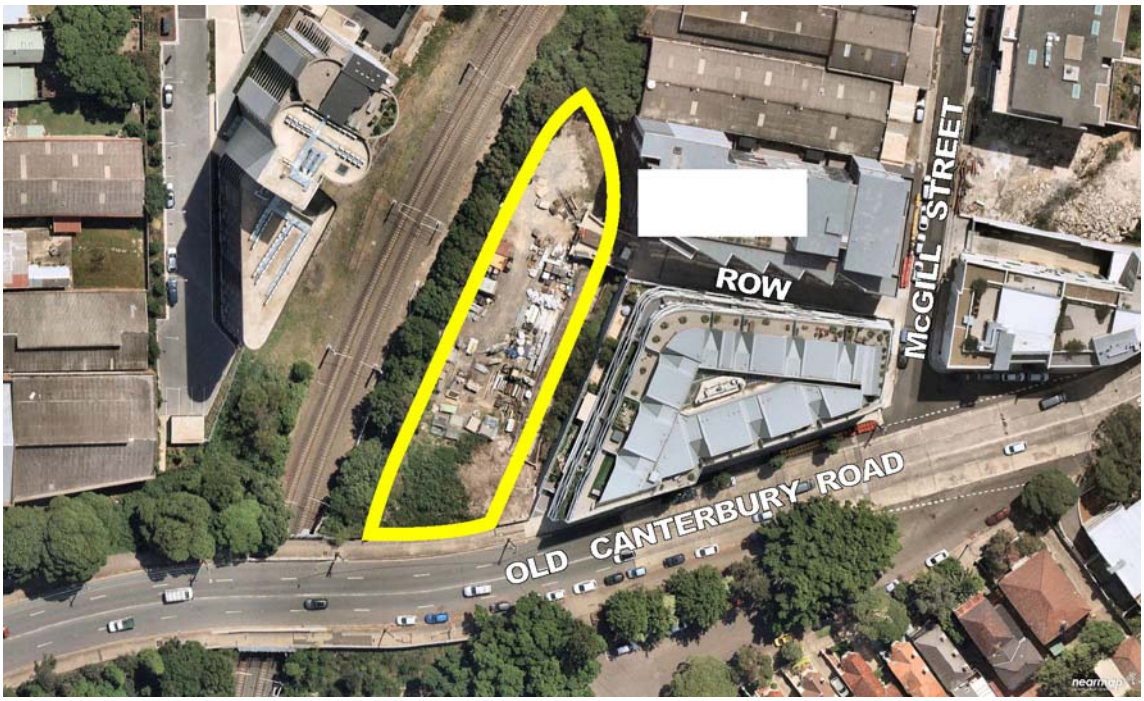

PROPOSED MIXED USE DEVELOPMENT

120C OLD CANTERBURY ROAD, SUMMER HILL

Traffic and Parking Assessment Report

25th May 2020

Ref: 19064

Prepared by

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1. INTRODUCTION

This report has been prepared to accompany a development application to Inner West Council for a proposed mixed use development at 120C Old Canterbury Road, Summer Hill (Figures 1 and 2).

The development site is located on the northern side of Old Canterbury Road and has a total site area of 1,957m^2. The site is currently undeveloped and is used as a storage yard.

Vehicular access to the site is via a Right of Carriageway (ROW) that connects the site to McGill Street. The ROW varies in width from approximately 6.1m wide at McGill Street to approximately 7.4m wide towards the development site. To access the site, vehicles are required to travel over a 4.0m wide single lane bridge.

Approved Development

In December 2012, Ashfield Council approved DA10.2011.144 on the site for the construction of a mixed use development comprising:

Ground Level Factory/Warehouse	355m^2
First Floor Office	146m^2
Second Floor Caretakers Residence	82m^2
Total GFA	**583m^2**

The approval is served by 12 off-street parking spaces located on the ground level. Vehicular access to the ground level carpark is via the existing ROW that connects the site to McGill Street.

Proposed Development

The proposed development involves the construction of a new mixed use residential/commercial building comprising the following:

Commercial / Retail	
Retail Suite 1	73.8m^2 GFA
Retail Suite 2	57.7m^2 GFA
Retail Suite 3	58.6m^2 GFA
Community Office	43.0m^2 GFA
Total	**233.1m^2 GFA**
Residential	
Studio apartments:	1
1 bedroom apartments:	7
2 bedroom apartments:	33
3 bedroom apartments:	14
4 bedroom apartments:	2
TOTAL APARTMENTS:	**57**

Off-street carparking is proposed for a total of 78 cars on three (3) basement carparking levels comprising 57 x resident spaces, 6 x retail/commercial tenant spaces, 14 visitor parking spaces and 1 car wash bay.

As per the approved development, vehicular access to the site is via the Right of Carriageway connecting to McGill Street. Each basement level is connected by dual width ramps that can facilitate passing flows.

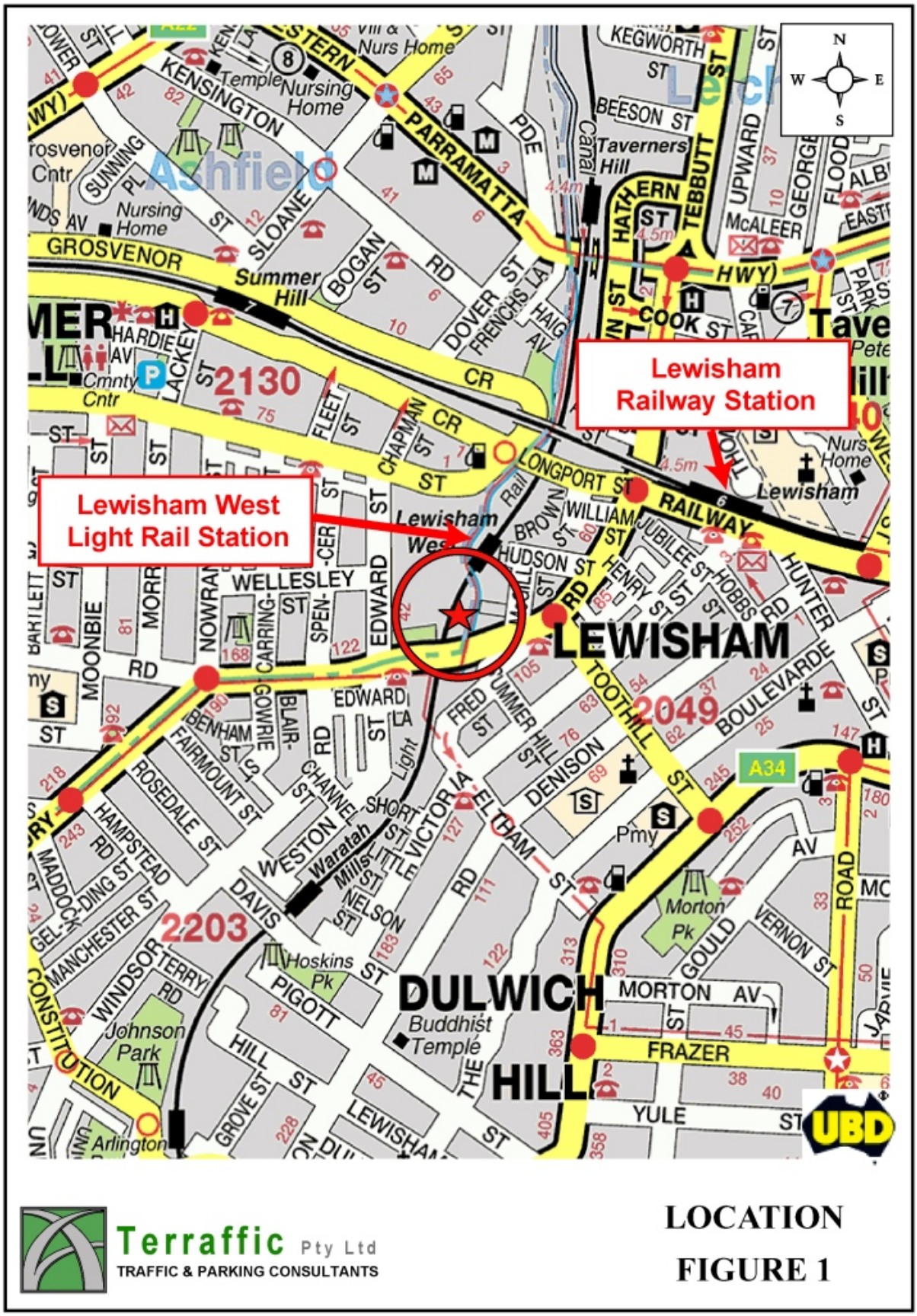
Provision has been made on Level 1 for a loading bay capable of accommodating a standard 8.8m long Medium Rigid Vehicle (MRV) and Council's 9.4m long waste collection vehicle. The swept paths of these vehicles accessing the loading bay are reproduced in Appendix A. These paths have been prepared using the Autodesk Vehicle Tracking software that has been developed to assess vehicle manoeuvring and ground clearances.

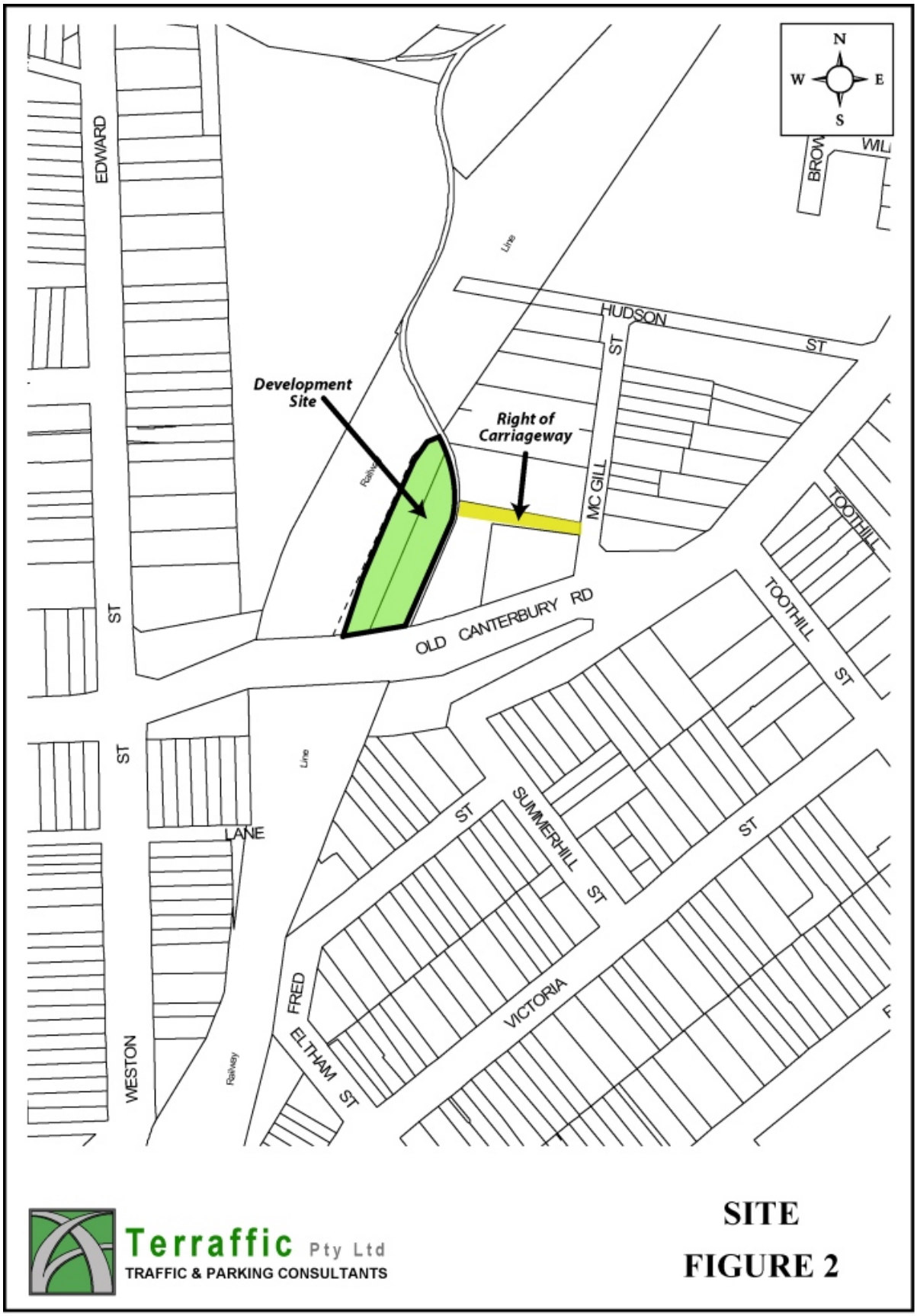
Public Transport Accessibility

As can be seen on Figure 1, residents of the proposed development have convenient access to Lewisham West Light Rail Station (240m walk) and Lewisham Railway Station (800m walk). In addition, the development site has convenient access to the following bus route that travels along Old Canterbury Road:

Route 413 Campsie to City Martin Place via Ashbury, Petersham, Stanmore and Railway Square. Service operates daily

The purpose of this report is to assess the traffic and parking implications of the development proposal.





2. PARKING ASSESSMENT

DCP Car Parking Requirements

Table 3 in Section 2 - Chapter A / Part 8 of the Inner West Comprehensive Development Control Plan 2016 for Ashbury, Ashfield, Croydon, Croydon Park, Haberfield, Hurlstone Park and Summer Hill specifies the following car parking rates that apply to the subject development:

Residential Flat Buildings in B4 - Mixed Use Zone

Minimum 1 space for all dwellings
1 space per 4 dwellings for visitors
1 car wash bay

Commercial Premises including office premises, business premises, retail premises

1 space per 40m^2

Clause DS3.4 of the DCP also notes that when calculating the required number of parking spaces, the result is rounded **up** or **down** to the nearest whole number.

Application of the DCP parking rates to the subject development yields a total parking requirement of 78 parking spaces calculated as follows:

57 dwellings @ 1 space per dwelling	57.0 spaces
57 dwellings @ 1 space per 4 dwellings for visitors	14.2 spaces (rounded to 14 spaces)
1 car wash bay	1.0 space
233.1m^2 retail/commercial @ 1 space per 40m^2	5.8 spaces (rounded to 6 spaces)
Combined Total	**78.0 spaces**

The proposed development satisfies the DCP requirement with the provision of 78 cars comprising 57 x resident spaces, 6 x retail/commercial tenant spaces, 14 visitor parking spaces and 1 car wash bay.

DCP Bicycle Parking Requirements

Table 2 in Section 2 - Chapter A / Part 8 of the Inner West Comprehensive Development Control Plan 2016 for Ashbury, Ashfield, Croydon, Croydon Park, Haberfield, Hurlstone Park and Summer Hill specifies the following bicycle parking rates that apply to the subject development:

Residential Flats

Resident	1 per 10 flats in an accessible communal area if no lockable garage provided
Visitor	1 per 10 flats in an accessible communal area

Office and retail premises

Staff	1 per 20 employees
Customer	1 per 250m^2 gross floor area

For the purposes of this assessment, it has been assumed that the 3 small retail/commercial premises will contain a total of 20 employees.

Application of the DCP bicycle parking rates to the subject development yields a total bicycle parking requirement of 13 spaces calculated as follows:

57 dwellings @ 1 per 10 flats	5.7 spaces
57 dwellings @ 1 per 10 flats	5.7 spaces
20 staff @ 1 per 20 employees	1.0 space
233.1m^2 retail/commercial @ 1 per 250m^2	0.9 spaces (rounded to 1 space)
Combined Total	**13.3 spaces (rounded to 13 spaces)**

The proposed development satisfies the DCP requirement with the provision of 13 bicycle spaces comprising:

- a communal bike storage area in the basement capable of storing 11 bikes for the residential component, and

- 2 bicycle racks for the retail component.

DCP Motorcycle Parking Requirements

Clause DS2.2 in Section 2 - Chapter A / Part 8 of the Inner West Comprehensive Development Control Plan 2016 for Ashbury, Ashfield, Croydon, Croydon Park, Haberfield, Hurlstone Park and Summer Hill specifies the following bicycle parking rates that apply to the subject development:

> DS2.2 Motorcycle parking spaces 2.5m x 1.3m are required in addition to those for bicycles and are to be provided for sites containing 25 or more car parking spaces at the rate of 1 space per 25 car parking spaces in a communal area accessible to residents/staff/visitors or other users of the parking facility. Calculations are to be rounded up or down to the nearest whole number – see Table 3.

Application of the DCP motorcycle parking rate to the subject development yields a total motorcycle parking requirement of 13 spaces calculated as follows:

78 parking spaces @ 1 space per 25 spaces	3.1 spaces (rounded to 3 spaces)

The proposed development satisfies the DCP requirement with the provision of 3 motorcycle spaces in the basement carpark.

Car Park Compliance

The proposed car parking areas have been designed to satisfy the following requirements of the Australian Standard AS/NZS2890.1-2004:

- Parking spaces have a minimum length of 5.4m and width of 2.4m
- An additional 0.3m has been provided for spaces adjacent to a wall or obstruction
- Blind aisle extensions in accordance with Figure 2.3 have been provided where necessary
- The access/manoeuvring aisles satisfy the minimum requirement of 5.8m
- Pavement cross-falls at parking spaces do not exceed 5% (1 in 20)
- Columns have been located in accordance with Clause 5.2 of the Standard
- Two-way access ramps have a minimum width of 6.1m wall to wall comprising a 5.5m wide roadway and 2 x 300mm wide kerbs
- The access ramps have a maximum grade of 25% (1 in 4)

- 2.0m long transitions of 12.5% (1 in 8) have been provided
- A minimum headroom clearance of 2.2m has been provided throughout the basement carpark and on the ramps connecting the parking levels

The disabled parking spaces have also been designed in accordance with the Australian Standard AS/NZS2890.6:2009 – *"Off-street parking for people with disabilities"* as follows:

- A 5.4m long x 2.4m wide dedicated *(non-shared)* parking space
- An adjacent *shared* area that is also 5.4m long x 2.4m wide
- A minimum headroom of 2.5m above the disabled spaces
- Pavement cross-falls in disabled spaces do not exceed 2.5% (1 in 40) in any direction

The ability of the Australian Standard B99 and B85 vehicles to pass each other on the basement ramp was assessed using the Autodesk Vehicle Tracking software. The swept paths are reproduced in Appendix B and show the exiting vehicle pulling into a linemarked WAITING BAY before proceeding. Convex mirrors will be required to facilitate sight lines to oncoming vehicles and can be positioned prior to occupation.

In the circumstances, it can be concluded that the off-street parking provision incorporated in the proposed development is adequate such that the proposed development has no unacceptable parking implications.

3. TRAFFIC ASSESSMENT

Existing Road Network

The classifications assigned to the road network serving the site by the RMS (Figure 3) identify the following classified State and Regional Roads:

State Road	**Regional Road**
Old Canterbury Road	Toothill Street
New Canterbury Road	Longport Street – Carlton Crescent
Parramatta Road	
Railway Terrace	
Barker St - Brown St – Hathern St	
Tebbutt Street	

As can be seen, Old Canterbury Road is a classified State Road performing an arterial road function. It has a sealed carriageway approximately 13m wide capable of accommodating 4 traffic lanes, although the kerbside lanes are typically used for parking. The Old Canterbury Road frontage of the site is restricted to NO STOPPING and has a speed limit of 60km/h.

McGill Street is an unclassified local road that provides vehicular access to the proposed development site and neighbouring properties that front it. It has a sealed carriageway of approximately 6.3m wide and is subject to a 50km/h speed limit.

Projected Traffic Generation of the Proposed Development

As noted in Chapter 2 of this report, Council's parking requirement of 1 car parking space per 40m^2 GFA applies to retail and commercial floor space. While the Council DCP does not differentiate between staff and shopper parking, this report assumes that the 6 spaces required by the DCP will be allocated to retail/commercial tenants only.

An indication of the traffic generation potential of the proposed development is provided by reference to the updated RMS Guidelines in the Technical Direction TDT 2013-04a (August 2013). The traffic generation rates specified in the Guidelines are based on extensive surveys

of a wide range of land uses throughout Sydney and regional NSW. The 2013 Technical Direction nominates the following traffic generation rates for high density residential flat buildings and offices:

High Density Residential Flat Buildings

AM Peak	0.19 vehicle trips per unit
PM Peak	0.15 vehicle trips per unit

Commercial Offices

AM Peak	1.6 vehicle trips per 100m^2
PM Peak	1.2 vehicle trips per 100m^2

Application of the above traffic generation rates to the residential and retail/commercial components of the development proposal yields a traffic generation potential of approximately 12-15 vehicle trips per hour (vtph) during peak periods as set out below:

Morning Peak Period

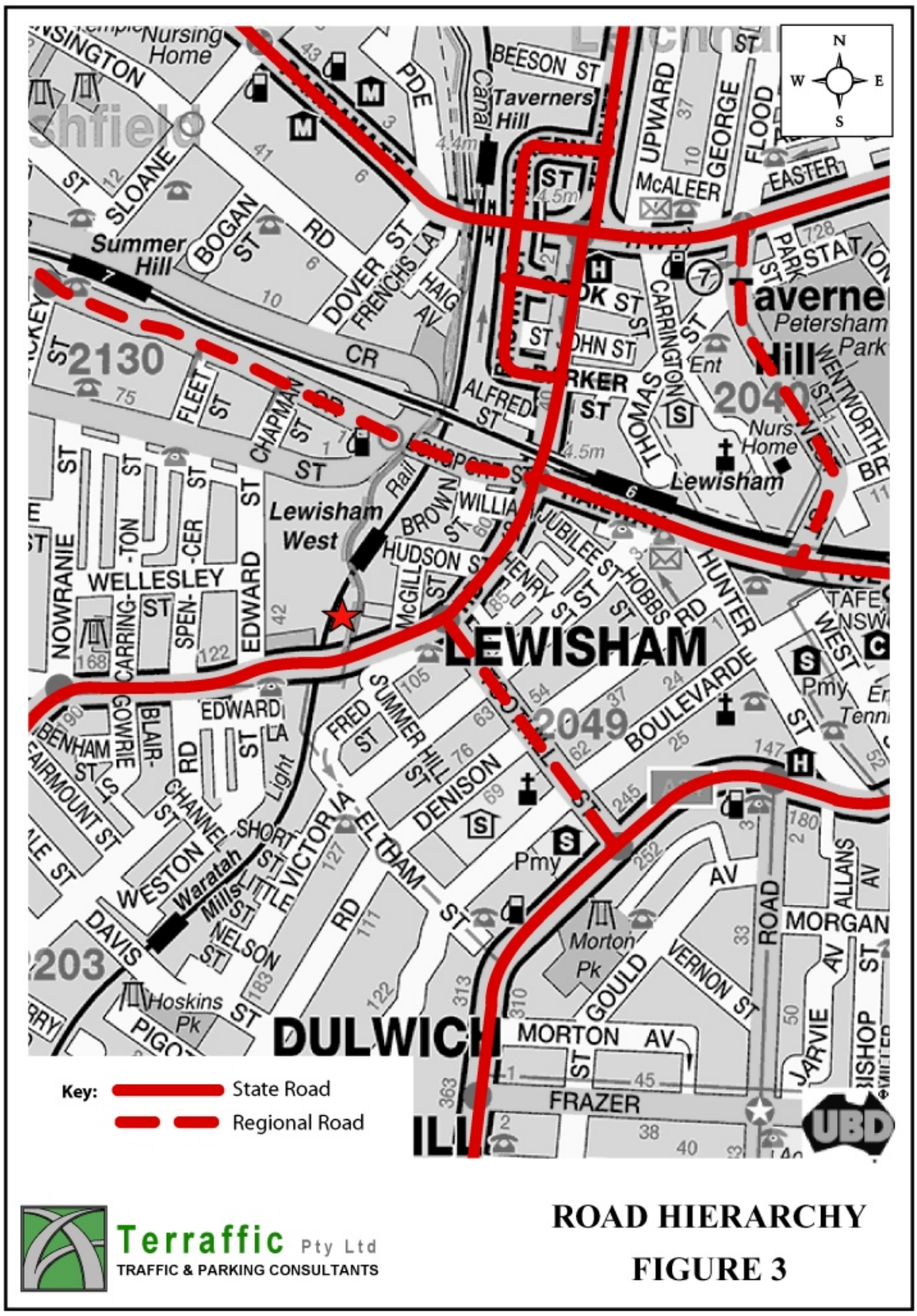
57 units @ 0.19vtph per unit	11vtph (2 in / 9 out)
233.1m^2 commercial @ 1.6vtph per 100m^2	4vtph (4 in / 0 out)
Total Traffic Generation	**15vtph (6 in / 9 out)**

Evening Peak Period

57 units @ 0.15vtph per unit	9vtph (8 in / 1 out)
233.1m^2 commercial @ 1.2vtph per 100m^2	3vtph (0 in / 3 out)
Total Traffic Generation	**12vtph (8 in / 4 out)**

It will be readily appreciated that the traffic generated by the proposed development is very minor (12-15 vehicle trips per hour) which will not have any noticeable or unacceptable effect on the operating performance of the road network serving the site. Furthermore, the site has convenient access to the higher order road network and will not be required to travel on local residential streets.

In the circumstances, it can be concluded that the proposed development has no unacceptable traffic implications.



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ROAD HIERARCHY

FIGURE 3

APPENDIX A

LOADING BAY MANOEUVRING PATHS

Path prepared using
Autodesk Vehicle Tracking

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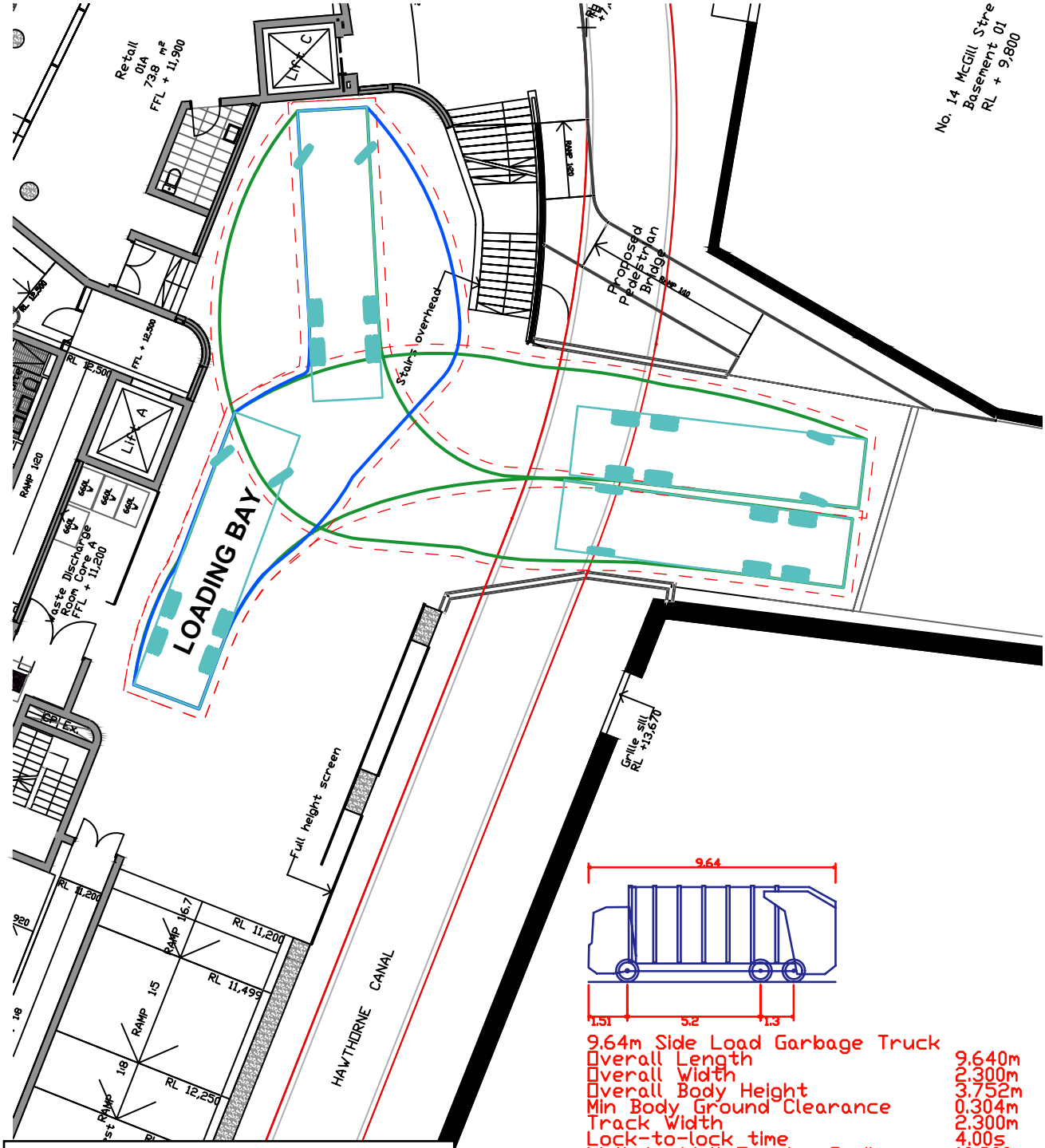

9.64m Side Load Garbage Truck	
Overall Length	9.640m
Overall Width	2.300m
Overall Body Height	3.752m
Min Body Ground Clearance	0.304m
Track Width	2.300m
Lock-to-lock time	4.00s
Wall to Wall Turning Radius	10.300m

Forward Vehicle Path
Reverse Vehicle Path
300mm Clearance Path

Manoeuvring Path of Council's 9.64m Waste Collection Vehicle Accessing Loading Bay

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APPENDIX B

BASEMENT RAMP SWEPT PATHS

Path prepared using
Autodesk Vehicle Tracking

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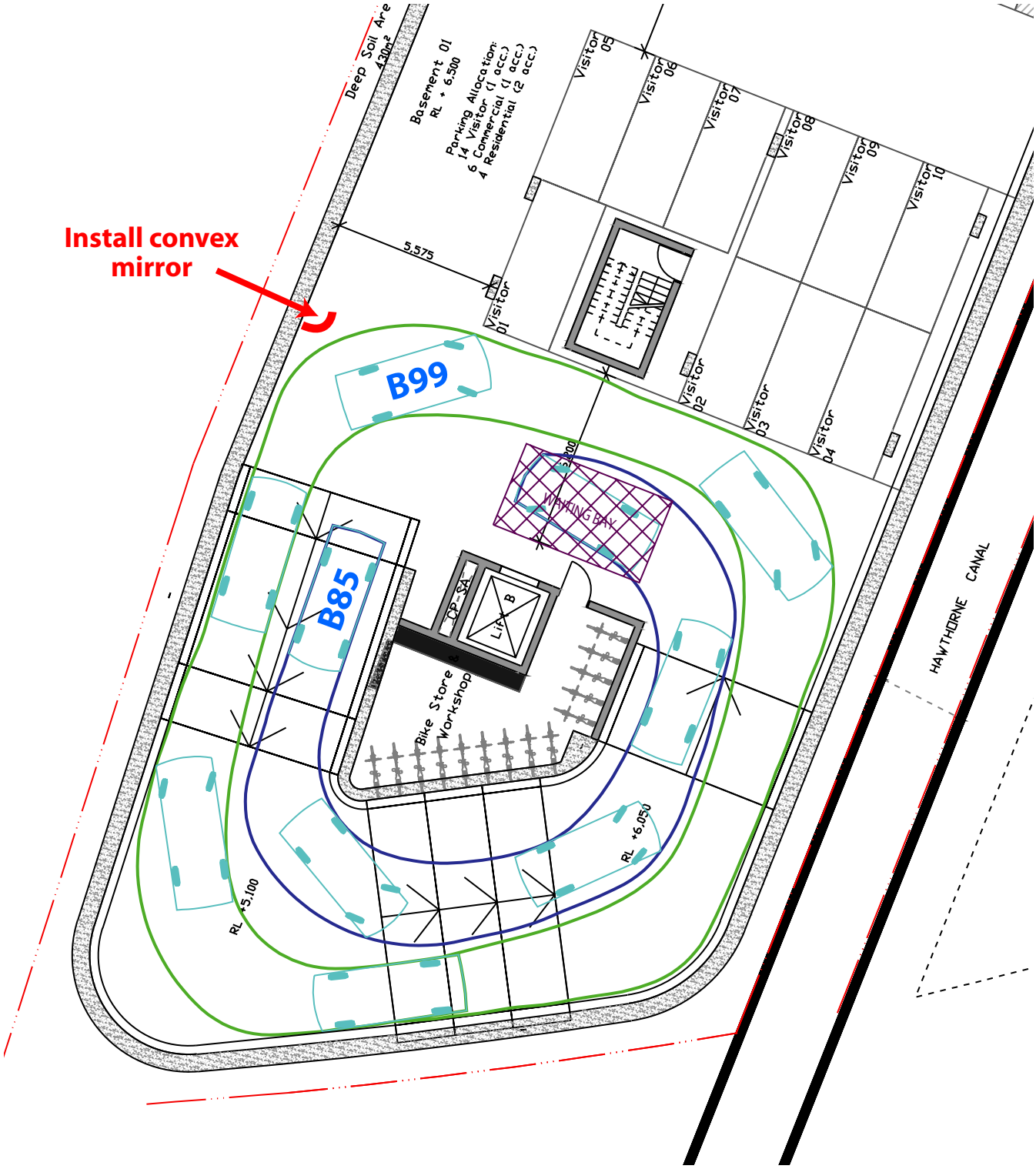
SCALE 1:200



Manoeuvring Path of Australian Standard AS/NZS2890.1:2004 B99 and B85 Vehicles Passing on Basement Ramp

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