

Traffix Group

Traffic Engineering Assessment

Proposed Social Housing Development

17 Grosvenor Street & 1A-F Woodstock Street,
Balaclava

Prepared for
H2O Architects

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1. Introduction

Traffix Group has been engaged by H2O Architects to undertake a traffic engineering assessment for the proposed social housing development at 17 Grosvenor Street & 1A-F Woodstock Street in Balaclava.

This report provides a detailed traffic engineering assessment of the car parking, bicycle parking, traffic, and access considerations associated with the proposed development.

2. Proposal

The proposal is to demolish the existing residential buildings on-site and construct a social housing development with two three-storey buildings in accordance with the development summary at Table 1.

Table 1: Development Summary

Use		No.
Dwelling	One-bedroom	44 dwellings
	Two-bedroom	21 dwellings
	Three-bedroom	3 dwellings
Total		68 dwellings

A total of 41 on-site car parking spaces (inclusive of three disabled spaces) are located within a basement car park.

Vehicular access to the site is provided via a ramp located at the western edge of the Grosvenor Street frontage.

Car parking spaces will be allocated to residents by the building management on an as-needs basis.

A total of 46 bicycle spaces are provided on-site comprising:

- 32 resident bicycle spaces located within the basement,
- five visitor spaces located at ground level adjacent to Grosvenor Street, and
- nine visitor spaces located at ground level adjacent to Brunning Street.

The existing crossover from Woodstock Street and Brunning Street will be removed with kerb and channel reinstated.

A copy of the proposed development plans, prepared by H2O Architects, is attached at Appendix A.

3. Existing Conditions

3.1. Site Locality

The subject site is located on the west side of Woodstock Street, between Grosvenor Street and Brunning Street in Balaclava as shown in the locality map provided at Figure 1 below.

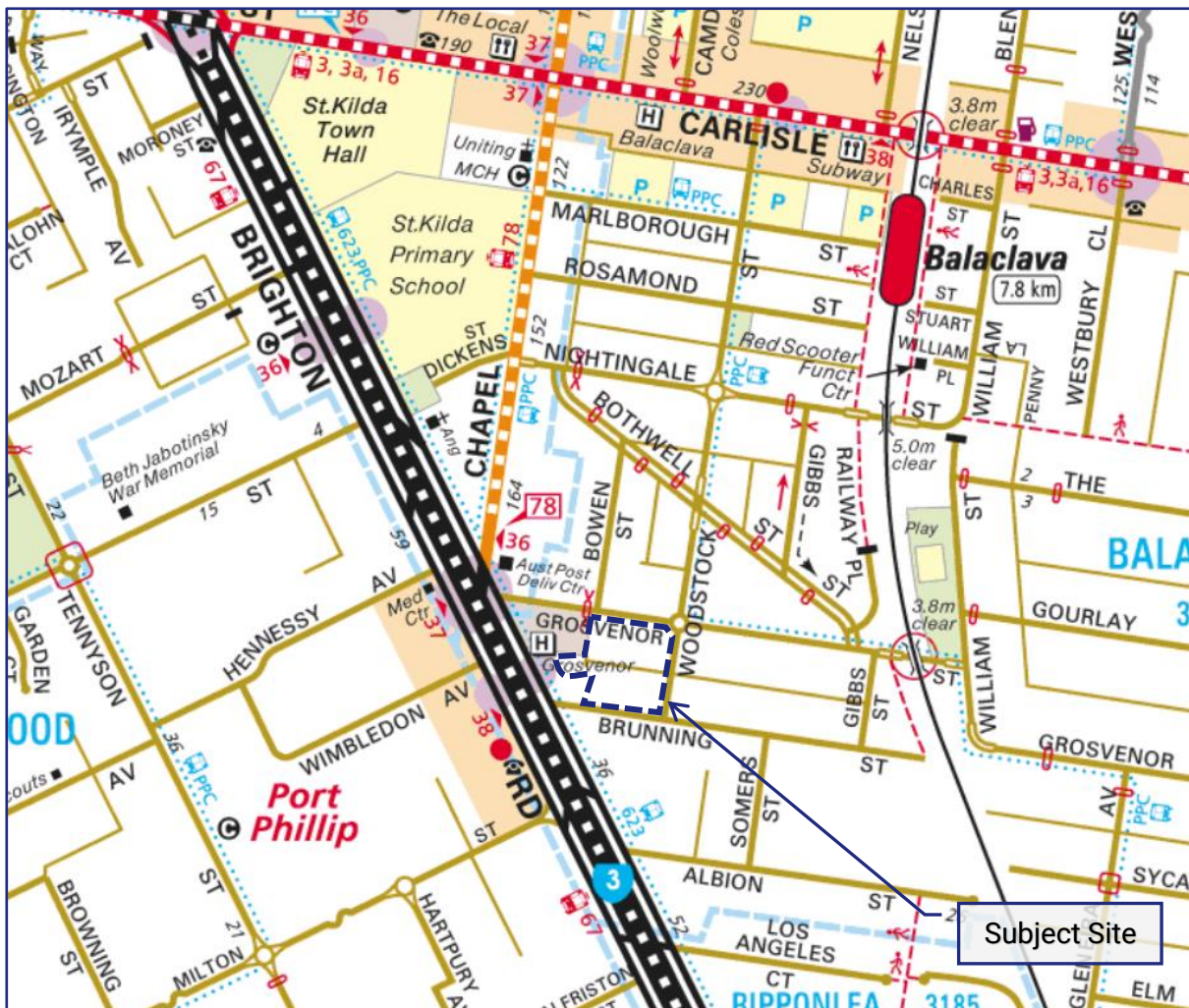


Figure 1: Locality Map

The site is irregular in shape and is currently occupied by 20 units on-site.

The site has a total area of approximately 3,800m² with frontages to Grosvenor Street, Woodstock Street and Brunning Street of approximately 79.5m, 61.5m, and 54m respectively.

Vehicular access to the site is provided via an internal laneway connecting between Brunning Street and Woodstock Street. An aerial view of the site and site frontage photographs are shown at Figure 2 to Figure 5.



Figure 2: Aerial Photograph of the Site (Nearmap September 2023)



Figure 3: Grosvenor Street Frontage



Figure 4: Woodstock Street Frontage



Figure 5: Brunning Street Frontage

3.2. Land Use

The site is located within a General Residential Zone – Schedule 1 (GRZ1) under the Port Phillip Planning Scheme as presented at Figure 6 below. The site is also affected by a Heritage Overlay (H07).

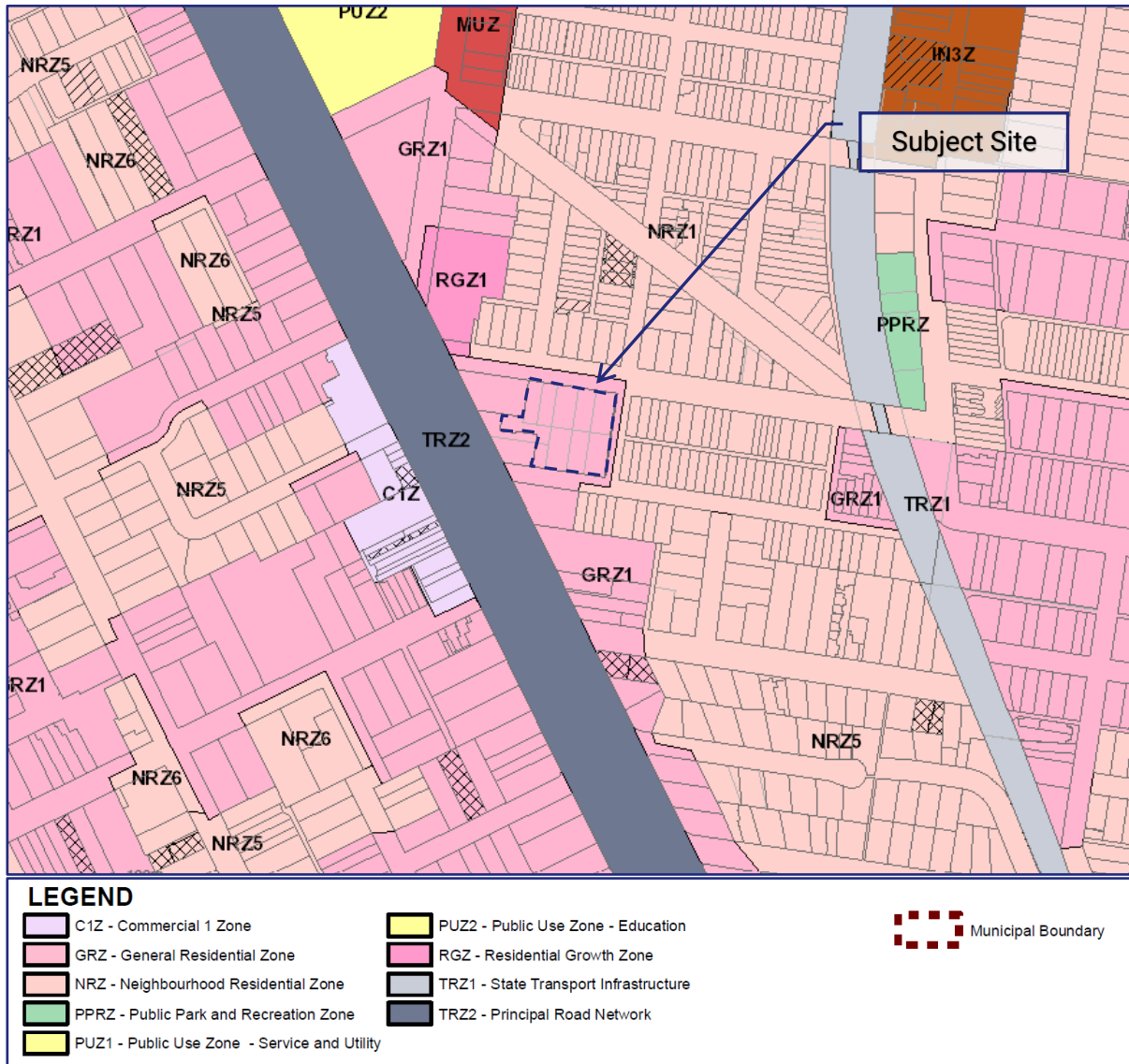


Figure 6: Locality Map

Land uses surrounding the site are generally residential in nature with commercial uses fronting Nepean Highway including the Grosvenor Hotel and a bottle-shop abutting the western boundary of the site.

3.3. Road Network

3.3.1. Grosvenor Street

Grosvenor Street is classified as a Local Road under Council's Register of Public Roads. It is comprised of a western and eastern section; the western section extends in an east-west direction for approximately 360m between Brighton Road and William Street. The eastern section extends in an east-west direction for approximately 400m between William Street and Hotham Street.

In the vicinity of the site, Grosvenor Street is constructed with an approximately 14.5m carriageway providing for through traffic in both directions, unrestricted kerbside parallel parking on the south side of the street, and "Permit Zone" angled parking on the north side of the street.

Footpaths are provided on both sides of the street.

A posted speed limit of 40km/h applies to Grosvenor Street.

Photographs of Grosvenor Street, taken in the vicinity of the site, are shown at Figure 7 and Figure 8.



Figure 7: Grosvenor Street – View East



Figure 8: Grosvenor Street – View West

3.3.2. Woodstock Street

Woodstock Street is classified as a Local Road under Council's Register of Public Roads. It extends in a north-south direction for approximately 500m between Brunning Street and Carlisle Street.

In the vicinity of the site, it is constructed with an approximately 7m carriageway providing for through traffic in both directions and unrestricted kerbside parallel parking on both sides of the street.

Footpaths are provided on both sides of the street.

A posted speed limit of 40km/h applies to Woodstock Street.

Photographs of Woodstock Street, taken in the vicinity of the site, are shown at Figure 9 and Figure 10.



Figure 9: Woodstock Street – View North



Figure 10: Woodstock Street – View South

3.3.3. Brunning Street

Brunning Street is classified as a Local Road under Council's Register of Public Roads. It extends approximately 290m east from Nepean Highway and terminates at a dead end.

In the vicinity of the site, it is constructed with an approximately 8m carriageway providing for through traffic in each direction and unrestricted kerbside parallel parking on both sides of the street.

Footpaths are provided on both sides of the street.

A posted speed limit of 40km/h applies to Brunning Street.

Photographs of Brunning Street, taken in the vicinity of the site, are shown at Figure 11 and Figure 12.



Figure 11: Brunning Street – View East



Figure 12: Brunning Street – View West

3.4. Sustainable Transport

3.4.1. Principal Public Transport Network (PPTN)

The site is located within the PPTN area, as shown in Figure 13.

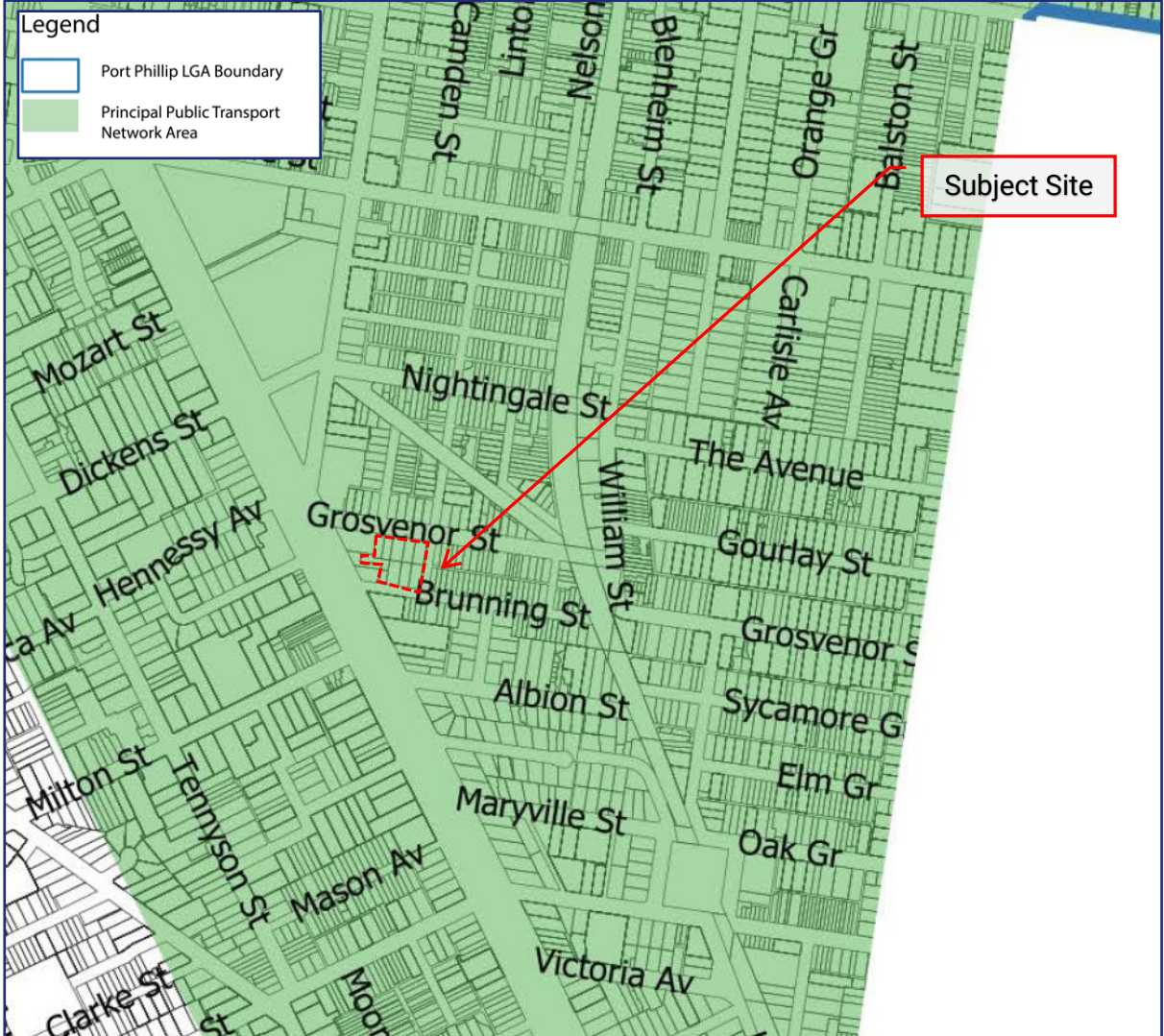


Figure 13: Principal Public Transport Network (Port Phillip)

3.4.2. Public Transport

The following public transport services operate in close proximity of the subject site:

- Balaclava Railway Station, which operates on the Sandringham Line, is located within 500m walking distance from the site. It provides a connection between Balaclava and Melbourne CBD and links to the broader metropolitan railway network.
- Tram Route 67 operates on Nepean Highway with the closest stop provided within approximately 80m walking distance from the site. It provides a connection between Melbourne University and Carnegie via the Melbourne CBD, St Kilda and Caulfield.
- Bus Route 623 operates on Nepean Highway with the closest stop provided within approximately 160m walking distance from the site. It provides a connection between Glen Waverley and St Kilda via Mount Waverley, Chadstone and Carnegie.

These services as well as other public transport services operating in the vicinity of the site are shown in the public transport map at Figure 14 below.

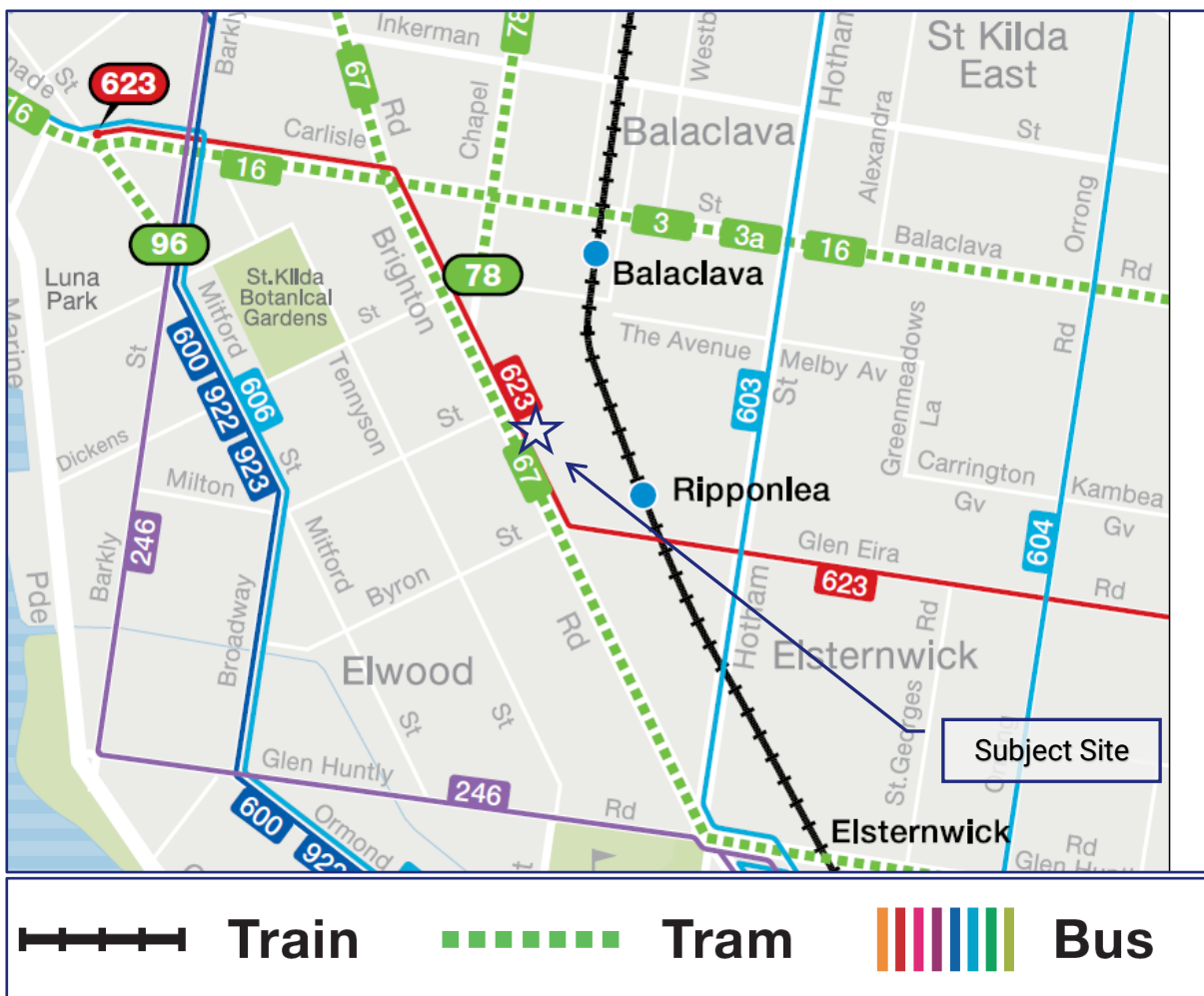


Figure 14: Public Transport Map

3.4.3. Bicycle and Pedestrian Provisions

The following bicycle and pedestrian infrastructure is provided in close vicinity to the site:

- on-road bike lanes along Nepean Highway and Chapel Street to the west of the site,
- informal bike routes along Bothwell Street and Woodstock Street to the north of the site, and
- footpaths on both sides of all nearby streets.

These paths and their connections to other pedestrian and bicycle paths are shown at Figure 15.

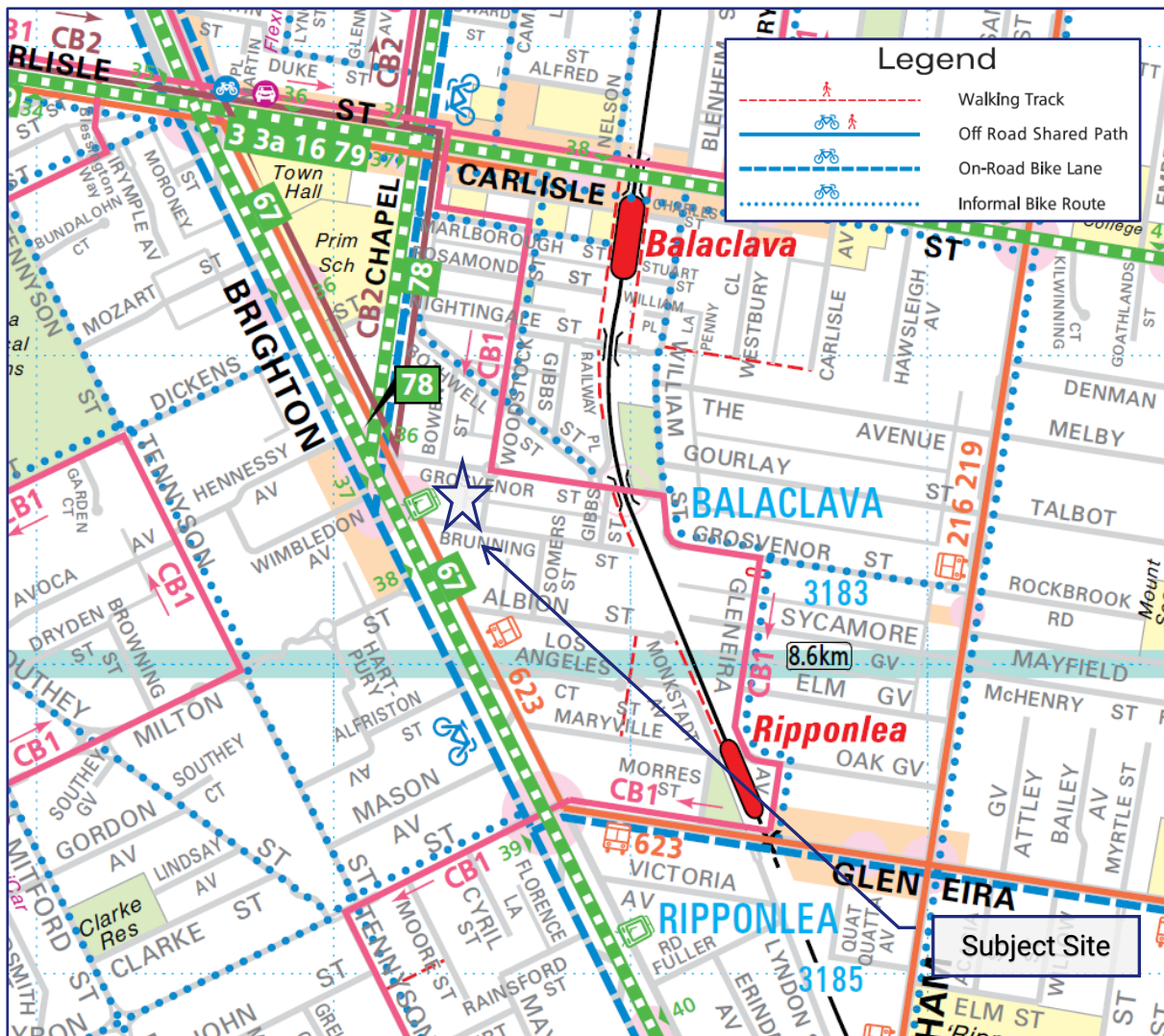


Figure 15: Port Phillip TravelSmart Map

3.5. Existing Car Parking Conditions

Traffic Group has undertaken a survey of the existing on-street car parking in the vicinity of the site. The survey was undertaken at 11:00am on the 16th of October 2023 and includes areas within approximately 200m walking distance of the site as shown in Figure 16.

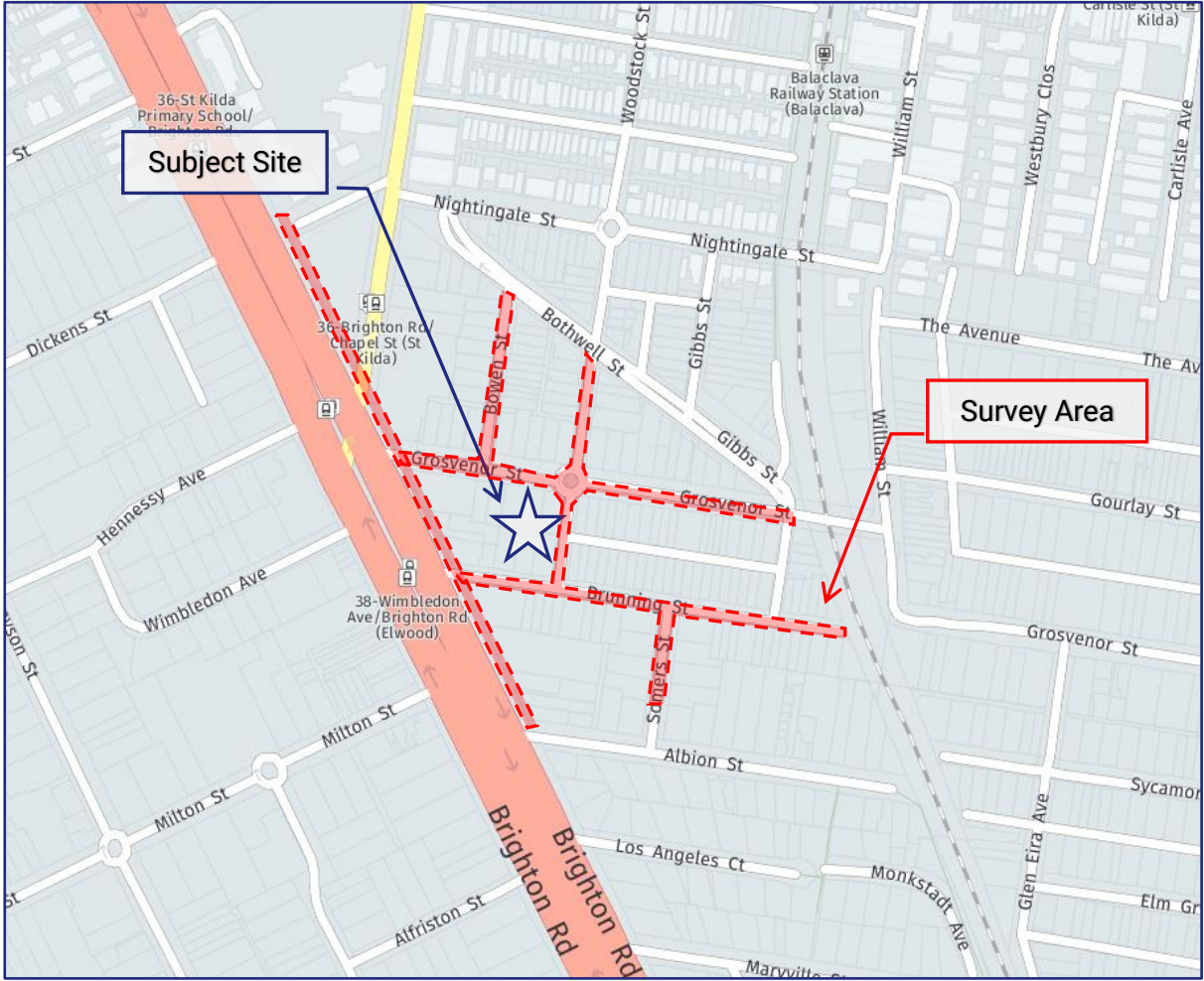


Figure 16: Car Parking Survey Area

Parking within the survey area is generally unrestricted with 2-hour parking between 8am-6pm on weekdays along Bowen Street and Woodstock Street, and Permit Zone restrictions on the north side of Grosvenor Street.

A total of 242 publicly available on-street car parking spaces were identified in the survey area. At the time of the survey, 170 vehicles were observed to be parked (72 vacant spaces) equating to an occupancy of 70%. Detailed survey results are attached in Appendix B.

4. Statutory Car Parking Assessment

4.1. Statutory Car Parking Requirements

Clause 52.06 of the Planning Scheme sets out the statutory requirements for car parking. The purposes of Clause 52.06 are:

- *To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.*
- *To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.*
- *To support sustainable transport alternatives to the motor car.*
- *To promote the efficient use of car parking spaces through the consolidation of car parking facilities.*
- *To ensure that car parking does not adversely affect the amenity of the locality.*
- *To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.*

Clause 52.06 states:

Column B applies if:

- *any part of the land is identified as being within the Principal Public Transport Network Area as shown on the Principal Public Transport Network Area Maps (State Government of Victoria, August 2018); or*
- *a schedule to the Parking Overlay or another provision of the planning scheme specifies that Column B applies.*

The site is located within the PPTN area and accordingly Column B rates apply.

The statutory car parking requirement for the proposed development is outlined in Table 2.

Table 2: Statutory Car Parking Requirement

Land Use	Measure	Rate	Requirement
Dwelling	44 x 1-bedroom dwellings	1 space to each one- or two-bedroom dwellings	44 spaces
	21 x 2-bedroom dwelling		21 spaces
	3 x 3-bedroom dwellings	2 spaces to each three or more-bedroom dwellings	6 spaces
	68 dwellings	0 spaces to every 5 dwellings for developments of 5 or more dwellings	0 spaces
Total			71 spaces

The proposed development generates a statutory car parking requirement for 71 car parking spaces. The provision of 41 on-site car parking spaces results in a shortfall of 30 spaces, and accordingly a permit to reduce the car parking requirement is being sought as part of this application.

4.2. Car Parking Demand Assessment

Clause 52.06-7 requires that:

An application to reduce (including reduce to zero) the number of car parking spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay must be accompanied by a Car Parking Demand Assessment.

The Car Parking Demand Assessment must address the following matters, to the satisfaction of the responsible authority:

- *The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use.*
- *The variation of car parking demand likely to be generated by the proposed use over time.*
- *The short-stay and long-stay car parking demand likely to be generated by the proposed use.*
- *The availability of public transport in the locality of the land.*
- *The convenience of pedestrian and cyclist access to the land.*
- *The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.*

- *The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.*
- *Any empirical assessment or case study.*

A consideration of these matters is provided in Table 3 below.

Table 3: Car Parking Demand Assessment

Matter	Consideration
The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use.	Given the proposed residential use, we would not anticipate that there will be any multi-purpose trips associated with the site.
The variation of car parking demand likely to be generated by the proposed use over time.	The residential use is generally expected to generate peak car parking demands during the evenings and on the weekends.
The short-stay and long-stay car parking demand likely to be generated by the proposed use.	Residents will generate long-stay parking demands, with occasional short-stay demands generated by visitors.
The availability of public transport in the locality of the land.	The site is well served by public transport as outlined in Section 3.4.2 and provides convenient access to surrounding areas and wider Melbourne.
The convenience of pedestrian and cyclist access to the land.	There are footpaths provided along all frontage roads and the road network is accessible for cyclists. Accordingly, the site is conveniently located for access via cycling and walking.
The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.	A total of 28 bicycle spaces are provided on-site comprising 20 resident spaces within the basement, and eight visitor spaces at ground level. No end of trip facilities are provided however, we expect residents to use facilities within their dwelling.

Matter	Consideration																				
<p>The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.</p>	<p>Traffix Group has sourced car ownership data from the 2021 ABS census for 1, 2 and 3-bedroom apartments in Balaclava for state housing. This data is outlined below. We note that there was no data available for three-bedroom state housing dwellings of this type.</p> <table border="1" data-bbox="504 651 1391 983"> <thead> <tr> <th colspan="4" data-bbox="504 651 1391 719">State Housing Car Ownership Rates</th> </tr> <tr> <th data-bbox="504 719 727 786"></th> <th data-bbox="727 719 948 786">1 bedroom</th> <th data-bbox="948 719 1168 786">2 bedrooms</th> <th data-bbox="1168 719 1391 786">3 bedrooms</th> </tr> </thead> <tbody> <tr> <td data-bbox="504 786 727 853">0 cars</td> <td data-bbox="727 786 948 853">76%</td> <td data-bbox="948 786 1168 853">51%</td> <td data-bbox="1168 786 1391 853">N/A</td> </tr> <tr> <td data-bbox="504 853 727 920">1 car</td> <td data-bbox="727 853 948 920">24%</td> <td data-bbox="948 853 1168 920">49%</td> <td data-bbox="1168 853 1391 920">N/A</td> </tr> <tr> <td data-bbox="504 920 727 983">2 or more cars</td> <td data-bbox="727 920 948 983">0</td> <td data-bbox="948 920 1168 983">0</td> <td data-bbox="1168 920 1391 983">N/A</td> </tr> </tbody> </table> <p>The ABS data indicates that there is a far lower car ownership rate than the statutory requirements for state housing.</p>	State Housing Car Ownership Rates					1 bedroom	2 bedrooms	3 bedrooms	0 cars	76%	51%	N/A	1 car	24%	49%	N/A	2 or more cars	0	0	N/A
State Housing Car Ownership Rates																					
	1 bedroom	2 bedrooms	3 bedrooms																		
0 cars	76%	51%	N/A																		
1 car	24%	49%	N/A																		
2 or more cars	0	0	N/A																		
<p>Any empirical assessment or case study.</p>	<p>GTA consultants (GTA) undertook a significant study of social housing sites across inner Melbourne, including existing dwellings on the subject site in 2009.</p> <p>For one-bedroom units, the GTA survey included 156 units across 12 sites and identified a provision rate of 0.4 spaces per unit and a demand rate of 0.19 spaces per units.</p> <p>For family units containing between two and four bedrooms, the GTA study included 266 units across 13 sites. The car parking provision equated to 0.95 spaces per dwellings, and the car parking demand (car ownership) was 0.35 cars per unit.</p>																				

The application of the ABS car ownership rates to the proposed development is shown in Table 4.

Table 4: Application of State Housing Rates to the Proposed Development

Dwelling Type	Car Ownership	State Housing Rates	No. Dwellings	State Housing Car Parking Demand
44 x 1 bedroom dwellings	0 cars	76%	33	0
	1 car	24%	11	11
	2 cars	0	0	0
	3 or more cars	0	0	0
21 x 2 bedroom dwellings	0 cars	51%	11	0
	1 car	49%	10	10
	2 cars	0	0	0
	3 or more cars	0	0	0
3 x 3 bedroom dwellings	0 cars	N/A	0	0
	1 car	N/A	3 ⁽¹⁾	3
	2 cars	N/A	0	0
	3 or more cars	N/A	0	0
Total			68 dwellings	24 spaces

1. Conservatively assuming each of the three-bedroom dwellings will generate demand for one car space. Notably this ratio exceeds the rate identified in the GTA social housing study.

The ABS data applied to the development results in a car parking demand of 0.35 spaces per dwelling which coincides with the GTA case study data for dwellings with two to four bedrooms. The rate is notably lower than the statutory car parking requirement and accordingly, we believe that the statutory car parking requirement overestimates the likely car parking demand to be generated.

4.3. Adequacy of Proposed Car Parking Provision

Clause 52.06-7 also requires that:

Before granting a permit to reduce the number of spaces, the responsible authority must consider the following, as appropriate:

- **The Car Parking Demand Assessment**
- *Any relevant local planning policy or incorporated plan.*
- *The availability of alternative car parking in the locality of the land, including:*
 - *Efficiencies gained from the consolidation of shared car parking spaces.*
 - *Public car parks intended to serve the land.*
 - *On street parking in non residential zones.*
 - *Streets in residential zones specifically managed for non-residential parking.*
- *On street parking in residential zones in the locality of the land that is intended to be for residential use.*
- *The practicality of providing car parking on the site, particularly for lots of less than 300 square metres.*
- *Any adverse economic impact a shortfall of parking may have on the economic viability of any nearby activity centre.*
- *The future growth and development of any nearby activity centre.*
- *Any car parking deficiency associated with the existing use of the land.*
- *Any credit that should be allowed for car parking spaces provided on common land or by a Special Charge Scheme or cash-in-lieu payment.*
- *Local traffic management in the locality of the land.*
- *The impact of fewer car parking spaces on local amenity, including pedestrian amenity and the amenity of nearby residential areas.*
- *The need to create safe, functional and attractive parking areas.*
- *Access to or provision of alternative transport modes to and from the land.*
- *The equity of reducing the car parking requirement having regard to any historic contributions by existing businesses.*
- *The character of the surrounding area and whether reducing the car parking provision would result in a quality/positive urban design outcome.*
- *Any other matter specified in a schedule to the Parking Overlay.*
- *Any other relevant consideration.*

It is anticipated that the proposal will generate a car parking demand for up to 24 spaces.

The car parking provision of 41 spaces is sufficient to accommodate the anticipated social housing car parking demands, and we do not anticipate that there will not be any off-site parking impacts associated with residents.

Notwithstanding the above, we note that Clauses 52.20 and 53.20 of the Port Phillips Planning Scheme, which both outline requirements for social housing development, require car parking to be provided at a minimum rate of 0.6 space per dwelling. While this application is not subject to these particular provisions of the Planning Scheme, this clearly indicates a policy directive to allow lower car parking provisions than the typical statutory requirements for social housing. The proposed provision of 41 spaces for 68 dwellings is consistent with this car parking rate.

Further, we note that the allocation of on-site car parking to residents will be managed by the facility manager to ensure that the demand does not exceed the provision.

On this basis we believe that the proposed car parking provision is adequate and that a permit to reduce the car parking requirement is appropriate in this instance.

4.4. Car Parking Layout

The proposed on-site car parking has been assessed against the requirements of Clause 52.06 and relevant sections of the Australian Standards. Specifically, we note the following:

Access

- all accessways have a minimum width of 4m,
- all vehicles can enter and exit the basement car park in a forwards direction, and
- pedestrian sight triangles measuring 2.5m along the accessway and 2.0m along the frontage can be provided, where no visual obstructions greater than 900mm in height are located.

Car Parking Spaces

- all standard car parking spaces are provided with dimensions of at least 4.9m x 2.6m and are accessed from an aisle width of at least 6.4m,
- all disabled spaces are provided with dimensions of 5.4m x 2.4m with an adjacent shared space of at least the same dimensions, noting that the Planning Scheme allows disabled spaces to encroach 500mm into the accessway width,
- all car parking spaces adjacent to a wall are offset by a minimum distance of 300mm,
- all columns adjacent to car parking spaces are outside of the clearance areas shown in Clause 52.06-9 Diagram 1, and
- an aisle extension is provided for the space at the dead end of an aisle.

Headroom Clearance

- the disabled spaces are provided with a headroom clearance of at least 2.5m, in accordance with the requirement in AS 2890.6-2022, and

- the basement and ramp has a minimum headroom clearance of at least 2.3m.

Ramp Grades

- the ramp has a maximum grade of 1:4,
- a 2.6m long 1:8 transition is provided at the bottom of the ramp,
- the grades at the top of the ramp are provided as follows:
 - 1:8 grade up for 0.8m to the flood apex level,
 - a flat grade for 2m at the flood apex level, and
 - 1:8 grade down for 2m before the main 1:4 ramp.

A flood apex is provided on the ramp by ramping up for 0.8m at 1:8 grade from the frontage to achieve a flood apex above footpath level. While grades of greater than 1:10 are present within the first 5m from the site boundary, the effective grade change across the initial five metres is only approximately 30mm, which is less than the allowable grade change under the Planning Scheme (500mm).

On this basis we are satisfied that this variation from the Planning Scheme requirement is acceptable in this instance. Notably, the intent is met, with vehicles able to see approaching pedestrians and vehicles.

Accordingly, we are satisfied that the proposed on-site car parking, access arrangements are suitable and there are no traffic engineering issues with the ramp.

5. Bicycle Parking Assessment

5.1. Statutory Bicycle Requirements

Clause 52.34 of the Planning Scheme sets out the statutory bicycle parking requirements for new developments. The purpose of Clause 52.34 is:

- *To encourage cycling as a mode of transport.*
- *To provide secure, accessible and convenient bicycle parking spaces and associated shower and change facilities.*

The statutory bicycle parking requirements for dwellings are as follows:

- *In developments of four or more storeys, 1 space to each 5 dwellings, and*
- *In developments of four or more storeys, 1 space to each 10 dwellings for visitors.*

The proposed development is only three storeys in height, and accordingly does not generate a statutory bicycle requirement.

Notwithstanding the above, a total of 46 bicycle spaces are provided on-site comprising:

- 32 resident bicycle spaces located within the basement,
- five visitor spaces located at ground level adjacent to Grosvenor Street, and
- nine visitor spaces located at ground level adjacent to Brunning Street.

The bicycle parking spaces on-site is provided at a rate of 0.68 bicycle spaces per dwelling.

We are satisfied that this is more than sufficient to accommodate the demands that may be generated by the development.

5.2. Bicycle Parking Design

The proposed on-site bicycle parking has been assessed against the requirements of Clause 52.34 and relevant section of the Australian Standards. Specifically, we note the following:

- all horizontal bicycle spaces are provided with dimensions of 1.8m x 0.5m, with handlebars able to overlap with adjacent spaces in accordance with AS2890.3-2015 ,and
- all vertical bicycle spaces are provided with dimensions of 1.2m x 0.5m, with handlebars able to overlap with adjacent spaces offset in height, and
- the access aisle to all spaces has a minimum width of 1.8m.

Additionally, a bicycle path is provided adjacent to the vehicle ramp with a width of 1.5m and grade of 1:12 to allow for bicycle access into the basement.

Accordingly, we are satisfied that the proposed on-site bicycle parking are suitable.

6. Traffic Considerations

The RTA Guide to Traffic Generating Development (2002) (RTA Guide) sets out traffic generation rates based on survey data collected in New South Wales for a range of land uses and is generally regarded as the standard for metropolitan development characteristics.

The RTA Guide (2002) sets out the following trip generation rates for medium density residential developments:

Smaller units and flats (up to two bedrooms):

- *Daily Vehicle Trips = 4-5 per dwelling*
- *Weekday peak hour vehicle trips = 0.4-0.5 per dwelling.*

Larger units and town houses (three or more bedrooms):

- *Daily vehicle trips = 5-6.5 per dwelling*
- *Weekday peak hour vehicle trips = 0.5-0.65 per dwelling*

For the purposes of undertaking a conservative assessment, we have adopted the upper end of these ranges and have assumed that all three-bedroom dwellings are provided with a car parking space and 27 one-bedroom dwellings will be without a car parking space.

Accordingly, application of these rates to the dwellings that are provided with a car space results in the anticipated traffic generation outlined in Table 5.

Table 5: Traffic Generation

Type of Dwelling	Daily Vehicle Trips		Weekday Peak Hour Vehicle Trips	
	Rate	Generation	Rate	Generation
17 x one bedroom dwellings	5 per dwelling	85 vehicle trips	0.5 per dwelling	8.5 vehicle trips
21 x two bedroom dwellings		105 vehicle trips		10.5 vehicle trips
3 x three-bedroom dwellings	6.5 per dwelling	20 vehicle trips	0.65 per dwelling	2 vehicle trips
Total		210 vehicle trips		21 vehicle trips

The proposed development may conservatively generate up to 210 vehicle movements per day and up to 21 movements in the peak hour. Traffic generation of this magnitude equates to one movement approximately every 3 minutes on average in the peak hour either entering or exiting the site. This amount of traffic is minimal and will have no noticeable impact on the operation of the surrounding road network.

Additionally, it is noted that this is a highly conservative analysis as it assumes a significantly higher car ownership rate than is typical of inner metropolitan social housing developments and assumes traffic generation rates for each dwelling at standard (private dwelling) rates.

7. Waste Collection

We understand that waste collection will be undertaken on-street by a private contractor on Grosvenor Street and Brunning Street.

8. Conclusions

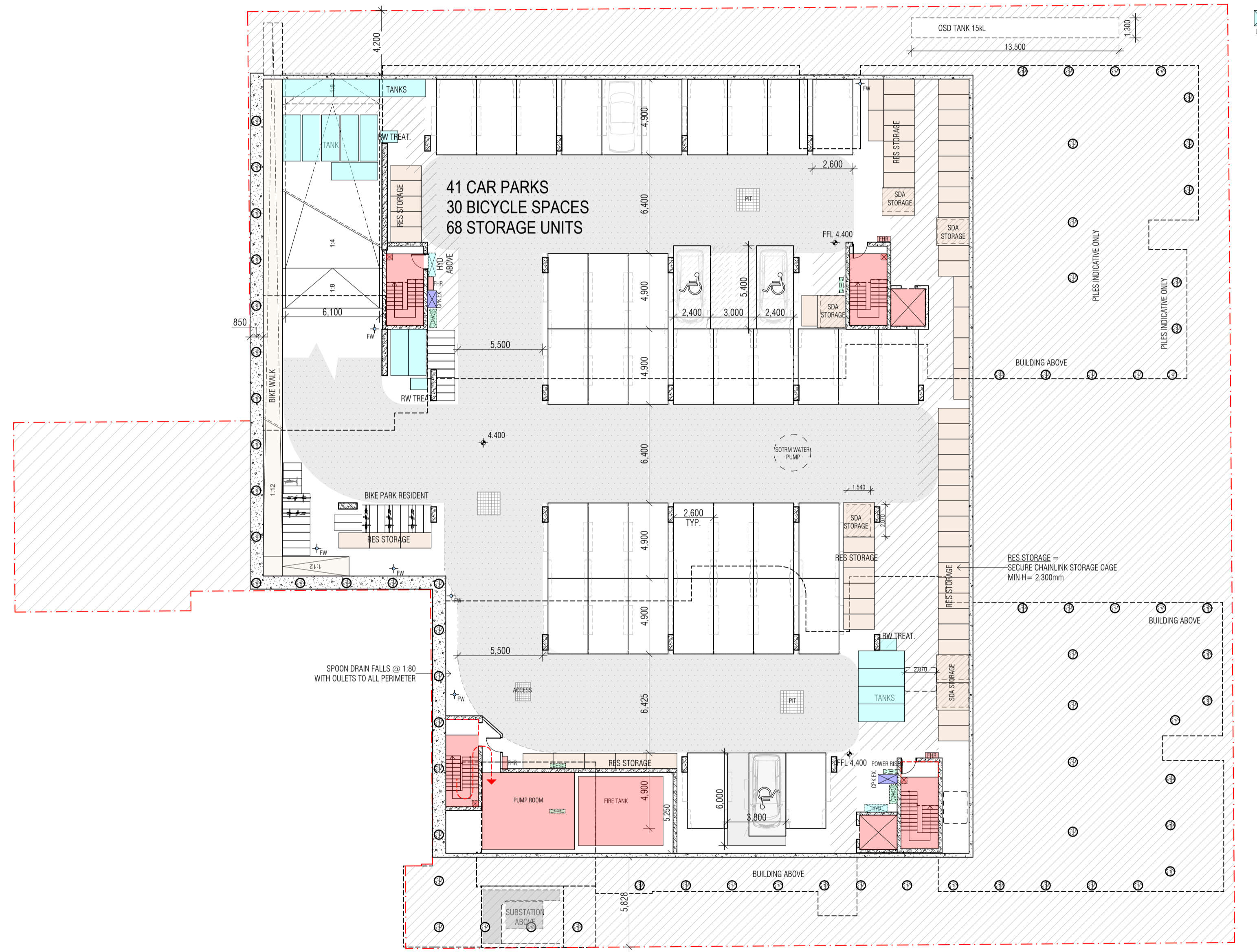
Having undertaken a detailed traffic engineering assessment of the proposed social housing development at 17 Grosvenor Street & 1A-F Woodstock Street, Balaclava, we are of the opinion that:

- a) the proposed development generates a statutory car parking requirement for 71 on-site car parking spaces,
- b) the proposed provision of 41 on-site car parking spaces falls short of the statutory requirement and accordingly, a permit to reduce the statutory car parking requirement is being sought as a part of this application,
- c) there is sufficient justification to warrant a reduction of the statutory requirement having regard to:
 - i) the car ownership data for similar dwelling types being far lower than the statutory car parking requirements,
 - ii) the proposed car parking provision being sufficient to accommodate the anticipated car parking demands generated by the proposed development, based on the car ownership data,
 - iii) Planning Scheme policy which supports car parking provisions for social housing developments at the same rate as is proposed for this development, and
 - iv) the on-site car parking provisions being managed and allocated to residents on an as-needs basis to ensure that resident car parking demands do not exceed supply,
- d) the proposed car parking and accessway design is generally in accordance with the relevant requirements of Clause 52.06 of the Planning Scheme and Australian Standards (where relevant) and will work well,
- e) the proposed development does not generate a statutory bicycle parking requirement,
- f) the level of traffic anticipated to be generated by the proposed development is minimal and will have no material impact on the operation of the surrounding road network,
- g) waste collection will be undertaken on-street, and
- h) there are no traffic engineering reasons why a planning permit for the proposed social housing development at 17 Grosvenor Street & 1A-F Woodstock Street, Balaclava, should not be granted.



Appendix A

Proposed Development Plans



ALL DIMENSIONS AND LEVELS TO BE VERIFIED ON SITE BY THE BUILDER BEFORE THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES MUST BE REPORTED TO THE ARCHITECT IMMEDIATELY. DO NOT SCALE DRAWINGS. FIGURED DIMENSIONS HAVE PREFERENCE OVER DIMENSIONS SCALED FROM THE DRAWINGS. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER ASSOCIATED DOCUMENTS. REFER TO ENGINEERING SERVICES DRAWINGS FOR CONFIRMATION OF LOCATIONS AND HEIGHT OF FITTINGS, AIR DIFFUSERS, GRILLES, SPRINKLERS, SMOKE DETECTORS, AND ALL OTHER CEILING MOUNTED OR RECESSED SERVICE OUTLETS AND FITTINGS AND ADDITIONAL SET OUT OF CEILING SUPPORT MEMBERS. MAKE ALL PENETRATIONS, CUT OUTS AND TRIM TO SUIT ALL RELEVANT SERVICE OUTLETS AND FITTINGS. ANY DISCREPANCIES BETWEEN THE ARCHITECTURAL AND SERVICES DOCUMENTS ARE TO BE REPORTED TO THE ARCHITECT FOR CLARIFICATION. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR MUST ALLOW FOR THE HIGHER COST ALTERNATIVE IN THE SCOPE OF WORKS. NOM INDICATES A NOMINAL DIMENSION TO BE CHECKED ON SITE.

REV	DESCRIPTION	DRAWN	DATE
T1	Concept	H2o	27/11/23
T2	PRE-PLANNING	H2o	21/12/2023
T3	PLANNING	H2o	17/01/2024



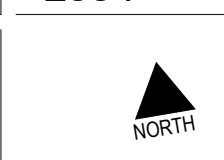
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PROJECT
 17 Grosvenor Street & 1A-F Woodstock
 Street, Balaclava

DRAWING TITLE
 GA - BASEMENT

DRAWN BY
 H2o
 PROJECT NUMBER
 2334



SCALE
 1:200 @A1
 PLOT DATE
 17/01/2024

DRAWING NUMBER
 A1.00
 REVISION
 T4





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PROJECT
 17 Grosvenor Street & 1A-F Woodstock Street, Balaclava

DRAWING TITLE
 GA - GROUND

DRAWN BY
 H2o

PROJECT NUMBER
 2334

SCALE	PLOT DATE
1:200 @A1	17/01/2024
DRAWING NUMBER	REVISION
A1.01	T4





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PROJECT	17 Grosvenor Street & 1A-F Woodstock Street, Balaclava
DRAWING TITLE	GA - LEVEL 01

DRAWN BY	H2o
PROJECT NUMBER	2334

SCALE	1:200 @A1	PLOT DATE	17/01/2024
DRAWING NUMBER	A1.02	REVISION	T4





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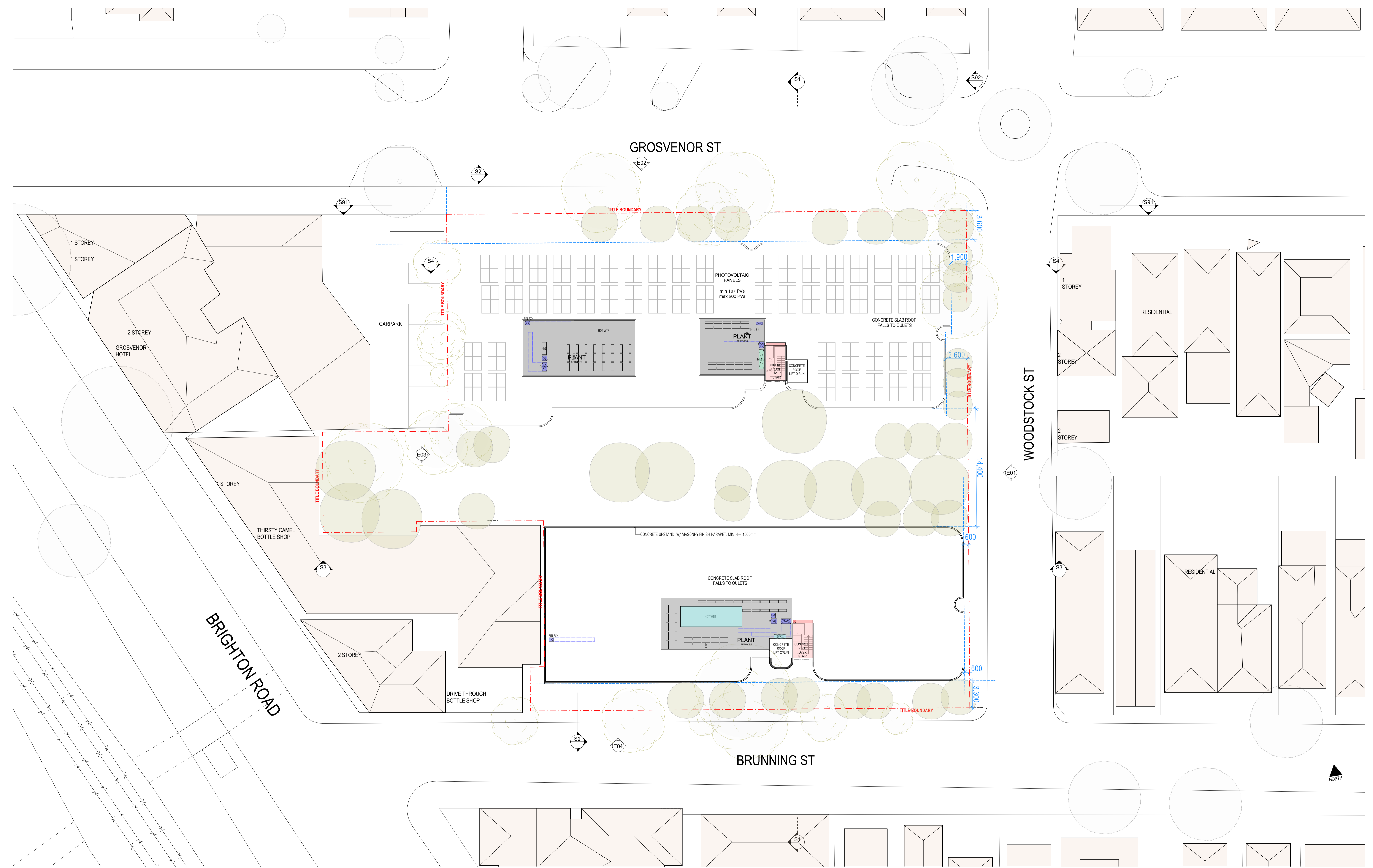
PROJECT
 17 Grosvenor Street & 1A-F Woodstock
 Street, Balaclava

DRAWING TITLE
 GA - LEVEL 02

DRAWN BY
 H2o

PROJECT NUMBER
 2334

SCALE	PLOT DATE
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PROJECT
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DRAWING TITLE
 GA - LEVEL 03

DRAWN BY
 H2o

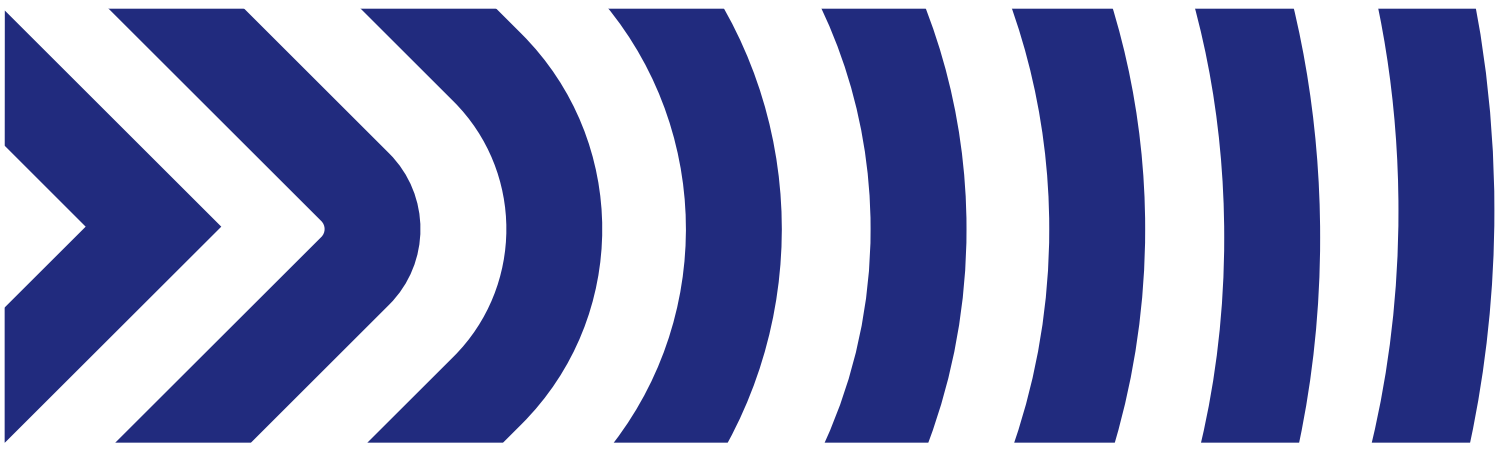
PROJECT NUMBER
 2334

SCALE
 1:200 @A1

PLOT DATE
 17/01/2024

DRAWING NUMBER
 A1.04

REVISION
 T4



Appendix B

Car Parking Surveys

Supervised By: Marcus Koorn
 Surveyed By: Alexander Bui

Survey Dates & Times: See below

Location	Restriction	Capacity Min - Max	Monday, 16th of October 2023
			11pm
ON-STREET CARPARKING			
ROAD NAME: Brighton Street			
Side of Road: East			
Dickens Street to Chapel Street	No Stopping	-	-
	Unrestricted	12	12
	No Stopping	-	-
Chapel Street to Grosvenor Street	No Stopping	-	-
Grosvenor Street to Brunning Street	No Stopping	-	-
Brunning Street to Albion Street	No Stopping	-	-
	Permit Zone, Go get, Authorised Car Share	1	1
	Permit Zone, Pop Car, Authorised Car Shre	1	1
	Unrestricted	14	10
	No Stopping	-	-
ROAD NAME: Brighton Street	Capacity	28 - 28	28
	Total Number of Cars Parked		24
	Total Number of Vacant Spaces		4
	Percentage Occupancy		86%
ON-STREET CARPARKING			
ROAD NAME: Grosvenor Street			
Side of Road: North			
Brighton Street to Bowen Street	No Stopping	-	-
	Unrestricted	8	8
	Permit Zone	5	2
	No Stopping	-	-
Bowen Street to Woodstock Street	No Stopping	-	-
	Permit Zone	12	7
	No Stopping	-	-
Woodstock Street to Gibbs Street	No Stopping	-	-
	Unrestricted	19	14
	No Stopping	-	-
Side of Road: South			
Brighton Street to Woodstock Street	No Stopping	-	-
	Unrestricted	11	9
	Disabled Parking	1	1
	Unrestricted	2	1
	No Stopping	-	-
Woodstck Street to Gibbs Street	No Stopping	-	-
	Unrestricted	39	29
	No Stopping	-	-
ROAD NAME: Grosvenor Street	Capacity	97 - 97	97
	Total Number of Cars Parked		71
	Total Number of Vacant Spaces		26
	Percentage Occupancy		73%

Location	Restriction	Capacity Min - Max	Monday, 16th of October 2023
			11pm
ON-STREET CARPARKING			
ROAD NAME: Bowen Street			
Side of Road: West			
Grosvernor Street to Bothwell Street	No Stopping	-	-
	2P, 8am - Midnight	8	3
	Disabled Parking	1	1
	2P, 8am - Midnight	5	2
	No Stopping	-	-
Side of Road: East			
Grosvernor Street to Bothwell Street	No Stopping	-	-
	Unrestricted	15	13
	No Stopping	-	1
ROAD NAME: Bowen Street		Capacity	29 - 29
		Total Number of Cars Parked	20
		Total Number of Vacant Spaces	9
		Percentage Occupancy	69%
ON-STREET CARPARKING			
ROAD NAME: Woodstock Street			
Side of Road: West			
Bothwell Street to Grosvernor Street	No Stopping	-	-
	2P, 8am-6pm Monday to Friday	5	2
	No Stopping	-	-
	2P, 8am-6pm Monday to Friday	2	0
	No Stopping	-	-
Grosvernor Street to Brunning Street	No Stopping	-	-
	Unrestricted	7	3
	No Stopping	-	-
Side of Road: East			
Bothwell Street to Grosvernor Street	No Stopping	-	-
	2P, 8am-6pm Monday to Friday	8	3
	No Stopping	-	-
Grosvernor Street to Brunning Street	No Stopping	-	-
	Unrestricted	6	4
	No Stopping	-	-
ROAD NAME: Woodstock Street		Capacity	28 - 28
		Total Number of Cars Parked	12
		Total Number of Vacant Spaces	16
		Percentage Occupancy	43%

Location	Restriction	Capacity Min - Max	Monday, 16th of October 2023
			11pm
ON-STREET CARPARKING			
ROAD NAME: Brunning Street			
Side of Road: North			
Brighton Road to Woodstock Street	No Stopping	-	-
	Unrestricted	8	6
	No Stopping	-	-
Woodstock Street to Gibbs Street	No Stopping	-	-
	Unrestricted	20	12
	No Stopping	-	1
Gibbs Street to Dead End	No Stopping	-	-
	Unrestricted	4	3
	No Stopping	-	-
Side of Road: South			
Brighton Road to Somers Street	No Stopping	-	-
	Unrestricted	5	5
	No Stopping	-	-
	Unrestricted	14	11
	No Stopping	-	-
Somers Street to Dead End	No Stopping	-	-
	Unrestricted	16	14
	No Stopping	-	-
ROAD NAME: Brunning Street	Capacity	67 - 67	67
	Total Number of Cars Parked		52
	Total Number of Vacant Spaces		15
	Percentage Occupancy		78%

Location	Restriction	Capacity Min - Max	Monday, 16th of October 2023
			11pm
ON-STREET CARPARKING			
ROAD NAME: Somers Street			
Side of Road: East			
Burning Street to Southern Boundary of No.2 Somers Street	No Stopping	-	-
	Unrestricted	6	0
Side of Road: West			
Brunning Street to Southern Boundary of 3 Somers Street	No Stopping	-	-
	Unrestricted	6	2
	No Stopping	-	-
ROAD NAME: Somers Street	Capacity	12 - 12	12
	Total Number of Cars Parked		2
	Total Number of Vacant Spaces		10
	Percentage Occupancy		17%
SUMMARY => ON-STREET CARPARKING			
Car Parking Supply		261 - 261	261
Total Number of Cars Parked			181
Total Number of Vacant Spaces			80
Percentage Occupancy			69%
Note: Public parking includes spaces that are available to the general public and excludes 'No Stopping', 'Loading Zones' and 'No Parking' areas, etc., during the relevant enforcement periods			
LEGEND: Public Parking Not available to the general public Not Available, illegally parked cars included in analysis No Stopping/ Other No Parking		