07/2020, File Reference: 1417r01v2 CTMP_Austral Bricks, Horsley Park

Ason Group, Proposed Plant 2 Refurbishment, 780 Wallgrove Road, Horsley Park, Ref: 0714r01v2 (Project Number), 5/08/2019, Client Austral Bricks
Ason Group, Suite 5.02, Level 5, 1 Castlereagh Street, Sydney NSW 2000
As referenced in Appendix 5 of EIS
<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-9601%2120190919T061721.018%20GMT>

Development Consent, Application Number SSD-9601, Consent Authority: Minister for Planning and Public Spaces, NSW Government, Department of Planning, Industry Environment, Applicant: The Austral Brick Co. Pty Ltd, Date: 18/5/2020, File EF19/12179
<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-9601%2120200520T230637.426%20GMT>

Willow Tree Planning, **Environmental Impact Statement for State Significant Development 9601**, Proposed Plant 2 Upgrade Works, 780 Wallgrove Road, Horsley Park, August 2019, Document Reference WTJ18-222
<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-9601%2120190919T061724.484%20GMT>

Construction Traffic Management Plan

Proposed Plant 2 Refurbishment
780 Wallgrove Road, Horsley Park

Ref: 1417r01v2
27/07/2020

Document Control

Project No: 1417r01v2

Project: 780 Wallgrove Road, Horsley Park

Client: Austral Bricks

File Reference: 1417r01v2 CTMP_Austral Bricks, Horsley Park

Revision History

Revision	Date	Details	Author	Approved by
-	17/07/2020	Draft	J. Laidler	
Issue I	21/07/2020	Issue I	J. Laidler	J. Laidler
Issue II	27/07/2020	Issue II	J. Laidler	J. Laidler

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1 Introduction

1.1 Overview

Ason Group has been engaged by Austral Bricks to prepare a Construction Traffic Management Plan (CTMP) for the refurbishment and extension of existing infrastructure (the Proposal) at the Plant 2 Site, which lies within the broader Austral Bricks site at 780 Wallgrove Road, Horsley Park (the Austral Site):

The works to be undertaken are generally summarised as:

- An extension of the existing building (Plant 2) to provide an additional GFA of approximately 13,090m² which would in turn provide for the replacement of two (2) existing kilns with one (1) new upgraded kiln.
- Construction of a new sealed fire road to allow emergency vehicles (including fire trucks) to service the Plant 2 Site.
- Retention of the existing on-site car park and provision of 18 formalised visitor parking spaces.

The Austral Site is located within the Fairfield Local Government Area (LGA) and is therefore subject to Fairfield City Council (Council) development controls. In this regard, the development approval includes a number of conditions of consent relevant to this CTMP.

“Council Condition of Consent: Construction Traffic and Pedestrian Management Plan

Condition 14: Prior to the commencement of construction, the Applicant must prepare a Construction Traffic Management Plan for the development to the satisfaction of the Planning Secretary. The plan must form part of the CEMP required by condition C2 and must:

- a) *be prepared by a suitably qualified and experienced person(s);*
- b) *be prepared in consultation with Council*
- c) *detail the measures that are to be implemented to ensure road safety and network efficiency during construction*
- d) *detail heavy vehicle routes, access and parking arrangements;*
- e) *include a Driver Code of Conduct to:*
 - (i) minimise the impacts of earthworks and construction on the local and regional road network;*
 - (ii) minimise conflicts with other road users;*
 - (iii) minimise road traffic noise; and*
 - (iv) ensure truck drivers use specified routes;*

- f) *include a program to monitor the effectiveness of these measures; and*
- g) *if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.*

Condition B15. The Applicant must:

- a) *not commence construction until the Construction Traffic Management Plan required by condition B14 is approved by the Planning Secretary; and*
- b) *implement the most recent version of the Construction Traffic Management Plan approved by the Planning Secretary for the duration of construction.*

Condition B16. The Applicant must provide sufficient parking facilities on-site, including for heavy vehicles and for site personnel, to ensure that traffic associated with the development does not utilise public and residential streets or public parking facilities.

The purpose of this report is to detail a traffic plan for construction that would minimise traffic impacts on the surrounding road network, ensure the safety and efficiency of all workers, pedestrians and road users, and provide information regarding the 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 changes to this plan shall be done in consultation with Fairfield Council (Council). Any special events (if required) would be subject to a separate request for a specific permit not covered by this report.

Please note, Ason Group is responsible for the preparation of this Plan only and not for its implementation, which is the responsibility of the project manager / builder.

1.2 CTMP Compliance with Draft Condition of Consent

A summary of the relevant requirements of the conditions of consent and this CTMP's compliance with each is provided below for clarity.

Table 1: Compliance Table

Reference	Requirement	Response
14	<i>Prior to the commencement of construction, the Applicant must prepare a Construction Traffic Management Plan for the development to the satisfaction of the Planning Secretary. The plan must form part of the CEMP required by condition C2 and must:</i>	

Reference	Requirement	Response
a	<i>be prepared by a suitably qualified and experienced person(s);</i>	Consultants from Ason Group are suitably qualified traffic engineers, including having the required "Prepare a Work Zone Traffic Management Plan" accreditation.
b	<i>be prepared in consultation with Council</i>	Consultation with Council for this specific site has not been formally undertaken at this time. A draft copy of this report shall be submitted for as part of the consultation process
c	<i>detail the measures that are to be implemented to ensure road safety and network efficiency during construction</i>	A review of the crash statistics has been undertaken and outlined within Section 1.1 in order to ensure there is not existing safety issue that the works may exacerbate.
d	<i>detail heavy vehicle routes, access and parking arrangements;</i>	Heavy vehicle access routes, and parking arrangements have been assessed within Section 3.1 of this report.
e	<i>include a Driver Code of Conduct to:</i>	A Driver Code of Conduct has been prepared to address, minimise and ensure that drivers travelling to and from the Site do so in a manner that minimised impacts to the wider road network. A copy of the Code of Conduct can be found within Appendix A.
	<i>(i) minimise the impacts of earthworks and construction on the local and regional road network;</i>	
	<i>(ii) minimise conflicts with other road users;</i>	
	<i>(iii) minimise road traffic noise; and</i>	
	<i>(iv) ensure truck drivers use specified routes;</i>	
f	<i>include a program to monitor the effectiveness of these measures; and</i>	Section 4.1 of this report outlines measures to monitor the effectiveness of this report.
g	<i>if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.</i>	Section 4.2 of this report outlines procedures for neighbouring properties of any potential disruptions.
15	<i>The Applicant must:</i>	
a	<i>not commence construction until the Construction Traffic Management Plan required by condition B14 is approved by the Planning Secretary; and</i>	noted
b	<i>implement the most recent version of the Construction Traffic Management Plan approved by the Planning Secretary for the duration of construction.</i>	noted
16	<i>The Applicant must provide sufficient parking facilities on-site, including for heavy vehicles and for site personnel, to ensure that traffic associated with the development does not utilise public and residential streets or public parking facilities.</i>	Ample parking opportunities shall be provided to all contractors on site, and can be seen within the TCP within Appendix B

- Westlink M7 Motorway:

The M7 Motorway is a high capacity road link of state significance and was built to accommodate future traffic growth in the western Sydney region. The M7 Motorway provides a key north-south link between the M2 motorway in the north and the M5 motorway to the south. A major interchange between the M7 motorway and M4 Western motorway is located approximately 3km north of the Austral Site, which connects the Sydney CBD with Western Sydney. The M7 Motorway carries 4 trafficable lanes with a divided carriageway. The M7 Motorway has a posted speed limit of 100km/h and currently carries approximately 70,000 vehicles per day (vpd).

- Ferrers Road

Ferrers Road is a sub-arterial road that runs in a north-south direction to the immediate east of the Plant 2 Site between The Horsley Drive and Brabham Drive. The two-lane, undivided road has a posted speed limit of 60km/h and currently carries approximately 15,000vpd in the vicinity of the Plant 2 Site.

- Wallgrove Road

Wallgrove Road is an arterial road that runs in a north-south direction to the west of the Austral Site and parallel to the M7 motorway. The four-lane, two-way road provides a link between the Great Western Highway and Elizabeth Drive. As with the M7 Motorway, Wallgrove Road connects to the M4 Motorway approximately 3 kilometres to the north of the Austral Site. Wallgrove Road has a posted speed limit of 70 km/h in the vicinity of the Austral Site, and currently carries approximately 30,000vpd.

- Austral Bricks Access Road (the Access Road)

The Access Road is a road that runs in an east-west direction between Ferrers Road in the east and Wallgrove Road in the west. The Access Road is generally constructed as a two-lane undivided carriageway with a clear width of approximately 6.0 – 7.0 metres. For the majority of its length, the Access Road is a private road owned by Austral Bricks, and there are a series of traffic calming devices on the road to deter through traffic and reduce vehicle speeds within the Austral Site. It is noted that the western end of Access Road (generally between the M7 Motorway and Wallgrove Road) is a public road, though there is little if any public demand.

- Intersection of Access Road & Ferrers Road

The intersection of Access Road & Ferrers Road provides a priority (Give Way) T intersection with no auxiliary lane infrastructure. Vehicle trips generated by the Plant 2 Staff utilise this intersection (and then Ferrers Road) to access the sub-regional road network.

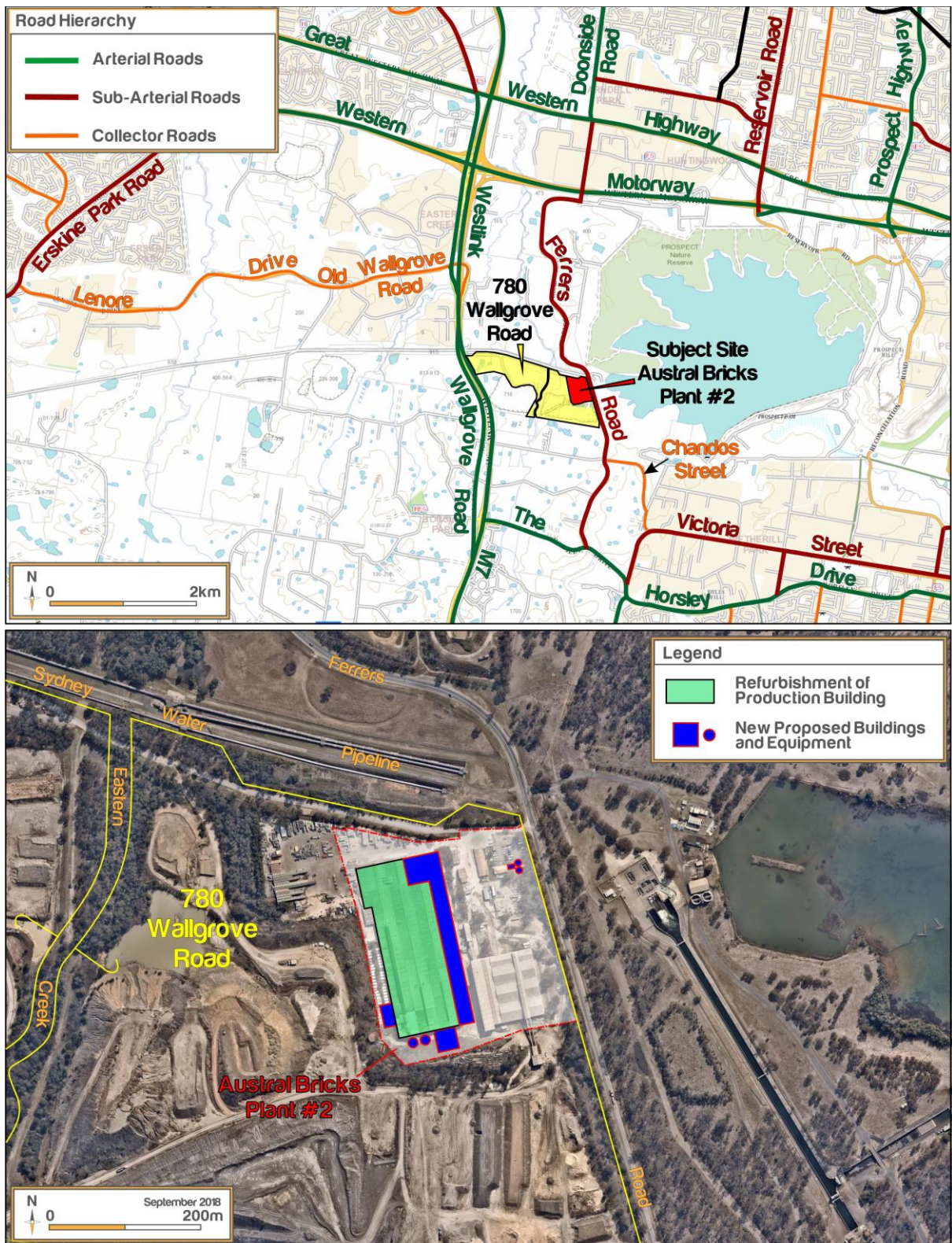


Figure 2: Site Context and Road Hierarchy

1.5 Crash History

A review of the TfNSW crash database has been undertaken to establish the crash history within intersection of Ferrers Road and the Access Road. The results indicate no crashes over the last five-year period, therefore suggesting there is no safety issue in relation to this intersection.

1.6 Non-Car Access

1.6.1 Existing Public Transport

The *Integrated Public Transport Service Planning Guidelines, Sydney Metropolitan Area* (Transport for NSW (TfNSW), December 2013), states that public transport services influence the travel mode choices of areas within 800 metres walk (approximately 10 minutes) of a train station.

Currently, the Site's proximity to public transport is shown in Figure 3, which highlights the locations and distances to bus services surrounding the Site. The site is serviced by the:

- 738 route, connecting Mt. Druitt Railway Station to Eastern Creek and Horsley Park, and
- 835 route, connecting St. Mary's Railway Station to the Prairiewood T-Way Station.

These services operate every 30 minutes during morning and evening periods, Monday to Friday.

1.7 Cycle Paths

Cycle networks surrounding the site are also shown on Figure 2. In this regard, the Westlink M7 Shared Path runs along the western boundary of the site. The shared path connects Prestons and Baulkham Hills, running through employment areas such as the Norwest Business Park and Eastern Creek. The path is separated from vehicular traffic improving safety for cyclists and pedestrians. In addition, other cycleways and shared paths connect to the M7 Shared Path, such as the Elizabeth Drive Shared Path. These provide the site with reasonable bicycle access to locations such as Rooty Hill, Liverpool and Cecil Hills.

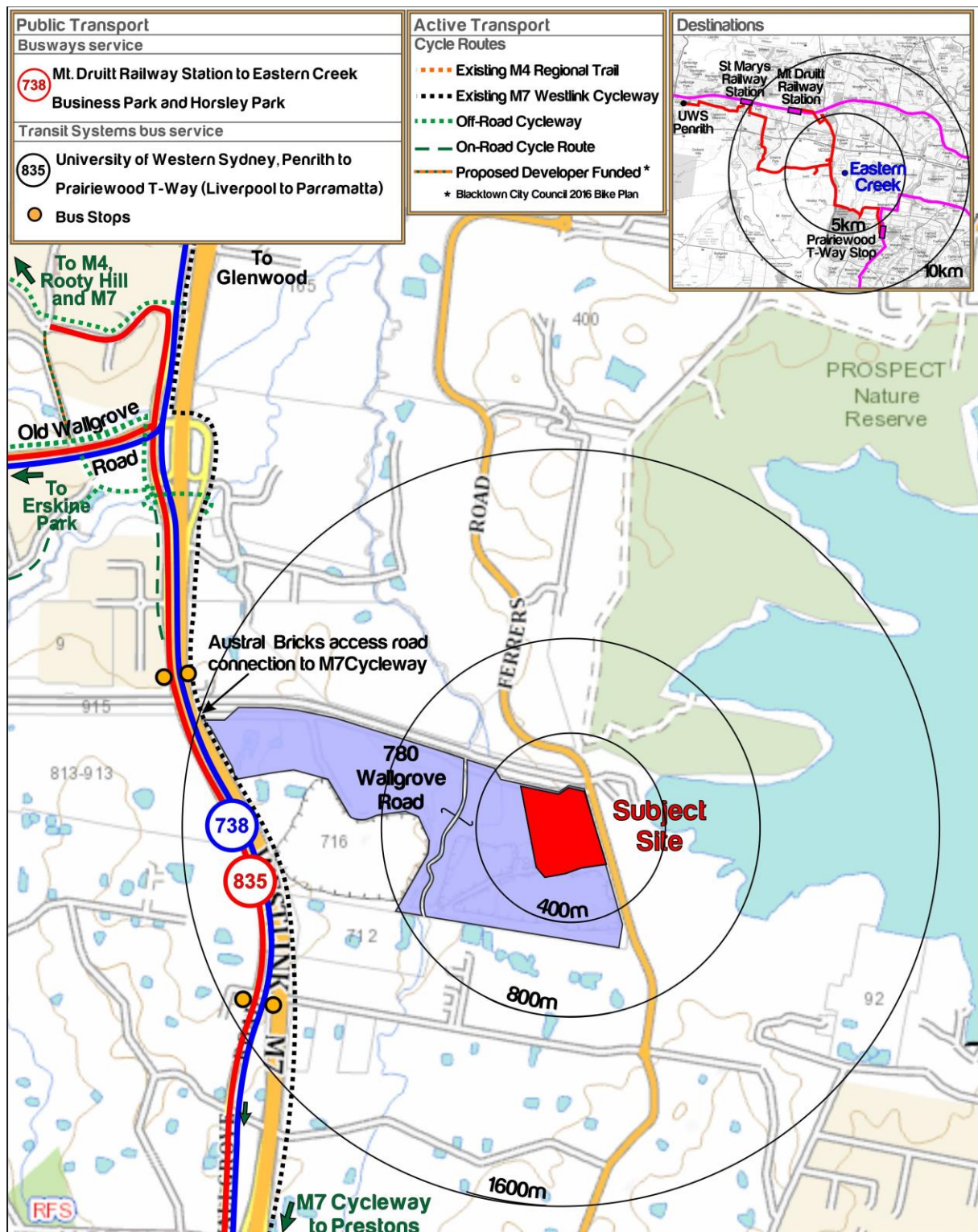


Figure 3: Public Transport Services & Cycleways

2 Overview of Works

2.1 Staging and Duration of Works

Recognising the purpose of this CTMP, it is estimated that the total duration of the construction works will be approximately 2 years from the commencement date.

For these works, the following summarises key aspects of the construction stages:

- Demolition works are set begin in August 2020 and continue for 5 months.
- Excavation is estimated to begin September 2020 and to continue for 5 months.
- General Construction and Concrete Pours are estimated to begin in November 2020 and to continue for 12 and 18 months respectively. Peak construction activities are expected to occur during this stage of works.
- External Finishes are expected to begin April 2021 and continue for 6 months.

2.2 Hours of Operation

All works will be undertaken within the approved work hours, as follows:

- Monday to Friday (other than Public Holidays): 7:00am – 6:00pm.
- Saturday: 8.00am – 1.00pm
- Sunday & Public Holidays: No works to be undertaken.

2.3 Proposed Site Access

The Access Road is a private road that runs in an east-west direction between Wallgrove Road and Ferrers Road. This two-lane bidirectional road is suitable to service the B-Double trucks currently accessing the site, with 3.5 m lane widths. Modifications to the road are limited generally to the construction of a new driveway on the eastern portion of the Access Road to provide access for employees and hauling vehicles to the new facility.

Construction vehicles will enter and exit the Site via a newly created entrance to the west of Plant 2. The largest vehicle accessing the Site will be a 19.6m Truck and Dog. Appendix C demonstrates that Truck and Dogs can exit site without crossing the centreline of Ferrers Road.

During this time, pedestrians attempting to cross the Site's access are to be managed through signage, pedestrian barriers and traffic controllers.

Emergency vehicle access to and from the Site will be available at all times while the Site is occupied by construction workers. This process shall be implemented through emergency protocols on the site which will be developed by the Contractor.

2.4 Construction Vehicle Access Routes

The routes shown are to be utilised by all construction vehicles travelling to and from the site and represents the shortest route available - hence minimising the impacts of the construction process.

Noting the above, the identified construction routes to and from the site shall utilise the Ferrers Road from the North. All construction vehicles shall enter and exit the Site via the routes shown Figure 5. A copy of the approved routes will be distributed by the Contractor to all drivers before their arrival to Site.

Further to this, it is important to consider the RMS' approved routes for 26m B-double vehicles. Figure 4 details the heavy vehicle restrictions for the area surrounding the Site as displayed in the Restricted Access Vehicle (RAV) map:

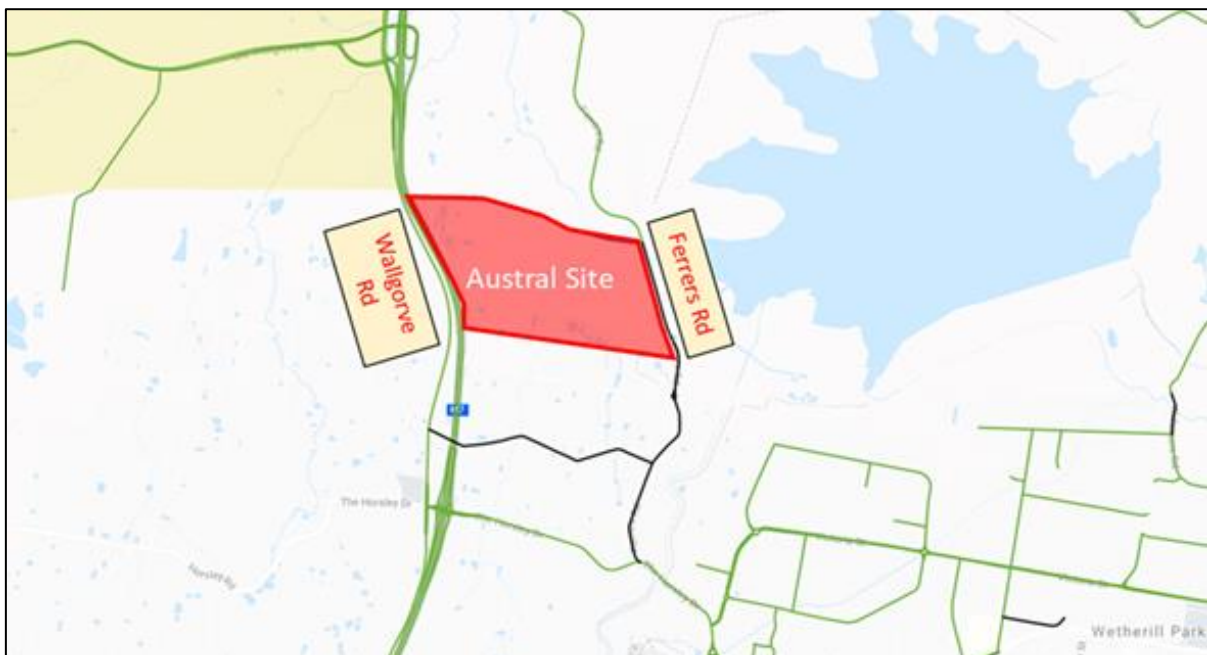


Figure 4: RMS Approved B-Double Route Map

Ferrers Road does allow for larger GML and CML vehicles (19.m – 26m B-doubles) until the access into the Austral Site – this is highlighted in green in the image below. The black line along Ferrers Road indicates that these trucks can drive along that specific section of Ferrers road in a southbound direction only and encompasses Ferrers Road from the Austral Site access to The Horsley Drive.

Any oversized or over-mass vehicles travelling to and / or from the Site will be required to obtain a permit from Transport for NSW (TfNSW) and / or the National Heavy Vehicle Register (NHVR). A separate application would be submitted to Council if required. Notwithstanding, this CTMP relates to general construction which does not seek the use of oversize vehicles.

All construction vehicles associated with the construction project will enter and exit the Site in a forward direction. Swept paths (attached in **Appendix C**) demonstrate critical turns at nearby intersections as outlined within Figure 5

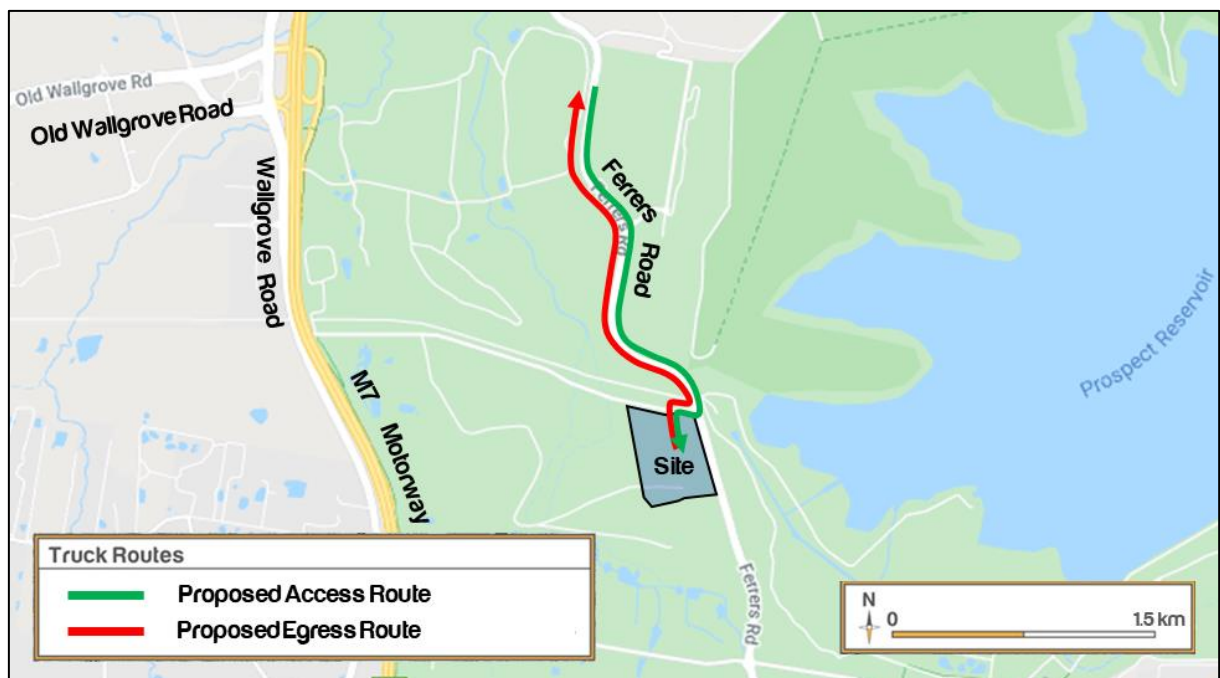


Figure 5: Construction Vehicle Route

2.5 Fencing Requirements

Security fencing will be erected along the entire boundary of the site and will be maintained for the duration of the construction program. The fencing is to ensure unauthorised persons are kept out of the Site. Access gates shall be provided along the Access Road and will be closed at all times outside of the permitted construction hours.

2.6 Work Zone

As all works are expected to occur completely within site, there is no requirement for a Work Zone.

In the event that a Work Zone is required, then prior approval shall be sought from Council.

2.7 Materials Handling

All material loading shall occur within the construction site boundary. Equipment, materials and waste will be kept within the construction site boundary. Should materials handling be required from the public roadway then prior approval shall be sought and obtained from Fairfield City Council.

2.8 Site Management

Site management will be required to notify adjacent properties of any temporary traffic restrictions and measures being implemented at least 14 days in advance.

Some works may be required within the roadway during the external finishes stage. These works would most likely be undertaken at night or during off peak periods to limit interaction with peak traffic conditions along Ferrers Road.

Any Traffic Control measures necessary for these works will be submitted to Council for approval and 14 days' notice would be provided to adjoining property owners as required by Council.

2.9 Site Plan

Figure 6 provides the layout for the Site during the construction period and illustrates the main Site accesses to be used and the location of the internal roads and offices.

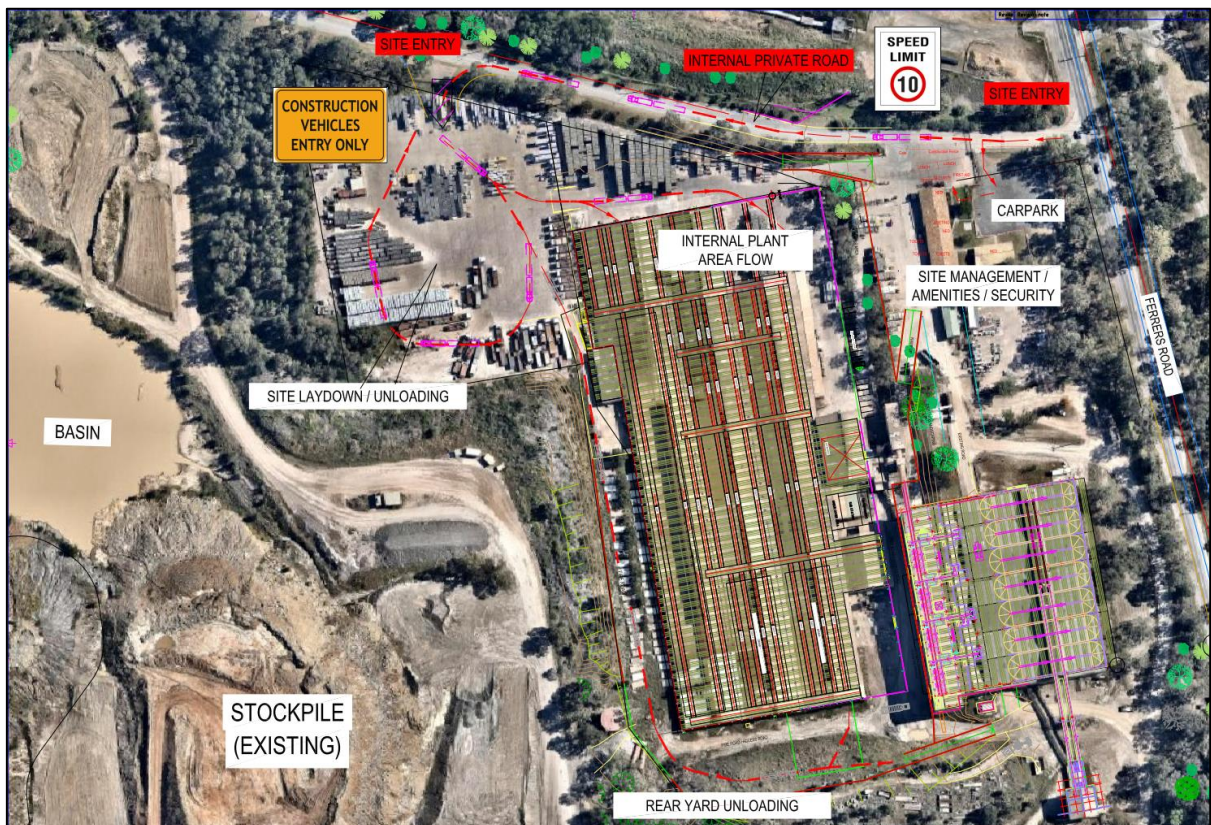


Figure 6: Site Plan

3 Assessment of Traffic & Transport Impacts

3.1 Construction Vehicle Traffic Generation

3.1.1 Truck Movements

Information provided by Austral Bricks indicates the following breakdown of truck movements;

Table 2: Truck Movement Overview

Stage	Demolition	Excavation	General Construction	Concrete Pours	External Finishes
Truck Frequency (Movements Per Day)	10	16	44	20	20
Largest Vehicle Size	MRV / Bins / Cranes	Truck & Dog	Truck & Dog	HRV	Tuck & Dog

An estimated 44 truck movements a day can be converted to an average of 4 trucks movements an hour (2 in and 2 out).

It is understood that peak volumes would be associated with general construction works. During this peak period, trucks are expected to arrive and depart the Site between the hours of 7:00am – 6:00pm. Austral Bricks indicates that a peak of 4 truck movements per hour will occur during the concrete pour's activities (2 in & 2 out). This relates to average movements noting there may be occasions when some increase in volumes are required for concrete pours.

3.1.2 Light Vehicle Movements

In relation to light vehicle movements, it is anticipated that a maximum of 120 movements per day would be expected during the general construction stage. These movements will be divided equally between morning and afternoon peaks where contractors arrive and depart the Site respectively, with an additional 20 movements for lunch time movements, visitors and other miscellaneous movements.

Parking spaces for employees / contractors are to be provided on-site. Notwithstanding, contractors are encouraged to carpool, thereby further reducing parking demands and traffic movements as far as practicable. The Site's accessibility to public transport is discussed in Section 3.5.

3.1.3 Traffic Impact

It is expected that an additional 50 vehicles shall arrive and depart during a 3-hour period in the morning and afternoon peaks.

Noting the relatively small existing volumes for the turning movements into and out of the access road, as well as the minor increase volumes as a result of the construction vehicles, it is not expected that the increased construction traffic shall have a material impact on the existing operations within the wider road network.

3.2 Vehicle Management

3.2.1 Principles

In accordance with TfNSW requirements, all vehicles transporting loose materials shall 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.

All drivers employed by Austral Bricks and drivers employed by the primary contractor will be familiar with the Code of Conduct. Other drivers including delivery drivers will be controlled by a staff member who is familiar with the Code of Conduct, from the time the driver arrives at the boom gate entry to the site until the time they leave the site. Driver who do not follow the strict guidelines established by Austral Bricks will be banned from the site. A copy of the Code is included in Appendix A.

Further to covering/securing the load to prevent deposits onto the roadway, The stabilised site access and truck wash down area (Blue Book SD 6-14) shown in the AT&L erosion and sedimentation control plans shall be installed at the point of vehicle egress to minimise the risk of dirt tracking out onto Ferrers Road. Responsibility to ensure that the device is driven over would be included as part of the Driver Code of conduct.

Austral Bricks will induct all contractors and subcontractors so that they clearly understand all the Work Health and Safety (WHS) requirements required on the Plant 2 Upgrade site. Part of these WHS requirements include the procedures 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 will not be obstructed by any materials, vehicles, refuse skips or the like, under any circumstances.

3.2.2 Queuing

A schedule for deliveries of materials and goods will be established prior to that day, thus, at no stage shall queueing occur on the public road network.

In the event that vehicles are required to use a layover prior to arrival to site, it is expected that all vehicles could utilise the access road within the Site prior to entering the Plan 2 Site, ensuring that no queuing occurs on surrounding public roads.

3.3 Contractor Parking

As previously mentioned, parking will be provided within the Site. Contractors shall be encouraged to carpool where possible. However, for those Contractors that still wish to use private vehicles, then there is sufficient space available for contractors to utilise within the Site.

Furthermore, all construction workers should be shown the NSW governments *Travel Choices*' website which is a free resource to help them make the best available choices with regards to public transport.

3.4 Pedestrian and Cyclist Access

The cycle network shall remain unaffected throughout the construction works, and therefore the combination of these paths provides the Site with good pedestrian and cycle accessibility.

3.5 Traffic Control

The RMS (TfNSW) guide "Traffic Control at Worksites" (TCAW) manual contains standard traffic control plans (TCPs) for a range of work activities. The manual's objective is to maximise safety by ensuring traffic control at worksites complies with best practice. The RMS TCAW outlines the requirements for a Vehicle Movement Plan (VMP) which has been outlined within Figure 5

A VMP shows 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.

It is proposed to implement the TCP's as shown in Appendix B which is a site-specific version of standard TCP 195.

3.6 Traffic Controllers

Austral Bricks will maintain a guard shack and boom gate at the entrance to the site off Ferrers Road. Any vehicle entering the site must first check in with the guard at the guard shack who will first get the vehicle details and then contact the appropriate traffic controller with respect to the delivery or other function that is being made. When the driver passes the boom gate they will be controlled by the relevant traffic controller until they leave the site. The guard shack will be manned during the entire time that the construction site is operating. Responsibilities include:

- Supervision of all construction vehicle movements into and out of the internal 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.

4 Monitoring and Communication Strategies

4.1 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. We note the following items to consider when developing the processes and tasks involved within monitoring the CTMP.

This CTMP shall be subject to ongoing review and will be updated accordingly. Regular reviews will be undertaken by the Austral Brick WHS Officer utilising the data collected at the guard shack. 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.

4.2 Communications Strategy

The communications strategy will outline the most effective communication methods to ensure adequate information within the community. If, in the unlikely event, that there might be some traffic changes these communication methods will be used to assist the project team to ensure minimal disruption to the road network.

All surrounding occupants shall be notified (by letterbox drop) of any work that is deemed disruptive to the surrounding network prior to commencement. Ongoing communication is also proposed so that all stakeholders are kept up to date of works and potential impacts.

Nearby properties that may be affected by the construction works shall be included within the communications strategy.

Appendix A

Drivers Code of Conduct

Safe Driving Policy for Austral Bricks construction activities.

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 project approved routes only

Code of Conduct

The code of conduct requires that while driving any vehicle for work-related purposes. Drivers are to be issued with a copy of the Drivers Code of Conduct, and must comply with all of the following:

- Demonstrate safe driving and road safety activities
- Abide by traffic, road and environmental legislations
- Follow site signage and instructions
- Drivers must only enter and exit the site via the approved entry and exit points and travel routes.

The below activities in any vehicles will be considered as a breach of conduct and will result in removal from site:

- Reckless or dangerous driving causing injury or death
 - Driving whilst disqualified or not correctly licensed
 - Drinking or being under the influence of drugs while driving
 - Failing to stop after an incident
 - Loss of demerit points leading to suspension of licence
 - Any actions that warrant the suspension of a licence
 - Exceeding the speed limit in place on any permanent or temporary roads
 - Turning right into Abbots Road from Mamre Road, or turning right out of Abbots Road into Mamre Road in direct contradiction to the approved traffic route.
-

Driver Responsibilities

All Drivers on site must:

- Be responsible and accountable for their actions when operating a company vehicle or driving for the purposes of work.
 - Display the highest level of professional conduct when driving a vehicle at all times.
 - Ensure they have a current driver licence for the class of vehicle they are driving, and this licence is to be carried at all times
 - Immediately notify their supervisor or manager if their drivers' licence has been suspended, cancelled, or has had limitations applied.
 - Comply with all traffic and road legislation when driving, including the adhering to any project specific road rules such as the no right turn out of or in to Abbotts Road.
 - Assess hazards while driving.
 - Undertake daily pre-start checks of oil, tyre pressures, radiator and battery levels of company vehicles they regularly used.
 - Drive within the legal speed limits, including driving to the conditions.
 - Not drive outside of the approved heavy vehicle routes. All drivers must obey weight, length and height restrictions imposed by the National Vehicle Regulator, and other Government agencies. Heavy Vehicles shall adhere to the routes outlined in Section 3
 - Be cognisant of the noise and emissions requirements imposed within the EIS, and in a broader sense, the NSW/ Australian Road Rules. Works must be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline.
 - Do not queue on public roads unless a prior approval has been sought.
 - Be aware that at no time may a tracked plant be permitted or required on a paved road.
 - Never drive under the influence of alcohol or drugs, including prescription and over the counter medication if they cause drowsiness – to do so will merit disciplinary measures.
 - All drivers to report to their supervisor if they have been prescribed medication prior to the start of work.
 - Wear a safety seat belt at all times when in the vehicle.
 - Avoid distraction when driving – the driver will adjust car stereos/mirrors etc. before setting off, or pull over safely to do so.
 - Report ALL near-misses, crashes and scrapes to their manager,
-

- Report infringements to a manager at the earliest opportunity.
- Report vehicle defects to a manager prior to the next use of the vehicle.
- Follow the approved site access/egress routes only.
- Follow speed limits as imposed within the estate.
- Keep loads covered at all times.

The Site Team Responsibilities

The Contractor is responsible to take all steps necessary to ensure company vehicles are as safe as possible and will not require staff to drive under conditions that are unsafe.

This will be achieved by undertaking the following:

- Ensuring all vehicles are well maintained and that the equipment enhances driver, operator and passenger safety by way of:
 - Pre-commencement checks for all new plant arriving on-site and prior to undertaking any work.
 - Daily prestart inspections for all plant, vehicles and equipment currently on-site.
 - All construction plant must be fitted with a flashing light, fire extinguisher and reverse alarms (or squawkers).
 - Ensure all operators onsite have a current verification of competency (VOC) for their current driver's licence of the appropriate class.
 - Ensure maintenance requirements are met and recorded.
 - Identify driver training needs and arranging appropriate training or re-training. This may include providing the below:
 - Operator VOC assessment as part of all inductions.
 - Regular Toolbox discussions on safety features, managing fatigue, approved heavy routes, driver responsibility and drink-driving
 - Encouraging Safe Driving behaviour by:
 - Ensuring the subcontractor is informed if their staff become unlicensed
 - Not covering or reimbursing staff speeding or other infringement notices
 - Ensuring Legal use of mobile phones in vehicles while driving only and that illegal use is not undertaken.
-

- Encouraging better fuel efficiency by:
 - Use of other transport modes or remote conferencing, whenever practical.
 - Providing training on, and circulating information about, travel planning and efficient driving habits.

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.

Environmental Procedures.

A range of measures shall be implemented to ensure the following;

- No dirt or debris from the construction vehicles is tracked on to the public road network.
 - Reduce the impacts to sensitive receivers, including, where practicable, starting noisy equipment away from sensitive receivers and implementing respite periods.
-

- Watering of dusty activities will be undertaken, or activities temporarily halted and then resumed once weather conditions have improved.
- Containment measures for spillages will be provided at appropriate locations and in close proximity to staff car park areas, dangerous goods stores areas and main Project work areas.
- All vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria, and
- Keep an accurate record which includes the range of measures undertaken to reduce environmental impacts.

Appendix B



Installed as per TCP and in accordance with any changes, as shown on TCP.

Team leader (on site):

Signature:

Date:

Ticket: Orange/Red/Yellow (Circle appropriate ticket):

Ticket No:

Reason for modification:

NOTES

Closure:
Trucks Turning

Client:
Austral Bricks

Project:
Job No: 1417
Address: 780 Wallgrove Rd, Horsley Park

Drawing Title:
1417-TCP-01- Austral Bricks, Horsley Park

Date:
17/07/2020

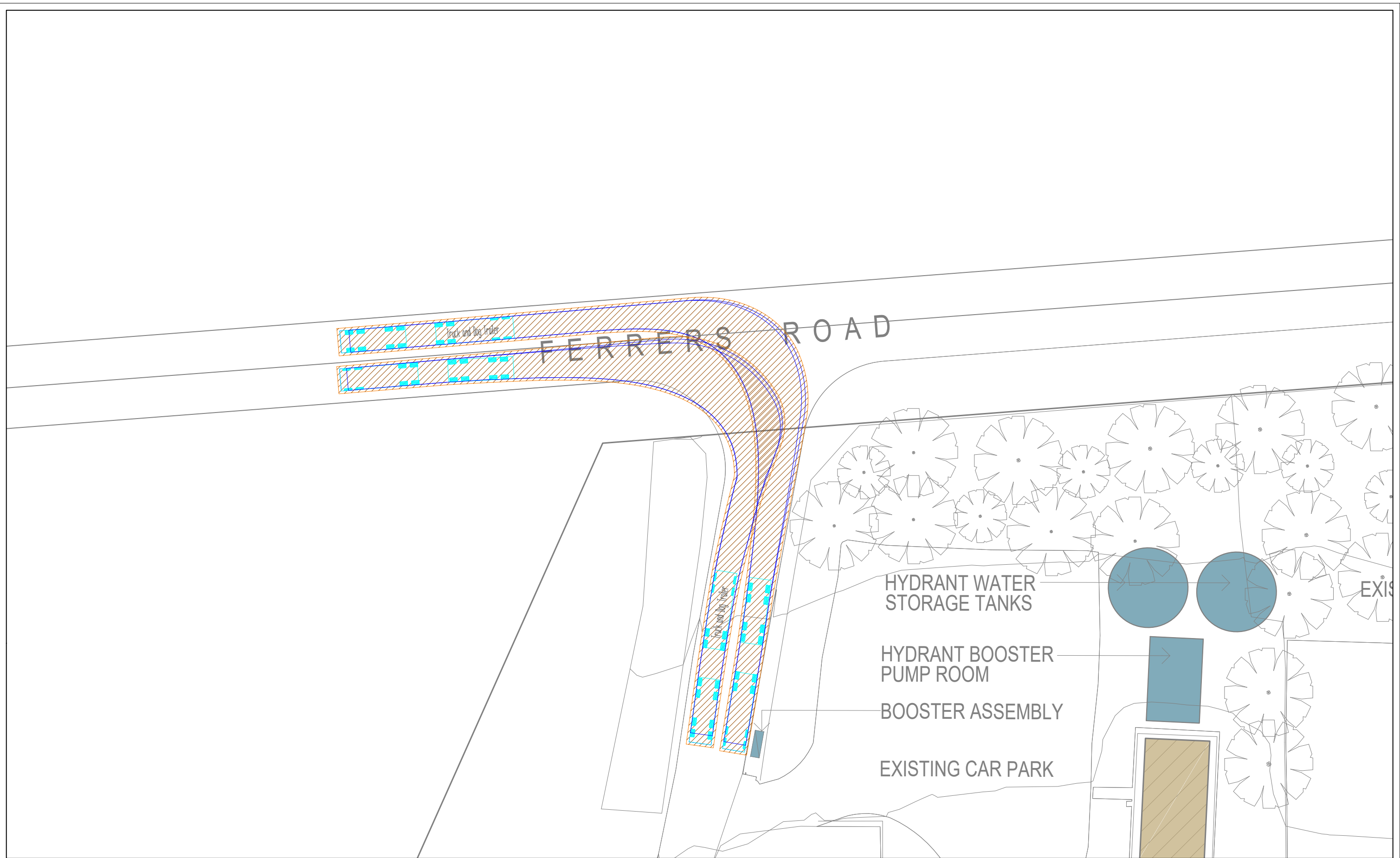
Scale @ A3:


Drawing Number:
AG.01

asongroup

DESIGNER: JAMES LAIDLER
CERT: 0052158569

Appendix C



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Truck & Dog

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02



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