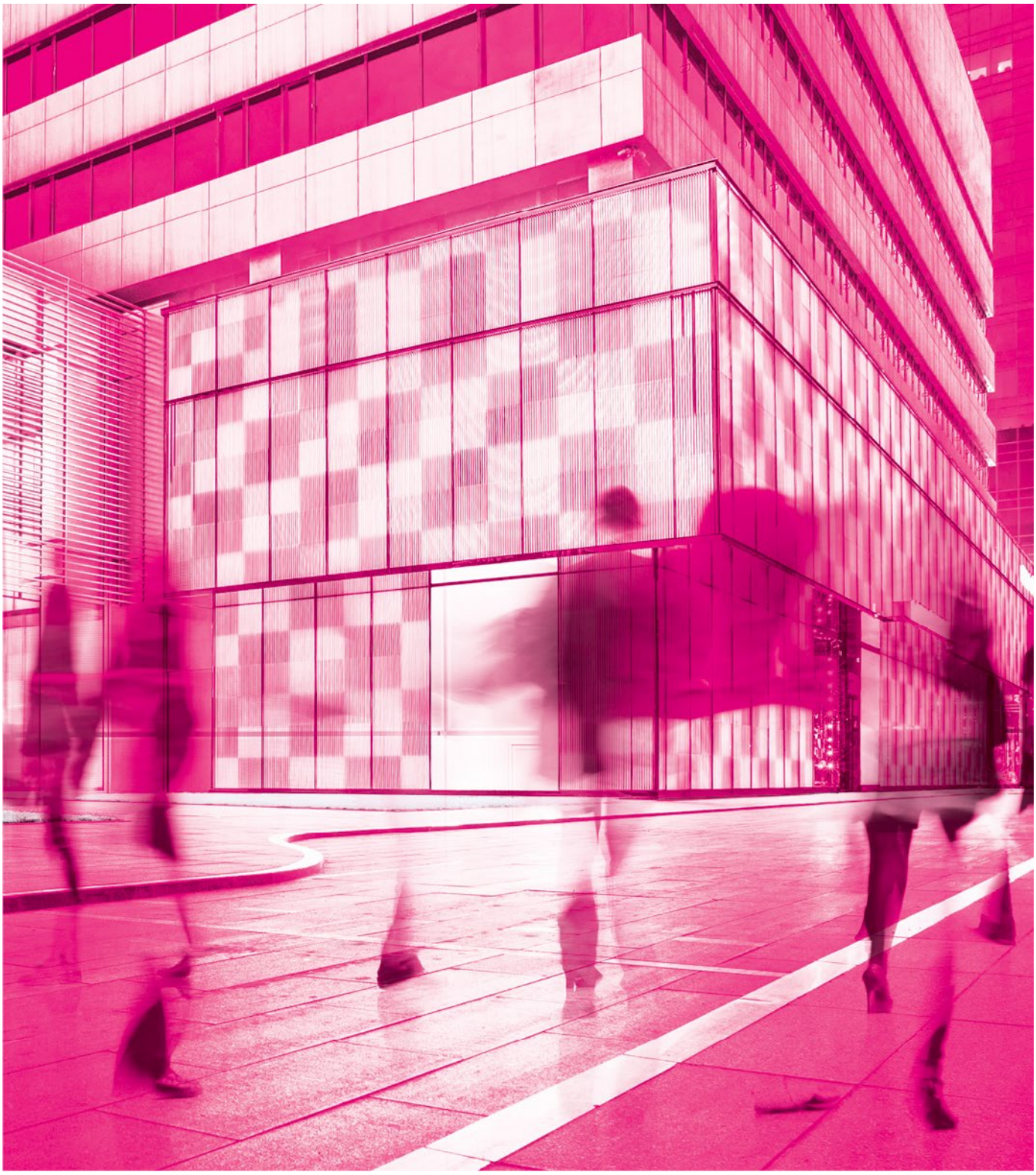

Construction Traffic Management Plan;

Hassall Street CTMP

For Gurner Sydney
29 March 2022

parking;
traffic;
civil design;
wayfinding;

ptc.

Document Control

Hassall Street CTMP, Report

Issue	Date	Issue Details	Author	Reviewed	For the attention of
1	16/02/2022	Draft CTMP	JAJ	DB	Michael Skala
2	18/03/2022	Draft Revision	JAJ	DB	Michael Skala
3	29/03/2022	Final	JAJ	DB	Michael Skala

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Contents

1. Introduction

1.1 Project Summary

ptc. has been engaged by Gurner to prepare a Construction Traffic Management Plan (CTMP) for submission to Transport for NSW and the City of Parramatta in relation to the Build to Rent development at 12 Hassall Street, Parramatta.

The site is approximately 170 metres to the east of the Parramatta Transport Interchange and on the eastern edge of the Parramatta Central Business District (CBD). Parramatta LGA has been divided into several strategic areas and this site sits within the strategic area identified as 'Parramatta City Centre'. The location of the subject site is outlined in Figure 1.1.

Figure 1.1 - Site Location (Source: MetroMap)

1.2 Site Context

12 Hassall Street lies in the Parramatta CBD district and is categorised as business mixed use (B4). The surrounding land uses are illustrated in Figure 1.2.

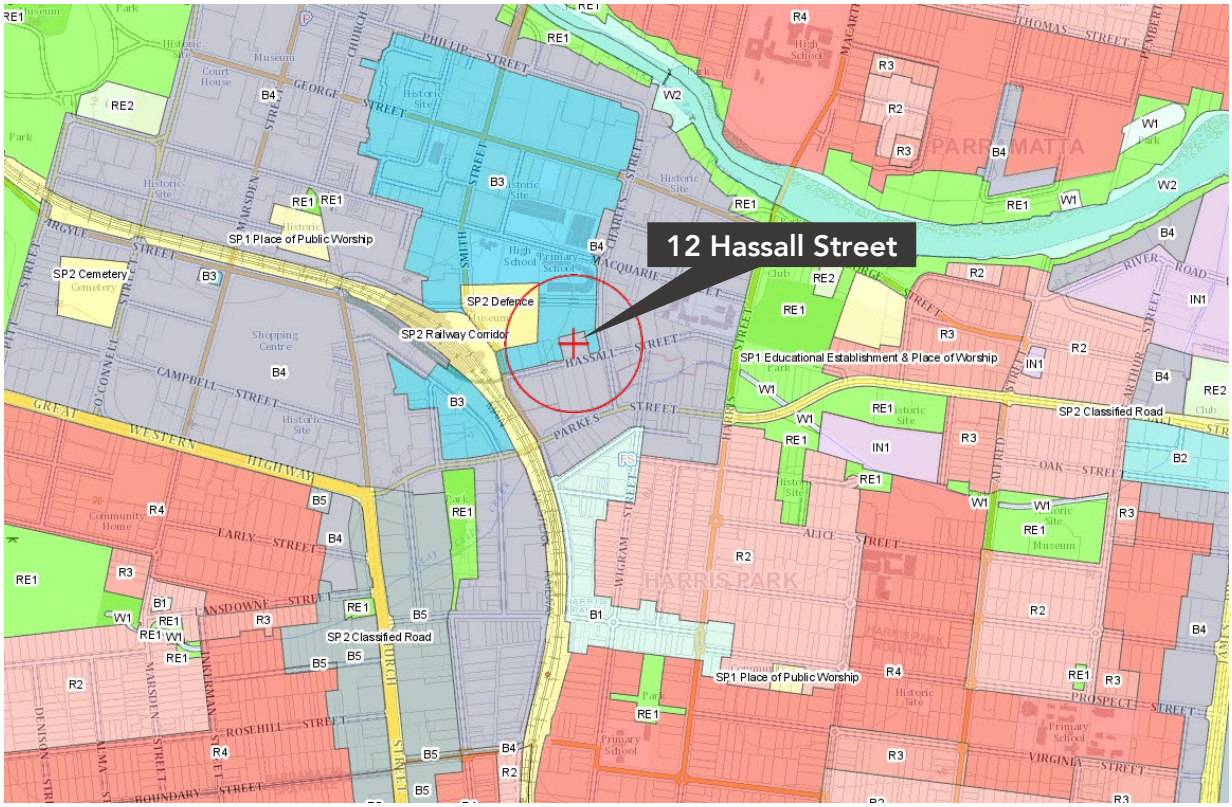

Figure 1.2 - Local Land Use Map (Source: NSW Planning Viewer)

1.3 Development Site

The proposed development relates to the site at 12 Hassall Street, Parramatta which is illustrated in Figure 1.2. The site has a land area of approximately 2000m² with a site frontage of approximately 30m along Hassall Street to the south.

Falling within the B4 Mixed Uses zone the site is in proximity to major shopping facilities, commercial office buildings, Parramatta Transport Interchange and public open spaces.

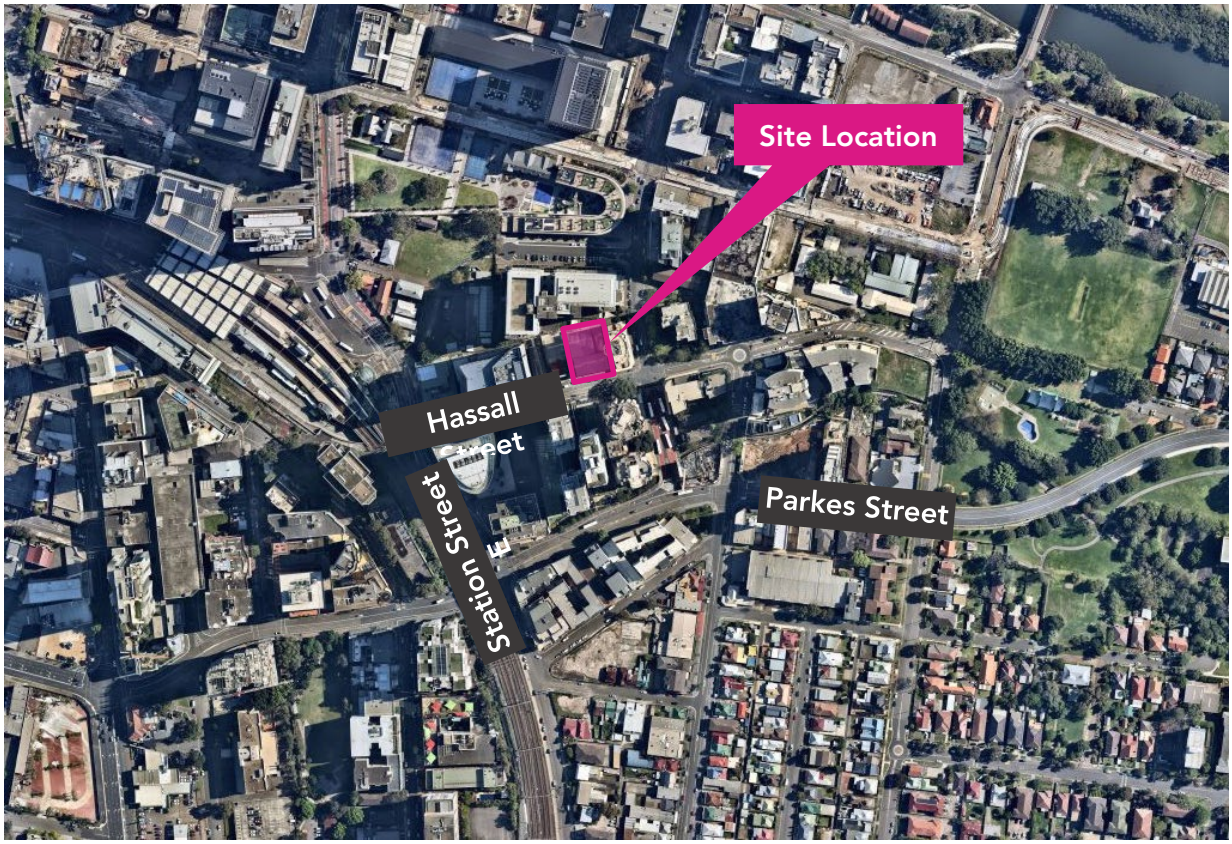

Figure 1.3 - Aerial View of Subject Site & Surrounds (Source: Nearmap)

1.4 Development Proposal

Delivering mixed commercial and retail spaces, residential units, and public and residential amenities, the development lies within a thriving collection of high-rise office towers, university buildings and mixed-use redevelopments. The development includes the demolition of the existing building and structures and the erection of a 61 storey mixed use building.

1.5 Purpose of this Report

This CTMP addresses the potential construction activity associated with the development at 12 Hassall Street, including:

- Location of any proposed Work Zones, site boundary, and any site office, crane locations, material and waste storage area and other components as necessary;
- Haulage routes;
- Construction vehicle access arrangements;
- A heavy vehicle swept path assessment, demonstrating feasibility of any proposed Works Zones or site access;
- Proposed haulage routes;
- Proposed construction hours;
- Estimated number of construction vehicle movements;
- Construction program;
- Any potential impacts to general traffic, cyclists, pedestrians, and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works; and
- Measures proposed to mitigate any associated general traffic, public transport, pedestrian, and cyclist impact.

2. Transport Environment

2.1 Road Hierarchy

12 Hassall Street is located in the City of Parramatta Local Government Area (LGA) and is serviced by a mix of state, regional and local roads as presented in Figure 2.1.

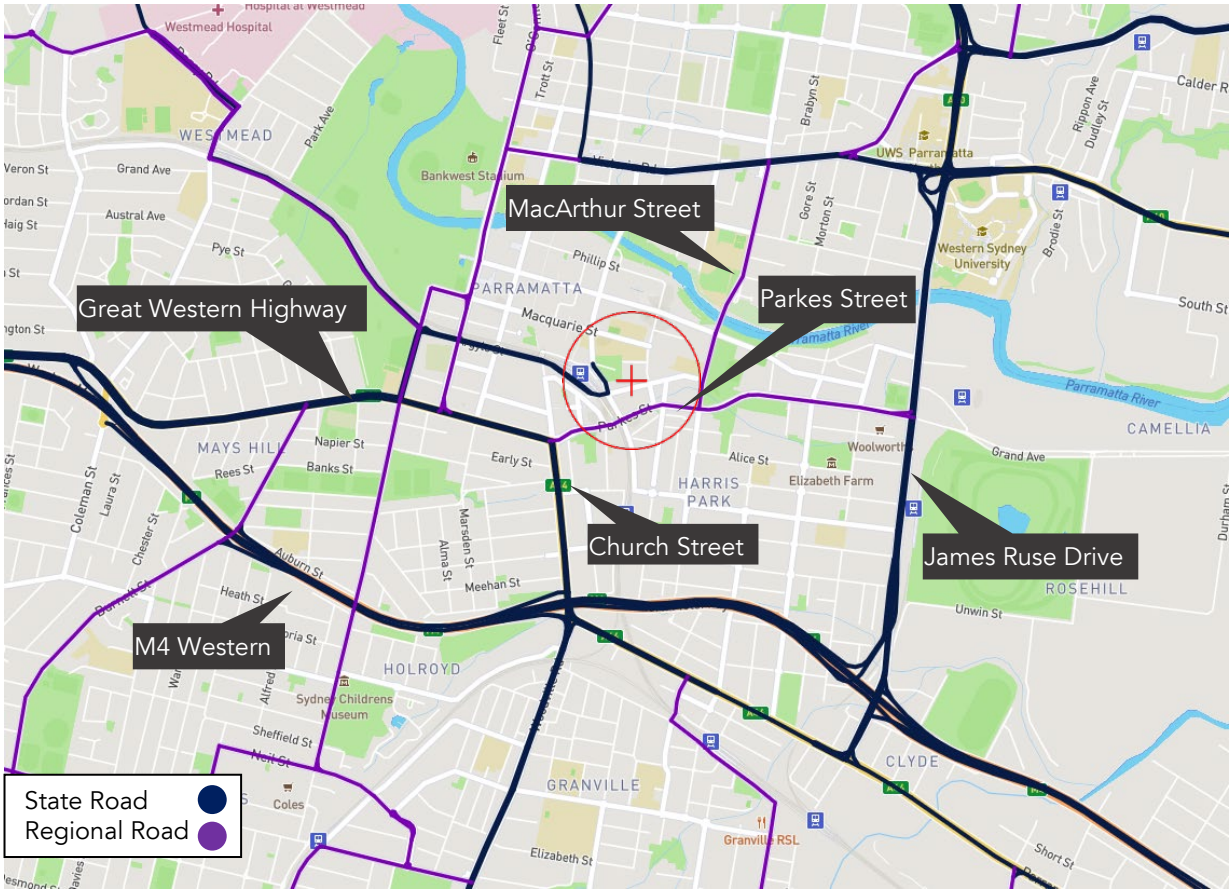

Figure 2.1 - Road Hierarchy (Source: TfNSW State and Regional Roads)

The NSW administrative road hierarchy comprises the following road classifications, which align with the generic road hierarchy:

- State Roads: Freeways and Primary Arterials (TfNSW managed);
- Regional Roads: Secondary or sub-arterials (Council managed, partly funded by the State);
- Local Roads: Collector and local access roads (Council managed).

Hassall Street	
Road Classification	Local Road
Alignment	East – West
Number of Lanes	1 each direction
Carriageway Type	Undivided
Carriageway Width	9.5m
Speed Limit	50km/hr
School Zone	No
Parking Controls	Timed and metered
Forms Site Frontage	Yes

Figure 2.2 - Hassall Street (Eastbound)

Charles Street	
Road Classification	Local Road
Alignment	North-South
Number of Lanes	1 lane each direction plus parking lane
Carriageway Type	Undivided
Carriageway Width	13m
Speed Limit	40km/hr
School Zone	Yes
Parking Controls	Timed and metered
Forms Site Frontage	No

Figure 2.3 – Charles Street (Southbound)

Station Street East	
Road Classification	State and Local Road
Alignment	North-South
Number of Lanes	1 each direction, with bus lanes
Carriageway Type	Undivided
Carriageway Width	9m
Speed Limit	40km/hr
School Zone	No
Parking Controls	Parking not permitted
Forms Site Frontage	No

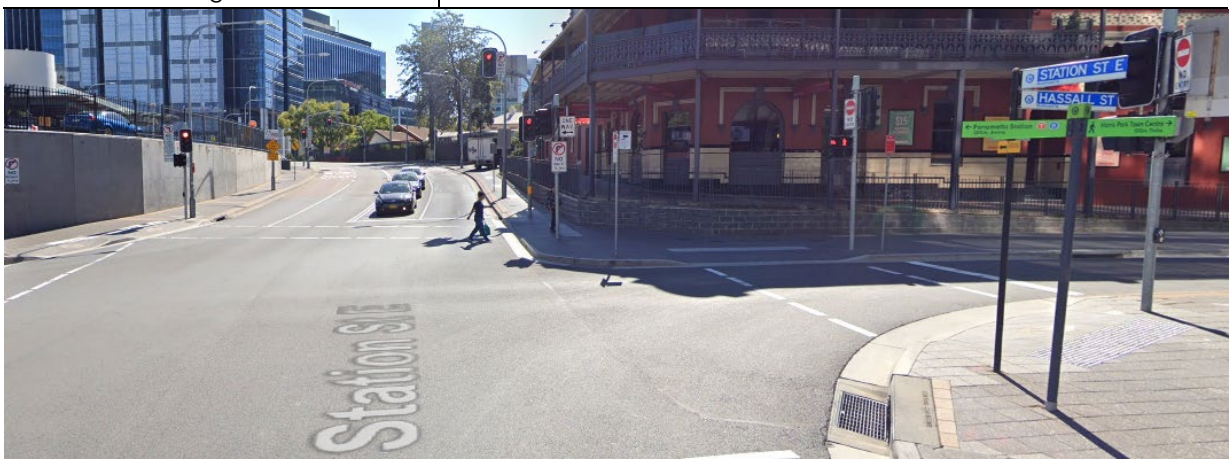

Figure 2.4 – Station Stret E (Northbound)

Wigram Street	
Road Classification	Local Road
Alignment	North – South
Number of Lanes	1 each direction
Carriageway Type	Divided into undivided
Carriageway Width	12m
Speed Limit	40km/hr
School Zone	Yes
Parking Controls	Timed and metered
Forms Site Frontage	No

Figure 2.5 - Wigram Street (Northbound)

Parkes Street	
Road Classification	Regional Road
Alignment	East-West
Number of Lanes	2 each direction
Carriageway Type	Divided into undivided
Carriageway Width	12m
Speed Limit	60km/hr
School Zone	No
Parking Controls	Parking not permitted
Forms Site Frontage	No

Figure 2.6 - Parkes Street (Westbound)

2.2 Key Intersections

The key intersections in the vicinity of the development site and their characteristics are listed below:

1. Hassall Street / Charles Street — 4-arm signalised intersection;
2. Hassall Street / Wigram Road — 3-arm roundabout;
3. Wigram Street / Parkes Street — 4-arm signalised intersection;
4. Parkes Street / Station Street East — 4-arm signalised intersection;
5. Parkes Street / Church Street / Great Western Hwy — 4-arm signalised intersection;

The key intersections are illustrated in Figure 2.7.

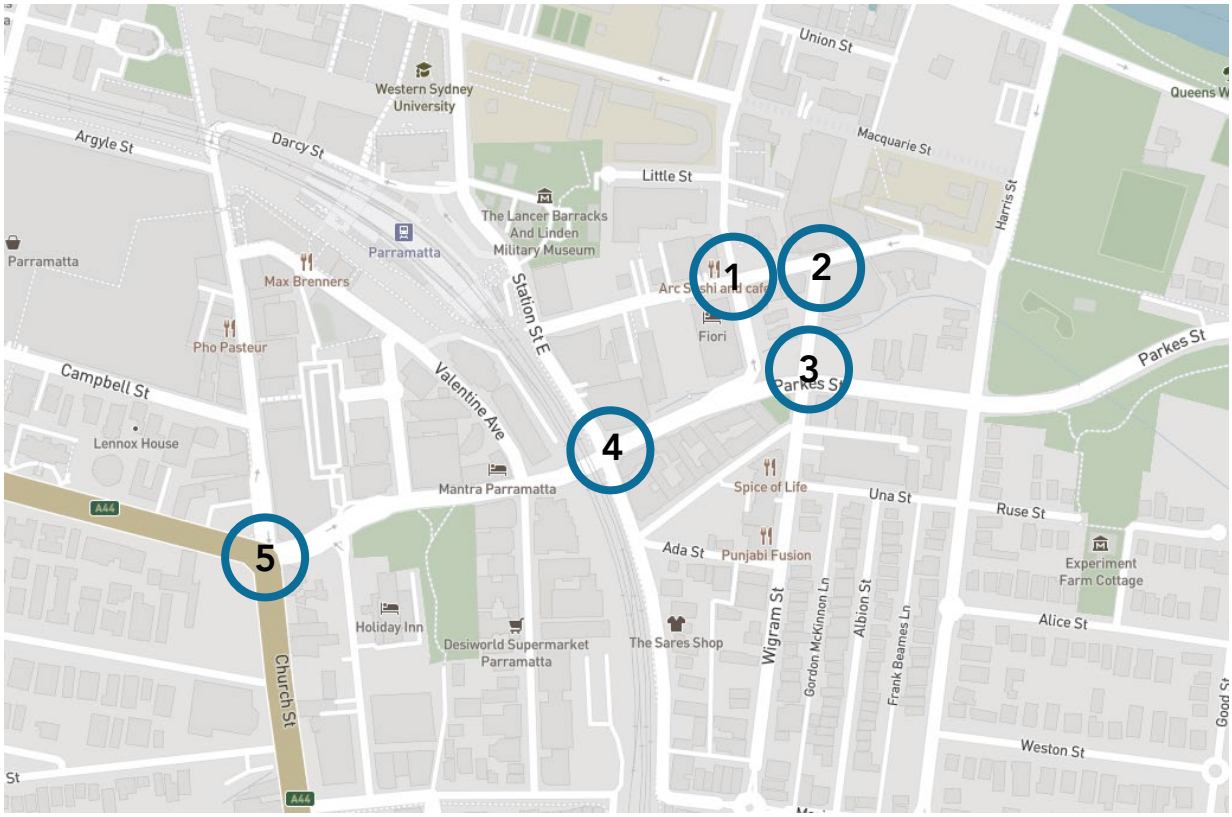

Figure 2.7 - Key Intersection Locations (Source: MetroMap)

2.3 Public & Active Transport

The locality has been assessed in relation to the available public transport options that may serve the various users of the subject development. This assessment considered the *NSW Planning Guidelines for Walking and Cycling (2004)*, which suggests that a distance of 400-800m is a walkable catchment and 1,500m is a suitable cycling catchment when the development is within proximity to public transport. Figure 2.8 presents the catchment within 800m radius of the site.

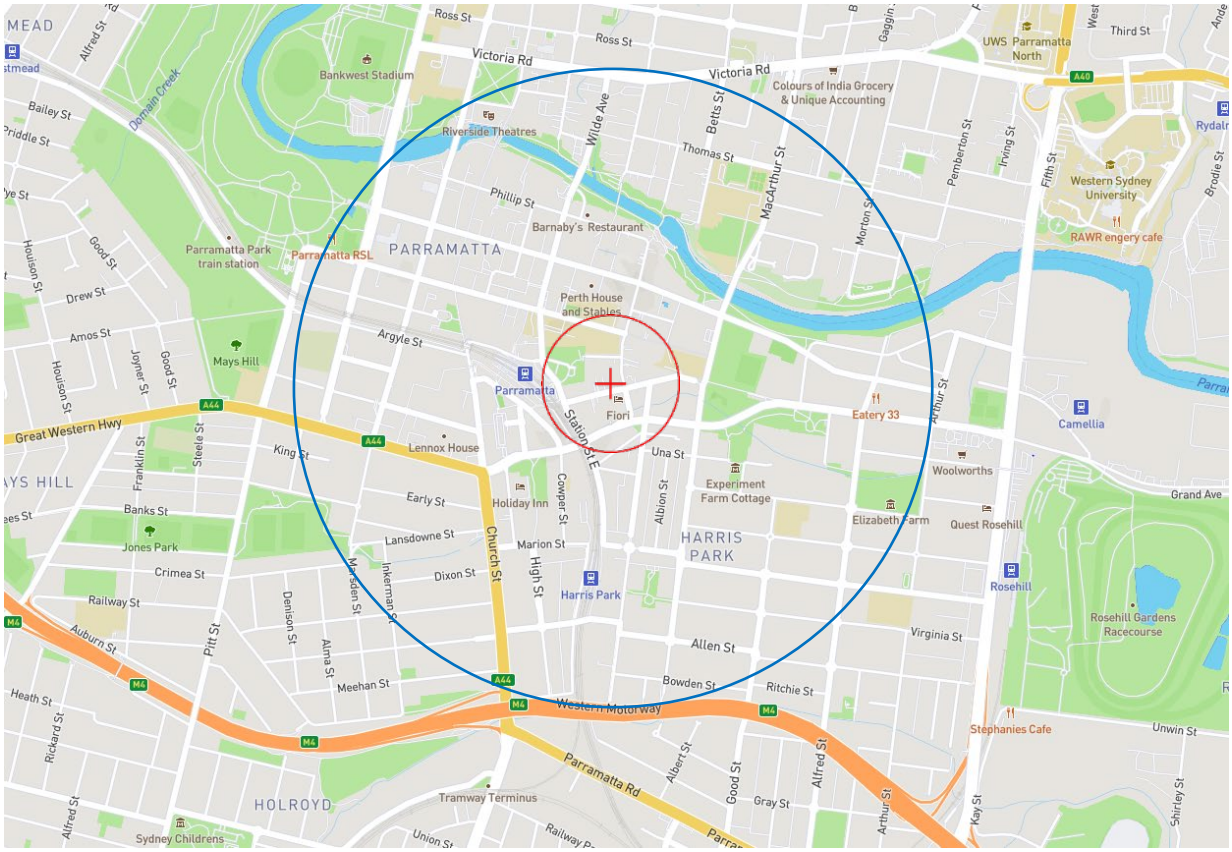

Figure 2.8 - 800m Walking Catchment surrounding the Subject Site

Given that the subject site is located near to the Parramatta CBD, there is abundant public transport facilities within close proximity, all of which provide high frequency services throughout each day, including train services, bus routes, ferry and light rail options, as outlined in the following sub-sections.

2.3.1 Bus

The site is serviced by the numerous bus services from Parramatta Station, within the 800m walking catchment. A summary of the available bus routes is illustrated in Figure 2.9.

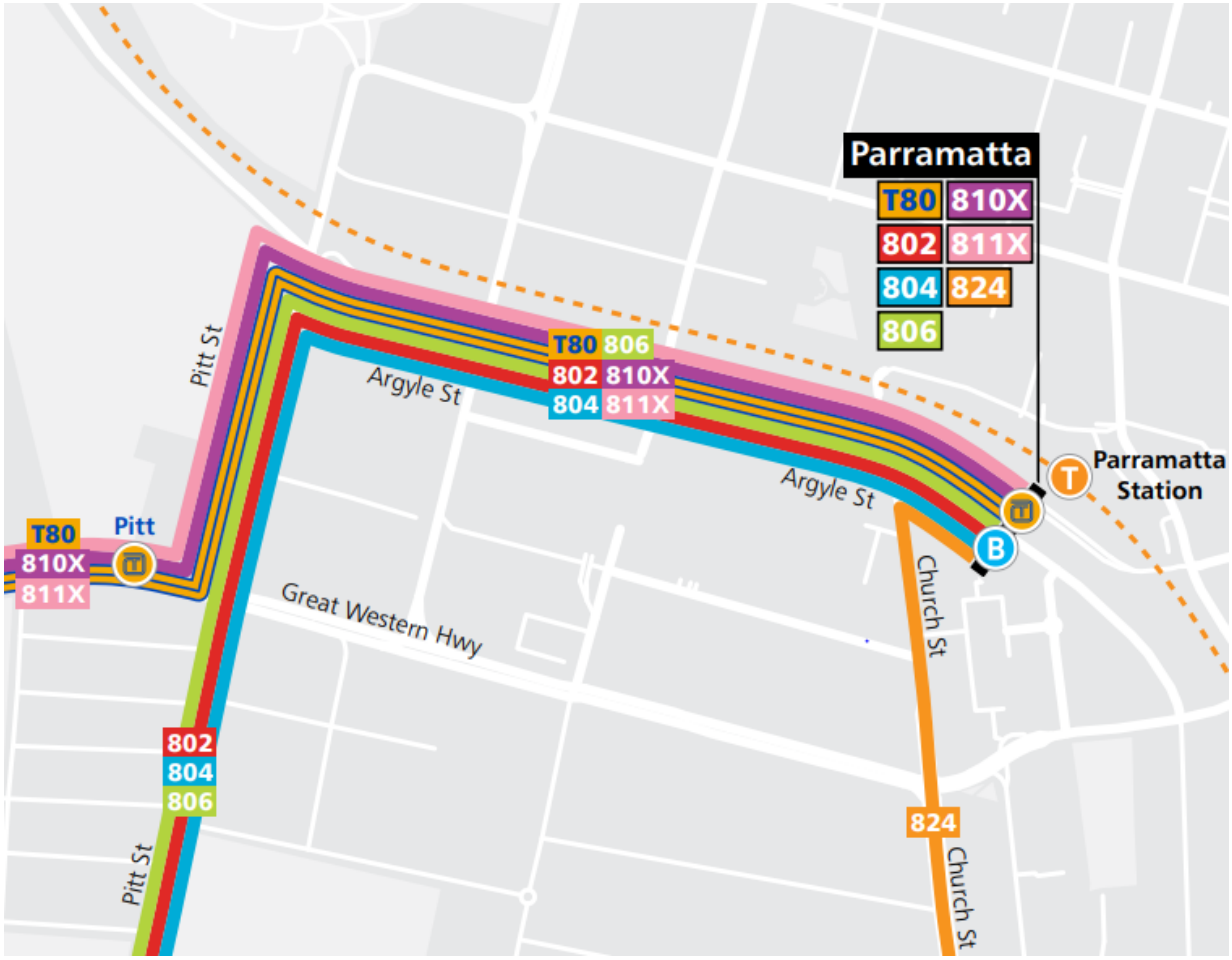

Figure 2.9 - Surrounding Bus Routes (Source: TfNSW)

Route Number	Coverage (to and from)	Frequency
T80	Liverpool to parramatta via T-Way	Every 10 minutes peak Mon-Fri Every 10-15 minutes Sat-Sun
810X	Parramatta to Merrylands via Pemulwuy	Every 10-20 minutes in PM peak Mon-Fri Every 60 minutes off peak Mon-Sun
802	Parramatta to Liverpool via Guildford West	Every 20-30 minutes peak Mon-Fri Every 30 minutes Sat-Sun
811X	Parramatta to Pemulwuy via Beresford Rd	Every 30 minutes peak Mon-Fri Every 60 minutes off peak Mon-Sun

804	Parramatta to Liverpool via Fairfield West	Every 15-30 minutes Mon-Fri Every 30 minutes Sat-Sun
824	Parramatta to Westmead Hospitals	Every 30 minutes Mon-Sun
806	Liverpool to Parramatta via Abbotsbury	Every 30 minutes Mon-Sat peak Every 60 minutes Sundays

2.3.2 Train

The site is located 200m (4 minutes' walk) from Parramatta Station. The station provides access to train services connecting to the Sydney Metropolitan area, providing frequent services seven days a week.

A summary of the train services operating at Parramatta Station is presented in Table 2.1.

Table 2.1: Summary of Train Services at Parramatta Station

Train Line	Station	Coverage (to and from, and vice versa)	Approximate Frequency
T1	Parramatta	City to Emu Plains or Richmond via Parramatta	Every 3-6 minutes during peak hours Every 5-10 minutes during off-peak
T2	Parramatta	Parramatta to City	Every 10-15 minutes during peak hours Every 20-30 minutes during off-peak
T5	Parramatta	Leppington to Richmond via Parramatta	Every 30 minutes

In summary, the train services at Parramatta Station are frequent and provide excellent connection throughout the broader Sydney Trains network, as shown in Figure 2.10.

Figure 2.10 - Sydney Trains Network Map

2.3.3 Ferry

The development site is 500m walking distance from Parramatta Wharf. Due to the proximity of the ferry wharf, it is anticipated that the ferry services provide a convenient transport option for construction workers, site employees and visitors. The Parramatta Wharf provides access to Circular Quay. Figure 2.11 presents the layout of the ferry service areas.

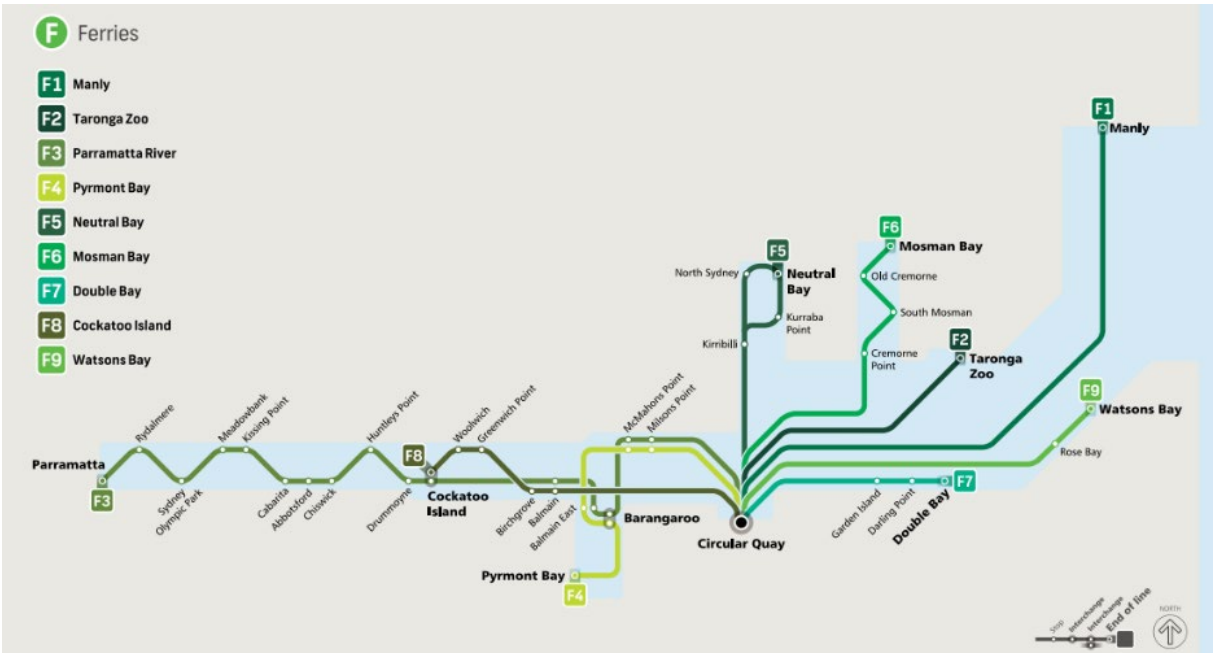

Figure 2.11 - Ferry Service Map

A summary of the ferry services is presented in Table 2.2.

Table 2.2: Summary of Ferry Services

Route No.	Coverage	Frequency
F3	Parramatta Wharf to Circular Quay	Every 60 minutes at peak from Mon-Sun

2.3.4 Light Rail

A new light rail network in the Parramatta area is expected to open in 2023 and will provide further connection from Parramatta to surrounding Sydney. A station on Macquarie Street will be approximately 550m from the site.

The intended Parramatta Light Rail network map is illustrated in Figure 2.12.

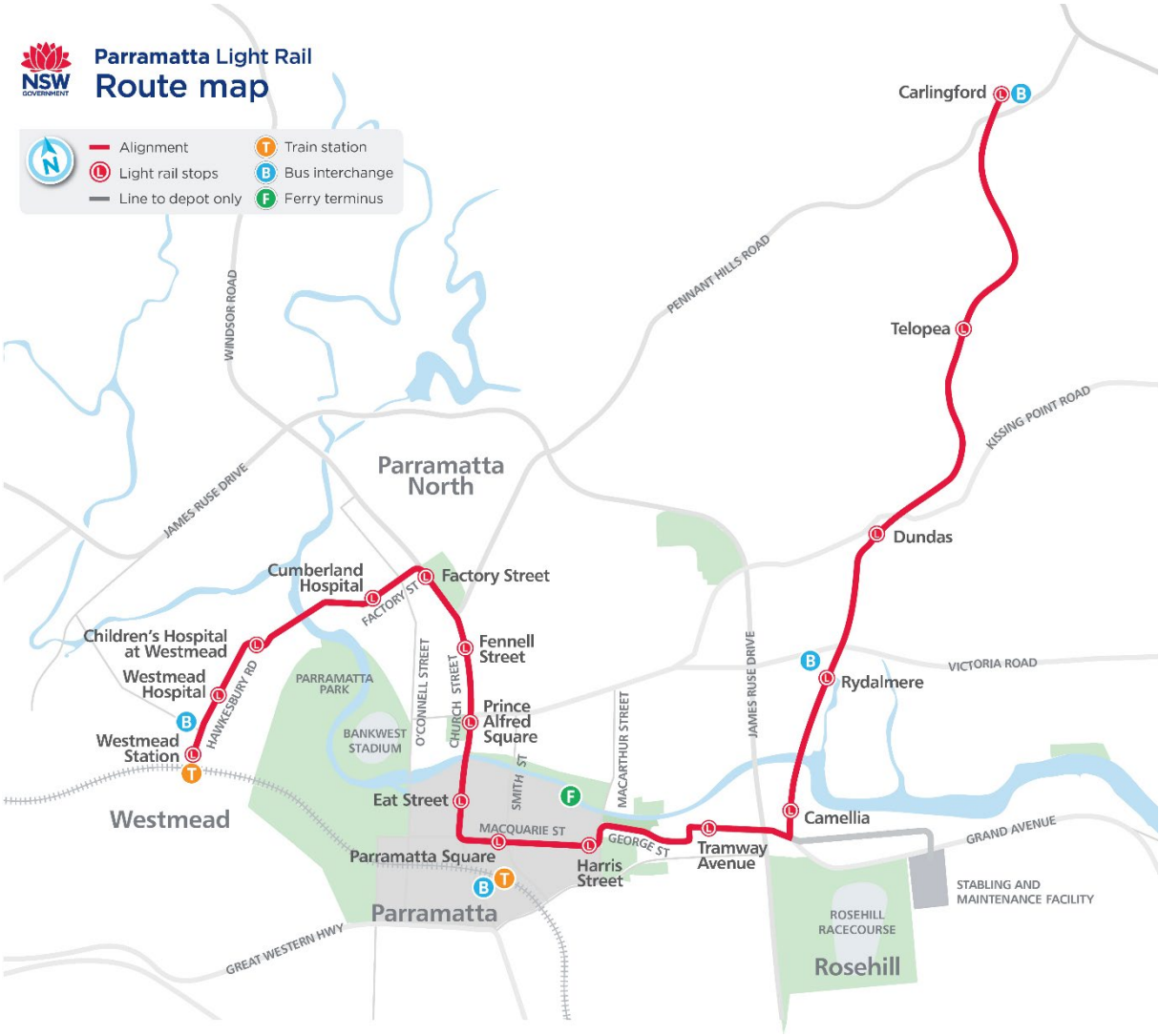

Figure 2.12 - Parramatta Light Rail Network Map (Source: TfNSW)

2.3.5 Car Share

In addition to the public transport options, there are car share facilities available in the vicinity of the site for those who wish to access a vehicle. Figure 2.13 presents the nearby car share facilities of the popular car share provider GoGet.

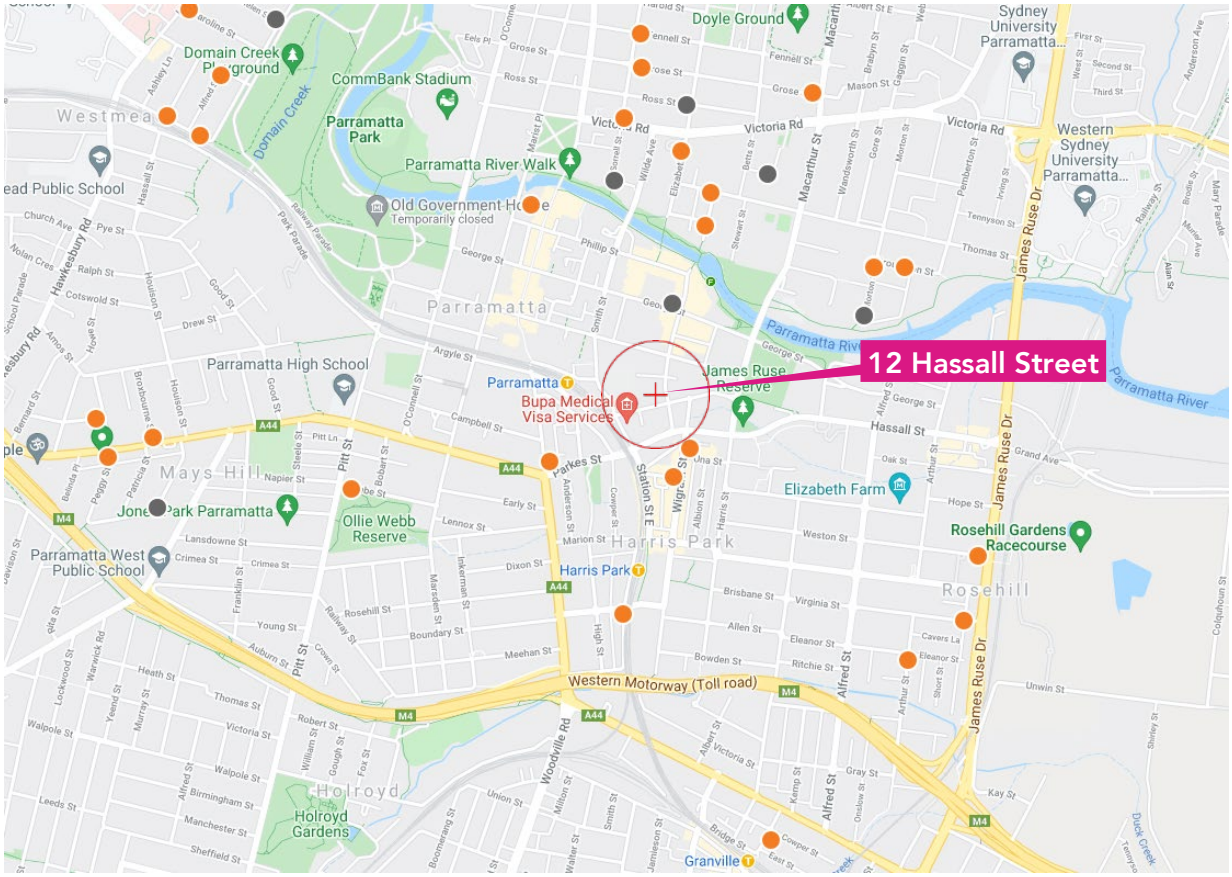

Figure 2.13 - Car Share Facilities in the vicinity of the Site (Source: GoGet)

2.3.6 Cycling

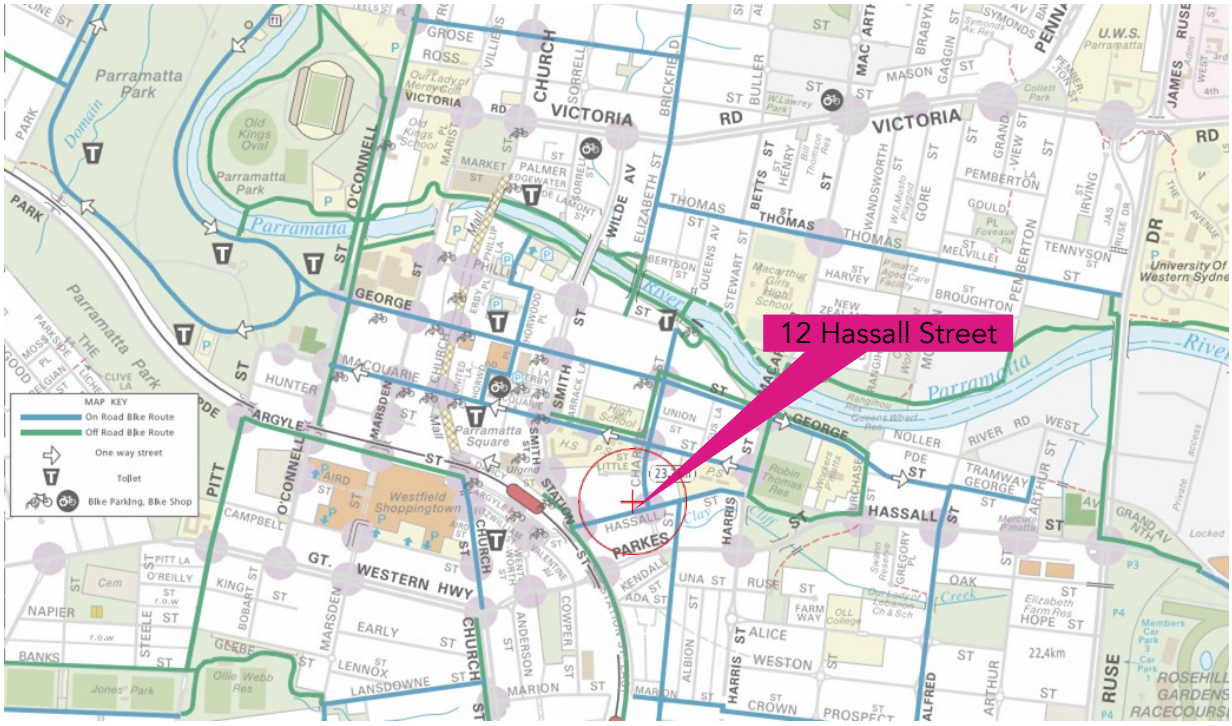

Figure 2.14 - Cycling Network Parramatta CBD (Source: Parramatta City Council)

A well connected bicycle network around the site promotes the uptake of active transport (cycling). A combination of on-road and off-road cycleways of varying difficulty levels are shown in Figure 2.15.

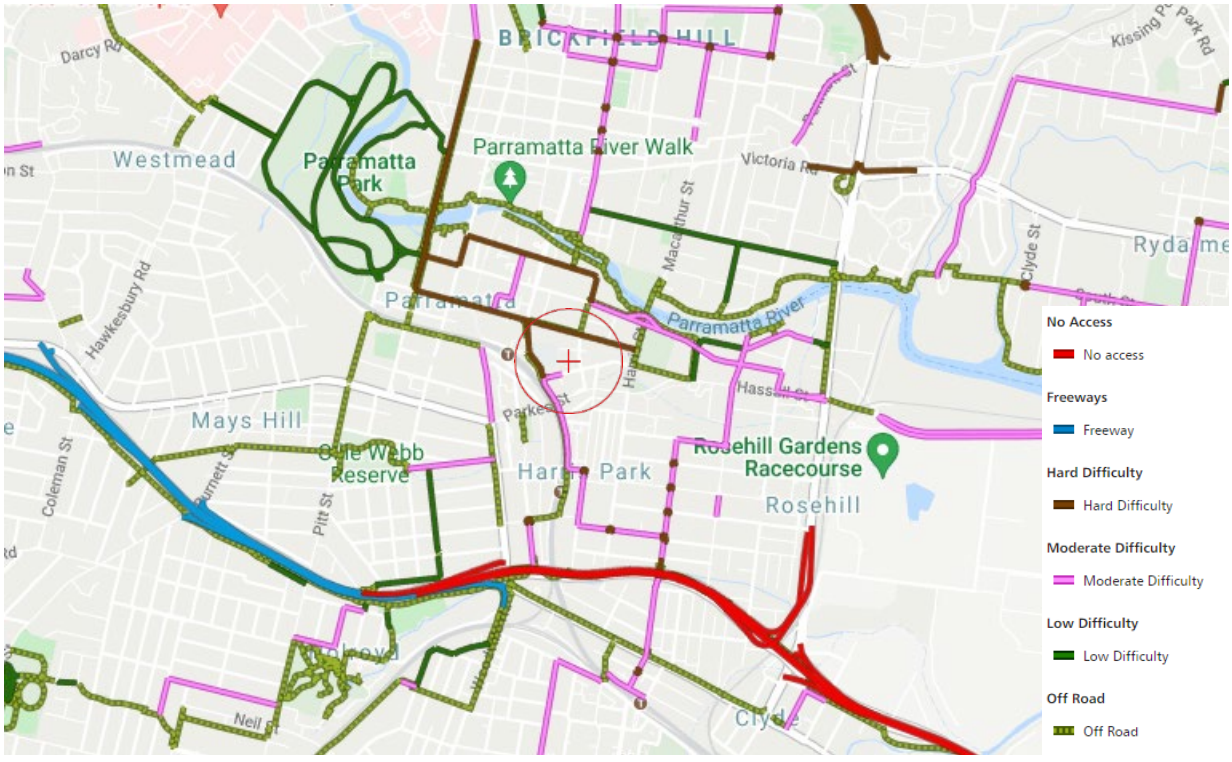

Figure 2.15 - Cycleway Finder (TfNSW)

3. Construction Traffic Management Plan

The following sections outline the proposed construction activity, anticipated timeline as well as the proposed management measures relating to vehicular access, pedestrian access and other key considerations for the delivery of the project.

3.1 Objectives

The traffic management plan associated with the construction activity aims to ensure the safety of all workers and road users within the vicinity of the construction site and the following are the primary objectives:

- To minimise the impact of the construction vehicle traffic on the overall operation of the road network;
- To ensure continuous, safe and efficient movement of traffic for both the general public and construction workers;
- Installation of appropriate advance warning signs to inform users of the changed traffic conditions;
- To provide a description of the construction vehicles and the volume of these construction vehicles accessing the construction site;
- To provide information regarding the changed access arrangement and also a description of the proposed external routes for vehicles including the construction vehicles accessing the site; and
- Establishment of a safe pedestrian environment in the vicinity of the site.

3.2 Traffic Management Planning Process

Temporary Traffic Management (TTM) for the project has been planned in accordance with Transport for NSW, *Traffic control at work sites – Technical Manual, Issue No.6.0,* 14 September 2020 (TCAWS). The process is shown in Figure 3.1.

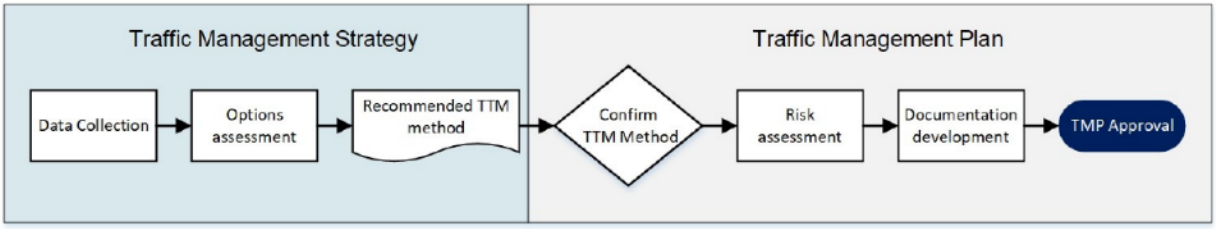

Figure 3.1 - Traffic Management Planning Process

An iterative process is being adopted in collaboration with relevant stakeholders to adopt the most appropriate traffic management approach and develop the associated documents for the work.

3.3 Traffic Management Strategy

A traffic management strategy has been chosen to support the appropriate allocation of time, funds and resources for the project, and allow for consultation in determining the safest and most efficient way for road users to interact with the work site. The following have been considered in determining the TTM method:

Detour Options

To be confirmed by contractor and amended

Site Location

The site of the works does contain existing street parking and infrastructure that may obstruct signs and devices needed for certain strategies.

Work Area
Any road closures or Works Zones if necessary to be confirmed by contractor and amended

Vulnerable Road Users
Desire lines of pedestrians, cyclists, motorcyclists do impact on works or create undesired interaction between these road users and traffic. Footpath closures, traffic control and loss of street parking may be introduced as a result of the work.

Community Facilities and Needs
Hotel, medical services, and nearby local shop access on Hassall Street will result in conflict with the works.

3.4 Decision of TTM Method

The decision of TTM Method is dependent on the factors mentioned in Section 3.3. As these factors are yet to be finalised and require further information from the contractor, the TTM method is to be amended and finalised at a later date.

3.5 General Requirements

In accordance with TfNSW (formerly RMS) requirements, all vehicles transporting loose materials will have the entire load covered and/or secured to prevent any large items, dust or dirt particles depositing onto the roadway during travel to and from the site. All subcontractors must be inducted by the Principal Contractor to ensure that the procedures are met for all vehicles entering and exiting the construction site. The Principal 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.

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

No tracked vehicles will be permitted or required on any paved roads except for delivery and collection where suitable protection is to be used. Public roads and access points will not be obstructed by any materials, vehicles, refuse skips or the like, under any circumstances. No construction vehicles are permitted to double park, or park on the public road.

3.6 Hours of Work

All works associated with the demolition and excavation works, and activities in the vicinity of the site generating noise associated with the preparation for the commencement of work (e.g. loading/unloading of goods, transferring of tools etc.) in connection with the proposed development will be limited to the permitted work hours outlined in the DA Conditions of Consent when issued.

The hours of work are to be defined by contractor upon appointment and amended. Estimated work hours are provided below:

Monday to Friday	7am to 5pm;
Saturdays	7am to 5pm; and
Sundays & Public Holidays	No work to be carried out without prior approval

Notwithstanding the above, the use of a crane for special operations including the delivery of materials, hoisting of plant and equipment and erection and dismantling of onsite tower cranes which warrant the on-street use of mobile cranes outside of the above hours can occur, subject to a separate application being submitted to and approved by Council under Section 68 of the Local Government Act 1993 and Sections 138/139 of the Roads Act 1993.

3.7 Construction Staging

The delivery of the project will be undertaken in the following key stages and phases outlined in Table 3.1.

Table 3.1: Construction Staging Summary (Source: Gurner)

Stage	Approximate Duration	Start / End Dates	Description of Works
1	18 months		Bulk Excavation and Site Retention, Inground Works
2	24 months		Structure and Main Tower Works

Staging information is to be provided upon appointment of contractor.

3.8 Construction Vehicle Types

Vehicle types are to be confirmed by contractor and amended at a later date. It is anticipated that up to 19m Truck and Dog and Articulated Vehicles will be used at the site.

Any oversized vehicles (including the use of mobile cranes) that is required to travel to the project into the vicinity of the site will be dealt with separately, with the submission of required permits to and subsequent approval by TfNSW's Customer Journey Planning (CJP) and councils' Construction Regulation Unit prior to any delivery being undertaken. Any road closures associated with the use of a mobile crane must be applied to council in advance as it requires Local Pedestrian, Cycling and Traffic Calming Committee (LPCTCC) approval. All Oversize Overmass (OSOM) applications must be submitted via the National Heavy Vehicle Regulator (NHVR) portal.

Refer to Section 3.17 for further details regarding special deliveries.

3.9 Construction Traffic Volumes

The delivery of materials to and from the site will result in some generated traffic activity associated with the works. Where possible, deliveries are to be scheduled to occur outside of the peak commuter periods. The expected vehicle types and estimated construction traffic volume during each phase of the works is outlined in Table 3.2.

A construction project of this scale is not expected to have any noticeable detrimental impact on the road network, however this is subject to further information and analysis.

Truck volumes are to be determined by the appointed contractor.

Table 3.2: Estimated Construction Vehicle Volumes (Source: Gurner)

Stage	Estimated Average No. of Trucks per Day	Estimated Peak No. of Trucks per Day
1 (Bulk Excavation and Site Retention, Inground Works)		
2 (Structure and Main Tower Works)		

3.9.1 Daily Breakdown of Construction Vehicles

Typical daily vehicle volume patterns are detailed in Table 3.3.

Table 3.3 – Typical daily volumes

Stage	Estimated AM trucks per hour	Estimated PM trucks per hour	Details of any on-site activity that may create higher than usual truck volumes
1			
2			

Due to adjacent work sites, coordination will be required to ensure, wherever possible, that major demolition/ construction activities do not occur concurrently to minimise construction traffic vehicle volumes on the external road network.

3.9.2 Nearby Construction Traffic Cumulation

Ongoing development in the local Parramatta CBD area results in several active construction sites in close proximity to the 12 Hassall Street site. These are highlighted in Figure 3.2.

Figure 3.2 - Nearby Works

To ensure the overall road network is not detrimentally impacted, consideration needs to be taken regarding vehicle access and egress routes so as to avoid compounding with other sites, and the arrival and departure of construction vehicles should be spaced sufficiently to not overwhelm the local road network.

3.10 Construction Vehicle Routes

The site is located within the Parramatta CBD and the proposed construction vehicle routes have regard for the surrounding traffic arrangements in the vicinity of the site. No queuing or marshalling of trucks is permitted on any public road and all loading and unloading of materials will be undertaken wholly within the site.

All vehicle routes to site are constrained to existing public roads that have the physical geometry to accommodate the turning movements.

In terms of the broader road network, the site is accessible via the M4 Western Motorway, and James Ruse Drive as shown in Figure 3.3.

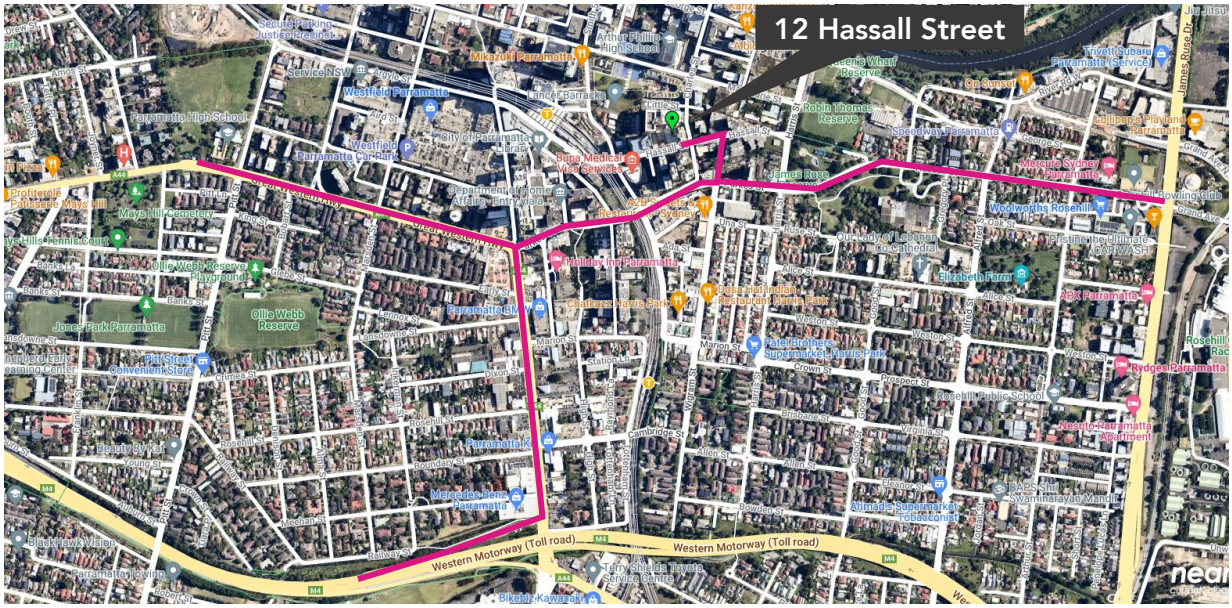

Figure 3.3: Construction Vehicle Routes

3.11 Construction Vehicle Access

Upon appointment of contractor, site establishment plans are to be developed and provided to show site access points, truck routes, Works Zones and any further required information.

While reviewing the need for a Work Zone, the following matters have been considered:

- Pedestrian and public safety;
- To ensure no construction vehicles queue in nearby public roads; and
- Providing clarity to pedestrians and the general public of the approved designated construction activity zone.

Any Works Zones proposed by the appointed contractor are to be assessed at a later date. Appropriate hoarding class will be determined following this.

The Applicant must apply to the Transport for NSW's Transport Management Centre for approval of any road works on State Roads or within 100m of Traffic Signals and receive an approved Road Occupancy Licence (ROL). A copy of the ROL must be provided to council.

3.12 Road Closures

To be determined by contractor and amended at a later date.

3.13 Emergency Vehicle Access

Any emergency vehicles requiring access to the project site and neighbouring properties will continue to do so via Hassall Street. Emergency access to the site must be retained at all times.

3.14 Traffic Control Measures

Traffic Guidance Schemes (TGS) (previously known as 'Traffic Control Plans' or TCPs) outline the proposed traffic management measures to inform road users of the changed traffic conditions in the vicinity of the works

site. Traffic control measures are required as trucks will be turning into the site intermittently at various access points around the construction site.

Traffic management and control measures will be required along Hassall Street (traffic controllers & signage) as trucks will be accessing the site and Works Zones intermittently. Concept TGSs will be prepared and included in Attachment 4 pending the appointment of a contractor and the provision of further details regarding site establishment and truck movements.

It is noted that detailed TGSs are to be prepared by the appointed traffic management contractor prior to commencement of works and submitted to Council and TfNSW for approval. All TGSs associated with the CTMP must comply with the Australian Standards and the *TfNSW Traffic Control at Work Sites Technical Manual* (TCAWS). Any traffic controllers shall be appropriately qualified and SafeWork NSW accredited.

Traffic control shall be established in accordance with the requirements of the TCAWS and gate controllers are to be stationed at site access gates to manage access and egress to the site.

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 to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site – the vehicles already on the road have right-of-way.

3.15 Pedestrian Access

The general public will not be allowed access to the site. The contractor will ensure that the proposed hoardings are maintained in a clean, well illuminated and safe manner at all times, throughout the duration of the project. Due to the nature of the site and the emphasis placed on materials handling, the efficient control and protection of pedestrian traffic is of utmost importance.

The site perimeter boundaries consist of hoarding class that is to be determined by the contractor and installed during the various construction phases. These hoardings will be established immediately following site possession and fitted with appropriate public directional signage.

The contractor will provide a dedicated traffic & pedestrian management team adjacent to the publicly accessible roads. This will ensure deliveries are received efficiently and safely. Gurner is committed to a proactive management process for the public safety which will progressively increase and develop as the project evolves including particular attention to the public interface associated with the proposal.

It should be noted that Traffic Controllers are NOT to stop general traffic, pedestrians and cyclists 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 to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site - the vehicles already on the road and pedestrians on the footpath have right-of-way.

Pedestrians may be held only for very short periods to ensure safety when trucks are leaving or entering BUT the contractor must NOT stop pedestrians in anticipation i.e. **at all times the pedestrians have right-of-way on the footpath, not construction vehicles**.

The Applicant must apply to Parramatta Councils to organise appropriate approvals for hoarding prior to commencement of works. Physical barriers to control pedestrian or traffic movements need to be determined by council Construction Regulations Unit prior to commencement of work.

3.16 Special Deliveries

It is anticipated that the works will require a limited number of special deliveries conducted by mobile crane, such as for the erection of the tower cranes onsite.

It is understood that oversize and over-mass vehicles are generally not allowed to travel on Local Roads unless approval for a one-off occasion is obtained from the National Heavy Vehicle Regulator (NHVR) and council. Requests to use these vehicles must be submitted to the NHVR 28 days prior to the vehicle's scheduled travel date. For more information, please contact the NHVR on 1300 696 487 or www.nhvr.gov.au.

Should the contractor require a partial road closure on State, Regional and/or Local Roads, or carry out work within 150m of traffic signals, an application will be made to the relevant authority to obtain their approval.

3.17 Work Site Security

To provide security to the works site and protection to the general public, it is proposed that the site perimeter boundaries consist of hoardings, installed during the various construction phases. These hoardings will be established immediately following site possession and fitted with appropriate public directional signage.

All gates are securely locked outside of working hours. Gurner and the appointed contractor will maintain a site entry register requiring all visitors to sign in upon entry. All visitors are required to wear appropriate PPE at all times while on site and will be escorted by a contractor representative.

The Applicant must apply to Parramatta Councils' Building Approvals Unit to organise appropriate approvals for hoarding prior to commencement of works.

A summary of the proposed hoarding and Works Zone establishment arrangements shall be provided by the appointed contractor

3.18 Plant/Equipment Management

At the commencement of construction, plant and equipment, including construction hoarding/scaffolding material, site sheds, mobile cranes and machinery will be required to be delivered to the site. The delivery and removal of plant and equipment to and from the site will be undertaken from the on-site materials handling/loading area, via the use of machine floats.

The delivery and removal of plant and equipment that requires a wide or long load vehicle will be subject to a separate application/permit and separate prior approval from relevant authorities. In order to minimise traffic disruption during the delivery of the plant and equipment, it is proposed to undertake this work during the evening/early morning period. All plant and equipment deliveries will be carried out in accordance with Council/TfNSW requirements and the NSW Police regulations.

3.19 Staff Induction

All staff and subcontractors of the Principal Contractor are required to undergo a site-specific induction which outlines the construction procedures and management framework specific to the project. The induction is aimed at instilling in each person a common-sense approach to safety, to ensure they employ the responsible environmental practices and awareness needed to deliver the project in accordance with the relevant regulations and standards.

The induction will include a description of the available transport options and the policy towards site access, parking options for staff, and the storage of tools at the site to reduce the need to bring vehicles to site.

The induction will include permitted access routes to and from the construction site for all vehicles, as well as standard environmental, OH&S, driver protocols and emergency procedure. Additionally, the Principal Contractor will discuss TMP requirements regularly as part of toolbox talks and advise workers of public transport and carpooling opportunities.

3.20 Access to Adjoining Properties

Access to all adjoining properties will be maintained throughout the works. The adjacent landowners will be notified of works via letter box distribution and road signage to advise of anticipated truck movements in operation with access to adjoining properties being maintained at all times.

3.21 Occupational Health and Safety

Any workers required to undertake works or traffic control within the public domain shall be suitably trained and will be covered by adequate and appropriate insurances. All traffic control personnel will be required to hold SafeWork NSW accreditation in accordance with Section 8 of Traffic Control at Worksites.

The comprehensive Work Health & Safety Management Plan will be prepared by the Principal Contractor and shall be constantly reviewed as the design and construction methodology progress.

3.22 Consultation and Method of Communicating Traffic Changes

Traffic Guidance Schemes (TGSs, previously known as 'Traffic Control Plans' or TCPs) in accordance with Australian Standards (*AS 1742.3 – Traffic Control Devices for Works on Roads*) and *TfNSW Traffic Control at Work Sites Manual* will advise motorists of upcoming changes in the road network.

During construction the contractor shall each morning, prior to work commencing, ensure all signage is erected in accordance with the TGSs and clearly visible. Each evening, upon completion of work, the contractor is to ensure signage is either covered or removed as required. Sign size is to be size "A".

Any variation to the layout of the TGSs on site is to be recorded and certified by authorised SafeWork NSW accredited personnel. The associated TGS road signage will inform drivers of works activities in the area including truck movements in operation. Any modifications to the TGSs must also be approved by Council and/or TfNSW prior to implementing any changes.

Prior to commencement of works on site the contractor is to inform neighbouring properties of proposed works and provide site contact information by means of a letter box distribution. Throughout the construction process, the Principal Contractor shall inform the local businesses and residents about construction updates by monthly communications.

3.23 Hazard and Risk Identification

All construction projects entail a set of risks—from a transport perspective—that may need to be mitigated. Some of these hazards and risks are related to:

- Moving traffic;
- Queued traffic;
- Site vehicle access and egress points;
- High vulnerability road user activity;

- Other construction activity or roadworks in close proximity to the proposed work site; and
- Reduced lane and shoulder widths.

This is appropriate for the construction of the development because of the following:

- Moving traffic could spill from Hassall Street and queue into nearby intersections and streets as a result of being held up by construction vehicles entering site.
  Risk Matrix Reference: R1

- Queued traffic could pose safety and manoeuvrability issue for trucks turning into and out of the site, prolong and delay the construction process and impact on surrounding on-street parking.
  Risk Matrix Reference: R2

- Existing footpath and pedestrian throughfare access may be restricted during works. Interaction between vehicles entering / exiting the site and pedestrians is likely to occur.
  Risk Matrix Reference: R3

As there is no guarantee that the contractor responsible for implementing the TGSs are fully aligned with the intention of this traffic report, this remains a risk to be assessed. As such, a risk matrix has been prepared as shown in Table 3.4 using the following definitions:

Risk Rating
- Very High (VH)
- High (H)
- Medium (M)
- Low (L)

Consequence:
- Insignificant: Illness, first aid or injury not requiring medical treatment. No lost time.
- Minor: Minor injury or illness requiring medical treatment. No lost time post medical treatment.
- Moderate: Minor injuries or illnesses resulting in lost time.
- Major: 1 to 10 serious injuries or illnesses resulting in lost time or potential permanent impairment.
- Severe: single fatality and/or 11 to 20 serious injuries or illnesses resulting in lost time or potential permanent impairment.
- Catastrophic: multiple fatalities and/or more than 20 serious injuries or illnesses resulting in lost time or potential permanent impairment.

Likelihood:
- Almost certain: expected to occur multiple times (10 or more times) during any given year.
- Very likely: expected to occur occasionally (1 to 10 times) during any given year.
- Likely: expected to occur once during any given year.
- Unlikely: expected to occur once every 1 to 10 years.
- Very unlikely: expected to occur once every 10 to 100 years.

- Almost unprecedented: not expected to occur in the next 100 years.

Table 3.4: Risk Matrix

Likelihood	Consequence						
		Insignificant C6	Minor C5	Moderate C4	Major C3	Severe C2	Catastrophic C1
	Almost certain L1						
	Very likely L2		R1, R2	R3			
	Likely L3						
	Unlikely L4						
	Very unlikely L5						
	Almost unprecedented L6						

Some recommended risk mitigation measures include:

- Provide overhead protection (e.g. in the form of B Class hoarding) for cyclists and pedestrians along the frontages of the work site where necessary. In particular, the changed traffic conditions should be clearly communicated to road users through appropriate signage and pavement markings.
- Gate controllers at the work site will need to ensure that there are no approaching pedestrians or cyclists prior to allowing a construction vehicle to enter or exit the site. Retractable gates may be used to temporarily prevent pedestrian/cyclist access across the proposed vehicular crossovers when a construction vehicle is entering or exiting the site.
- Preparation of TGSs to communicate to road users within the vicinity of the work site of the changed traffic conditions.
- Coordination with Site Managers of neighbouring sites to ensure that deliveries can be managed to be spread out across the day rather than have all deliveries arriving at the same time to relieve pressure on the surrounding road network.
- Provide signage and safe travel routes for pedestrians traveling along Hassall Street to keep them clear of
- Consult with the local businesses and tenancies to notify them of the potential impact on their access driveways or changes to traffic. This can be done by the Construction Manager or a Traffic Engineer within Parramatta Council. Consultation letters can be prepared and drafted accordingly.

Additional information in relation to risk assessment is to be determined by the contractor and included at a later date.

3.24 Contact Details for On-Site Enquiries and Site Access

Contact details for Gurner are:

Name: Michael Skala

Role: Development Manager

Email: michael@gurner.com.au

3.25 Maintenance of Roads and Footpaths

The roads and footpaths along the route of travel will be kept in a serviceable state at all times. A dilapidation survey of existing roads and footpaths will be carried out prior to proposed truck movements commencing. Any damage clearly demonstrated as not already existing and as being caused by the project truck movements will be treated / repaired by the Principal Contractor at no cost to Council.

4. CTMP Approval, Monitoring and Review

This CTMP has been reviewed and endorsed by the designer's one-up manager who holds a current Prepare Works Zone Traffic Management Plan qualification. This approved CTMP has been used to inform the development of all TGSs for the work.

Regular monitoring and review are to be conducted throughout the life of the project to ensure that the CTMP remains current and addresses all risks at the work site for the duration of the project or activity.

To ensure that this CTMP is kept up to date, the activities identified in Table 4.1 will be undertaken to facilitate review and continuous improvement.

Table 4.1: Monitoring Activities

Stage	Activity	Purpose	Qualification	Tools and Checklists
Planning	TGS verification	To ensure that the TGS selected or designed is suitable for the works and location.	ITCP or PWZTMP	TCAWS Appendix E.2 TGS verification checklist
During TTM	Weekly TTM inspections (includes preopening inspection)	To ensure that the CTMP and relevant TGS are appropriate and operating safely, effectively and efficiently	PWZTMP	TCAWS Appendix E.3 Weekly TTM inspection checklist
	Shift TTM inspections	To ensure that the TGS is implemented as designed. This includes at a minimum, twice per shift and when: • A TGS is installed, changed or updated. • At regular frequency afterwork commences, recommended every 2 hours; and • Once after care arrangements have been installed if required	ITCP or PWZTMP	TCAWS Appendix E.4 Shift / Daily TTM inspection checklist
	CTMP review	To ensure that CTMP controls are achieving the required outcomes.	PWZTMP	Not provided
	Client inspections	Verification of TTM through the Transport Traffic Engineering Services, Work Health and Safety Branch, Surveillance Officers or other client representatives.	Divisionally determined	Not provided

Stage	Activity	Purpose	Qualification	Tools and Checklists
Post Completion	Post-completion inspection	To ensure that the site has been demobilised as planned and is safe for opening to traffic	ITCP or PWZTMP	Appendix E.5 Post completion inspection checklist

All relevant changes must be considered and recorded in the CTMP with any changes made by an appropriately qualified person. A copy of all documentation relating to the endorsement of the changes must be available to be accessed, either electronically or in hard copy, by the person responsible for the works.

Any additional information provided by the contractor is to be included in future revisions of this report.

5. TGS Confirmation and Approval

The Traffic Guidance Schemes (TGSs) to be shown in Attachment 1 upon determination of further relevant information by contractor, outline the proposed traffic management to inform road users of the changed traffic conditions in the vicinity of the works site. The TGSs must be set out in accordance with Issue 6.0 of the Traffic Control at Work Sites Technical Manual, September 2020 (TCAWS).

TGSs are to be implemented throughout the project to warn road users that trucks will be turning into and out of the site, in accordance with TCAWS TGS D.4.7. A TGS in accordance with TCAWS TGS D.4.18 is to also be implemented to warn road users of the presence of traffic controllers managing traffic.

It is noted that any changes to the existing parking restrictions will require a minimum fourteen (14) days notification to adjoining property owners prior to the implementation of any temporary traffic control measures.

Any revisions or additional TGSs ones must be prepared by a SafeWork NSW qualified person upon engagement of the traffic management contractor and prior to commence of works on site.

5.1 TGS Verification

Site confirmation must be undertaken via the completion of the TGS verification. A TGS verification must be undertaken to confirm the selected or designed TGS is fit for purpose. A TGS verification must be completed in accordance with Section 8.1.2 TGS verification by an ITCP or PWZTMP qualified person. TGS verification must include an inspection of the work site where the TGS will be implemented.

5.2 TGS Approval

The SafeWork NSW qualified person who has designed or modified the relevant TGS has approved the TGS for use. Approval of the TGS includes:

- Review of the relevant TMP, risk assessment and associated TTM specific documentation;
- Design, redesign or modification of the TGS must be in accordance with the requirements of TCAWS;
- Confirmation that the TGS provides the relevant information for the ITCP person to safely implement on-site.

The one up manager of the SafeWork NSW qualified person has approved the TGS, including:

- Any non-standard or unaccepted signs or devices;
- Any departures from the requirements of TCAWS;
- If a manual traffic controller is proposed for use.

6. Conclusion

This CTMP has been prepared to outline the construction traffic measures to improve site safety to the public and workers and the construction process.

With the measures described in the CTMP in place, the site activity is anticipated to have minimal disruption to the daily activities within the vicinity of the site.

It is envisaged that this document will be continually reviewed and amended if required, due to changes in design, TfNSW, Parramatta Council or any other authority requirements. Should any changes be made, they will need to be reviewed and approved by Council and TfNSW.

Upon further information being provided by the contractor, this document can be updated and revised.

Attachment 1 – Traffic Guidance Scheme

Traffic Guidance Schemes are to be developed following further information from the contractor.

Attachment 2 – Swept Path Analysis

Swept path analysis of the site, including access and egress, are to be developed following further information from the contractor.

Attachment 3 – Mandatory Forms

Mandatory Forms are to be completed following further information from the contractor.