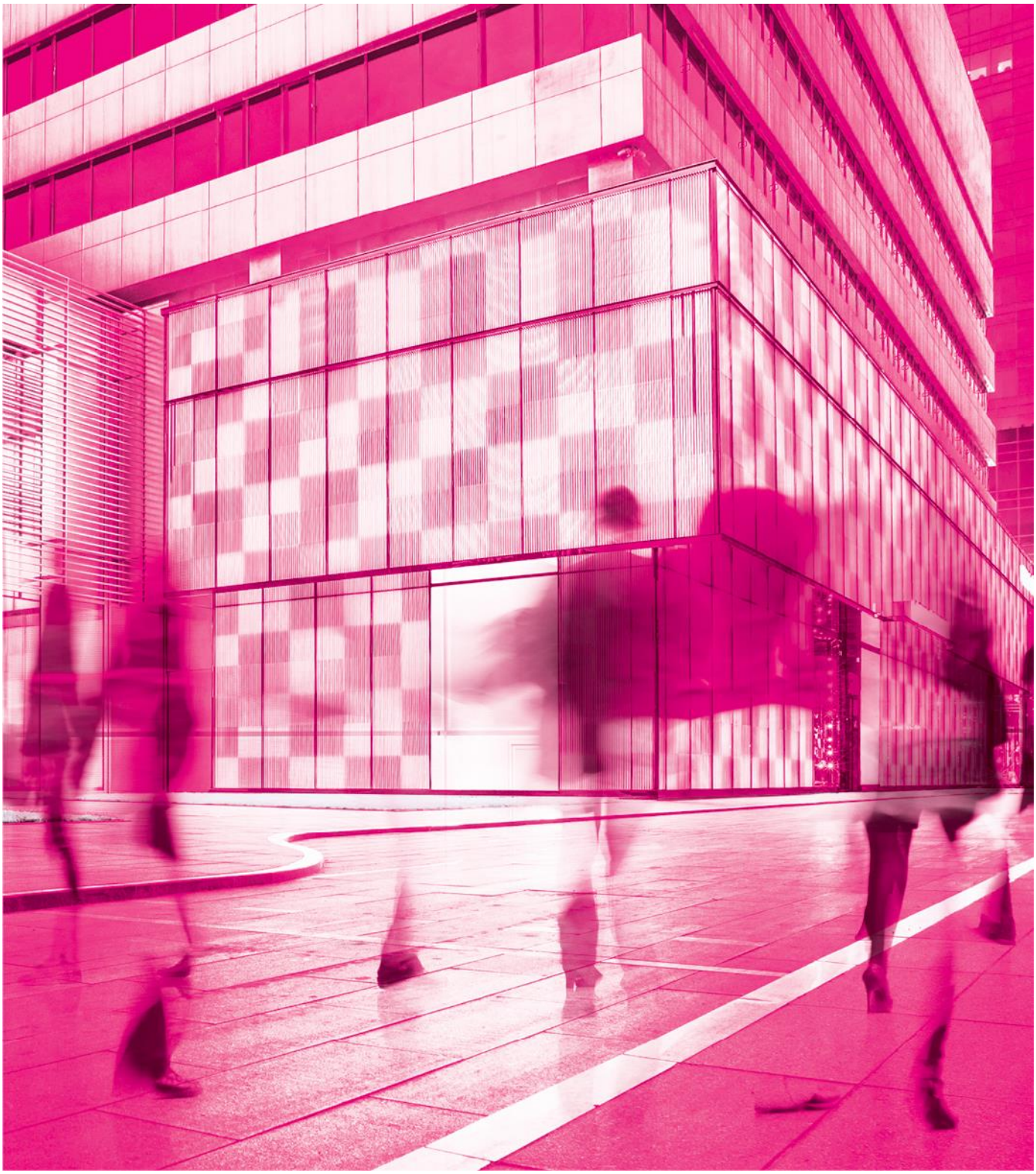

DRAFT

Concept construction traffic management plan;

MDCP Hughes Street

For Fairfield City Council

17th June 2019

parking;
traffic;
civil design;
wayfinding;

ptc.

Document Control

MDCP Hughes Street, Concept construction traffic management plan

Issue	Date	Issue Details	Author	Reviewed	For the attention of
1	03/06/19	Draft	SW	AM	Allan Saxby
2	17/06/19	Updated draft report	SW	AM	Allan Saxby / Walter Wong
3					
4					
5					

Contact

Steve Wellman
+61 2 8920 0800
+61 421 810 979
steve.wellman@ptcconsultants.co

ptc.
Suite 102, 506 Miller Street
Cammeray NSW 2062
info@ptcconsultants.co
t + 61 2 8920 0800
ptcconsultants.co

Contents

1. Introduction

1.1 Project Description

ptc. has been engaged by Collins and Turner (on behalf of Fairfield City Council) to prepare a Concept Construction Traffic management Plan to be submitted to Fairfield City Council, for the development of a Multi Deck Car Park (MDCP) at Hughes Street replacing the at-grade car park to the south of Hughes Street.

The subject site is bounded by Dutton Lane and Hughes Street in Cabramatta.

Figure 1 - Location proposed MDCP site

1.2 Scope of the Report

This report presents the following considerations in relation to the traffic and parking assessment of the proposal:

Section 2 - Background;

Section 3 - A description of the project;

Section 4 - A description of the road network serving the development site;

Section 5 - Management of construction vehicles and non-site traffic; and

Section 6 - Summary.

2. Background

2.1 Site Context

The subject site occupies the eastern half of the city block bounded by Hughes Street (north), and Dalton Lane (south, west and east), currently zoned for B4 (Mixed Use) Land Use classified under the Fairfied City Council DCP.

The subject site comprises the following property:

Property

Lot 1 DP236708

Lot 2 DP236708

Lot 3 DP236708

Circulating Lanes:
Lot 4 DP236708

B/100284

Lot 2 1201667

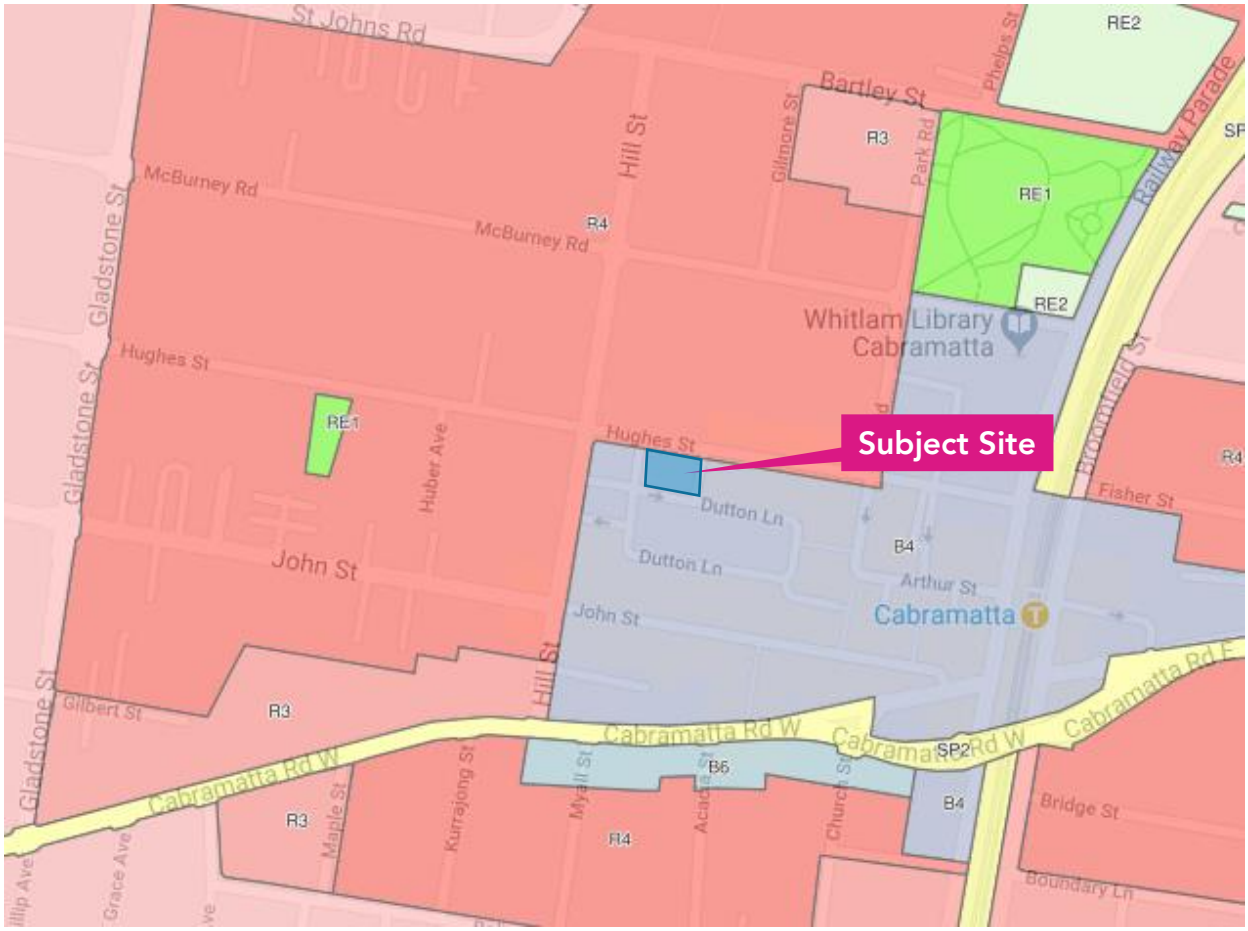

Figure 2 – Local Land Use Map (Source: NSW Planning Viewer)

2.2 Development Site

The subject site is located at address 34-40 Hughes Street and is currently free 2-hour at-grade parking area with 68 spaces. The development site comprises the north-eastern portion of the city block with the frontages formed by Hughes Street and Dalton Lane, shown in Figure 3.

Figure 3 – Development Site viewed from corner of Hughes Street and Dalton Lane

Figure 4 - View of the Site from Cabramatta Dutton Lane Car Park

2.3 Development Proposal

The development proposal will occupy the entire site and include provision of 219 car parking spaces (net 198 car parking spaces after alterations to the existing car parks), allocated within a three storey multi-deck car park.

The proposed Hughes street car park will be constructed to integrate with the existing Dutton Lane car park, with connecting traffic aisles on all 3 levels and a down ramp along the west edge.

An indicative perspective layout is shown in Figure 5.

Figure 5 – Perspective Layout (from Hughes Street)

The proposed development also includes alterations to the external access and egress arrangements to the three car parks and the proposed alterations are shown in Figure 6.

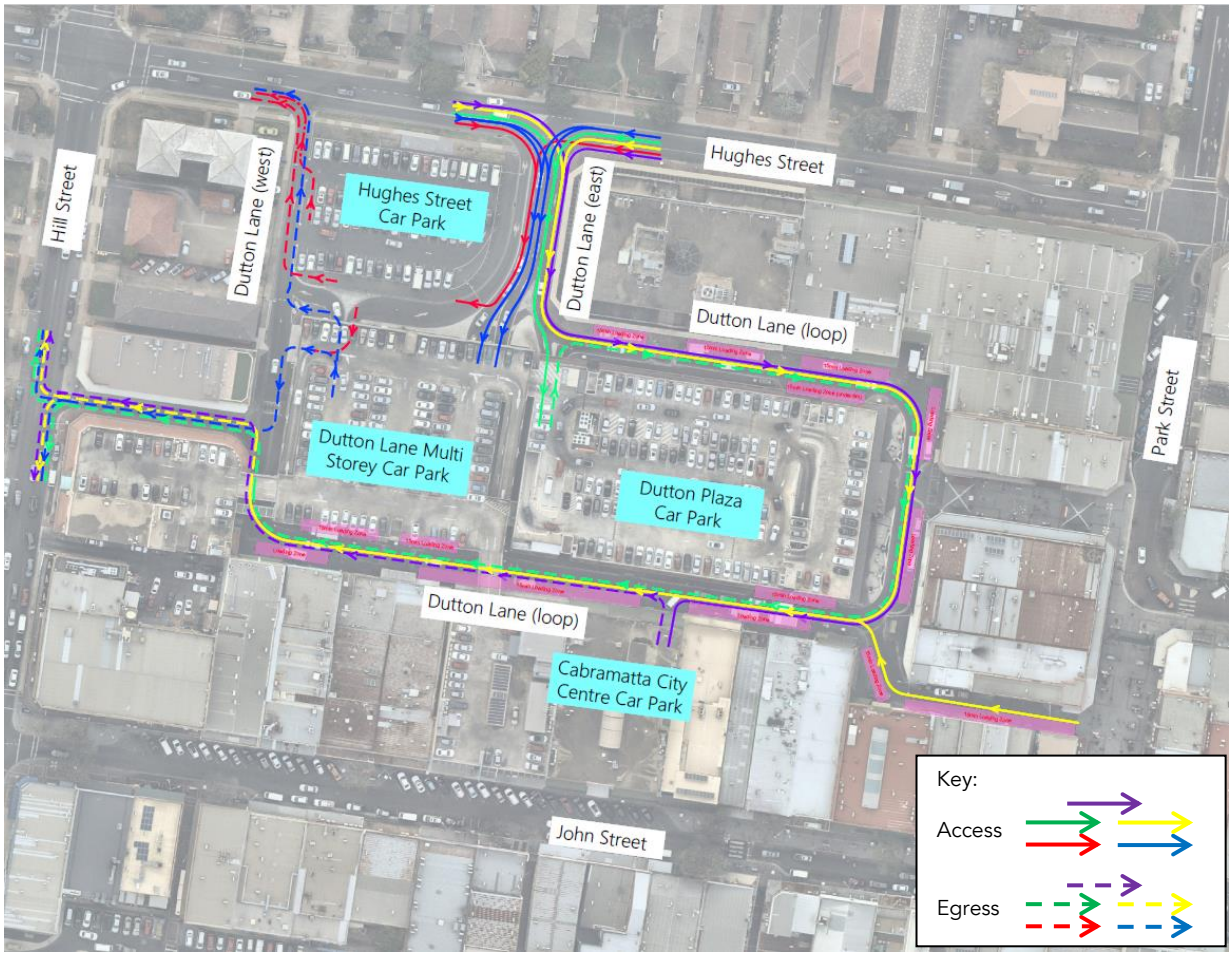

Figure 6 – Proposed Access and Egress

3. Existing Transportation Facilities

3.1 Road Hierarchy

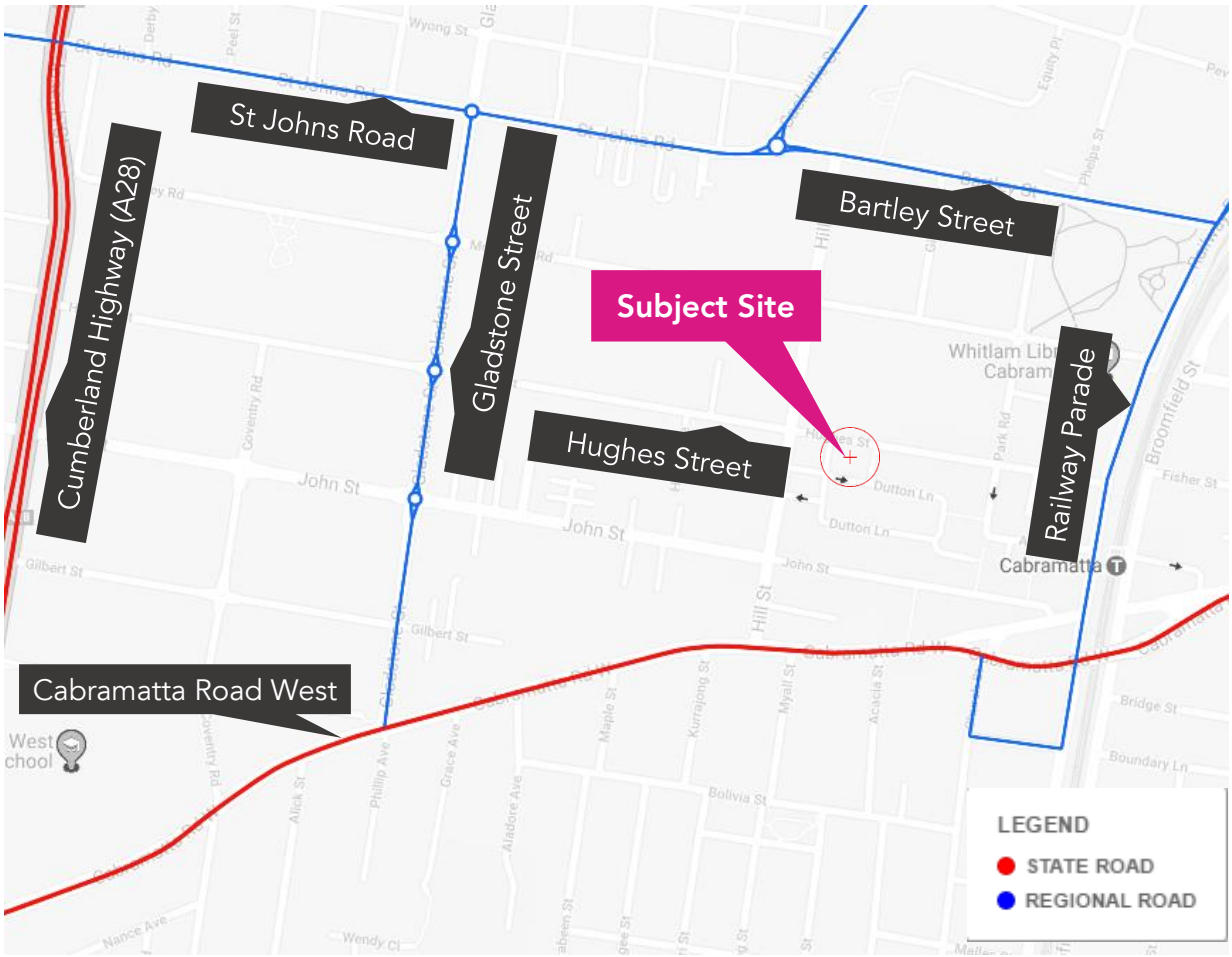

Figure 7 – Road Hierarchy (Source: RMS State and Regional Roads)

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

State Roads - Freeways and Primary Arterials (RMS Managed);

Regional Roads - Secondary or sub arterials (Council Managed, Part funded by the State); and

Local Roads - Collector and local access roads (Council Managed).

3.1.1 Road Network

Table 1 – Existing Road Network – Cumberland Highway

Cumberland Highway	
Road Classification	State Road
Alignment	North – South
Number of Lanes	2 lanes in each direction
Carriageway Type	Divided
Carriageway Width	26 metres
Speed Limit	70 kph
School Zone	No
Parking Controls	Clearway 6am – 7pm Mon-Fri / 8am – 8pm Sat-Sun
Forms Site Frontage	No

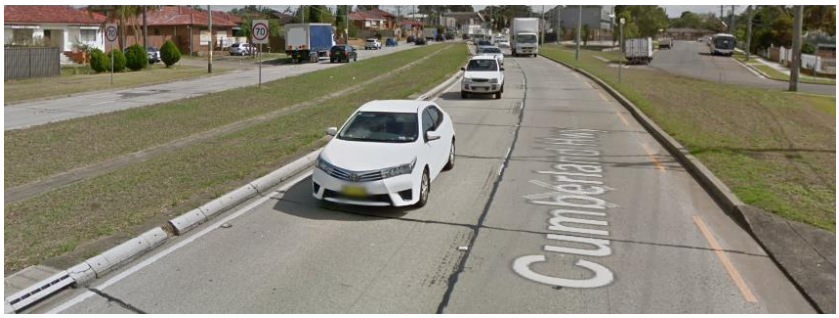

Figure 8 – Cumberland Highway (Southbound)

Table 2 – Existing Road Network – Cabramatta Road West

Cabramatta Road West	
Road Classification	State Road
Alignment	East – West
Number of Lanes	2 lanes in each direction
Carriageway Type	Undivided
Carriageway Width	12 metres
Speed Limit	60 kph
School Zone	Yes
Parking Controls	No Parking
Forms Site Frontage	No

Figure 9 – Cabramatta Road

Table 3 – Existing Road Network – Hughes Street

Hughes Street	
Road Classification	Local Road
Alignment	East – West
Number of Lanes	1 lane in each direction with adjacent parking lanes
Carriageway Type	Undivided
Carriage Width	12 metres
Speed Limit	40 kph
School Zone	No
Parking Controls	2P 8.30am to 6.00pm
Forms Site Frontage	Yes

Figure 10 – Hughes Street (Westbound)

Table 4 - Existing Road Network – Dutton Lane

Dutton Lane – Access from Hughes Street (Figure 11)	
Road Classification	Right of Carriageway
Alignment	North – South
Number of Lanes	4 lanes (3 south, 1 north)
Carriageway Type	Undivided
Carriage Width	12 metres
Speed Limit	40 kph
School Zone	No
Parking Controls	No Parking
Forms Site Frontage	Yes

Table 5 - Existing Road Network – Dutton Lane

Dutton Lane – (adjacent to Dutton Lane Plaza) (Figure 12)	
Road Classification	Right of Carriageway
Alignment	East – West and North - South
Number of Lanes	1 Lane, with adjacent loading zones
Carriageway Type	Undivided
Carriage Width	10 metres
Speed Limit	40 kph
School Zone	No
Parking Controls	15 minute Loading Zone
Forms Site Frontage	Yes

Figure 11 – Dutton Lane (Access from Hughes Street)

Figure 12 – Dutton Lane (Adjacent to Dutton Lane Plaza))

3.2 Existing Parking Facilities

There are two existing multi-deck car parks next to the proposed development.

The first is Dutton Lane Multi Storey Car Park, which has approximately 498 spaces and was developed in the 1980's.

Figure 13 - Cabramatta Dutton Lane Multi Storey Car Park

The other is Dutton Plaza Car Park, which has 278 spaces and includes retail space at the ground level.

Figure 14 - Dutton Plaza Car Park

3.3 Key Intersections

The key intersections in the vicinity of the site (in relation to construction traffic) and their characteristics are listed below:

Joseph Street and St Johns Road:	4 arm signalised intersection
Park Street and Bartley Street:	3 arm roundabout
Hughes Street and Park Street:	4 arm signalised intersection
Hughes Street and Gladstone Street:	4 arm roundabout
Gladstone Street and Cabramatta Road West:	4 arm signalised intersection
Cabramatta Road West and Joseph Street:	4 arm signalised intersection

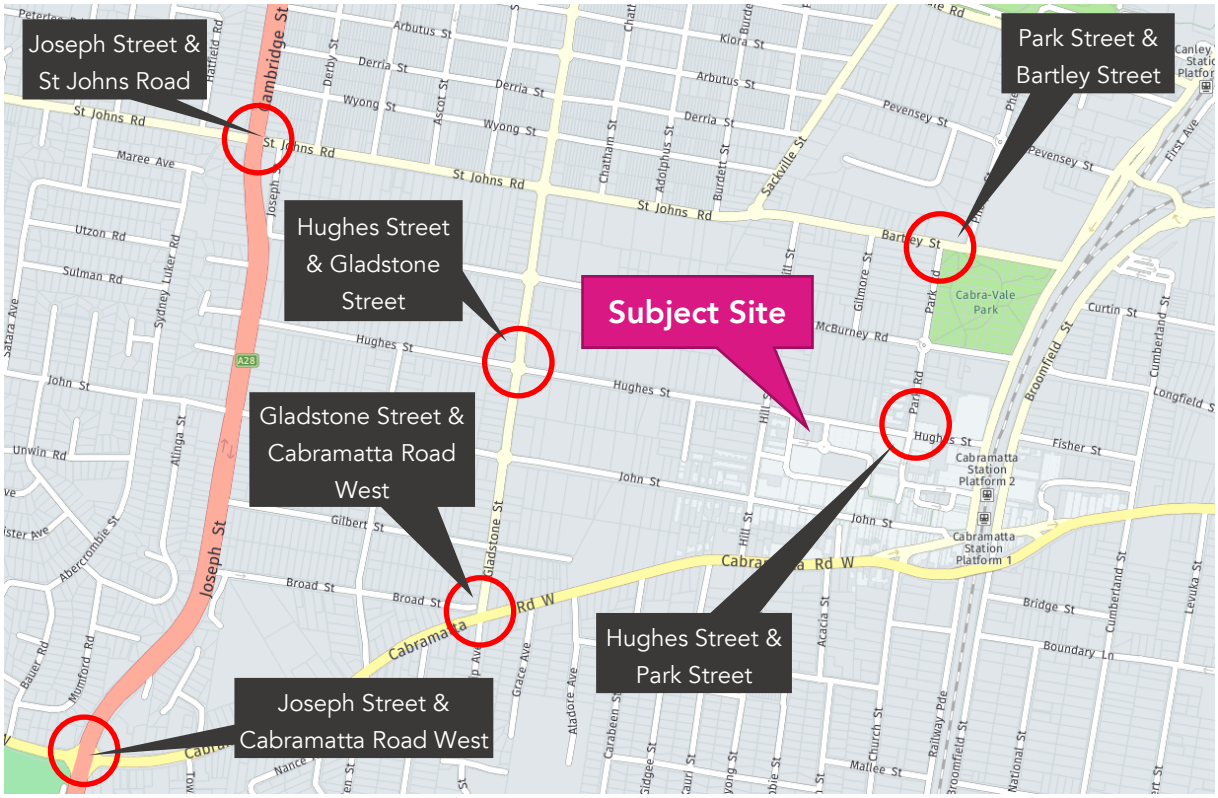

Figure 15 – Key Intersections

3.4 Existing Access, Egress and Parking Restrictions

3.4.1 Existing Access and Egress Arrangements

Dutton Lane provides access and egress to the Hughes Street at grade car park, the Dutton Lane Multi Storey Car park and Dutton Lane Plaza car park, as well as service vehicle access to Dutton Lane and car access to the Cabramatta City Centre Car Park.

Figure 16 shows the various access and egress routes for the various users of Dutton Lane.

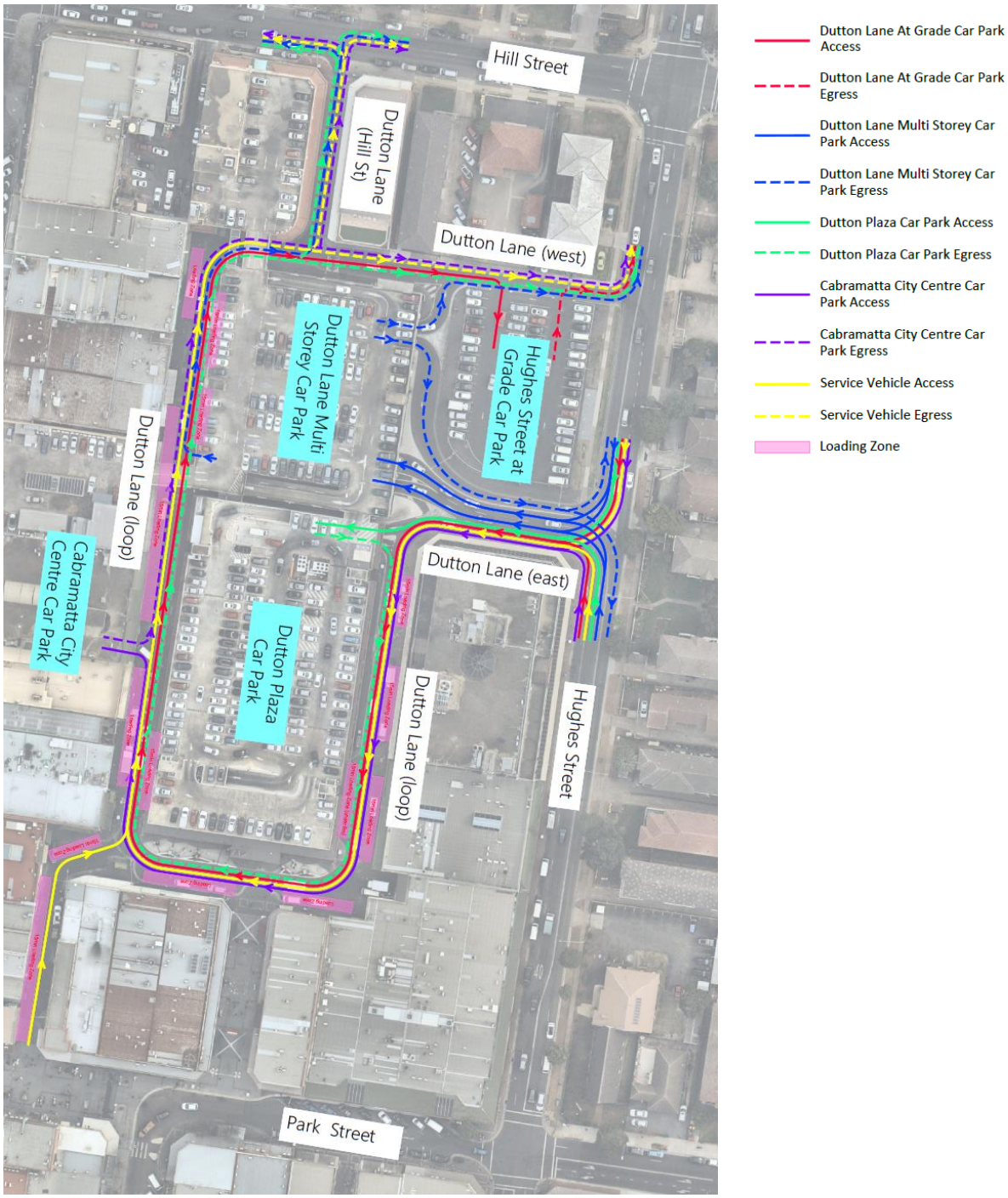

Figure 16 – Existing Access and Egress Arrangements

In summary, access and egress to the various car parks and user groups is as follows:

Hughes Street at Grade Car Park –

Access via Dutton Lane East, Dutton Lane Loop and Dutton Lane West

Egress Via Dutton Lane West

Dutton Lane Multi Storey Car Park

Access via Dutton Lane East

Egress via Dutton Lane East, Dutton Lane West and Dutton Loop/Dutton Lane Hill St (peak period egress only)

Dutton Plaza Car Park

Access via Dutton Lane East

Egress via Dutton Lane Loop and Dutton Lane West or Dutton Lane Hill St

Cabramatta City Centre Car Park

Access via Dutton Lane East and Dutton Lane Loop

Egress via Dutton Lane Loop and Dutton Lane West or Dutton Lane Hill St

Service vehicles

Access via Dutton Lane East onto Dutton Lane Loop

Egress via Dutton Lane Loop and Dutton Lane Hill St or Dutton Lane West

Service vehicles also access and egress the Hughes Street at grade car park during the AM period.

3.4.2 Existing On-Street Parking Restrictions

Parking and loading restrictions are in place along the roads within the vicinity of the site.

Figure 17, Figure 18 and Figure 19 shows the existing parking restrictions along Hill Street, Hughes Street and Dutton Lane.

In summary:

Hill Street provides a mix unrestricted and restricted parking options, with limited loading facilities.

Hughes Street provides a mix of restricted parking and loading facilities; and

Dutton Lane is Loading Bays for traders within the area.

Figure 17 – Existing On-Street Parking Restrictions – Hill Street

Figure 18 – Existing On-Street Parking Restrictions – Hughes Street

Figure 19 – Existing On-Street Parking Restrictions – Dutton Lane

3.4.3 Existing Parking Restrictions Within the Car Parks

The Dutton Lane and Dutton Plaza car parks provide a total of 776 spaces, including 49 reserved parking spaces and 3 spaces allocated to Council staff. The reserved spaces are located on the ground floor of the Dutton Lane car park and are allocated as shown in

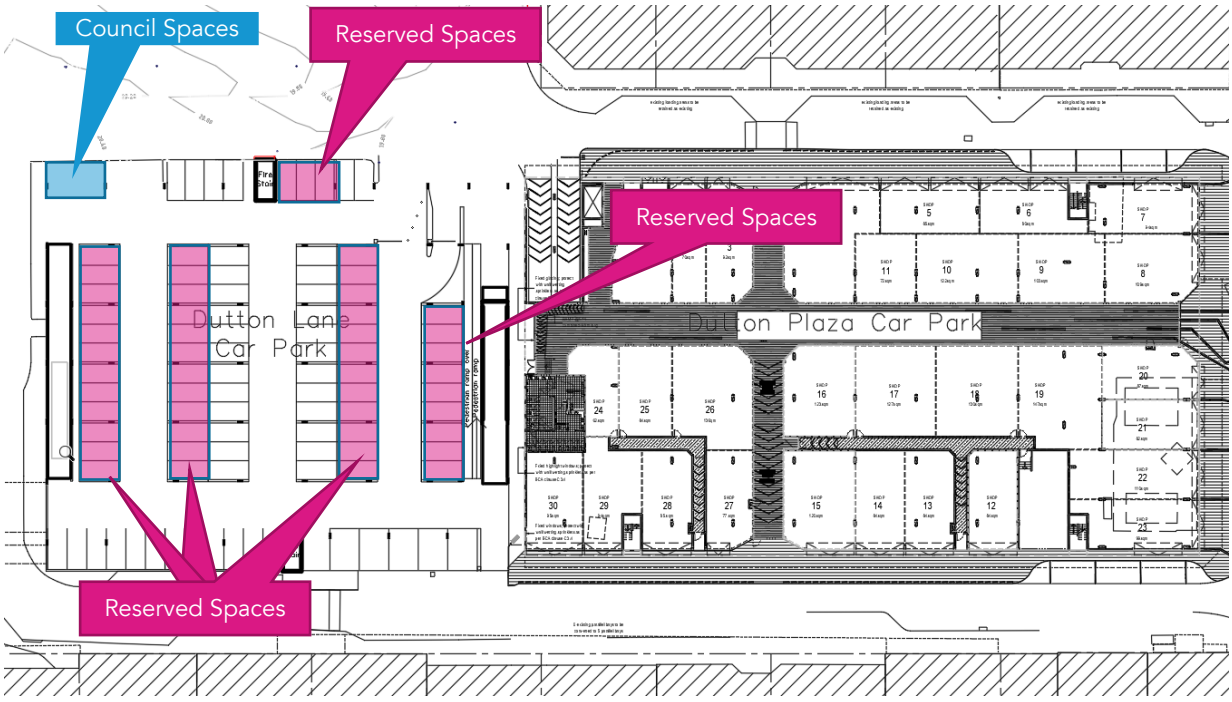

Figure 20 – Existing Dutton Lane Car Park- Space Allocation (Ground Floor)

3.4.4 Existing Car Park Occupancy - Dutton Lane and Dutton Plaza Car Parks

From data provide by Fairfield City Council, daily car park occupancy counts have been undertaken by utilising the boom gate entry and exit data from the Dutton Plaza (278 Spaces) and Dutton Lane (498 spaces) Multi-Storey car parks. This data was collected between July 2017 and June 2018 and the results are tabulated in Figure 21, Figure 22 and Figure 23.

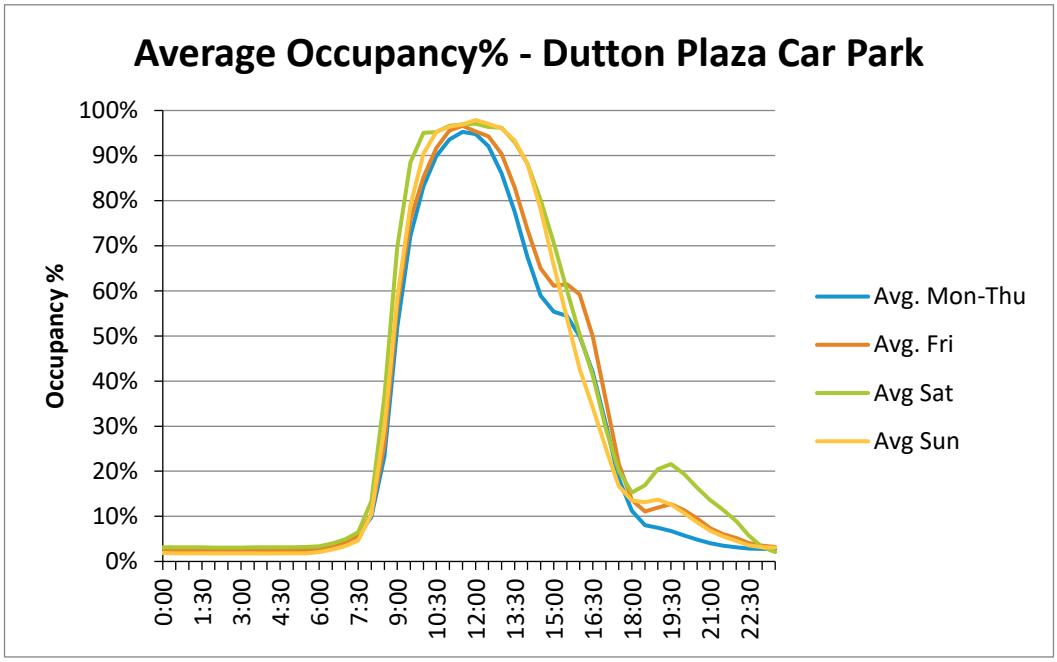

Figure 21 – Dutton Plaza – Average Daily Occuppancy %

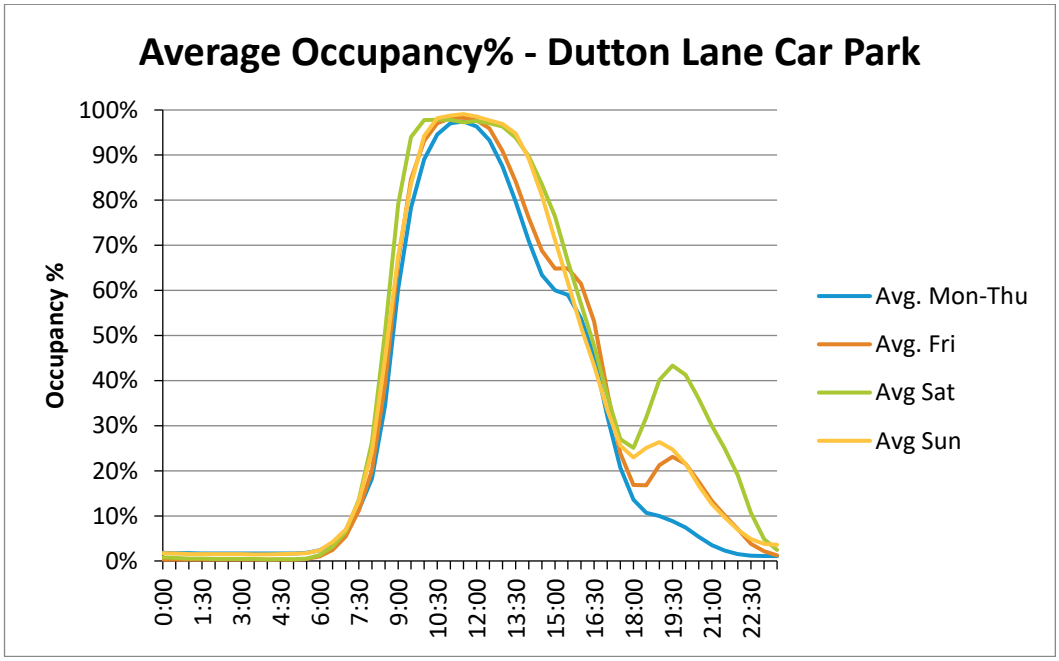

Figure 22 – Dutton Lane Multi Storey Car Park – Average Daily Occuppancy %

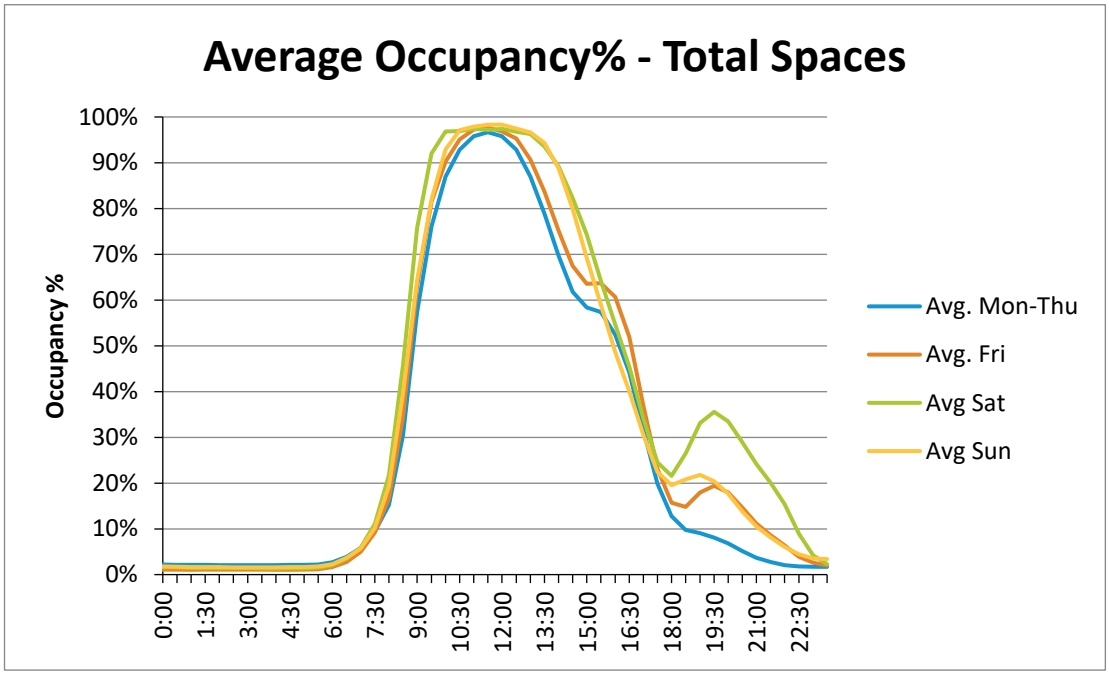

Figure 23 – Combined – Average Daily Occuppancy %

From this data the following can be ascertained that:

Dutton Plaza Car Park

Monday to Thursday – Average peak occupancy – 12.00pm – 95% Occupancy - 264 spaces

Friday – Average peak occupancy – 11.30am – 97% Occupancy – 269 spaces

Saturday - Average peak occupancy – 11.30am – 97% Occupancy – 269 spaces

Sunday - Average peak occupancy – 12.00pm – 98% Occupancy – 272 spaces

Dutton Lane Multi Storey Car Park

Monday to Thursday – Average peak occupancy – 11.30am – 97% Occupancy - 485 spaces

Friday – Average peak occupancy – 12.00pm – 98% Occupancy – 487 spaces

Saturday - Average peak occupancy – 12.00pm – 98% Occupancy – 486 spaces

Sunday - Average peak occupancy – 12.00pm – 99% Occupancy – 491 spaces

Combined Car Parks

Monday to Thursday – Between 10.30am and 12.30pm – 95% Occupancy – 736 of 776 spaces occupied

Friday - Between 10.00am and 1.00pm - 95% Occupancy – 735 of 776 spaces occupied

Saturday – Between 9.30am and 1.30pm - 96% Occupancy – 745 of 776 spaces occupied

Sunday - Between 10.00am and 1.30pm - 97% Occupancy – 750 of 776 spaces occupied

In summary, during the peak activity periods, the practical occupation of the car parks is 100%

3.4.5 Existing Car Park Occupancy – Hughes Street Car Park

An occupation survey was undertaken on the Hughes Street car park on Friday 17th May 2019 between 7am – 9am and 4pm – 6pm and on Saturday 18th May 2019 between 11am – 3pm to ascertain the typical car park peak occupancy of the Hughes Street car park.

The Hughes Street car park has a maximum capacity of 68 vehicles.

The results of these surveys are as follows:

Table 6 – Hughes Street Car Park Occupancy

Hughes Street Car Park (Max capacity 68)	7am to 8am	8am to 9am	4pm to 5pm	5pm to 6pm
Friday 17th May				
Occupancy	**34* (50%)**	**68* (100%)**	**68 (100%)**	**68 (100%)**

*- it was noted that approximately 16 SRV sized delivery vehicles were present in the car park unloading goods for the adjacent traders.

Hughes Street Car Park	11am to 12pm	12pm to 1pm	1pm to 2pm	2pm to 3pm
Saturday 18th May				
Occupancy	**68 (100%)**	**68 (100%)**	**68 (100%)**	**68 (100%)**

From these surveys it can be ascertained that the Hughes Street car park has a maximum of occupancy of 68 vehicles (100%) during the peak periods.

3.4.6 Existing Car Park Occupancy – Hill Street, John Street and Arthur Street Car Parks

An occupation survey was undertaken on the Hill Street, John Street, Arthur Street South and Arthur Street North car parks on Friday 17th May 2019 between 7am – 9am and 4pm – 6pm and on Saturday 18th May 2019 between 11am – 3pm to ascertain the typical car park peak occupancy of these car parks car park.

The location of these car parks in relation to Hughes Street is shown in Figure 24 and these car parks were chosen as they are within the Cabramatta CBD and within a 400m radius of the site.

Figure 24 – Car Park Occupancy Study Area

The maximum capacity of each car park is as follows:

Hill Street Car Park - 94 spaces

John Street Car Park - 75 spaces

Arthur Street North Car Park - 46 spaces

Arthur Street South Car Park - 50 spaces

The results of these surveys are as follows:

Table 7 – Hill Street Car Park Occupancy

Hill Street Car Park (Max capacity 94)	7am to 8am	8am to 9am	4pm to 5pm	5pm to 6pm
Friday 17th May				
Occupancy	**15 (16%)**	**86 (91%)**	**94 (100%)**	**66 (70%)**
Hill Street Car Park (Max capacity 94)	**11am to 12pm**	**12pm to 1pm**	**1pm to 2pm**	**2pm to 3pm**
Saturday 18th May				
Occupancy	**94 (100%)**	**94 (100%)**	**94 (100%)**	**94 (100%)**

Table 8 – John Street Car Park Occupancy

John Street Car Park (Max capacity 75)	7am to 8am	8am to 9am	4pm to 5pm	5pm to 6pm
Friday 17th May				
Occupancy	**6 (8%)**	**55 (73%)**	**75 (100%)**	**75 (100%)**
John Street Car Park (Max capacity 75)	**11am to 12pm**	**12pm to 1pm**	**1pm to 2pm**	**2pm to 3pm**
Saturday 18th May				
Occupancy	**75 (100%)**	**75 (100%)**	**75 (100%)**	**75 (100%)**

Table 9 – Athur Street North Car Park Occupancy

Arthur Street North Car Park (Max capacity 46)	7am to 8am	8am to 9am	4pm to 5pm	5pm to 6pm
Friday 17th May				
Occupancy	**17 (37%)**	**40 (87%)**	**44 (96%)**	**45 (98%)**
Arthur Street North Car Park (Max capacity 46)	**11am to 12pm**	**12pm to 1pm**	**1pm to 2pm**	**2pm to 3pm**
Saturday 18th May				
Occupancy	**46 (100%)**	**46 (100%)**	**46 (100%)**	**46 (100%)**

Table 10 – Athur Street South Car Park Occupancy

Arthur Street South Car Park (Max capacity 50)	7am to 8am	8am to 9am	4pm to 5pm	5pm to 6pm
Friday 17th May				
Occupancy	**29 (58%)**	**48 (96%)**	**49 (98%)**	**49 (98%)**
Arthur Street South Car Park (Max capacity 50)	**11am to 12pm**	**12pm to 1pm**	**1pm to 2pm**	**2pm to 3pm**
Saturday 18th May				
Occupancy	**50 (100%)**	**50 (100%)**	**50 (100%)**	**50 (100%)**

In summary, during the pm peaks and weekends, the practical occupation of the car parks is at 100%, with some spare capacity during weekday morning periods.

3.4.7 Existing Car Park Occupancy – Fisher Street Car Park

In addition, boom gate data has been acquired from Fairfield City Council for the Fisher Street multi deck car park. (Refer to Figure 25)

Figure 25 – Fisher Street Multi Deck Car Park

The Fisher Street Car Park has a maximum occupancy of 173 spaces and the most recent data from the entry and exit boom gates (Monday 4th March to Sunday 10th March 2019) provided to following occupancy data at the corresponding times to the occupation surveys for the other car parks:

Table 11 – Fisher Stree Car Park Occupancy

Fisher Street Car Park (Max capacity 173)	**7am to 8am**	**8am to 9am**	**4pm to 5pm**	**5pm to 6pm**
Friday				
Occupancy	**98 (56%)**	**153 (88%)**	**135 (78%)**	**90 (52%)**
Fisher Street Car Park (Max capacity 173)	**11am to 12pm**	**12pm to 1pm**	**1pm to 2pm**	**2pm to 3pm**
Saturday				
Occupancy	**83 (47%)**	**71 (41%)**	**51 (29%)**	**20 (11%)**

In summary, during the weekday am and pm peaks, the occupation of the car park reaches a maximum occupancy of 88% (20 spaces) and during the weekend, reaches a maximum occupancy of around 50%, with approximately 90 free spaces.

3.5 Public Transport

The development site is served by train and bus services. The NSW Planning Guidelines for Walking and Cycling 2004 (the Guide) suggests a distance of 400m as a walkable catchment to access local amenities. The Guide also recommends that an 800m catchment is an acceptable, walkable distance if the development is within an area with public transport links. Furthermore, the document also suggests a distance of 1500m is a suitable catchment for cycling for accessibility to public transport facilities and local amenities.

3.5.1 Train Services

Cabramatta Station is located 500 metres (6-minute walk) from Hughes Street car park and Dutton Lane as shown in Figure 26.

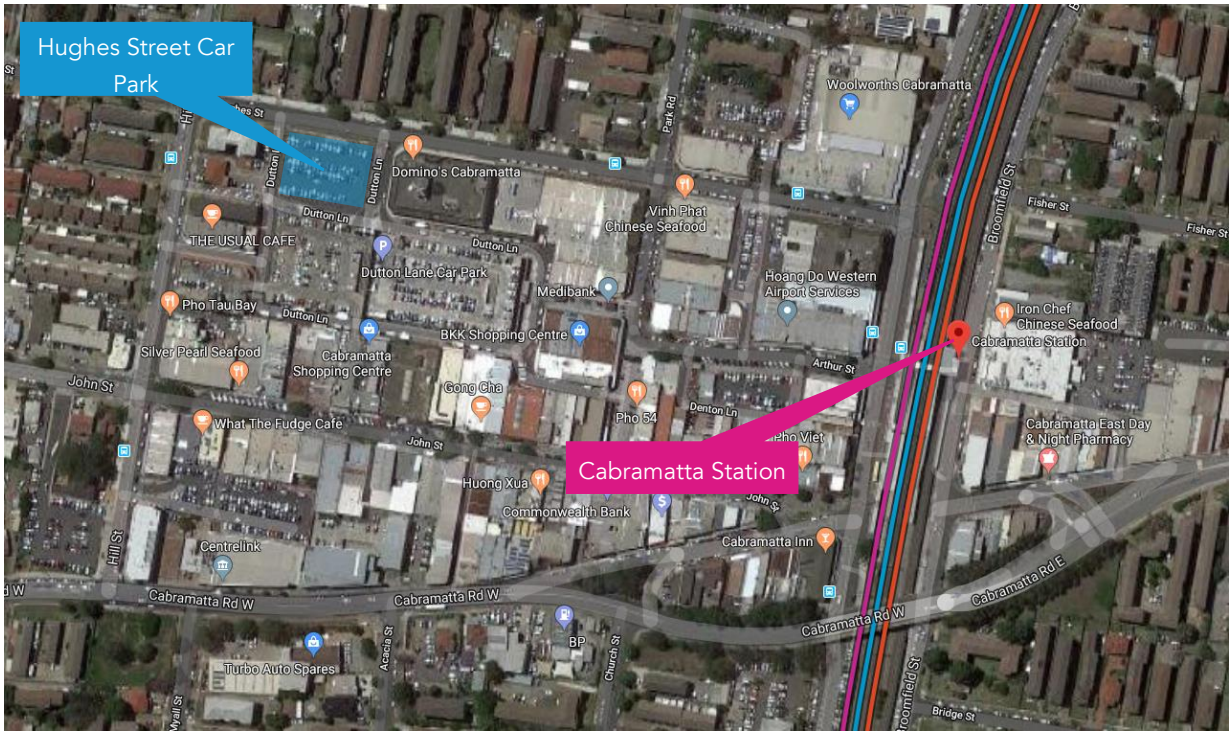

Figure 26 – Cabramatta Train Station

Cambramatta Station operartes services on the T2 – Inner West and Leppington Line, T3 – Bankstown Line and T5 – Cumberland Line and are summarised in Table 12, Table 13 and Table 14.

Table 12 – T2 - Inner West and Leppington Line

Service - T2 - Inner West and Leppington Line	
Service Summary	
Monday to Saturday	**4.00am to 12.40 am, approximately 10-minute intervals**
Sundays and Public Holidays	**4.00am to 12.00am, approximately 15-minute intervals**

Table 13 – T3 – Bankstown Line

Service - T3 – Bankstown Line	
Service Summary	
Monday to Friday	**4.00am to 12.30 am, approximately 30-minute intervals**
Weekends and Public Holidays	**4.15am to 11.45pm, approximately 30-minute intervals**

Table 14 – T5 – Cumberland Line

Service T5 – Cumberland Line	
Service Summary	
Monday to Friday	**6.45am to 12.45 am, approximately 30-minute intervals**
Saturday	**4.45am to 12.15am, approximately 30-minute intervals**
Sunday and Public Holidays	**4.45am to 11.45pm, approximately 30-minute intervals**

3.5.2 Bus Services

The Hughes Street Car park and Dutton Lane area are serviced by two bus stops located approximately 150 metres (2 minute walk) from the site, as shown in Figure 27.

Figure 27 – Bus Stops

These bus stops operate services on the 807, 815 and 816 routes and details of the services are summarised in Table 15, Table 16 and

Table 17.

Table 15 – Route 807 - Cecil Hill and Cabramatta

Route 807 – Cecil Hill and Cabramatta	
Service Summary	
Monday to Friday	**6.00am to 9.50pm, approximately 30-minute intervals**
Weekends and Public Holidays	**6.50am to 9.40pm, approximately 30-minute intervals**

Table 16 – Route 815 - Cabramatta and Mount Pritchard

Route 815 - Cabramatta and Mount Pritchard	
Service Summary	
Monday to Friday	**5.30am to 8.20pm, approximately 60-minute intervals**
Saturday	**7.00am to 6.00pm, approximately 60-minute intervals**

Sunday and Public Holidays	**8.00am to 6.00pm, approximately 60-minute intervals**

Table 17 – Route 816 - Cabramatta and Greenfield Park

Route 816 - Cabramatta and Greenfield Park	
Service Summary	
Monday to Friday	**5.00am to 9.00pm, approximately 60-minute intervals**
Saturday	**6.30am to 7.00pm, approximately 60-minute intervals**
Sunday and Public Holidays	**8.15am to 7.00pm, approximately 60-minute intervals**

3.5.3 Public Transport Summary

As outlined in Sections 3.5.1 and 3.5.2, the Hughes Street car park and the Dutton Lane area are well serviced by public transport options which provide a viable alternative mode of transport for visitors to the area.

3.6 Active Transport

The locality was reviewed for features that would attractive active transport trips (walking and cycling). It is noted that the site is located within comfortable walking distance to Cabramatta Town Centre (within 800 metres catchment) as suggested by the NSW Planning Guidelines for Walking and Cycling (2004), where a large range of destinations including supermarkets, health care, banks and restaurants are located.

3.6.1 Walking

Figure 28 - Pedestrain pathways within the vicinity of the Site

Due to the commercial and retail density in the area, it is well provided with pedestrian footpaths and crossings. There are signalised pedestrian crossings on all major intersections on Hughes Street (Hills Street, Park Road and Railway Parade).

3.6.2 Cycling

As shown in Figure 29, the site is not well provided with bicycle lanes or bicycle friendly roads. Lack of bicycle stands in the area are also likely to discourage cyclists.

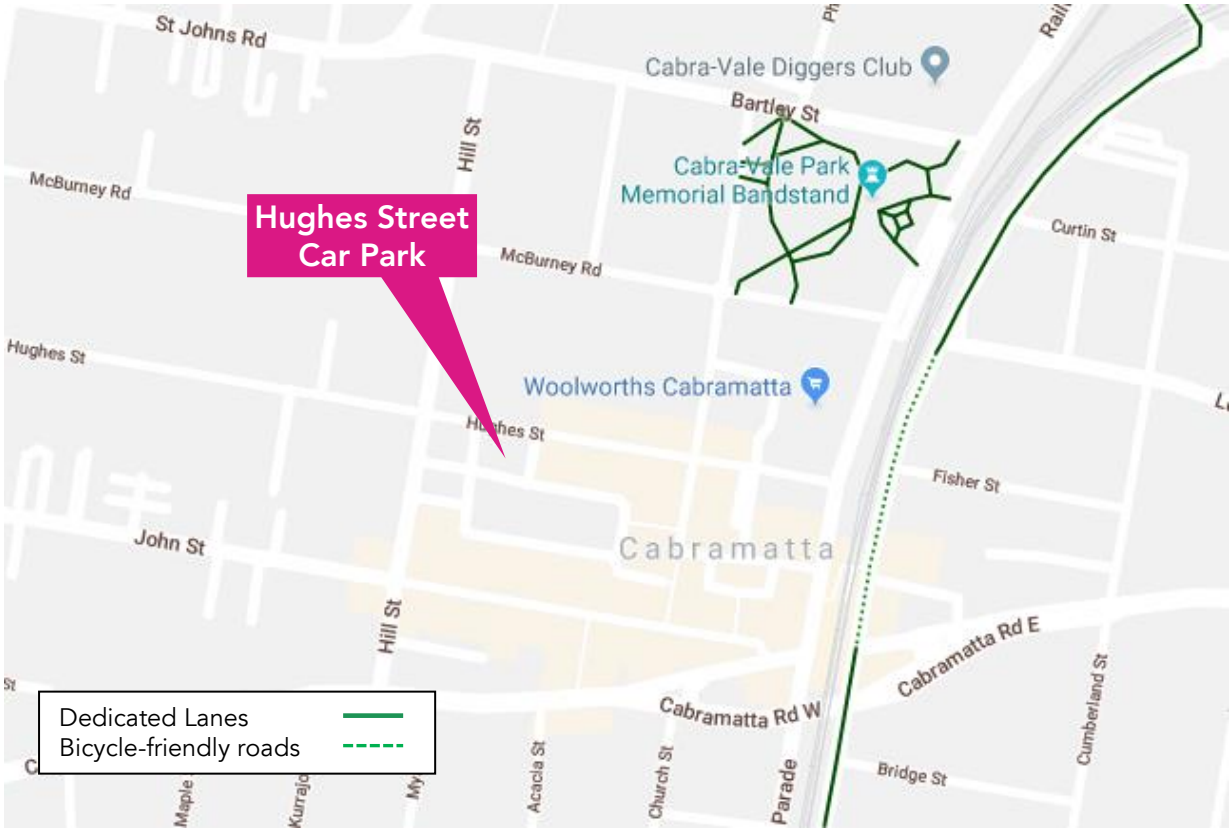

Figure 29 – Existing and proposed cycling network

As shown, the site has very limited cycling access and therefore discourages cycling as an alternative transport option.

4. Traffic Management Plan

4.1 Objective

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:

1 - To minimise the impact of the construction vehicle traffic on the overall operation of the road network;

2 - To ensure continuous, safe and efficient movement of traffic for both the general public and construction workers;

3 - Installation of appropriate advance warning signs to inform users of the changed traffic conditions;

4 - To provide a description of the construction vehicles and the volume of these construction vehicles accessing the construction site;

5 - 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

6 - Establishment of a safe pedestrian environment in the vicinity of the site.

4.2 Hours of Work

All works, associated with the project will be restricted to the time periods by the Conditions of Consent, which details the following permitted working hours associated with the construction activity. Given the high pedestrian and traffic activity during the weekday am and pm peaks and weekends, and the residential nature of the surrounding areas, the works hours are likely to be as follows (subject to DA conditions):

Monday to Friday: 7.00am to 5.00pm;

Saturdays, Sundays and public Holidays: No work unless specifically approved by Council;

Note: exceptions for special requirements, such as concrete pours will be needed and can be approved as exceptions

4.3 General Requirements

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

The applicant/contractor is required to follow and abide by the any specific standard requirements for construction management as set out by the Fairfield City Council.

4.4 Construction Process

The works are anticipated to commence mid-2019 and last for approximately 15 months.

The works are likely to be undertaken in two distinct stages:

Phase 1 – Demolition and Excavation

Phase 2 - Construction

4.4.1 Phase 1 – Demolition and Excavation

A summary of the likely Phase 1 characteristics is shown in Table 18.

Table 18 – Phase 1 Summary

Item	Description
Works to be undertaken	**Demolition of existing ground slab, site establishment, installation of piers, footings and completion of new ground floor slab**
Commencement date	**Mid-2019**
Duration	**3 months**
Largest anticipated vehicle	**12.5m HRV**
Peak daily trucks / deliveries to the site	**Up to 20 trips per day**

4.4.2 Phase 2 - Construction

A summary of likely Phase 2 characteristics is shown in Table 19.

Table 19 – Phase 2 Summary

Item	Description
Works to be undertaken	**Above ground structure, cladding, roof, internal fit out and external works**
Commencement date	**Late 2019**
Duration	**12 months**
Largest anticipated vehicle	**12.5m HRV**
Peak daily trucks / deliveries to the site	**20 concrete agitators (during concrete pours)**

Site establishment plans are to be provided by the contractor as part of the detailed CTMP for approval by Council, prior to commencement on site.

4.5 Construction Traffic Activity

It is proposed that the construction work is to commence in 2020 and is likely to be completed over the following 18 months.

The average daily construction vehicle movements are expected to be as follows:

12.5m Heavy Rigid Vehicles -	20 ingress and egress vehicles per day
8.8m Medium Rigid Vehicles -	10 ingress and egress vehicles per day

It is not anticipated that the construction activity would cause a notable impact upon the network capacity or operation of the road network and this activity would fall within typical daily traffic variations.

4.6 Construction Vehicle Types

As discussed in Section 1.1, the development involves the construction of a multi deck car park and will require removal of mixed materials, concrete delivery and the delivery of large materials to site.

Given the limitations of the surrounding road network (discussed further in Section 4.7), the maximum vehicle size will be 12.5m Heavy Rigid Vehicle. With smaller vehicles utilised, where possible, for concrete delivery (concrete agitators) and smaller plant and material.

Any oversized vehicle that is required to travel to the project will be dealt with separately, with the submission of required permits to and subsequent approval by Fairfield City Council prior to any delivery.

4.7 Construction Vehicle Routes

The site is located in the suburb of Cabramatta and the proposed construction vehicle routes have regard for the surrounding traffic arrangements within the vicinity of the site as illustrated in Figure 30.

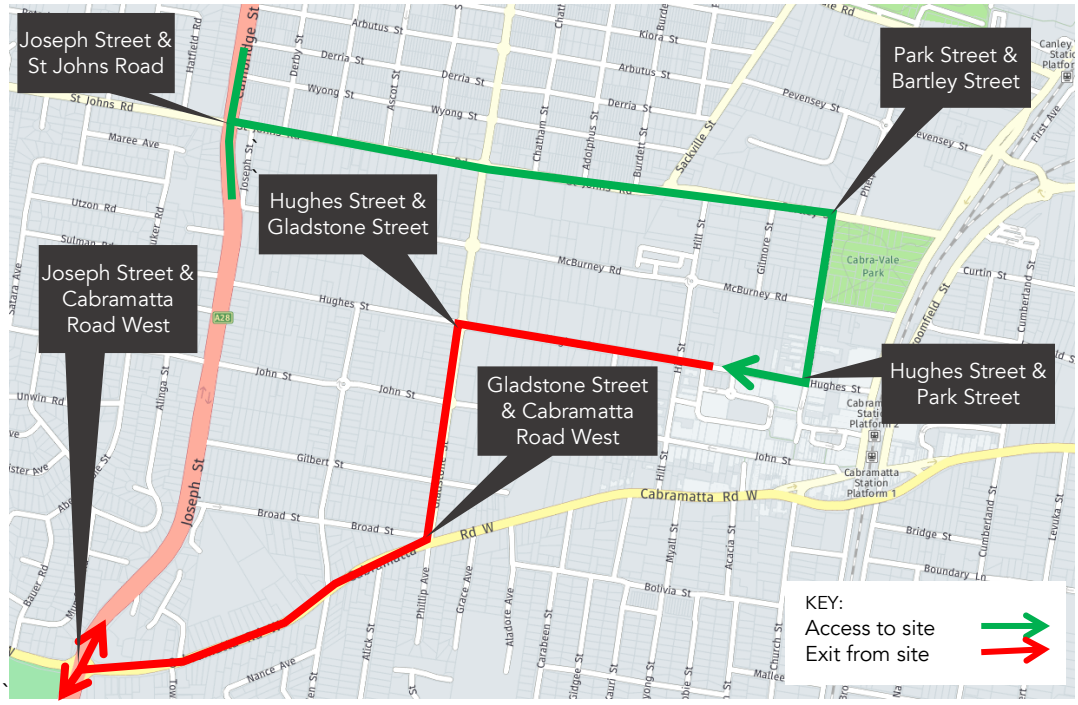

Figure 30 – Construction Vehicle Access and Egress Routes

The main access to the site is proposed via Joseph Street, St Johns Road, Park Road and Hughes Street and egress is via Hughes Street, Gladstone Street, Cabramatta Road West and Joseph Street.

Vehicles up to a 12.5m Heavy Rigid Vehicle (HRV) are expected to be required to access the site during the construction process.

No queuing or marshalling of trucks is permitted on any public road.

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

The key intersections (as outlined in Section 3.3 have been assessed in relation to the largest expected vehicles to access and egress the site.

Swept path analysis has been undertaken, utilising a HRV on the six key intersections and, as shown in Figure 31 to Figure 37 the intersections can accommodate the design vehicle.

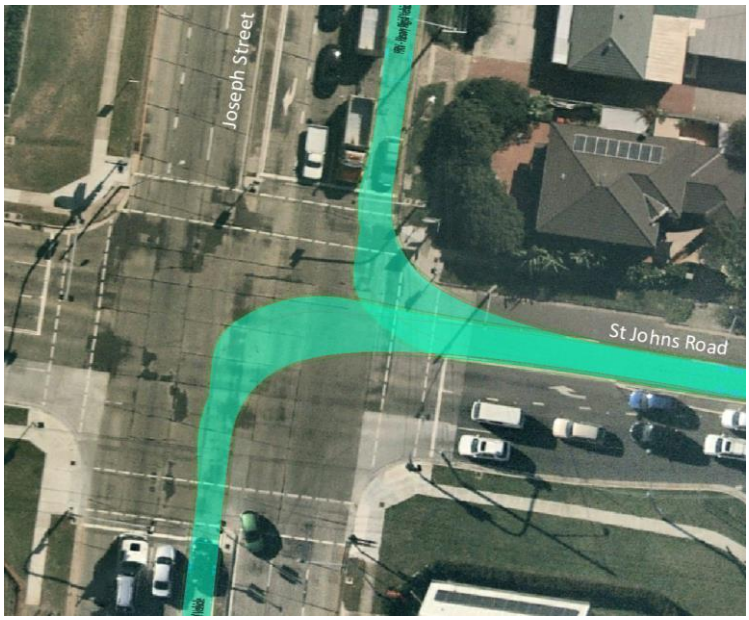

Figure 31 – Joseph Street and St Johns Road

Figure 32 –Bartley Street and Park Street

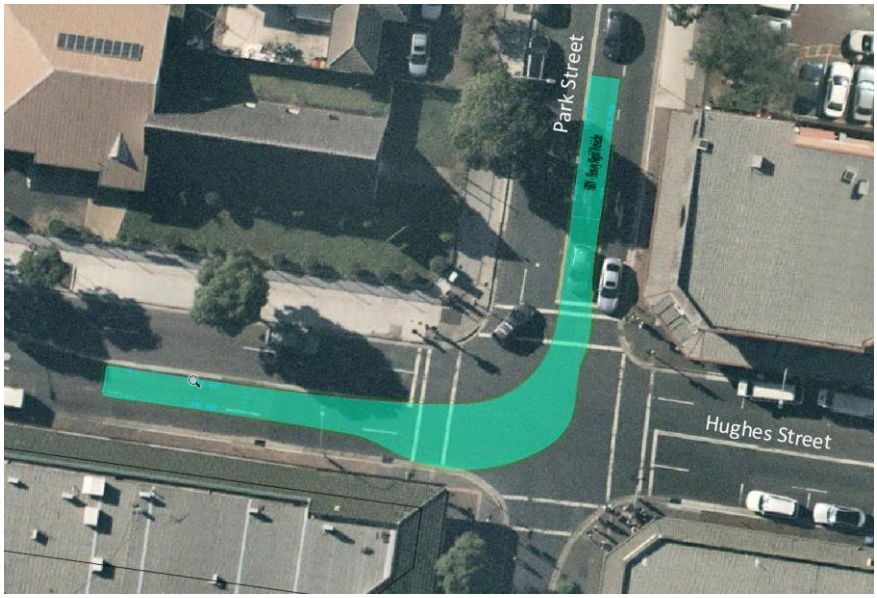

Figure 33 – Park Street and Hughes Street

Figure 34 – Hughes Street and Gladstone Street

Figure 35 – Gladstone Street and Cabramatta Road West

Figure 36 –Cabramatta Road West and Joseph Street

4.8 Work Zone and Site Access

All construction vehicles accessing the site will do so via either a proposed 25 metre long work zone along the Hughes Street frontage or the 20 metre long work zone on the Dutton Lane East frontage of the site and any direct access to the site, will be limited to and from Hughes Street or Dutton Lane East , via a gate within the work zone area.

The work zones will be 2.5 metres wide and will result in alterations to the lane assignment along Hughes Street.

Details of the revised work zone and revised configuration of Hughes Street and Dutton Lane East are shown in Figure 37.

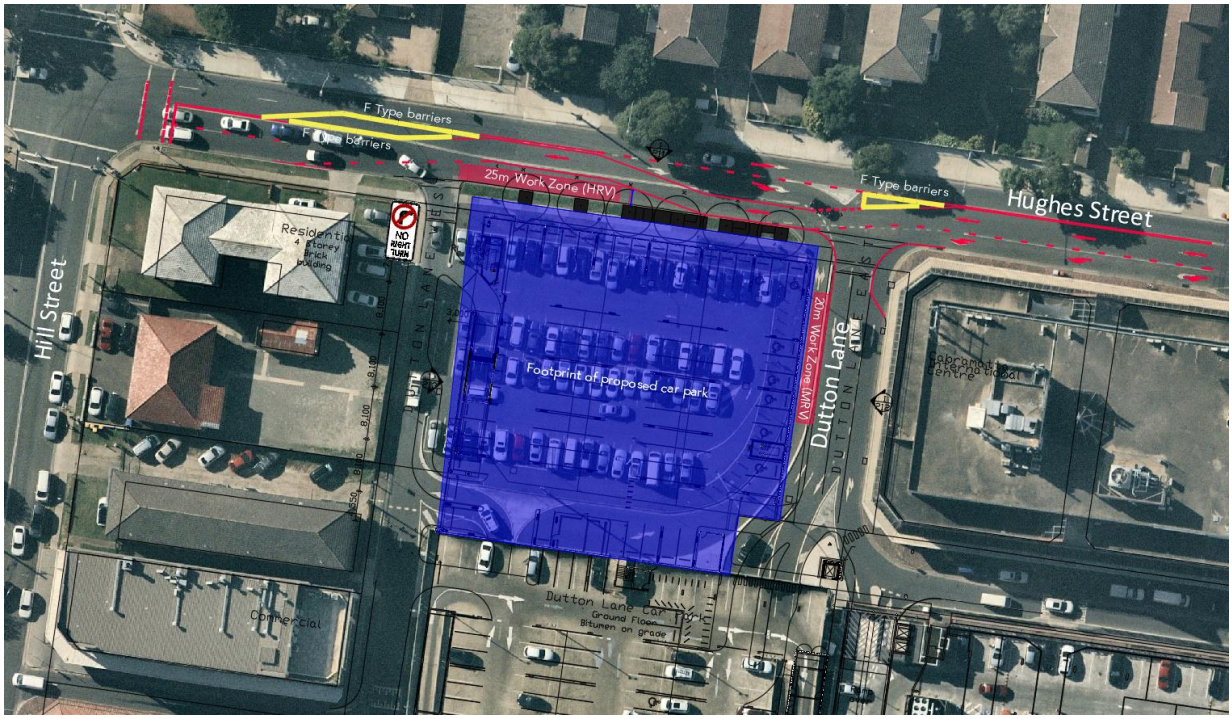

Figure 37 – Work Zone and revised Hughes Street Alignment

The work zones will be signed for use as a work zone to coincide with the hours of work outlined in Section 4.2 and the contractor is to provide details this signage and any traffic control required, as part of the final CTMP prior to commencement of construction.

The work zone and all signage details and traffic control plans (TCPs) are to be submitted to Council for approval, prior to construction.

It should be noted that the work zone area on Hughes Street is to be allocated as a 'loading zone' outside of construction hours and this is discussed further in Section 4.10.

4.9 Car Park Access and Egress During Construction

During the construction of the car park and as outlined in Section 4.8, the access and egress arrangements for the Dutton Lane, Dutton Lane car park and Dutton Plaza car park will be altered.

As shown in Figure 38, access to Dutton Lane and Plaza and the existing car parks the right turn capacity from Hughes Street will be reduced and egress will via either a left turn on to Hughes Street (from Dutton Lane West) or Hill Street via Hill Lane (in line with the post development layout).

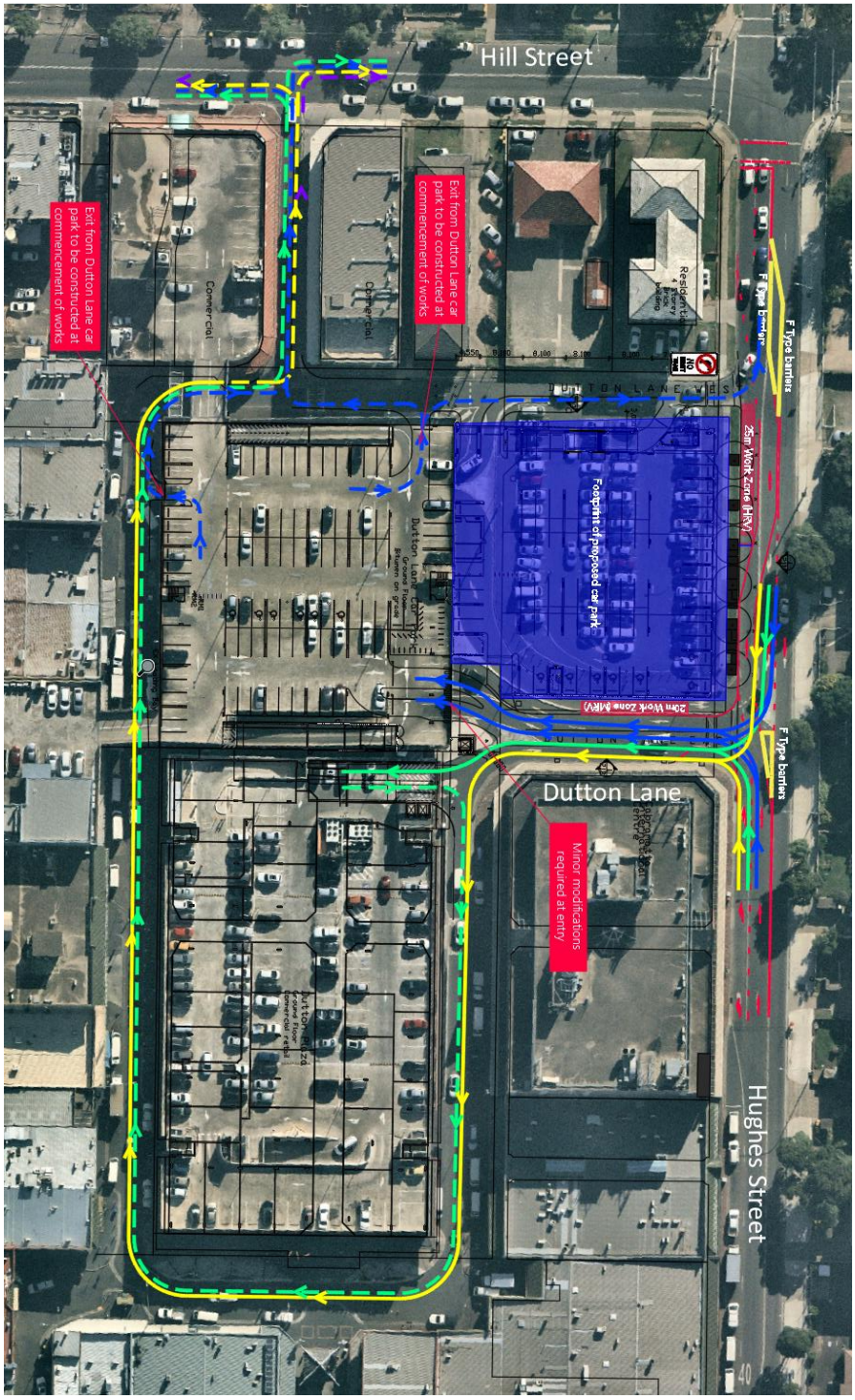

Figure 38 – Access & Egress During Construction

To advise visitors accessing Dutton Lane and Dutton Plaza, static diversions signs will be erected at key points to direct drivers to the alternative access routes. Figure 39, shows the indicative location of the alternative route to access the site, westbound on Hughes Street.

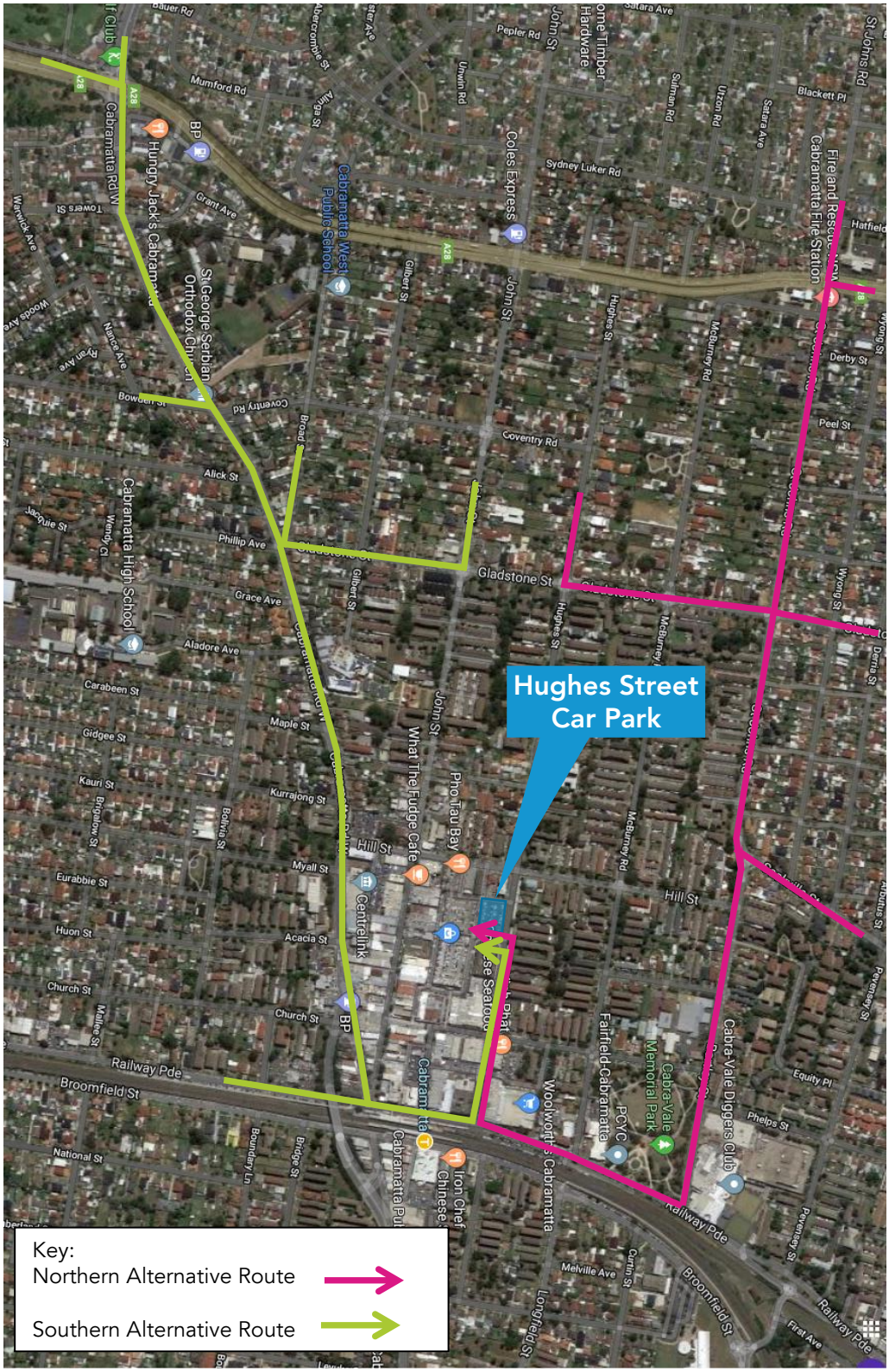

Figure 39 –Alternative Routes

Final alternative routes and signage are to submitted to RMS and Council, for approval, as part of the detailed CTMP prior to commencement on site.

Visitors to Dutton Lane/Plaza should also be advised of the public transport options (as outlined in Section 3.5) that are available to reduce the requirement of the use of private vehicles.

Also, as shown in Figure 38, additional egress points (in line with the final car park design) are required from the Dutton Lane Car Park. These egress points must be provided prior to the closure of the Hughes Street Car Park to provide visitors the ability to exit the Dutton Lane and Dutton Plaza car parks. In addition, internal signage is t be provided on the upper levels of the Dutton Lane and Dutton Plaza car parks advising users that they can exit the car parks via Dutton Plaza Car Park down ramp.

4.10 Alternative Parking and Loading Arrangements

To construct the Huches Street car park the existing Hughes Street at grade car park will be closed and as outlined in Section 3.4.5, this will displace approximatley 68 car spaces (visitors) and 15 spaces utilised by traders for loading and unloading of goods.

4.10.1 Vistor Parking

To mitigate these displaced vistors spaces, alternative parking is avaliable in the Fisher Street Car Park (refer to Section 3.4.7).

To direct visitors to the Fisher Street Car Park Variable Message Signs (VMS) need to be erected at key points in the vicinity of the site.

Figure 40 shows the indicative locations for the VMS.

Figure 40 – VMS Locations

The message for the VMS and the locations requires agreement with RMS and Council prior to commencement on site.

It is advised that the message for the VMS should be *"Alternative Parking, Use Fisher St Car Park'* or similar approved.

Visitors to Dutton Lane/Plaza should also be advised of the public transport options (as outlined in Section 3.5) that are available to reduce the requirement of the use of private vehicles.

4.10.2 Tempoary Loading Areas

To accomadate the displaced 'Loading Area' within the Hughes Street Car Park used by traders, the following tempoaray alterations are a required to the existing parking restrictions in the vicinity of the site.

- Hill Street –

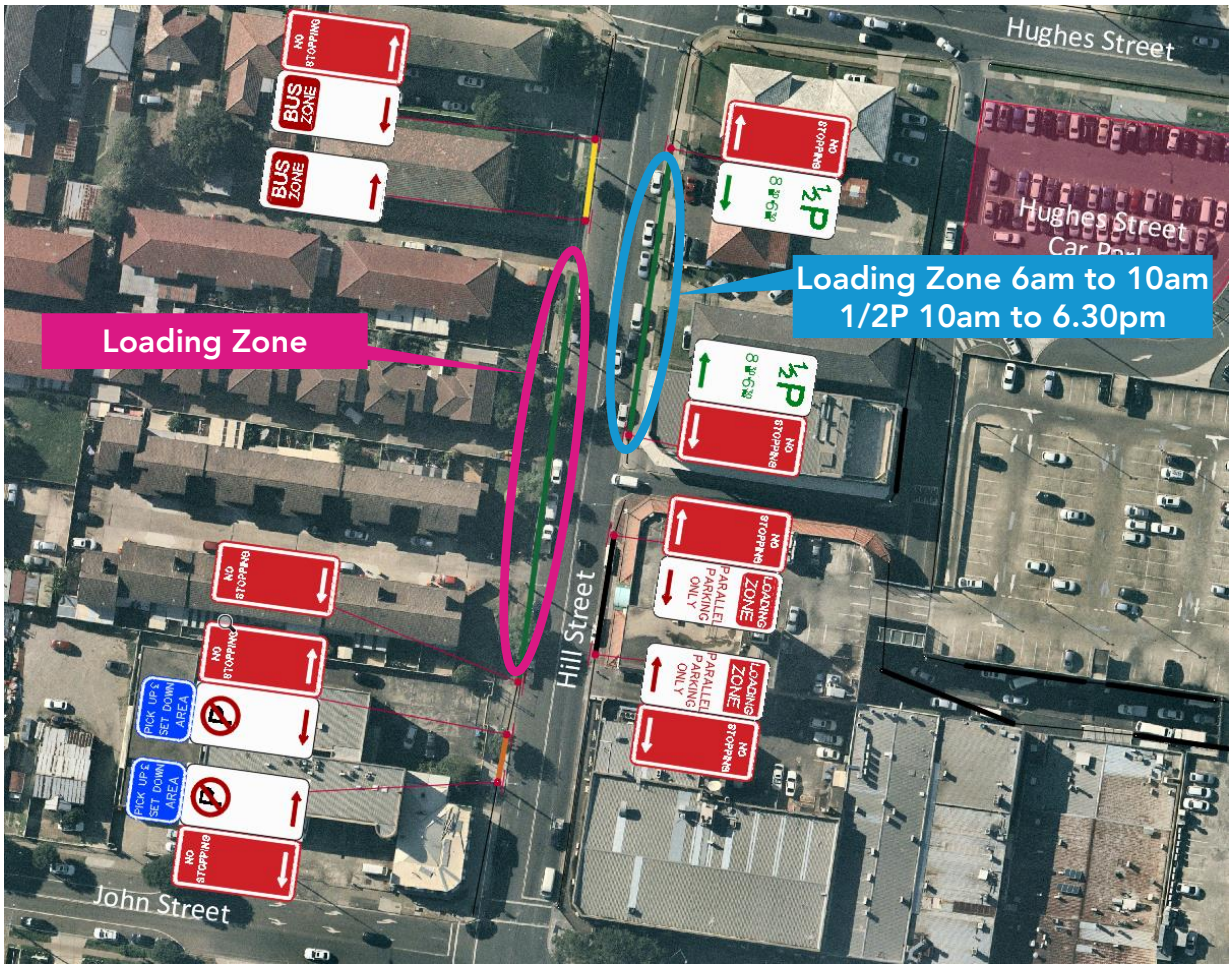

Figure 41 – Hill Street Loading Zones

- Hughes Street

Figure 42 – Hughes Street Loading Zone

- Work Zone – As outlined in Section 4.8, a Work Zone is required along the Hughes Street frontage of the site. This work zone will be utilised by the contractor during the site working hours (provisionally Monday to Friday - 9.00am to 4.00pm). Outside of these times, the area will be made avaliable for use as a loading zone.

Figure 43 – Work Zone Loading Zone – Hughes Street

All signage cahanges required to accomadate the Loading Zones must be submiited and agreed with Council prior to commencement on site.

4.11 Traffic Control Measures

The Traffic Control Plan (TCP) outlines the proposed traffic management to inform road users of the changed traffic conditions in the vicinity of the works site.

The TCPs must be set out in accordance with the RMS Traffic Control at Works Site.

Traffic controllers are expected to be required for management of the traffic during the construction period, along with traffic signs to advise road users of the presence of construction vehicles.

Final Traffic Control Plans must be prepared by the traffic management contractor prior to commencement to works on site and issued to Council for approval.

4.12 Pedestrian Management

Pedestrian access to and around the site is to be maintained at all times.

During the construction of the Hughes Street Car Park, the footways along the east, west and south of the existing car park will be closed to pedestrians. Pedestrian access to the Plaza and Dutton Lane will be maintained in all other locations with the inclusion of a pedestrian crossing located on Dutton Lane East and West, as shown in Figure 44.

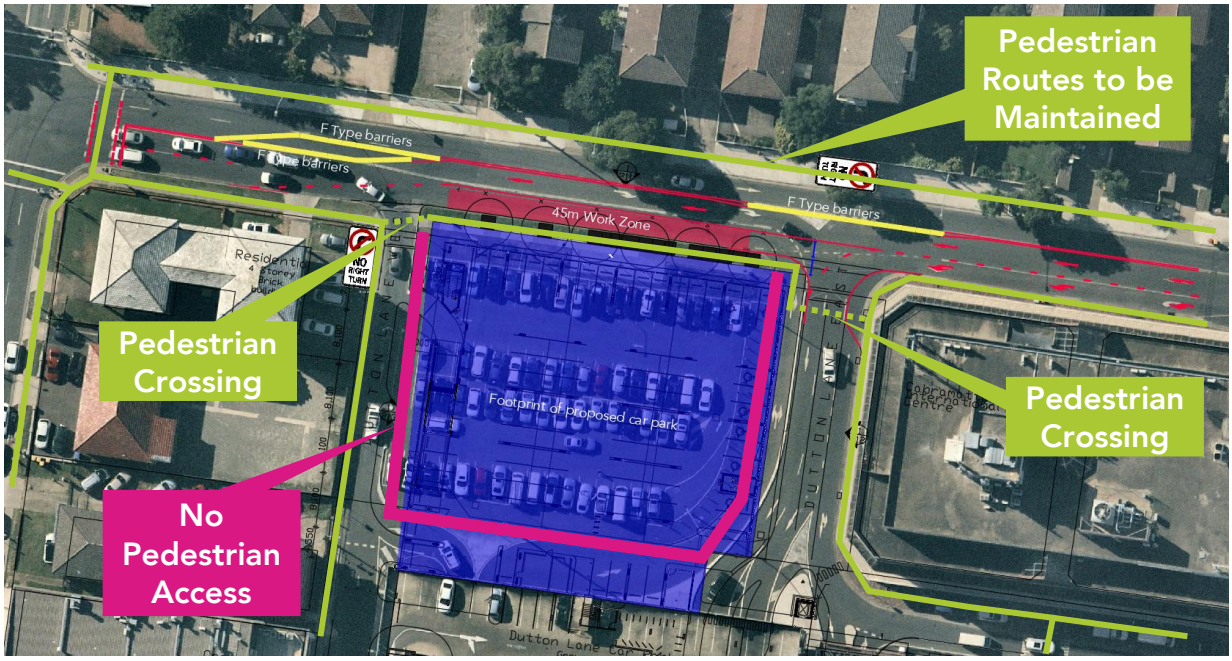

Figure 44 – Pedestrian Routes During Construction

The site is to be secured and bounded by Class A or Class B Hoarding at all times and all access points to the site are to be securely locked when not in use.

Details of the proposed pedestrian management are to be included within the final CTMP.

4.13 Special Deliveries

Whilst not anticipated, any oversized vehicle that is required to travel to the site will be dealt with separately, with the submission of required permits to and subsequent approval by Fairfield City Council prior to any delivery. Requests shall be submitted 28 days prior to the scheduled date of use of an oversized vehicle.

4.14 Staff Parking

Given the limited visitor and public parking available at the site, the contractor will actively discourage travel to the project in private cars, or, if required, to car pool (wherever practicable). The site is well serviced by public transport (refer to Section 4.3) and the contractor is to promote this aspect to all project participants, in particular subcontractor personnel.

No parking is to be reserved for the contractor or staff during construction by Council.

A public transport pack information is to be provided to all staff and contractors, advising them of the public transport options available.

4.15 Work Site Security

As discussed in Section 4.12, to provide security to the works site and protection to the general public, it is proposed that the entire site (and any remote work areas when applicable) will be physically separated from the public via a combination of A or B-Class hoardings and temporary fencing as depicted on the Site Establishment Plan. The extents of fencing and hoarding will be modified during the works as required to suit the works occurring at each project stage.

All access points are to be securely locked when construction activities are not in progress. The exact location of this fence is to be agreed on site, prior to commencement of the works.

4.16 Staff Induction

All staff and subcontractors engaged on site will be required to undergo a site induction. 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 procedures. Additionally, the lead contractor will discuss TMP requirements regularly as a part of toolbox talks and advise workers of public transport and car-pooling opportunities.

4.17 Emergency Vehicle Access

The proposed traffic control arrangements do not propose closure of any local roads. Any emergency vehicles requiring access to the project site will do so via the existing site access along Hughes Street

4.18 Access to Adjoining Properties

Access to all adjoining properties will be maintained throughout the works.

4.19 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 RMS accreditation in accordance with Section 8 of Traffic Control at Worksites.

4.20 Method of Communicating Traffic Changes

Traffic control plans in accordance with Australian Standards (AS 1742.3 – Traffic Control Devices for Works on Roads) and RMS Traffic Control at Worksites manual will advise motorist 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 TCP 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".

No deviation from the approved TCP shall be permitted, unless otherwise approved by Council and certified by an RMS accredited personnel.

The associated TCP road signage will inform drivers of works activities in the area including truck movements in operation.

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.

4.21 Driver Code of Conduct

All construction vehicle drivers are required to follow the ingress and egress routes in a "forward in, forward out" manner as specified in Section 4.7, whilst adhering to all road rules and regulations. This is essential to minimise the impacts of earthworks and construction on the local and regional road network. Should there be a Traffic Control Plan (TCP) required to manage construction activity, all construction vehicles entering or exiting from the site shall operate under the direction of an RMS accredited traffic controller at all times; this will also minimise conflicts with other road users. Furthermore, construction traffic activity shall only occur within the permitted hours of work (see Section 4.2) to minimise road traffic noise.

This code of conduct will be advised to all drivers engaged on site at the staff induction, where all demolition and construction vehicles (excluding worker vehicles) are to be contained wholly within the site and must enter the site completely before stopping.

An example of a Driver Code of Conduct leaflet has been provided as part of this CCTMP. This document should be site specific and distributed to truck drivers and operators. The example Driver Code of Conduct is part of this document as Attachment 1.

4.22 Visitor Information Sheet

Similar to the Drivers Code of Conduct, a 'Visitor Information Sheet' should be prepared to advise all visitors to Dutton Lane and Dutton Plaza of the changed traffic conditions during construction.

This sheet should be set out in a same format as the Drivers Code of Conduct and should inform visitors of the alternative car parking arrangements, traffic diversions due to the closure of the right turn into Dutton Lane off Hughes Street and the details of the available public transport.

4.23 Contact Details for On-Site Enquiries and Site Access

The principal contact for the contractor will be advised when available

4.24 Maintenance of Roads and Footpaths

The roads and footpaths along the route of travel will be kept in a serviceable state at all times. Any damage arising as a result of the proposed truck movements will be treated / repaired by the principal contractor at no cost to Council.

4.25 Dilapidation Survey

A dilapidation survey is required in advance of the commencement of works along the routes to be utilised by construction vehicles.

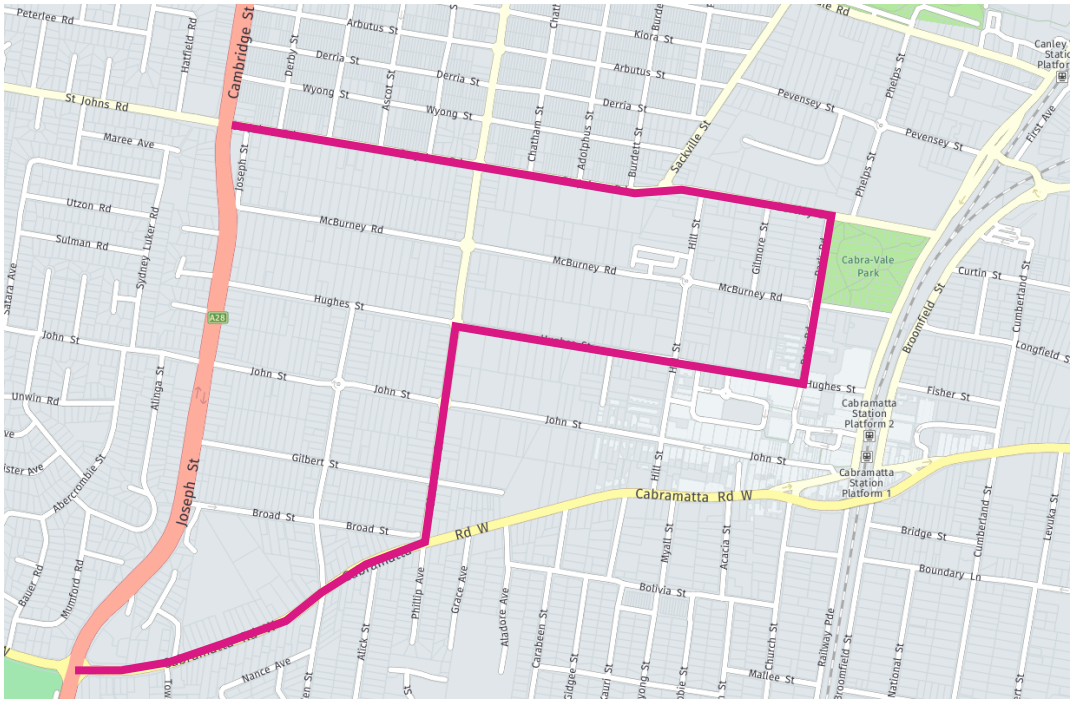

Figure 45 – Extent of Dilapidation Survey

The survey should be undertaken on St John Road, Park Road, Hughes Street, Gladstone Street and Cabramatta Road West, as shown in Figure 45.

The survey requirements will be provided by Fairfield Council prior to commencement of works and the condition of any existing features must be agreed with Council prior to commencement and any damage, as a result of construction activities, must be made good by the contractor to the satisfaction of the Council.

5. Summary

This CCTMP 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 CCTMP in place, the construction activity is anticipated to have minimal disruption to the daily activities within the vicinity of the site.

The Contractor is to finalise a Detailed CTMP for submission to and approval Council, prior to commencement of works on site.

It is envisaged that this document will be continually reviewed and amended if required, due to changes in design, RMS, Councils or any other authority requirements.

Attachment 1 Example Drivers Code of Conduct

Safety Initiatives

The construction site is within the Macquarie University Campus, where heavy pedestrian activity is anticipated. As such, care is to be taken around the vicinity of the site, keeping an eye on pedestrians.

Hours of Work

All work associated with the project will be restricted to the permitted working hours as defined in the CTPMSP:

Monday to Friday	7:00am to 7:00pm
Saturdays	8:00am to 4.00pm

Emergency Contact Numbers

RMS Transport Management Centre
131 700

Ryde City Council
9952 8222

FDC Site Manager (Anthony Hurst)
0417 481 154

FDC Construction & Fitout Sydney
02 8117 5000

NSW Ryde Police Station
02 9808 7401

All other Emergencies
000

FDC

Macquarie University
Central Courtyard Precinct

Construction Traffic and Pedestrian Management Sub Plan

Driver Code of Conduct

This Driver Code of Conduct applies to all personnel and any other person conducting business for the Macquarie University Central Courtyard Precinct, whether a direct employee of FDC Fitout and Construction or employed by some other organisation providing service or working with FDC.

General Requirements

- As a driver, you are required to know and comply with all the road rules pertaining to your vehicle;
- You are expected to hold a valid driver's license for the class of the vehicle you are operating;
- Undertake a site induction carried out by an approved member of the construction staff or suitably qualified person;
- Participate in regular toolbox meetings with appropriate and qualified person; and
- You are to operate the vehicle in a safe manner within and outside the construction site and comply with the direction of authorised site personnel while inside the site.

Truck Routes

Heavy vehicle drivers are to carefully plan their routes so that state and regional roads are given priority for route selection, keeping in mind the certain restrictions of during particular times of the day (i.e. No Right Turn from 7am to 10am, etc.) Local roads should only be used in an emergency situation.

Other Considerations

- Speed Limits – All heavy vehicle drivers are to observe the posted speed limits, within or outside of the construction site. Keep in mind that there are changes in traffic conditions and altered speed limits are posted on approach to the site;
- Driver Fatigue – Driver fatigue is a road safety hazard and one of the biggest causes of accidents especially for heavy vehicle drivers. All drivers have a duty to not drive a vehicle while impaired by fatigue.
- Covering Loads – RMS requires all loads covers to secure and contain all materials within the vehicle and trailer;
- Heavy Vehicle Interval – to increase road safety, heavy vehicles leaving the construction site should be separated, as far as practicable, a minimum of a 10-minute interval;
- Vehicle Breakdowns – in the case of a breakdown, the vehicle must be towed to the nearest breakdown point as soon as possible and reported to the RMS Transport Management Centre (131 700).