

Proposed Co-Living Boarding House Development
**175-177 Cleveland Street & 1-5 Woodburn Street,
Redfern**

TRAFFIC AND PARKING ASSESSMENT REPORT

4 March 2021

Ref 20734

TABLE OF CONTENTS

1. INTRODUCTION	1
2. PROPOSED DEVELOPMENT	5
3. TRAFFIC ASSESSMENT	10
4. PARKING ASSESSMENT	22

APPENDIX A PROPOSED ARCHTECTURAL PLANS

LIST OF ILLUSTRATIONS

Figure 1	Location
Figure 2	Site
Figure 3	Road Hierarchy
Figure 4	Existing Traffic Controls
Figure 5	Existing Public Transport
Figure 6	Car Share Locations
Figure 7	Bicycle Route Map
Figure 8	Existing Parking Restrictions

1. INTRODUCTION

This report has been prepared to accompany a development application for a boarding house development proposal to be located at 175-177 Cleveland Street & 1-5 Woodburn Street, Redfern (Figures 1 and 2).

The proposed development seeks to respond to the growing need for a variety of residential accommodation in central Sydney areas, and comprises the construction of a new six-storey co-living boarding house development, consisting of 120 rooms, extensive communal facilities, a ground floor café, and a single-level basement.

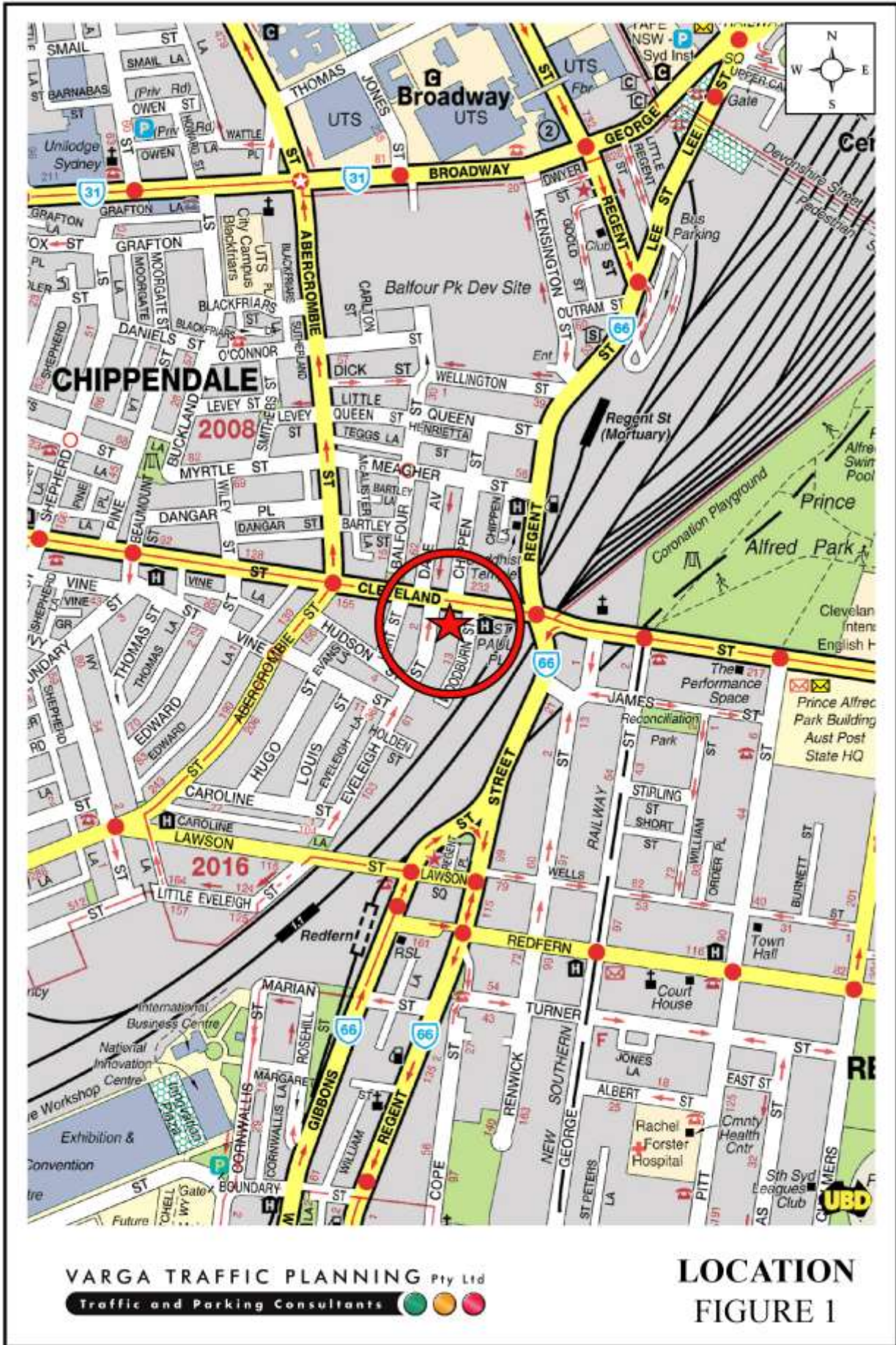
The subject site is located within the City of Sydney Council LGA and is also a *State Significant Development Site* as listed within *Schedule 2* of the *State Environmental Planning Policy (State and Regional Development) 2011*. Furthermore, the subject site is located within the “Redfern-Waterloo Authority Sites” and zoned “Business Zone – Mixed Use” under the *State Environmental Planning Policy (Major Development) 2005 Redfern-Waterloo Authority Sites – Land Zoning Map*. In this regard, the *Sydney Local Environment Plan 2012* is not applicable to the site, and *Development Control Plans (DCPs)* are also not applicable to the site under *Clause 11* of *State Environmental Planning Policy (State and Regional Development) 2011*.

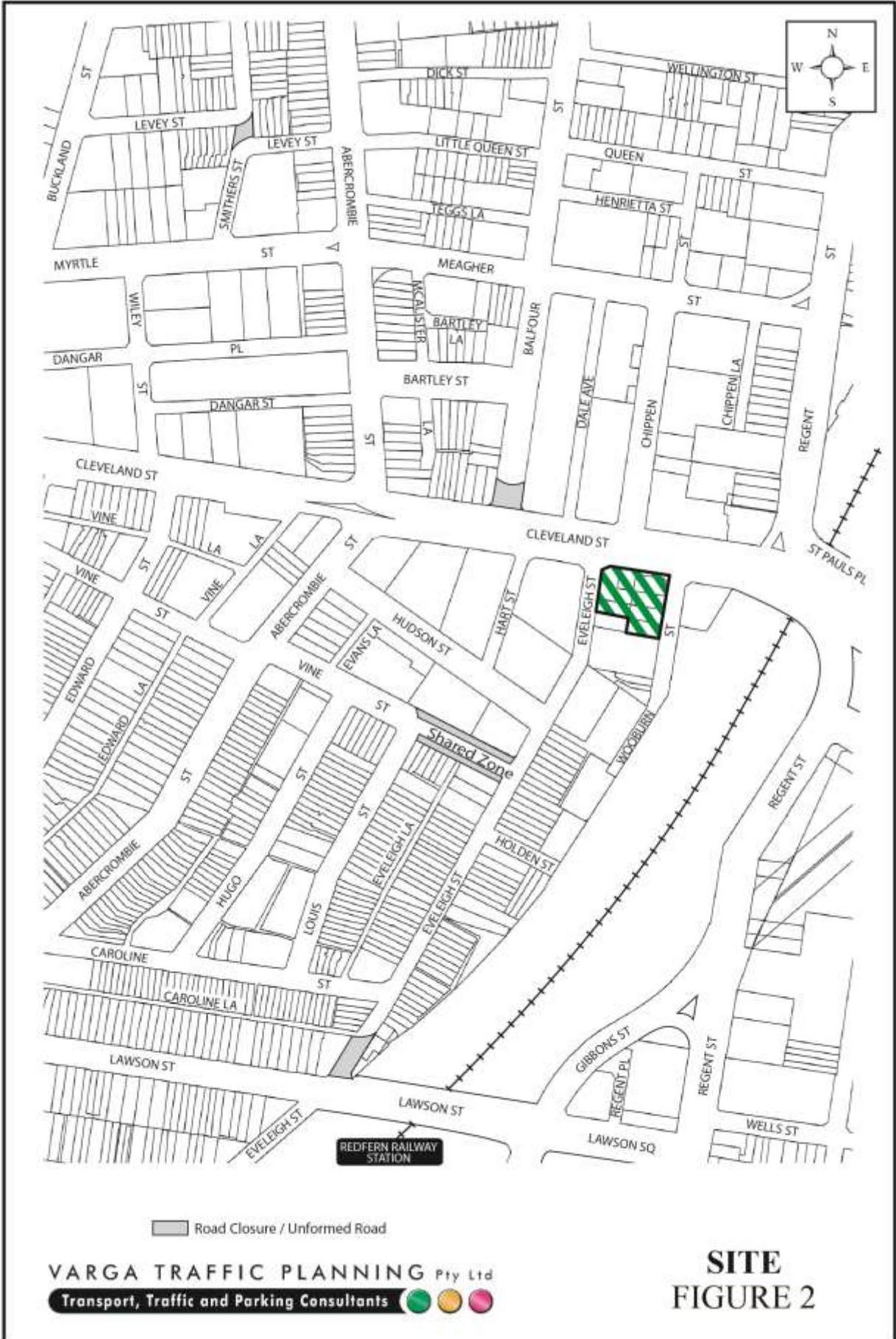
The site has a number of relatively recent development consents, including SSD 6371 approved in January 2015, which comprised a new five-storey mixed use development on the 175-177 Cleveland Street portion of the site, consisting of student accommodation for 40 students, 13 residential apartments and a single-level basement.

More recently in March 2018, SSD 7064 was approved through the Land & Environment Court for a new six-storey mixed use development on the current subject site (i.e. including 1-5 Woodburn Street), comprising 45 hotel accommodation rooms, 20 residential apartments, two retail/commercial tenancies, wine bar and a two-level basement. A subsequent s4.55 application (SSD 7064 MOD 1) was also approved in December 2018 which comprised additional retail/commercial space, layout changes to the approved retail/commercial tenancies, provision of a hotel reception and additional residential communal space.

The purpose of this report is to assess the traffic, parking and transport implications of the development proposal and to that end this report:

- describes the site and provides details of the development proposal
- reviews the road network in the vicinity of the site
- reviews the alternate forms of transport available in the vicinity of the site
- estimates the traffic generation potential of the development proposal
- assesses the traffic implications of the development proposal in terms of road network capacity
- reviews the construction traffic methodology
- reviews the geometric design features of the proposed parking and loading facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street parking and loading provided on the site.





2. PROPOSED DEVELOPMENT

Site

The subject site is located on the southern side of Cleveland Street, extending between Eveleigh Street and Woodburn Street. The site has street frontages of approximately 36m in length to Cleveland Street, 25m in length to Eveleigh Street and 33m in length to Woodburn Street, and occupies an area of approximately 1,060m².

A recent aerial image of the site and its surrounding is reproduced below.



The subject site is located within the City of Sydney Council area and is also a *State Significant Development Site* as listed within *Schedule 2 of the State Environmental Planning Policy (State and Regional Development) 2011*. Furthermore, the subject site is located within the “Redfern-Waterloo Authority Sites” and zoned “Business Zone – Mixed Use” under the *State Environmental Planning Policy (Major Development) 2005 Redfern-Waterloo Authority Sites – Land Zoning Map*. In this regard, the *Sydney Local Environment Plan 2012* is not applicable to the site, and *Development Control Plans (DCPs)* are also not applicable to the site under *Clause 11 of State Environmental Planning Policy (State and Regional Development) 2011*.

The subject site is located on the south-western edge of the Sydney CBD and is within short walking distance of Redfern and Central Railway Stations. The site is also located within close proximity to several tertiary educational establishments including University of Sydney, University of Technology and Notre Dame University.

The subject site is currently occupied by two separate commercial buildings. The floor area of the Cleveland Street building has been estimated at approximately 560m² whilst the floor area of the Woodburn Street building has been estimated at approximately 770m². Vehicular access to the site is provided via two crossovers located in Woodburn Street and one crossover located in Eveleigh Street. *Streetview* images of the site are reproduced below.



Development History

In January 2015, a mixed use student accommodation and residential development was approved on the 175-177 Cleveland Street portion of the site under delegation from the Minister by the Secretary of the Department of Planning & Environment (SSD 6371).

The approved SSD 6371 scheme consisted of 36 single student accommodation rooms, 4 double student accommodation rooms and 13 one-bedroom apartments. Off-street parking in the SSD 6371 scheme was approved for a total of 7 car spaces, 10 motorcycle spaces and 61 bicycle spaces in a new single-level basement car parking area. Vehicular access to the off-street parking facilities was approved via a new single lane driveway/ramp located at the southern end of the Eveleigh Street site frontage.

More recently in March 2018, SSD 7064 was approved through the Land & Environment Court for a new six-storey mixed use development on the current subject site (i.e. including 1-5 Woodburn Street), comprising 45 hotel accommodation rooms, 20 residential apartments, two retail/commercial tenancies, wine bar and a two-storey basement. A subsequent s4.55 modification was also approved in December 2018 which comprised additional retail/commercial space, layout changes to the approved retail/commercial tenancies, provision of a hotel reception and additional residential communal space.

Proposed Development

The proposed development involves the demolition of the existing industrial buildings on the site and the construction of a new six-storey co-living residential development, consisting of 120 rooms, extensive communal facilities, a ground floor café, and a single-level basement.

Co-living is a relatively new concept in Australia however has become very popular overseas. Notwithstanding, three co-living developments are currently operating in Stanmore, Newtown and Paddington. Co-living involves residing in studios with large shared community facilities, such as communal kitchens and outdoor areas. Overseas research has found that co-living residents preferred this sense of “community” over more traditional apartment buildings where “house mate hunting” is required.

Off-street parking is proposed for a total of 8 cars (including 2 disabled spaces, a manager's space and a car share space) and 24 motorcycles within a new single-level basement. Vehicular access to the basement parking area is proposed to be provided via a new entry/exit driveway located at the southern end of the Eveleigh Street site frontage.

In addition to the car and motorcycle parking, the proposed development also makes provision for a total of 38 bicycle spaces located on the ground floor level of the building, comprising 27 resident spaces and 11 visitor spaces.

The small scale of the proposed on-site café will allow servicing to be undertaken by smaller, light commercial vehicles up to the size of a B99 vehicle (e.g. Toyota HiAce, Hyundai iLoad, Ford Transit Custom etc.), which are capable of fitting into a conventional parking space, as is commonplace in the City of Sydney, particularly for commercial uses located on busy thoroughfares. The servicing needs of the boarding house will also be undertaken using smaller light commercial vehicles. These light commercial vehicles can be accommodated on street, likely within Eveleigh Street.

It is noted in this regard that the availability of on-street parking in the surrounding area is severely constrained, as follows:

- kerbside parking is prohibited on a 24 hour basis along Cleveland Street and Regent Street by Clearway and No Stopping/No Parking restrictions
- the majority of both sides of Eveleigh Street are subject to No Parking restrictions in the vicinity of the site
- kerbside parking is also constrained in Woodburn Street due to its narrow width and No Stopping restrictions which extend along one side of the street for its entire length.

The proposed development is expected to have a very low car parking requirement given the site's excellent connectivity, and therefore endeavours to accommodate its parking needs within the site, thus reducing any potential external impacts on the limited availability of on-street car parking.

A garbage room is proposed within the ground floor level of the building, which is located approximately 10 metres from the property boundary at Eveleigh Street. Given that Council's garbage trucks already traverse Eveleigh Street, the collection of bins from Eveleigh Street by private contractors will not result in any significant change to the collection process which presently occurs in the street.

Plans of the proposed development have been prepared by *Mark Shapiro Architects* and are reproduced in Appendix A.

3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services is illustrated on Figure 3.

Regent Street is classified by the RMS as a *State Road* and provides the key north-south road link in the area, linking Broadway to Botany Road. It typically carries two to three traffic lanes in each direction in the vicinity of the site, and is subject to Clearway restrictions during commuter peak periods.

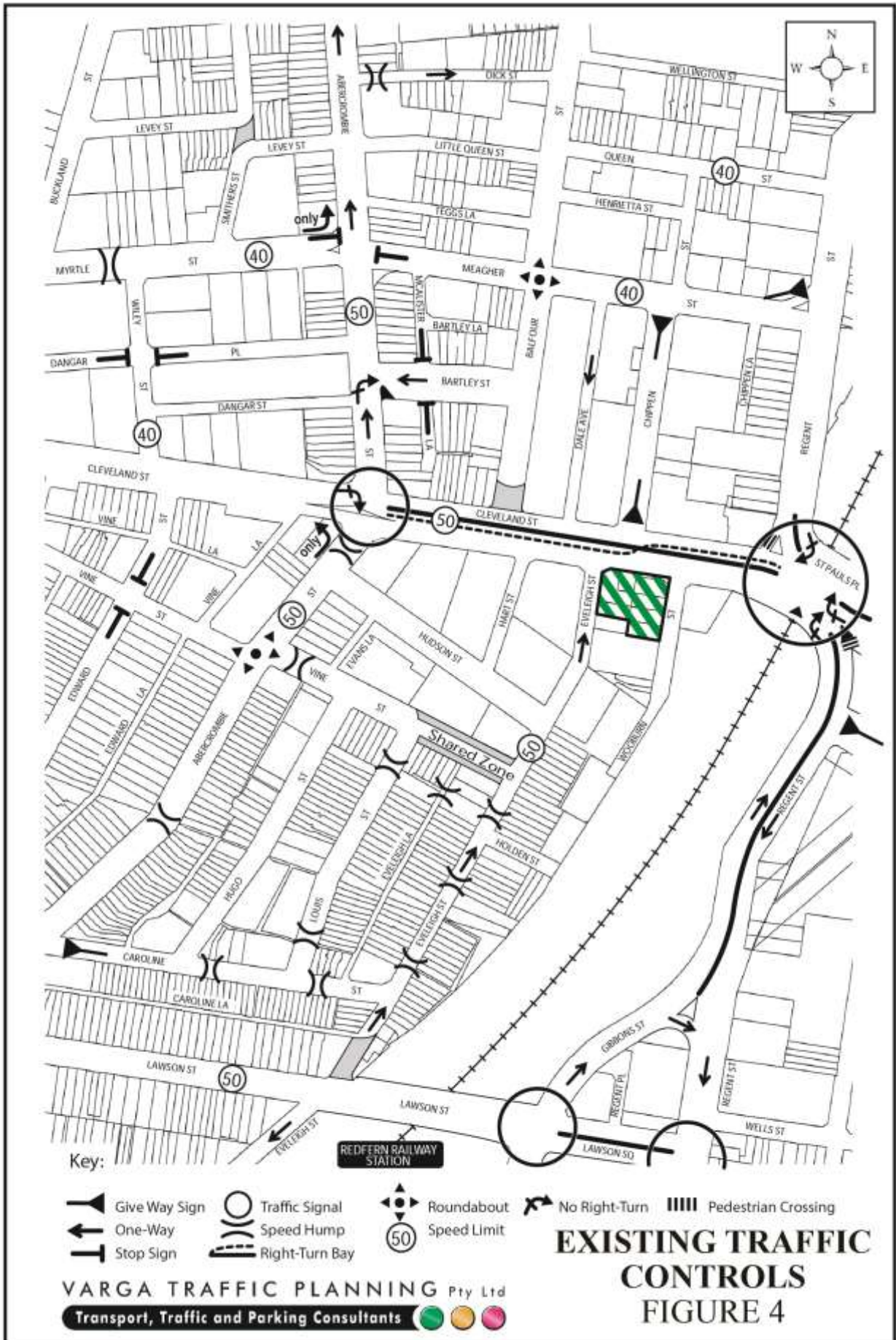
Cleveland Street is also classified by the RMS as a *State Road* and provides the key east-west road link in the area, linking City Road to Anzac Parade. It typically carries two traffic lanes in each direction in the vicinity of the site with turning bays provided at key locations.

Eveleigh Street and Woodburn Street are local, unclassified roads which are primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is permitted at selected locations, subject to signposted restrictions.

Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

- a 50 km/h SPEED LIMIT which applies to Cleveland Street and the majority of other local roads in the area
- TRAFFIC SIGNALS in Cleveland Street where it intersects with Abercrombe Street and also Regent Street
- a ONE WAY northbound restriction in Eveleigh Street between Hudson Street and Cleveland Street



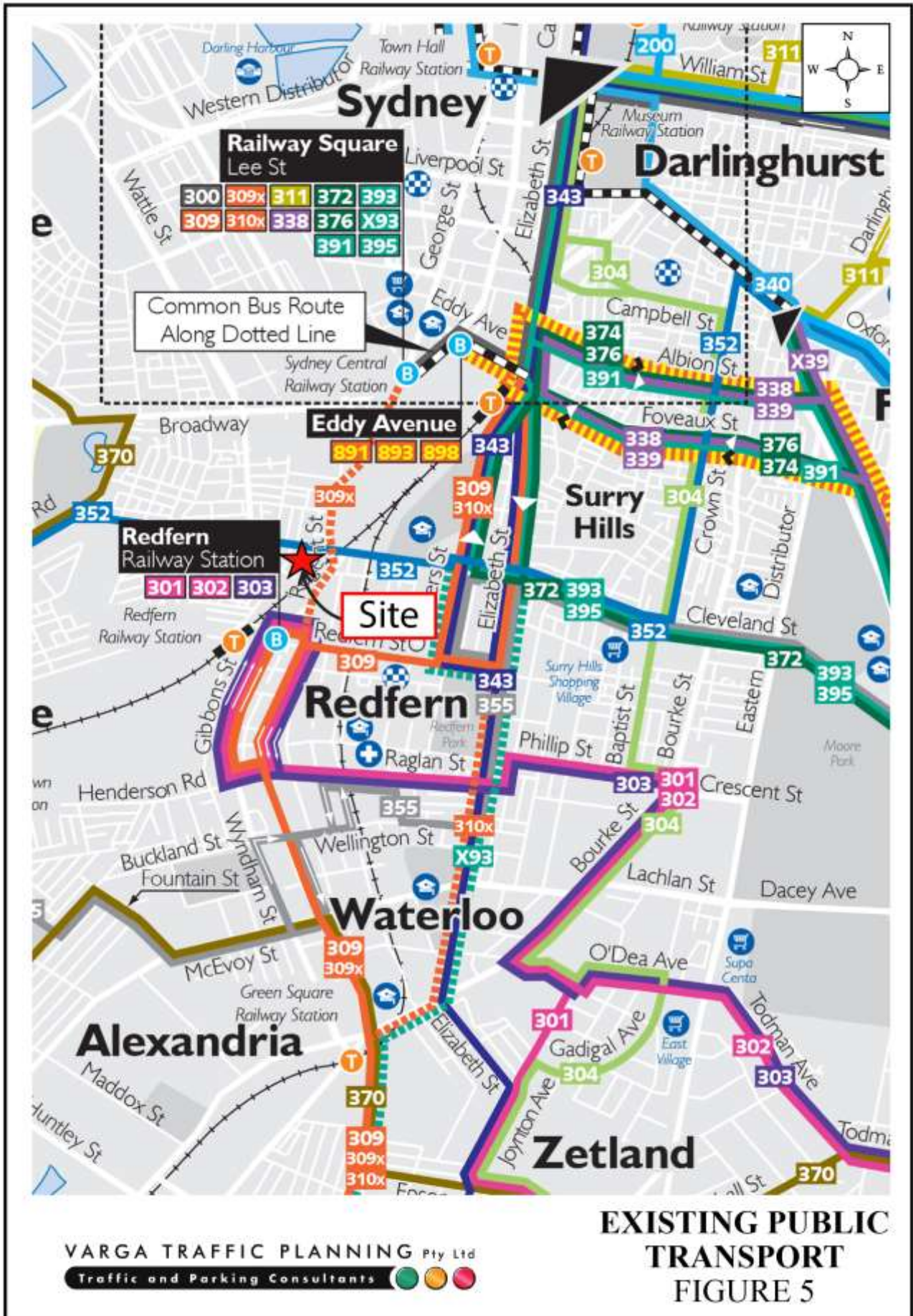
Existing Public Transport Services

The existing public transport services available in the vicinity of the site are illustrated on Figure 5. The subject site is located within easy walking distance of an extensive range of public transport services as follows:

- Route 352 bus service between Marrickville Metro and Bondi Junction Bus/Rail Interchange traverses Cleveland Street past the site frontage 7 days per week, with 79 services per day on weekdays, 72 services per day on Saturdays and 52 services per day on Sundays
- Route 308, 309 and 310 bus services provide regular services between the City and Marrickville Metro, Matraville and Pagewood respectively via Redfern Railway Station with the nearest bus stop located within approximately 600m walking distance to/from the site
- there are approximately 20 separate bus services travelling along Broadway which is located within approximately 600m walking distance to/from the site, and
- there are approximately 10 bus services travelling northbound or southbound along Chalmer Street and Elizabeth Street respectively which is located approximately 600m walking distance to the east of the site. All these services interchange with suburban railway services and the light rail service at Central Railway Station.

The site is also located approximately 400m walking distance from Redfern Railway Station and approximately 800m walking distance from Central Railway Station, which both provide access to all suburban rail services. In addition, the site is located approximately 1,100m walking distance from Haymarket Light Rail Station.

On the above basis, it is reasonable to conclude that the subject site has excellent connectivity to existing public transport services.



Cycling in City of Sydney

Riding a bike is a fun, healthy and sustainable way of getting around the city. Using two wheels can also potentially save time and money.

More and more Sydneysiders are riding bikes for transport, with a 100% increase over the past 3 years. Twice as many are riding bikes for transport than the national average, and some 31,600 City of Sydney residents get on a bike in a typical week (2013 Australian Bicycle Council survey).

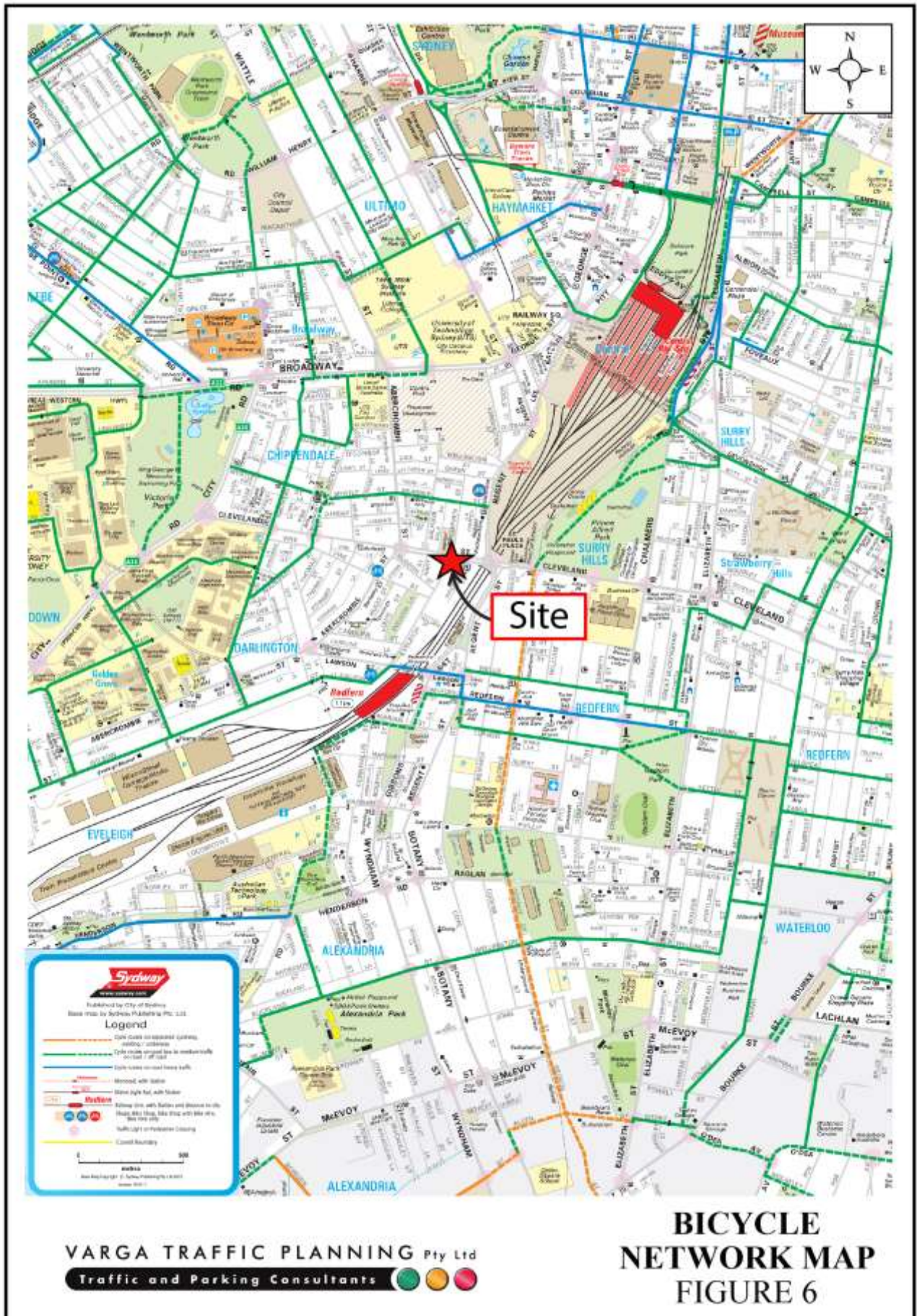
The City is supporting this growth in cycling by building a 200km bike network which includes dedicated bike paths separating riders from traffic and pedestrians, as illustrated in the City of Sydney bicycle network map shown in Figure 6.

The City of Sydney bicycle network map shows that the site has excellent connectivity to the wider cycle network via separated off-road cycleways and low-traffic routes.

Planning Guidelines for Walking and Cycling

The *Planning Guidelines for Walking and Cycling* identify a number of city-scale design principles that can assist the creation of walkable and cyclable cities and neighbourhoods. These principles emphasise urban renewal and the creation of compact, mixed use, accessible centres around public transport stops. At the neighbourhood scale, design principles can be reinforced through the creation of local and accessible centres and neighbourhoods with connected street patterns and road design which aim to reinforce local walking and cycling networks.

In particular, the *Guidelines* note that increased population density is an important element in creating a walkable and cyclable city. A compact development brings activities close together, making them more accessible by foot or by bicycle, without the need to use a car. Increased population density also enhances the viability of public transport services.



Existing Car Share Facilities

In addition to public transport services, car sharing is becoming increasingly popular in Sydney, and offers a convenient, affordable and sustainable alternate transport option to owning/using private cars.

It is pertinent to note that Sydney City Council supports car sharing because it encourages more sustainable travel habits by allowing a single vehicle to be used by a large number of people. This reduces road congestion and the competition for parking spaces, which ultimately benefits all road users.

Recently published statistics by Sydney City Council indicates that almost 31,000 residents and businesses have now joined one of the car share schemes that operate in Sydney where members can book for a car online whenever they need one, and pick it up from one of the nearby car sharing “pods”.

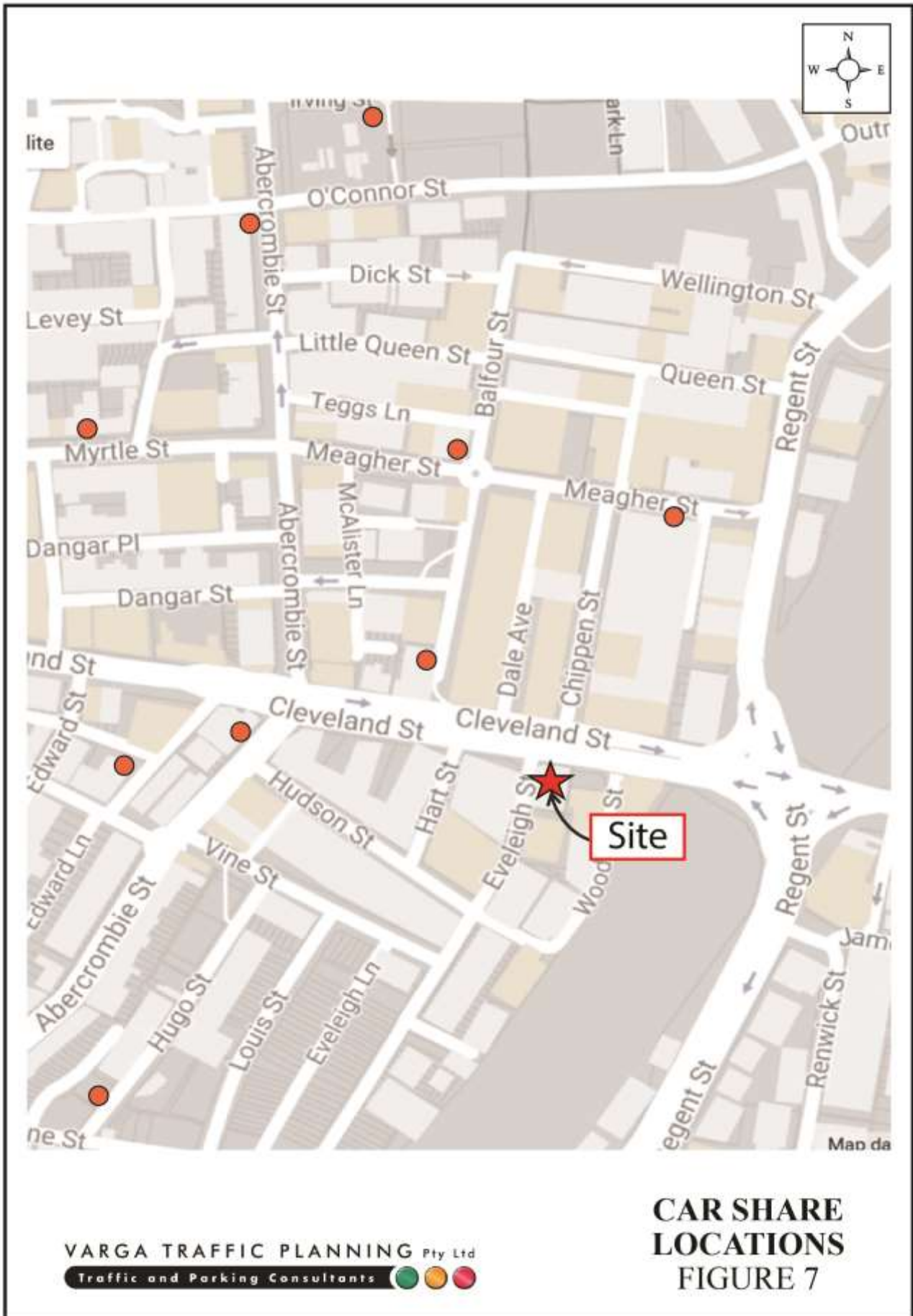
Car share users are charged by time and distance, at a rate set by each operator. Costs associated with fuel, vehicle maintenance and insurance are usually included in the operator’s hire fees which ranges from \$6 to \$13 per kilometre depending on the type of vehicle.

The location of the available car share services in the vicinity of the site are illustrated in Figure 7, showing there are several existing car share pods located within a short walking distance to / from the site. These are in addition to the proposed car share car which is to be provided within the on-site basement parking area.

The subject site is therefore conveniently located to take advantage of these existing car share services in accordance with Sydney City Council’s planning objectives to encourage the greater use of sustainable modes of transport.

Work Place Travel Plan

A Work Place Travel Plan aims to manage transport through a series of measures that promote and facilitate more sustainable modes of travel with a view to reducing motor vehicle use.



A Work Place Travel Plan establishes travel mode targets in consultation with residents and employees which are to be reviewed on a regular basis. The key tasks of the Work Place Travel Plan Coordinator will include:

- undertake regular surveys to identify the travel modes of building occupants
- maintain and update the information provided in the Transport Access Guide, and
- set new travel mode targets on an ongoing pace in consultation with residents and employees.

Transport Access Guide

The aim of a Transport Access Guide is to ensure that residents and employees are aware of the options available for travel to the subject development by walking, cycling or public transport.

A Transport Access Guide will typically include a map illustrating public transport routes, cycle ways and walking paths, as well as key destinations in the vicinity of the site such as tertiary education facilities, within 200m, 400m and 800m radii.

The Transport Access Guide will be developed in accordance with the principles identified by Transport for NSW and Sydney City Council prior to issue of the Occupation Certificate.

Projected Traffic Generation

The traffic implications of development proposals primarily concern the effects of the *additional* traffic flows generated as a result of a development and its impact on the operational performance of the adjacent road network. An indication of the traffic generation potential of the development proposal is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002)* and the updated traffic generation rates in the recently published RMS *Technical Direction (TDT 2013/04a)* document.

The TDT 2013/04a document specifies that it replaces those sections of the RMS *Guidelines* indicated, and must be followed when RMS is undertaken trip generation and/or parking demand assessments.

Notwithstanding, neither the RMS *Guidelines* nor the updated TDT 2013/04a nominate a specific traffic generation rate for co-living developments, referring only to traditional residential apartment (flat) buildings. For the purposes of this assessment therefore, the following traffic generation rates have been adopted:

High Density Residential Flat Buildings

AM: 0.15 peak hour vehicle trips per car space

PM: 0.12 peak hour vehicle trips per car space

The RMS *Guidelines* also make the following observation in respect of high density residential flat buildings:

Definition

A *high density residential flat building* refers to a building containing 20 or more dwellings. This does not include aged or disabled persons housing. *High density residential flat buildings* are usually more than 5 levels, have basement level car parking and are located in close proximity to public transport services. The building may contain a component of commercial use.

Factors

The above rates include visitors, staff, service/delivery and on-street movements such as taxis and pick-up/set-down activities.

Furthermore, neither the RMS *Guidelines* nor the updated TDT 2013/04a nominate a traffic generation rate for small, local cafés. In any event, the proposed customer base of the café will be entirely foot traffic living and working nearby, including within the development itself. Accordingly, the café component of the development has been excluded from the traffic assessment.

Application therefore of the above residential rates to the proposed development with 8 car spaces yields a traffic generation potential of just 1 vehicle trips per hour (vph) during the weekday AM and PM commuter peak periods.

That level of traffic activity associated with the proposed development proposal is *statistically insignificant* and will clearly not have any unacceptable traffic implications in terms of road network capacity.

4. PARKING IMPLICATIONS

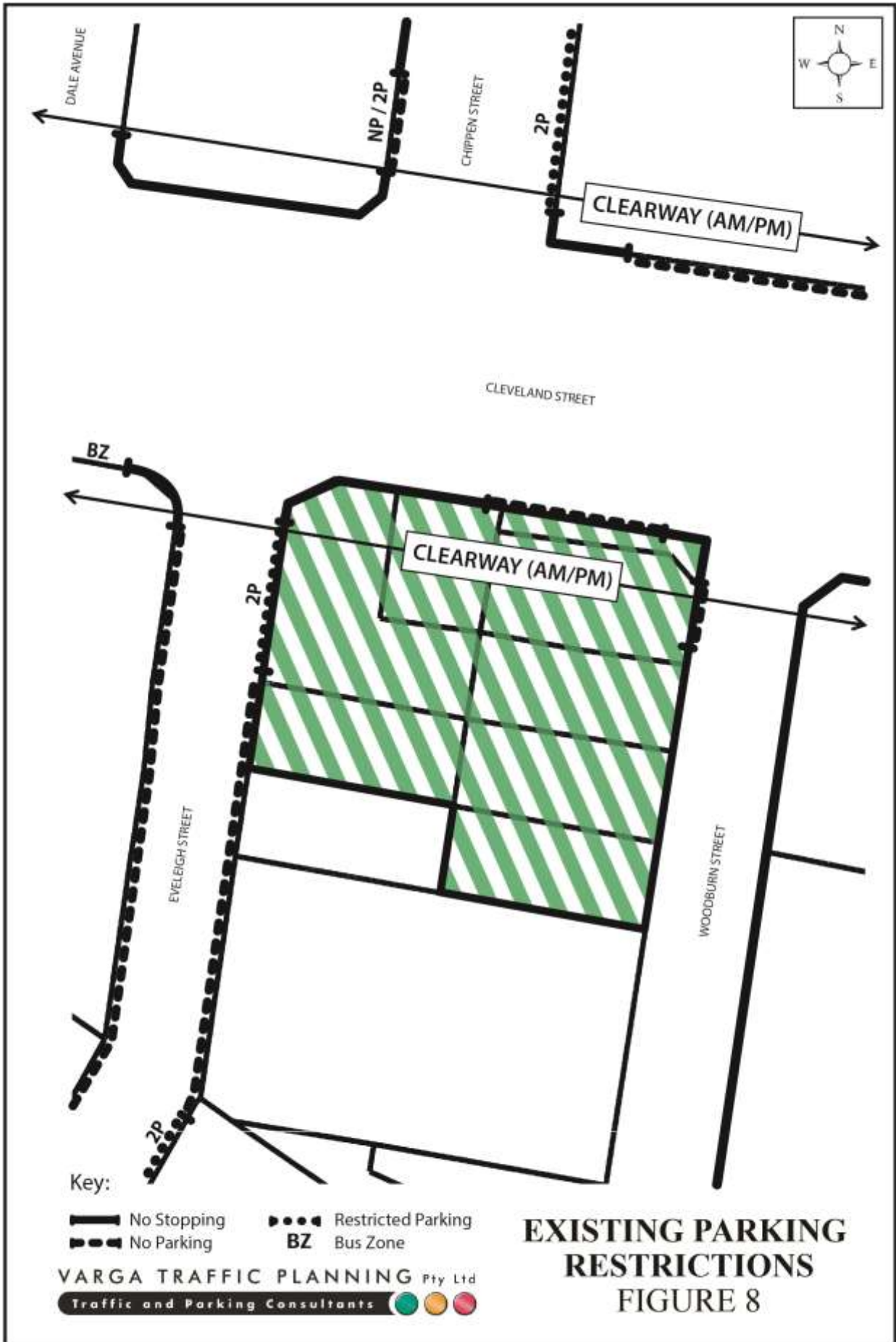
Existing Kerbside Parking Restrictions

The existing kerbside parking restrictions which apply to the road network in the vicinity of the site are illustrated on Figure 8 and comprise:

- CLEARWAY restrictions along both sides of Cleveland Street during commuter peak periods
- NO STOPPING / NO PARKING restrictions along both sides of Cleveland Street at all other times including along the entire site frontage
- NO PARKING restrictions along the western side of Eveleigh Street
- 2 HOUR PARKING restrictions along the eastern side of Eveleigh Street, including along the site frontage
- NO STOPPING restrictions along the eastern side of Woodburn Street
- generally UNRESTRICTED kerbside parking along the western side of Woodburn Street, including along the site frontage
- BUS ZONES located at regular intervals along both sides of Cleveland Street.

Off-Street Car Parking Provisions

As mentioned in the foregoing, the site lies within the *State Significant Development Site* as listed within *Schedule 2* of the *State Environmental Planning Policy (State and Regional Development) 2011*, and is also within *Zone MD (Major Development)* as stipulated within the *State Environmental Planning Policy (Major Development)*. However, *SEPP (Major Development) 2005* does not specify any off-street parking requirements, and notes that:



3 Relationship with other environmental planning instruments

All other environmental planning instruments do not apply to the Redfern-Waterloo Authority Sites, except for other State environmental planning policies.

The off-street parking rates applicable to the development proposal are therefore specified in the *SEPP (Affordable Rental Housing) 2009* document in the following terms:

Division 3 Boarding Houses

29 Standards that cannot be used to refuse development consent for boarding houses

- (2) A consent authority must not refuse consent to development to which this Division applies on any of the following grounds:
- (e) **Parking:** if at least the following is provided:
- (i) in the case of development carried out by or on behalf of a social housing provider in an accessible area – at least 0.2 parking spaces are provided for each boarding room, and
 - (ii) in the case of development carried out by or on behalf of a social housing provider not in an accessible area – at least 0.4 parking spaces are provided for each boarding room, and
 - (iia) in the case of development not carried out or on behalf of a social housing provider – at least 0.5 parking spaces are provided for each boarding room, and
 - (iii) in the case of any development – not more than 1 parking space is provided for each person employed in connection with the development and who is resident on site
- (4) A consent authority may consent to development to which this Division applies whether or not the development complies with the standards set out in subclause (1) or (2).

30 Standards for boarding houses

- (1) A consent authority must not consent to development to which this Division applies unless it is satisfied of each of the following:
- (h) at least one parking space will be provided for a bicycle, and one will be provided for a motorcycle, for every 5 boarding rooms.

The subject site is located in an “accessible area” as defined by the *SEPP*, and therefore application of the above *SEPP* parking rates to the 120 rooms outlined in the development proposal yields an off-street car parking requirement of 60 parking spaces.

The proposed development makes provision for 8 off-street car parking provisions, thereby resulting in a shortfall of 52 spaces when assessed under the *SEPP (Affordable Rental Housing) 2009* rates.

However, there is a distinction to be made pursuant to the requirements of the *SEPP* in that:

- the requirements of Clause 29, if satisfied, cannot be used to refuse consent, whereas
- the requirements of Clause 30 are mandatory.

Thus, the provision of car parking is *not* a mandatory requirement under the *SEPP*, however the provision of motorcycle and bicycle parking *is* mandatory.

Furthermore, that shortfall in car parking is considered acceptable in this instance because:

- the site is located within easy walking distance of Redfern and Central Railway Stations,
- there are also an extensive number of bus services which operate in the vicinity of the site,
- the site is located within a very short walking distance of an extensive range of shops and services including supermarkets, specialty shops, restaurants and banks,
- a number of car share parking spaces are available within easy walking distance of the site which could be used by residents. Car share vehicles provide a sustainable alternative to car ownership and usage, and are ideally suited to the needs of residents who do not own a car,
- Council generally encourages “constraining” parking provision in private developments which are located in accessible areas such as the subject site, and

- the requirements of Clause 29 of the *SEPP*, if satisfied, cannot be used to refuse consent – i.e. in planning terms, the provision of off-street car parking is *not* a mandatory requirement under the *SEPP*

Furthermore, *Sydney Local Environmental Plan 2012, Part 7, Division 1* specifies a *maximum* car parking threshold for a wide range of developments located in the City of Sydney LGA. Whilst it does not specifically refer to co-living boarding house developments, limiting off-street parking is consistent with the city-wide sustainable transport planning objectives.

The *SEPP* also requires the provision of 24 bicycle parking spaces and 24 motorcycle parking spaces. The proposed development makes provision for a total of 24 off-street motorcycle spaces within the basement plus 38 bicycle spaces located on the ground floor level (27 x Class B residential spaces & 11 x Class C visitor spaces), thereby *exceeding* the above *SEPP* parking requirements.

The geometric design layout of the proposed parking facilities have been designed to comply with the relevant requirements specified in the Standards Australia publications *AS2890.1*, *AS2890.2*, *AS2890.3* & *AS2890.6*.

In the circumstances, it is considered that the proposed provision of 8 off-street car parking spaces, 24 motorcycle spaces and 38 bicycle spaces will satisfy the *actual* parking demands likely to be generated by the development proposal, and that the proposed development will not have any unacceptable parking implications.

Conclusion

Based on the analysis and discussions presented in this Traffic & Parking Assessment Report, the following conclusions are made:

- the subject site is located within *Major Development Zone* and is only subject to the relevant traffic and parking controls stipulated within *State Environmental Planning Policies*

- the subject site has excellent connectivity to existing public transport services, car share services and cycling networks
- a work travel plan can be prepared for future residents and a transport access guide can also be prepared to further encourage the use of sustainable modes of transport
- a detailed Construction Traffic Management Plan (CTMP) will ultimately be developed post development application approval to obtain construction certification, however, a concept CTMP has been prepared for the DA submission and is provided under separate cover
- the proposed development is not expected to result in any appreciable increase in the traffic generation potential of the site when compared with the previously approved development on the site
- the proposed development will make provision for adequate off-street car parking facilities in an effort to minimise any external impacts on the very limited availability of on-street parking (due to the extensive Clearway, No Stopping and No Parking restrictions that apply in the surrounding area)
- the proposed development makes generous provision for sustainable modes of transport with 41 bicycle parking spaces proposed plus 24 motorbike parking spaces
- all loading/servicing activities associated with the development will be undertaken by light commercial vehicles that can be satisfactorily accommodated in conventional kerbside parking spaces on the surrounding road network
- residential garbage collection can be satisfactorily undertaken in Eveleigh Street, as presently occurs in the lane

On the above basis, it is concluded that the proposed co-living boarding house development is supportable on traffic planning grounds, and is therefore recommended for approval.

APPENDIX A

PROPOSED ARCHITECTURAL PLANS

PROPOSED CO-LIVING DEVELOPMENT

175-177 CLEVELAND STREET, REDFERN

DRAWING No	DRAWING NAME	SCALE	REV
DA0000	COVERSHEET		A
DA1000	SITE LOCATION PLAN		A
DA1200	SITE ANALYSIS PLAN	1:200	A
DA2000	DEMOLITION PLAN	1:200	A
DA2001	BASEMENT PLAN	1:200	A
DA2002	GROUND FLOOR PLAN	1:200	A
DA2003	LEVEL 1 PLAN	1:200	A
DA2004	LEVEL 2 PLAN	1:200	A
DA2005	LEVEL 3 PLAN	1:200	A
DA2006	LEVEL 4 PLAN	1:200	A
DA2007	LEVEL 5 PLAN	1:200	A
DA2008	LEVEL 6 PLAN	1:200	A
DA2009	ROOF LEVEL	1:200	A
DA2010	SITE & ROOF PLAN	1:200	A
DA2011	UNIT TYPE A & B TYPICAL PLANS	1:50	A
DA2012	UNIT TYPE C TYPICAL UNIT PLANS	1:50	A
DA2013	UNIT TYPE D & E TYPICAL UNIT PLANS	1:50	A
DA2014	UNIT TYPE F & G TYPICAL UNIT PLANS	1:50	A
DA2015	TYPE H TYPICAL UNIT PLAN	1:50	A
DA2300	SECTION A	1:200	A
DA2301	SECTION B	1:200	A
DA2302	SECTION C	1:200	A
DA2303	SECTION D	1:200	A
DA2304	SECTION E	1:200	A
DA2400	NORTH ELEVATION (CLEVELAND STREET)	1:200	A
DA2401	EAST ELEVATION (WOODBURN STREET)	1:200	A
DA2402	SOUTH ELEVATION	1:200	A
DA2403	WEST ELEVATION (EVELEIGH STREET)	1:200	A
DA2404	MATERIALS FINISHES - CLEVELAND STREET N/E CORNER		A
DA9000	GROSS FLOOR AREAS	1:500	A
DA9001	COMMON AREAS	1:500	A
DA9002	PHOTOMONTAGE N/E - EXISTING		A
DA9003	PHOTMONTAGE N/E - PROPOSED		A
DA9004	PHOTOMONTAGE N/W - EXISTING		A
DA9005	PHOTOMONTAGE N/W - PROPOSED		A
DA9100	WINTER SOLSTICE PLAN SHADOW DIAGRAMS 9AM-12PM	1:500	A
DA9101	WINTER SOLSTICE PLAN SHADOW DIAGRAMS - 1PM-3PM	1:500	A
DA9102	EQUINOX PLAN SHADOW DIAGRAMS 9AM-12PM	1:500	A
DA9103	EQUINOX PLAN SHADOW DIAGRAMS 1PM-3PM	1:500	A
DA9104	SUMMER SOLSTICE PLAN SHADOW DIAGRAMS 9AM-12PM	1:500	A
DA9105	SUMMER SOLSTICE PLAN SHADOW DIAGRAMS 1PM-3PM	1:500	A
DA9200	WINTER SOLSTICE SUN EYE VIEW DIAGRAMS 9AM-12PM		A
DA9201	WINTER SOLSTICE SUN EYE VIEW DIAGRAMS 1PM-3PM		A

SITE AREA : 1062.1 m²

ALLOWABLE HEIGHT OF BUILDING : 5 STOREYS

ALLOWABLE FSR : 3:1

ALLOWABLE FSR (AHSEPP BONUS) : 3.5:1

ALLOWABLE GFA : 3717.35 m²

APPROVED HEIGHT OF BUILDING : 6 STOREYS

APPROVED FSR : 3.51:1

APPROVED GFA : 3725 m²

GROSS FLOOR AREA (GFA)

GROUND LEVEL	420.54
LEVEL 1	735.03
LEVEL 2	757.88
LEVEL 3	717.13
LEVEL 4	717.13
LEVEL 5	362.40
TOTAL	3,710.11 m²

COMMON OPEN SPACES (TOTAL)

CAFE	102.79
EXTERNAL COMMON AREA	816.64
INTERNAL COMMON AREA	392.93
LAUNDRY	35.20
STUDY	72.11
TOTAL	1,419.67 m²

RESIDENTIAL (GFA)

TOTAL GFA	3,710.11m ²
(-CAFE AREA)	-102.79m ²
TOTAL	3,607.32 m²

PARKING

		QTY
B	BICYCLES	27
M	MOTORBIKES	24
PB	CAR PARKING BAYS	8
VB	VISITOR BICYCLES	11

UNIT MIX

	SINGLE	DOUBLE	TOTAL
LEVEL 1			
	11	16	27
LEVEL 2			
	12	18	30
LEVEL 3			
	10	18	28
LEVEL 4			
	10	18	28
LEVEL 5			
	1	6	7
TOTAL	44	76	120

UNIT TYPES

TYPE	SIZE	AREA (m2)	QTY
TYPE A	DOUBLE	21.16	58
TYPE B	SINGLE	18.08	40
TYPE C	DOUBLE	30.06	6
TYPE C2	DOUBLE	29.52	1
TYPE D	SINGLE	16.08	4
TYPE E	DOUBLE	20.51	4
TYPE F	DOUBLE	22.30	4
TYPE G	DOUBLE	24.85	2
TYPE H	DOUBLE	26.93	1
TOTAL			120



Copyright of this drawing is retained by Mark Shapiro Architects. Authority is required for reproduction. Contractor to verify all dimensions on site prior to commencing work. MSA is to be notified of any discrepancies in the dimension and setting out of the work.

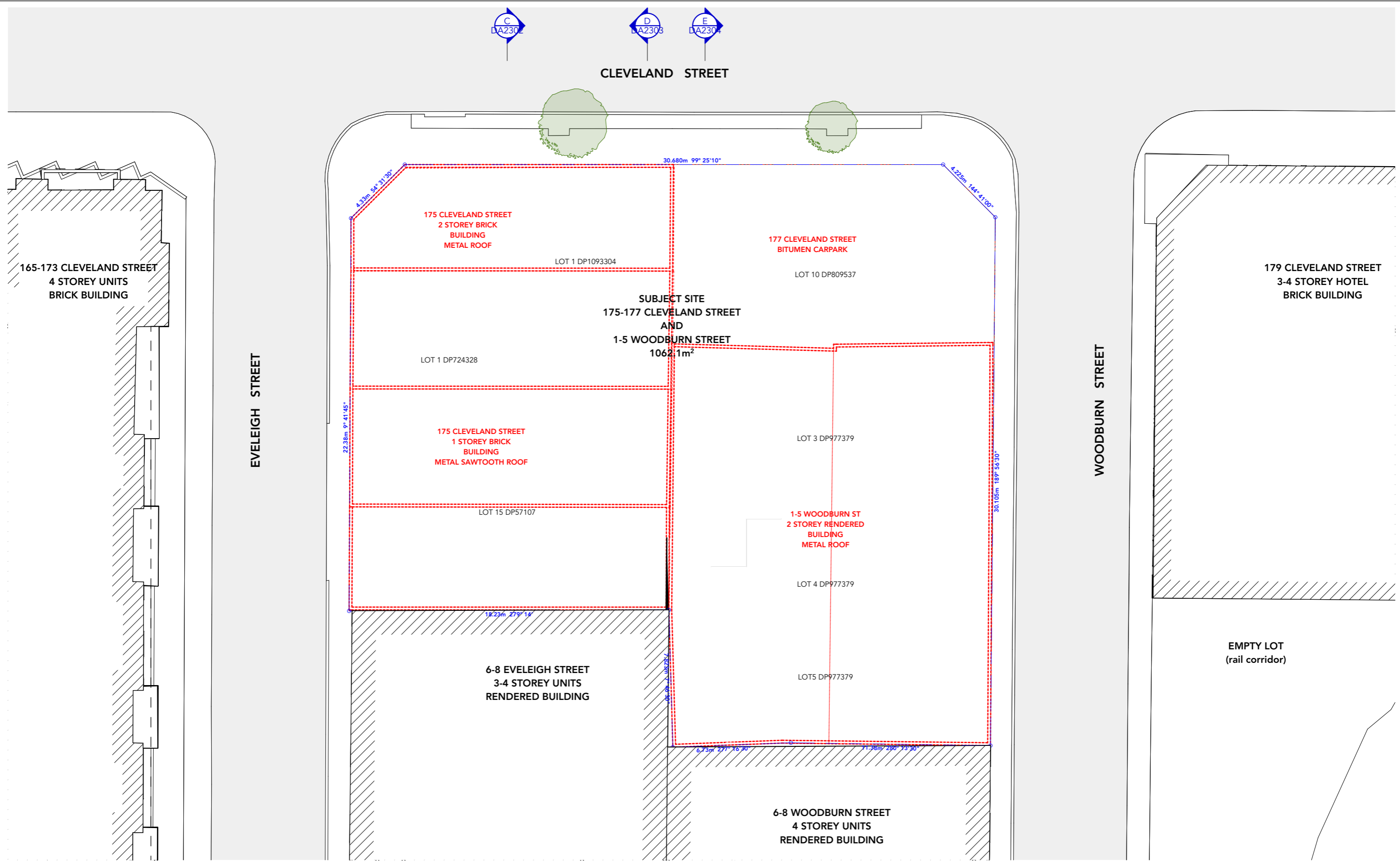
T 0421 996 467
W markshapiro.com.au
E mark@markshapiro.com.au
NSW REG. 9789
ABN 646 2000 7678

ISSUE	DATE	REVISION
A	26/2/21	ISSUE FOR DEVELOPMENT APPLICATION

CLIENT:
EG Funds Management
Level 21, Governor Phillip Tower,
1 Farrer Place, Sydney, 2000

PROJECT:
PROPOSED CO-LIVING DEVELOPMENT
175-177 CLEVELAND STREET, REDFERN
DRAWING:
COVERSHEET

PROJECT NO:
20008
PLOTTED: 1/3/21
DRAWING NO:
DA0000
REV:
A



1 DEMOLITION PLAN 1:200

MARK SHAPIRO ARCHITECTS
 T 0421 996 467
 W markshapiro.com.au
 E mark@markshapiro.com.au
 NSW REG. 9789
 ABN 646 2000 7678

Copyright of this drawing is retained by Mark Shapiro Architects. Authority is required for reproduction. Contractor to verify all dimensions on site prior to commencing work. MSA is to be notified of any discrepancies in the dimension and setting out of the work.

ISSUE	DATE	REVISION
A	26/2/21	ISSUE FOR DEVELOPMENT APPLICATION

ALL EXISTING STRUCTURES ON SITE TO BE DEMOLISHED AS INDICATED

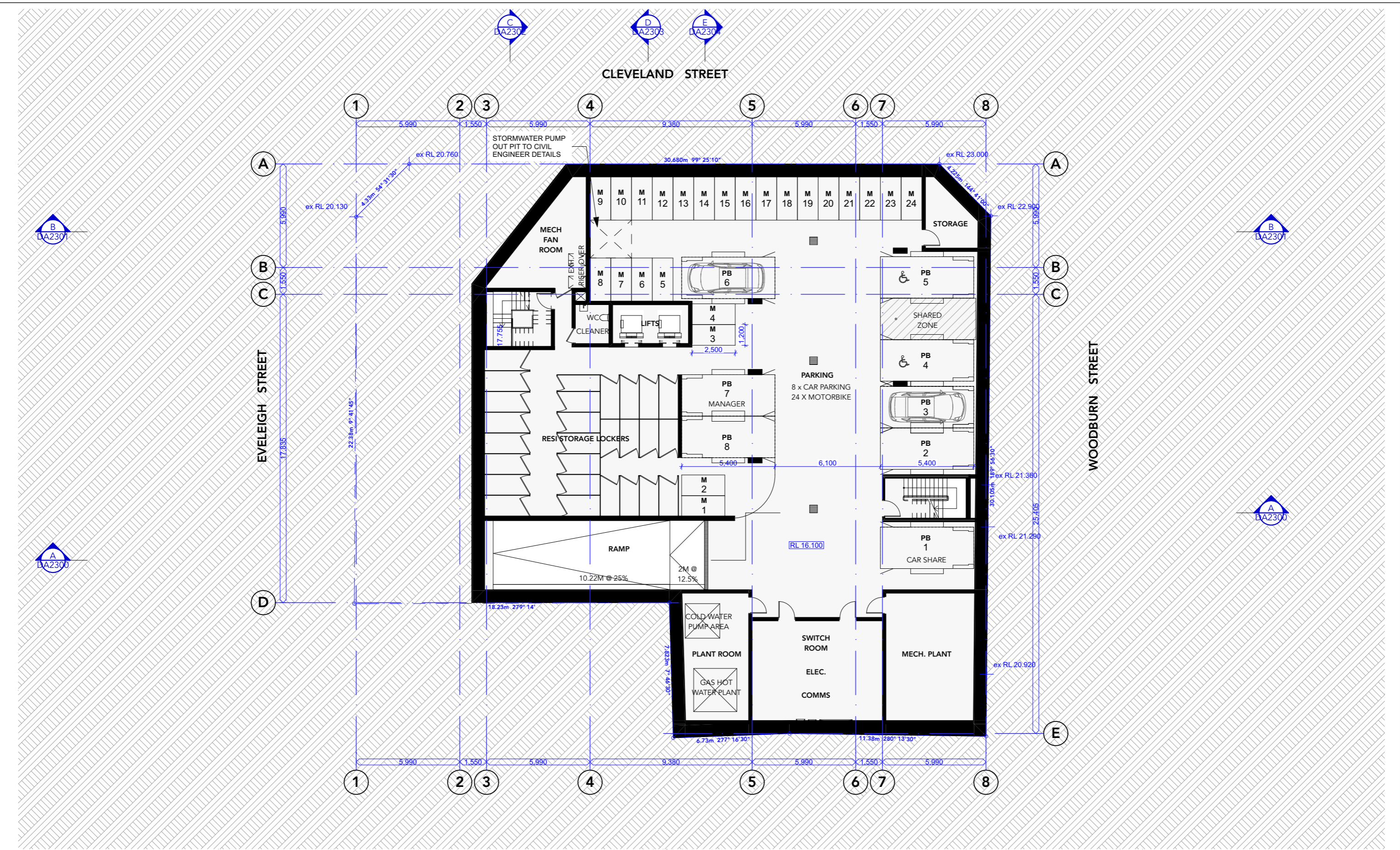


CLIENT:
EG Funds Management
 Level 21, Governor Phillip Tower,
 1 Farrer Place, Sydney, 2000

PROJECT:
PROPOSED CO-LIVING DEVELOPMENT
 175-177 CLEVELAND STREET, REDFERN
 DRAWING:
DEMOLITION PLAN

PROJECT NO:
20008
 PLOTTED: 1/3/21
 DRAWING NO:
DA2000 REV: **A**

FILE: 20008_175_177_Cleveland_Street_Redfern_DA_200210.dwg



1 BASEMENT 1:200

MARK SHAPIRO ARCHITECTS
 T 0421 996 467
 W markshapiro.com.au
 E mark@markshapiro.com.au
 NSW REG. 9789
 ABN 646 2000 7678

Copyright of this drawing is retained by Mark Shapiro Architects. Authority is required for reproduction. Contractor to verify all dimensions on site prior to commencing work. MSA is to be notified of any discrepancies in the dimension and setting out of the work.

ISSUE	DATE	REVISION
A	26/2/21	ISSUE FOR DEVELOPMENT APPLICATION

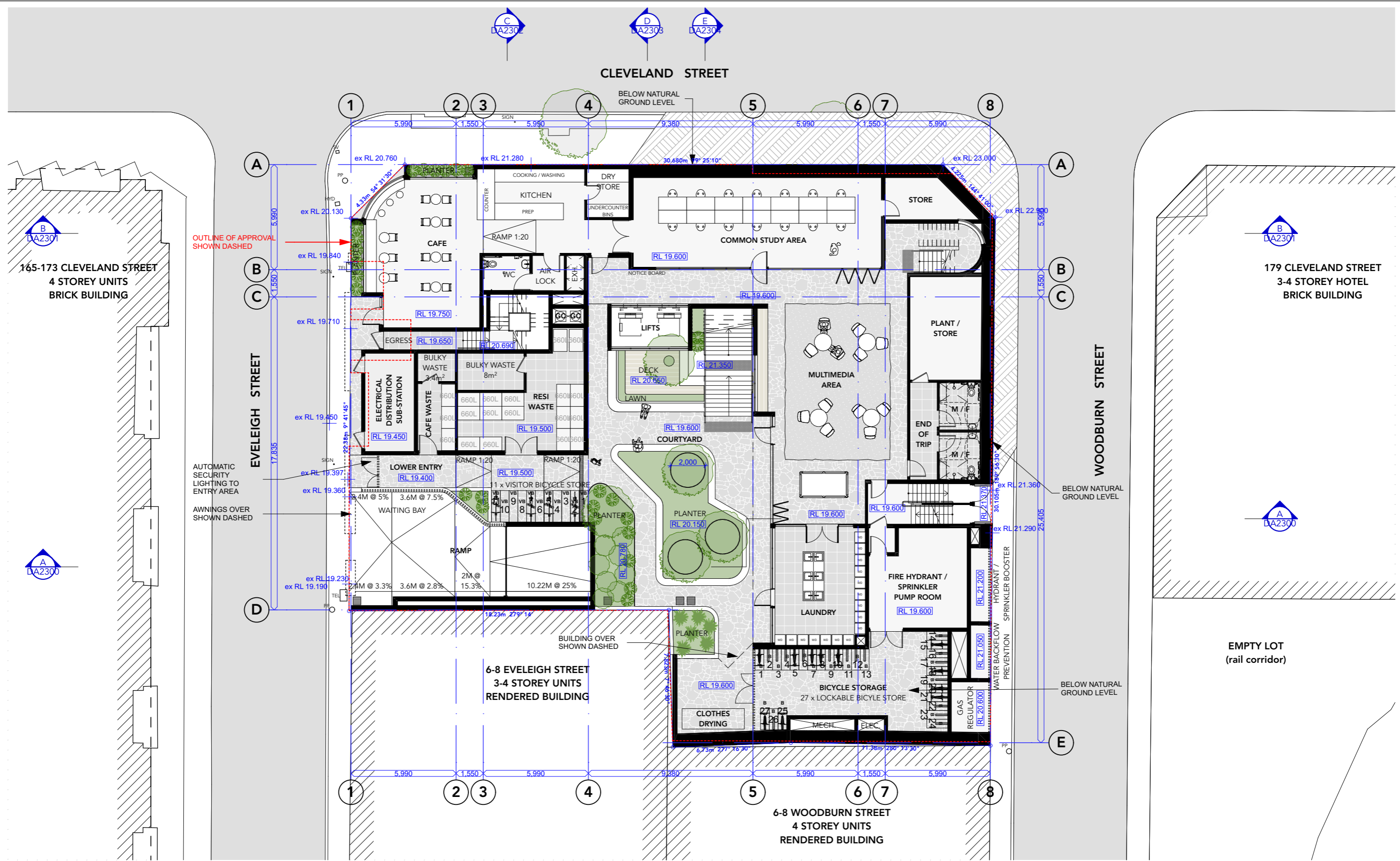
- BASIX COMMITMENTS**
 (ALL OTHER BASIX COMMITMENTS AS PER BASIX CERTIFICATE)
- ENERGY: 3 PHASE ≤ 2.5
 - AIRC CONDITIONING: CENTRAL GAS
 - HOT WATER: GEARLESS TRACTION WITH VVVF MOTOR
 - LIFTS: REFER BASIX COMMITMENTS
 - LIGHTING: REFER BASIX COMMITMENTS
 - WATER: 4 STAR
 - SHOWERHEADS: 4 STAR
 - TOILETS: 4 STAR
 - BATHROOM TAPS: 4 STAR
 - KITCHEN TAPS: 4 STAR
- THERMAL COMFORT OPTIONS**
 INSULATION: REFER SECTION J
 GLAZING TYPE: REFER SECTION J

CLIENT:
EG Funds Management
 Level 21, Governor Phillip Tower,
 1 Farrer Place, Sydney, 2000

PROJECT:
PROPOSED CO-LIVING DEVELOPMENT
 175-177 CLEVELAND STREET, REDFERN
 DRAWING:
BASEMENT PLAN

PROJECT NO:
20008
 PLOTTED: 1/3/21
 DRAWING NO:
DA2001
 REV: **A**

FILE: 20008_175_177_Cleveland_Street_Redfern_DA_200210.dwg



1 GROUND LEVEL
1:200

MARK SHAPIRO ARCHITECTS
 T 0421 996 467
 W markshapiro.com.au
 E mark@markshapiro.com.au
 NSW REG. 9789
 ABN 646 2000 7678

Copyright of this drawing is retained by Mark Shapiro Architects. Authority is required for reproduction. Contractor to verify all dimensions on site prior to commencing work. MSA is to be notified of any discrepancies in the dimension and setting out of the work.

ISSUE	DATE	REVISION
A	26/2/21	ISSUE FOR DEVELOPMENT APPLICATION

- BASIX COMMITMENTS**
 (ALL OTHER BASIX COMMITMENTS AS PER BASIX CERTIFICATE)
- ENERGY: 3 PHASE ≤ 2.5
 - AIR CONDITIONING: CENTRAL GAS
 - HOT WATER: GEARLESS TRACTION WITH VVVF MOTOR
 - LIFTS: REFER BASIX COMMITMENTS
 - WATER: 4 STAR
 - SHOWERHEADS: 4 STAR
 - TOILETS: 4 STAR
 - BATHROOM TAPS: 4 STAR
 - KITCHEN TAPS: 4 STAR
 - WATER: 4 STAR
 - SHOWERHEADS: 4 STAR
 - TOILETS: 4 STAR
 - BATHROOM TAPS: 4 STAR
 - KITCHEN TAPS: 4 STAR
- THERMAL COMFORT OPTIONS**
- INSULATION: REFER SECTION J
 - GLAZING TYPE: REFER SECTION J

CLIENT:
EG Funds Management
 Level 21, Governor Phillip Tower,
 1 Farrer Place, Sydney, 2000

PROJECT:
PROPOSED CO-LIVING DEVELOPMENT
 175-177 CLEVELAND STREET, REDFERN
 DRAWING:
GROUND FLOOR PLAN

PROJECT NO:
20008
 PLOTTED: 1/3/21
 DRAWING NO:
DA2002
 REV:
A

FILE: 20008_175_177_Cleveland_Street_Redfern_DA_200210.rvt



1 LEVEL 1
1:200

MARK SHAPIRO ARCHITECTS
 T 0421 996 467
 W markshapiro.com.au
 E mark@markshapiro.com.au
 NSW REG. 9789
 ABN 646 2000 7678

Copyright of this drawing is retained by Mark Shapiro Architects. Authority is required for reproduction. Contractor to verify all dimensions on site prior to commencing work. MSA is to be notified of any discrepancies in the dimension and setting out of the work.

ISSUE	DATE	REVISION
A	26/2/21	ISSUE FOR DEVELOPMENT APPLICATION

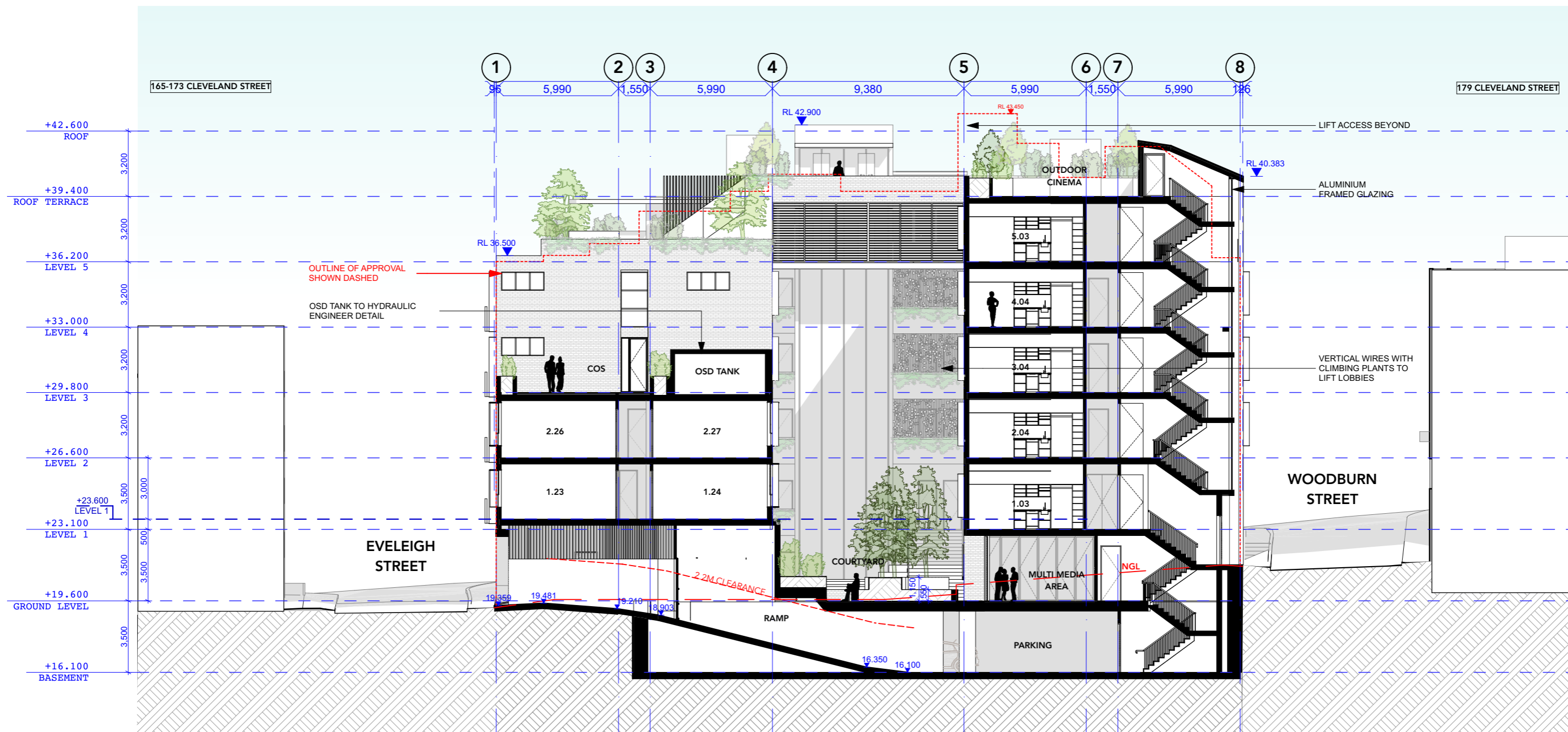
- BASIX COMMITMENTS**
 (ALL OTHER BASIX COMMITMENTS AS PER BASIX CERTIFICATE)
ENERGY
 AIRCONDITIONING: 3 PHASE 2.5
 HOT WATER: CENTRAL GAS
 LIFTS: GEARLESS TRACTION WITH VVVF MOTOR
LIGHTING
 REFER BASIX COMMITMENTS
WATER
 SHOWERHEADS: 4 STAR
 TOILETS: 4 STAR
 BATHROOM TAPS: 4 STAR
 KITCHEN TAPS: 4 STAR
THERMAL COMFORT OPTIONS
 INSULATION: REFER SECTION J
 GLAZING TYPE: REFER SECTION J

CLIENT:
EG Funds Management
 Level 21, Governor Phillip Tower,
 1 Farrer Place, Sydney, 2000

PROJECT:
PROPOSED CO-LIVING DEVELOPMENT
 175-177 CLEVELAND STREET, REDFERN
 DRAWING:
LEVEL 1 PLAN

PROJECT NO:
20008
 PLOTTED: 1/3/21
 DRAWING NO:
DA2003
 REV: **A**

FILE: 20008_175_177_Cleveland_Street_Redfern_DA_200210.dwg



1 SECTION A
1:200

MARK SHAPIRO ARCHITECTS
 T 0421 996 467
 W markshapiro.com.au
 E mark@markshapiro.com.au
 NSW REG. 9789
 ABN 646 2000 7678

Copyright of this drawing is retained by Mark Shapiro Architects. Authority is required for reproduction. Contractor to verify all dimensions on site prior to commencing work. MSA is to be notified of any discrepancies in the dimension and setting out of the work.

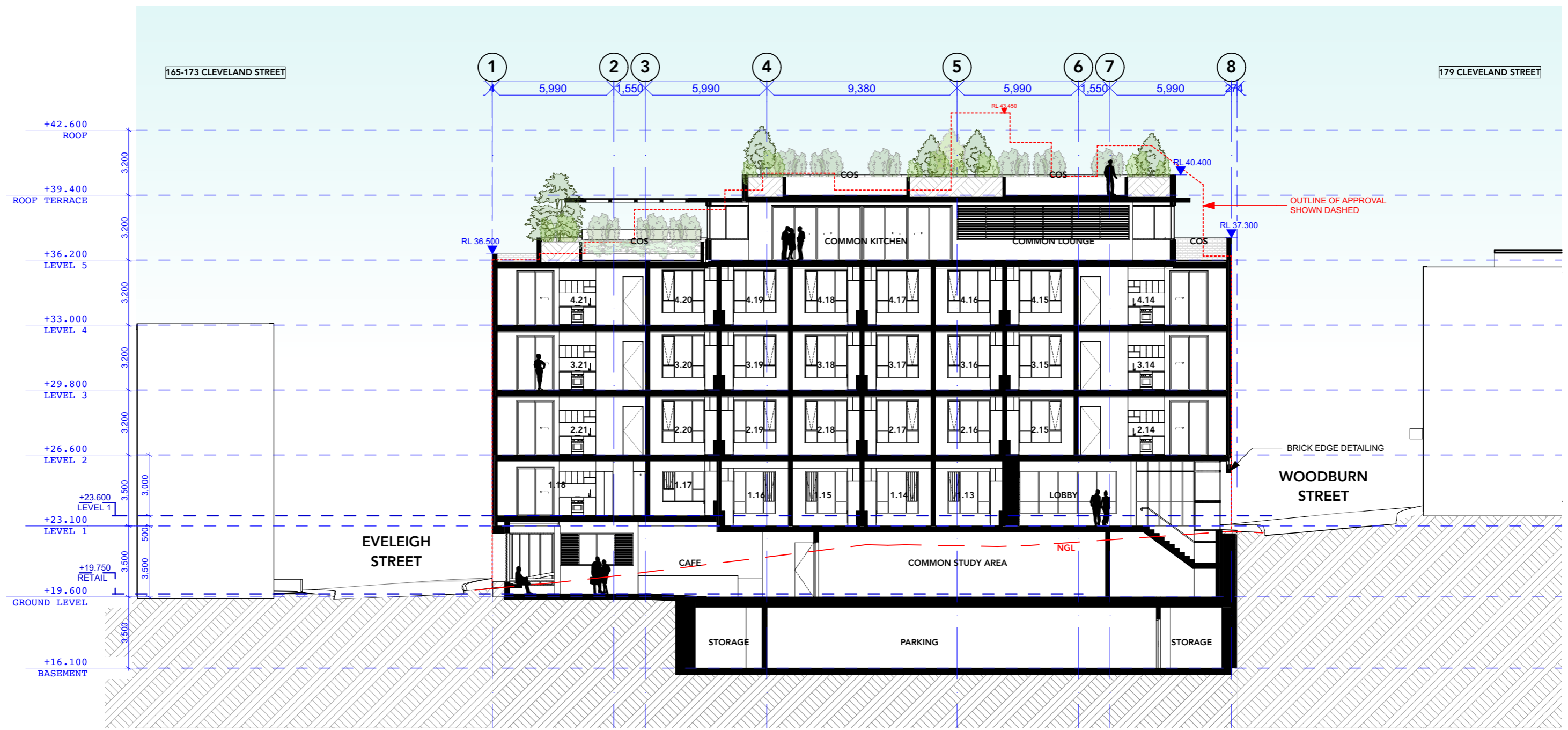
ISSUE	DATE	REVISION
A	26/2/21	ISSUE FOR DEVELOPMENT APPLICATION

BASIX COMMITMENTS
 (ALL OTHER BASIX COMMITMENTS AS PER BASIX CERTIFICATE)
 ENERGY: 3 PHASE <2.5
 AIR CONDITIONING: CENTRAL GAS
 HOT WATER: CENTRAL GAS
 LIFTS: GEARLESS TRACTION WITH VVVF MOTOR
 LIGHTING: REFER BASIX COMMITMENTS
 WATER: 4 STAR
 SHOWERHEADS: 4 STAR
 TOILETS: 4 STAR
 BATHROOM TAPS: 4 STAR
 KITCHEN TAPS: 4 STAR
 THERMAL COMFORT OPTIONS: REFER SECTION J
 INSULATION: REFER SECTION J
 GLAZING TYPE: REFER SECTION J

CLIENT:
EG Funds Management
 Level 21, Governor Phillip Tower,
 1 Farrer Place, Sydney, 2000

PROJECT:
PROPOSED CO-LIVING DEVELOPMENT
 175-177 CLEVELAND STREET, REDFERN
 DRAWING:
SECTION A

PROJECT NO:
20008
 PLOTTED: 1/3/21
 DRAWING NO:
DA2300
 REV:
A



1 SECTION B
1:200

MARK SHAPIRO ARCHITECTS
 T 0421 996 467
 W markshapiro.com.au
 E mark@markshapiro.com.au
 NSW REG. 9789
 ABN 646 2000 7678

Copyright of this drawing is retained by Mark Shapiro Architects. Authority is required for reproduction. Contractor to verify all dimensions on site prior to commencing work. MSA is to be notified of any discrepancies in the dimension and setting out of the work.

ISSUE	DATE	REVISION
A	26/2/21	ISSUE FOR DEVELOPMENT APPLICATION

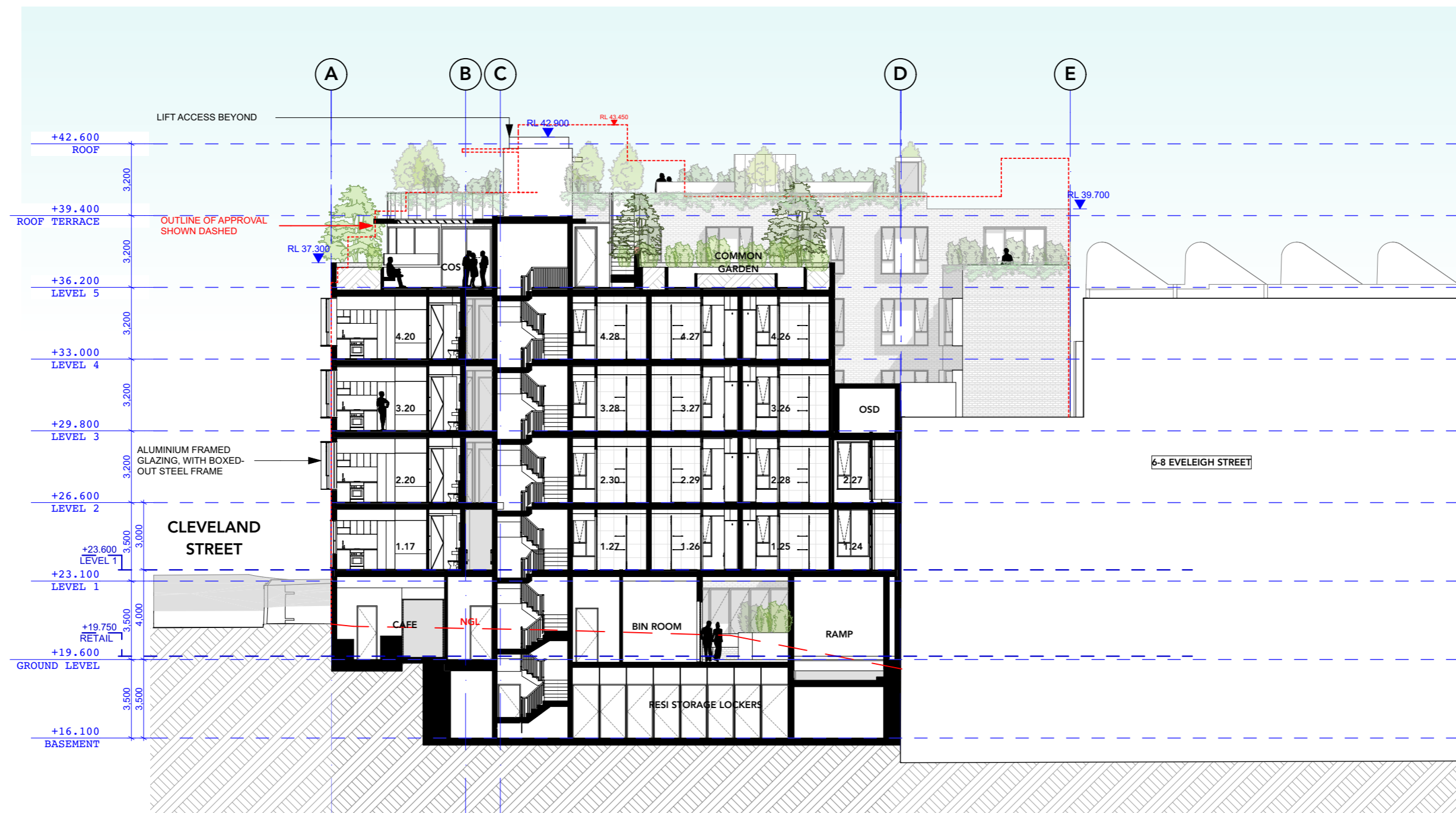
BASIX COMMITMENTS
 (ALL OTHER BASIX COMMITMENTS AS PER BASIX CERTIFICATE)
 ENERGY: 3 PHASE <2.5
 AIRCONDITIONING: CENTRAL GAS
 HOT WATER: CENTRAL GAS
 LIFTS: GEARLESS TRACTION WITH VVVF MOTOR
 LIGHTING: REFER BASIX COMMITMENTS
 WATER: 4 STAR
 SHOWERHEADS: 4 STAR
 TOILETS: 4 STAR
 BATHROOM TAPS: 4 STAR
 KITCHEN TAPS: 4 STAR
THERMAL COMFORT OPTIONS
 INSULATION: REFER SECTION J
 GLAZING TYPE: REFER SECTION J

CLIENT:
EG Funds Management
 Level 21, Governor Phillip Tower,
 1 Farrer Place, Sydney, 2000

PROJECT:
PROPOSED CO-LIVING DEVELOPMENT
 175-177 CLEVELAND STREET, REDFERN
 DRAWING:
SECTION B

PROJECT NO:
20008
 PLOTTED: 1/3/21
 DRAWING NO:
DA2301
 REV:
A

FILE: 20008_175_177_Cleveland_Street_Redfern_DA_200210.dwg



1 SECTION C
1:200

ISSUE	DATE	REVISION
A	26/2/21	ISSUE FOR DEVELOPMENT APPLICATION

BASIX COMMITMENTS
 (ALL OTHER BASIX COMMITMENTS AS PER BASIX CERTIFICATE)

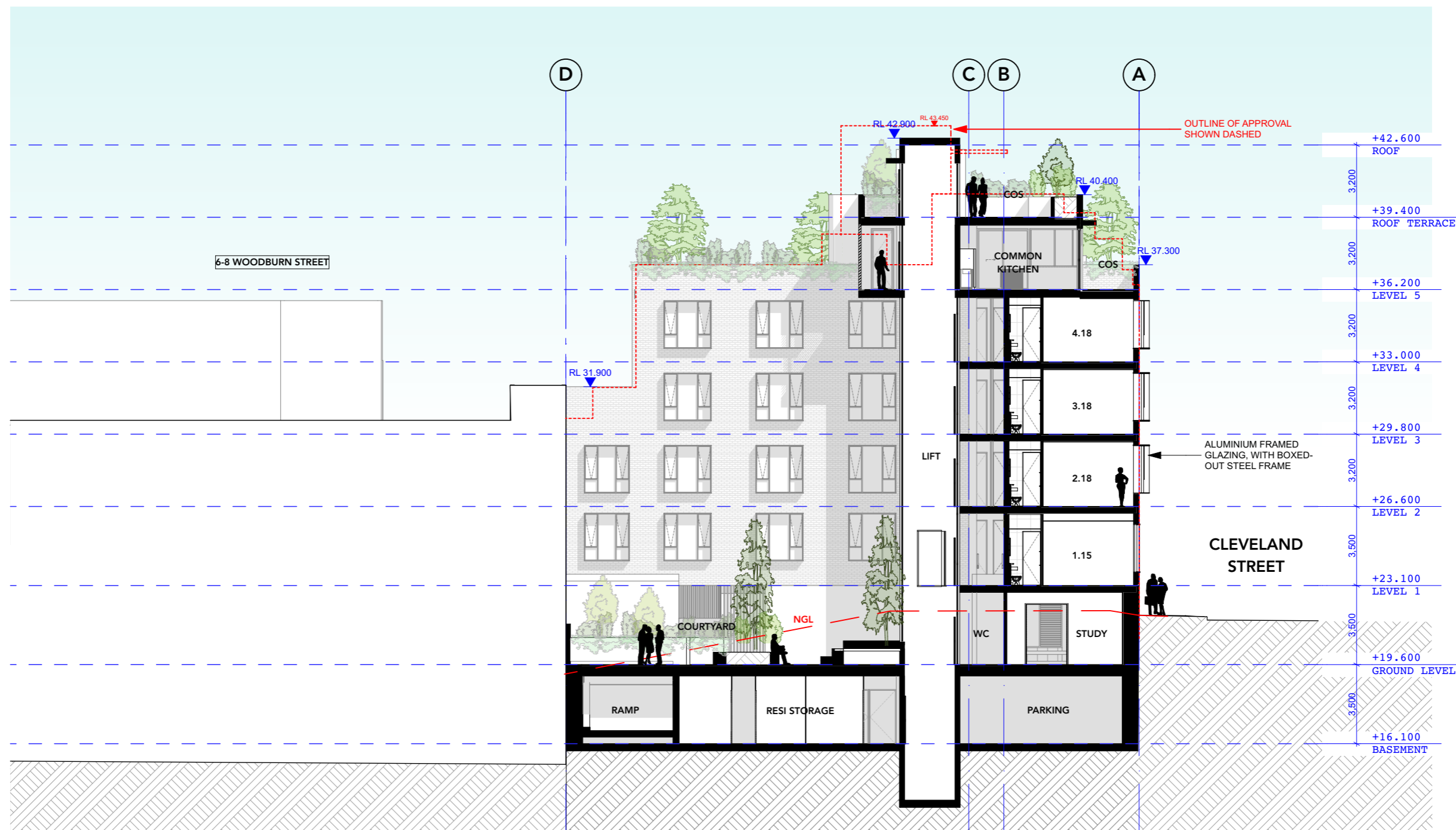
ENERGY	3 PHASE +2.5
AIR CONDITIONING:	CENTRAL GAS
HOT WATER:	CENTRAL GAS
LIFTS:	GEARLESS TRACTION WITH VVVF MOTOR
LIGHTING	REFER BASIX COMMITMENTS
WATER	
SHOWERHEADS:	4 STAR
TOILETS:	4 STAR
BATHROOM TAPS:	4 STAR
KITCHEN TAPS:	4 STAR
WATER	
SHOWERHEADS:	4 STAR
TOILETS:	4 STAR
BATHROOM TAPS:	4 STAR
KITCHEN TAPS:	4 STAR

THERMAL COMFORT OPTIONS
 INSULATION: REFER SECTION J
 GLAZING TYPE: REFER SECTION J

CLIENT:
EG Funds Management
 Level 21, Governor Phillip Tower,
 1 Farrer Place, Sydney, 2000

PROJECT:
PROPOSED CO-LIVING DEVELOPMENT
 175-177 CLEVELAND STREET, REDFERN
 DRAWING:
SECTION C

PROJECT NO:
20008
 PLOTTED: 1/3/21
 DRAWING NO:
DA2302
 REV:
A



1 SECTION D
1:200

ISSUE	DATE	REVISION
A	26/2/21	ISSUE FOR DEVELOPMENT APPLICATION

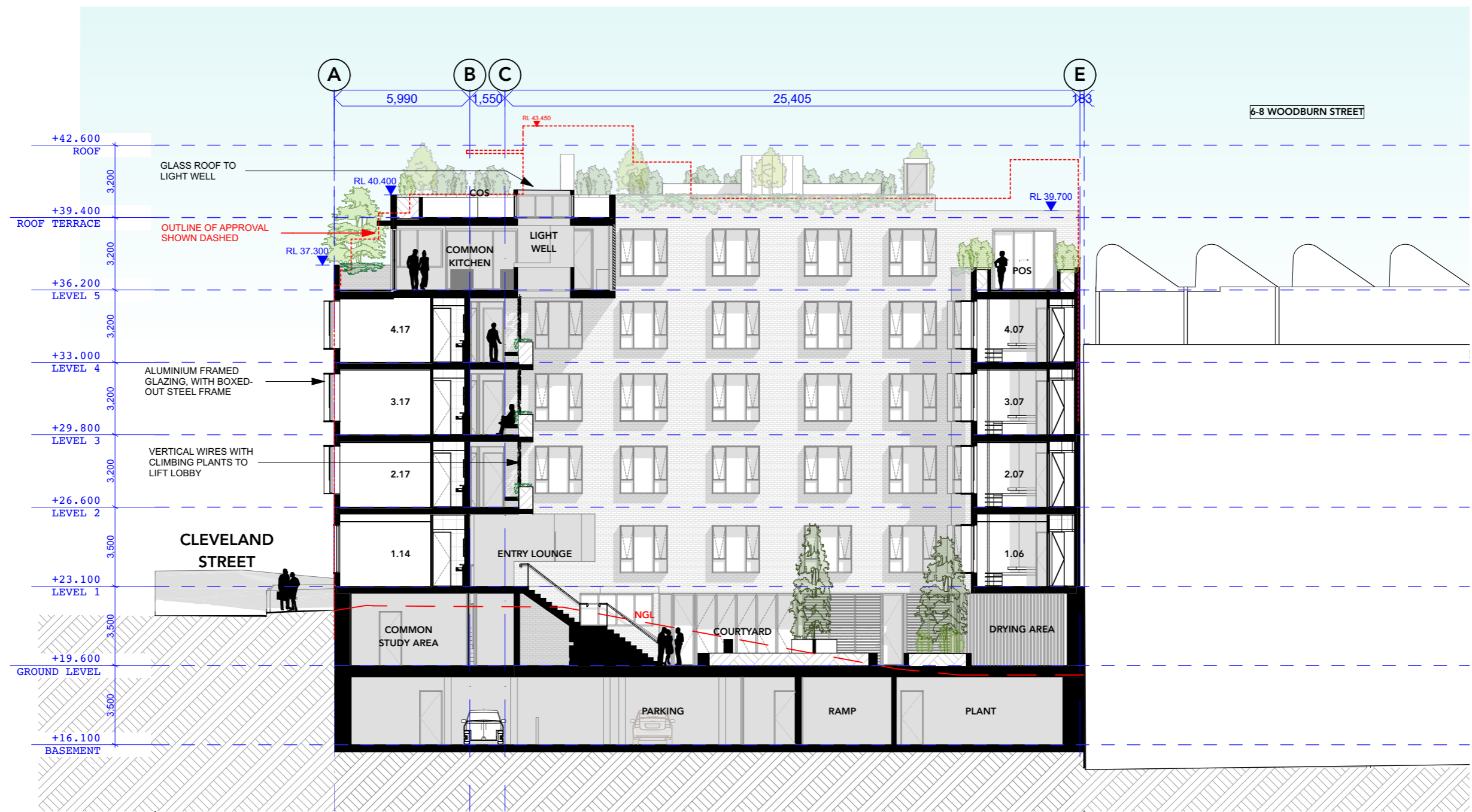
BASIX COMMITMENTS
 (ALL OTHER BASIX COMMITMENTS AS PER BASIX CERTIFICATE)

ENERGY	3 PHASE ≤ 2.5
AIRCONDITIONING:	CENTRAL GAS
HOT WATER:	CENTRAL GAS
LIFTS:	GEARLESS TRACTION WITH VVVF MOTOR
LIGHTING	REFER BASIX COMMITMENTS
WATER	
SHOWERHEADS:	4 STAR
TOILETS:	4 STAR
BATHROOM TAPS:	4 STAR
KITCHEN TAPS:	4 STAR
THERMAL COMFORT OPTIONS	
INSULATION:	REFER SECTION J
GLAZING TYPE:	REFER SECTION J

CLIENT:
EG Funds Management
 Level 21, Governor Phillip Tower,
 1 Farrer Place, Sydney, 2000

PROJECT:
PROPOSED CO-LIVING DEVELOPMENT
 175-177 CLEVELAND STREET, REDFERN
 DRAWING:
SECTION D

PROJECT NO:
20008
 PLOTTED: 1/3/21
 DRAWING NO:
DA2303
 REV:
A



1 SECTION E
1:200



Copyright of this drawing is retained by Mark Shapiro Architects. Authority is required for reproduction. Contractor to verify all dimensions on site prior to commencing work. MSA is to be notified of any discrepancies in the dimension and setting out of the work.

T 0421 996 467
W markshapiro.com.au
E mark@markshapiro.com.au
NSW REG. 9789
ABN 646 2000 7678

ISSUE	DATE	REVISION
A	26/2/21	ISSUE FOR DEVELOPMENT APPLICATION

BASIX COMMITMENTS
(ALL OTHER BASIX COMMITMENTS AS PER BASIX CERTIFICATE)

ENERGY	3 PHASE -2.5	AIRCONDITIONING:	CENTRAL GAS
HOT WATER:	GEARLESS TRACTION WITH VVVF MOTOR	LIFTS:	REFER BASIX COMMITMENTS
LIGHTING	REFER BASIX COMMITMENTS	WATER	4 STAR
SHOWERHEADS:	4 STAR	TOILETS:	4 STAR
BATHROOM TAPS:	4 STAR	KITCHEN TAPS:	4 STAR
THERMAL COMFORT OPTIONS	INSULATION: REFER SECTION J	GLAZING TYPE:	REFER SECTION J

CLIENT:
EG Funds Management
Level 21, Governor Phillip Tower,
1 Farrer Place, Sydney, 2000

PROJECT:
PROPOSED CO-LIVING DEVELOPMENT
175-177 CLEVELAND STREET, REDFERN
DRAWING:
SECTION E

PROJECT NO:
20008
PLOTTED: 1/3/21
DRAWING NO:
DA2304
REV:
A

