Proposed Residential Development

92-94 Lancaster Avenue, Punchbowl

TRAFFIC AND PARKING ASSESSMENT REPORT

9 October 2023

Ref 23175

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants

Suite 6, 20 Young Street, Neutral Bay NSW 2089 - PO Box 1868, Neutral Bay NSW 2089 Ph: 9904 3224

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LIST OF ILLUSTRATIONS

1. INTRODUCTION

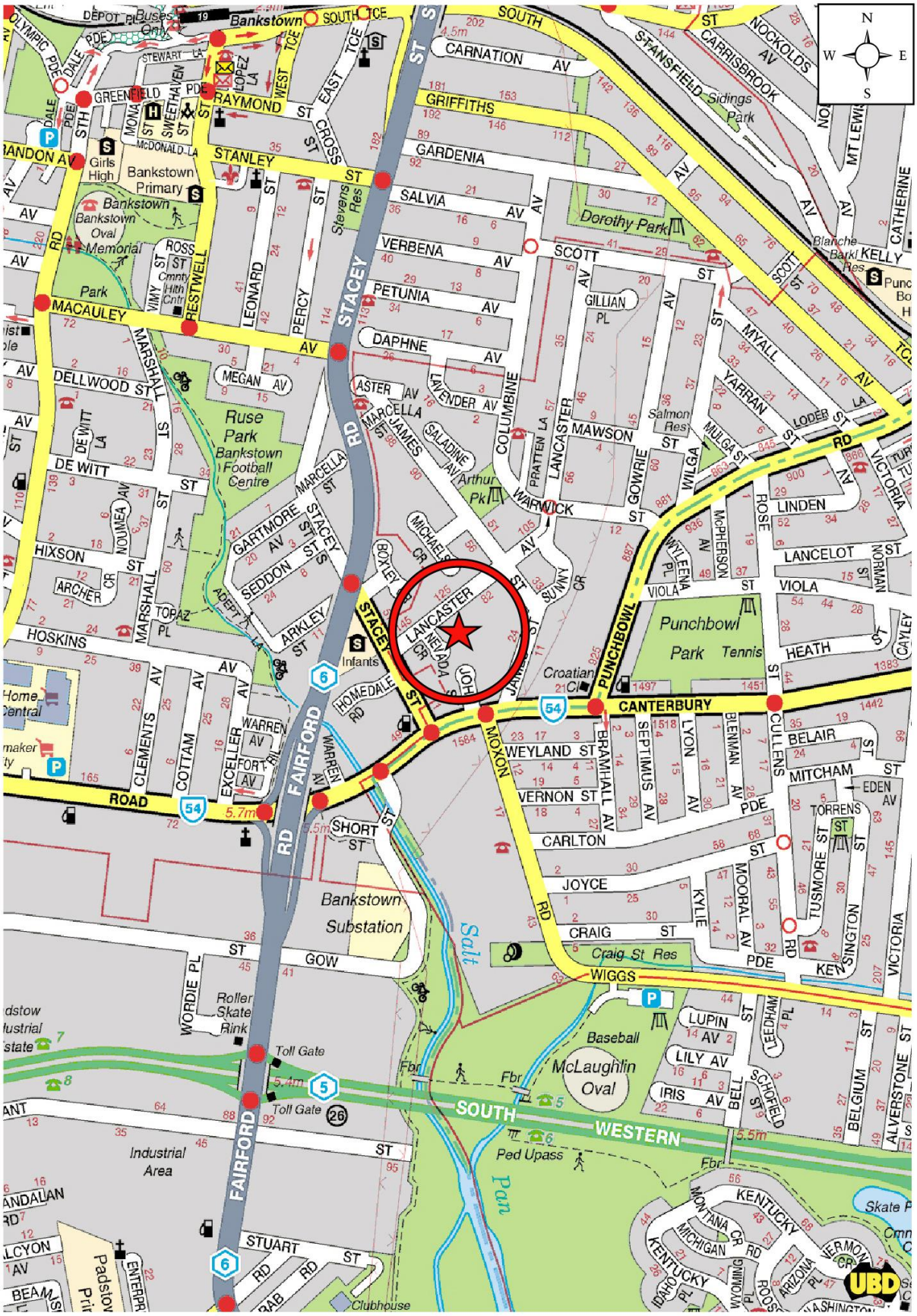
This report has been prepared to accompany a development application to Canterbury Bankstown Council for a residential development proposal to be located at 92-94 Lancaster Avenue, Punchbowl (Figures 1 and 2).

The proposed development involves demolition of 2 existing houses on the site to facilitate the construction of a dual-occupancy development comprising 2 x 5-bedroom dwellings on Lot A, and 2 x 4-bedroom dwellings each on Lots B and C.

Off-street parking is proposed to be provided in ground-level car parking areas in accordance with Council's requirements, with vehicular access to the site to be provided off Lancaster Avenue only.

The purpose of this report is to assess the traffic and parking 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 public transport services in the vicinity of the site
- estimates the traffic generation potential of the development proposal and assesses the traffic implications of the development proposal in terms of road network capacity
- reviews the geometric design features of the proposed car parking and loading facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking and loading provided on the site.



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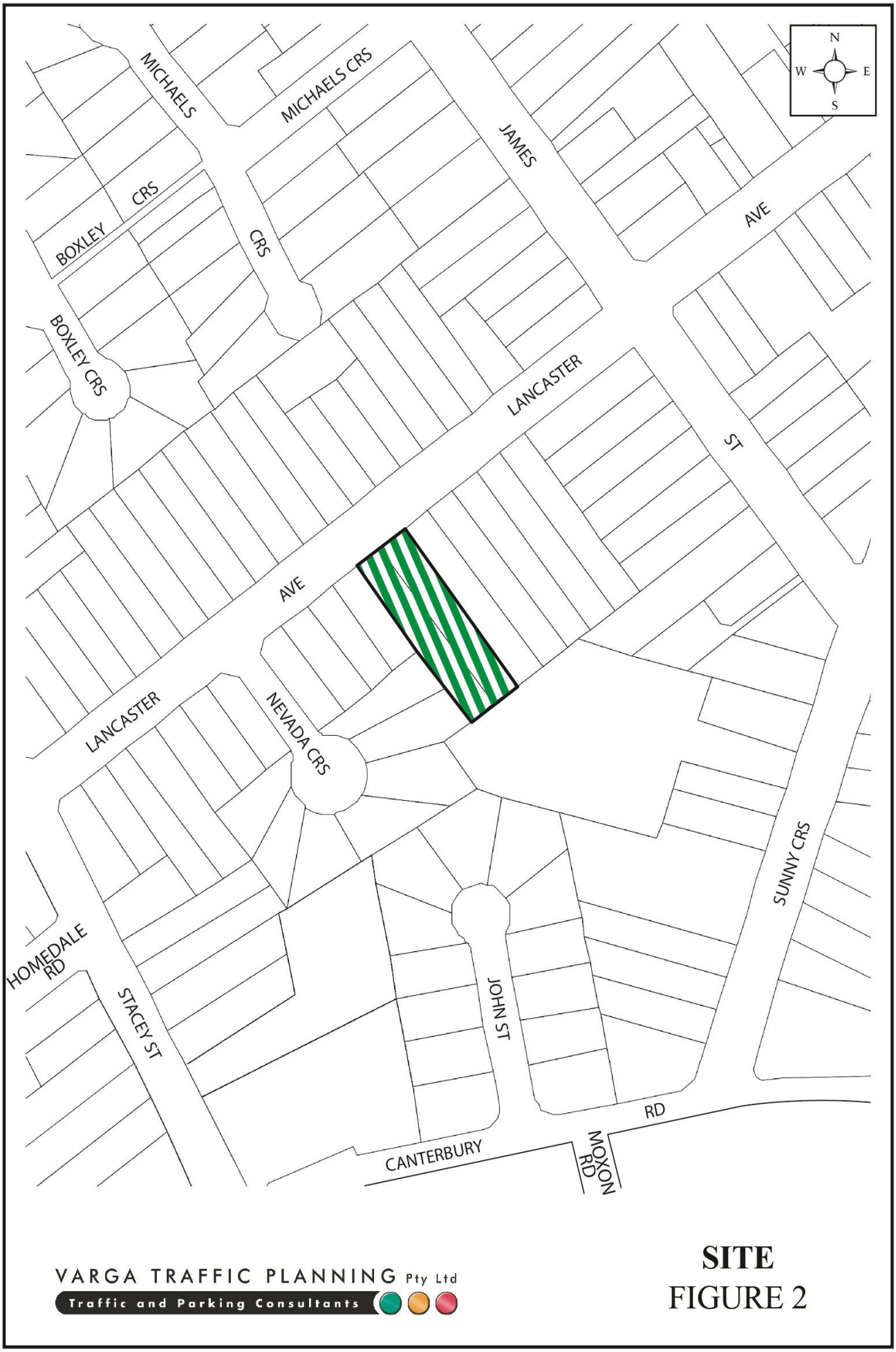
Traffic and Parking Consultants

LOCATION
FIGURE 1



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SITE
FIGURE 2

2. PROPOSED DEVELOPMENT

Site

The subject site is located on the southern side of Lancaster Avenue, approximately mid-way between Nevada Cres and James Street.

The site has a street frontage of approximately 12 metres in length to Lancaster Avenue, and with a total site area of approximately 1,655m^2.

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

Source: Nearmap

The site is currently occupied by 2 residential dwelling houses, and 3 sheds. Vehicular access to each of the 2 dwellings is provided via separate driveways off Lancaster Avenue, as shown in the *Streetview* image of the site reproduced on the following page.

View of site along Lancaster Avenue

Proposed Development

The proposed development involves demolition of the two existing dwellings and outbuildings on the site to facilitate the construction of a dual-occupancy development comprising 2 x 5-bedroom dwellings on Lot A, and 2 x 4-bedroom dwellings each on Lots B and C.

Off-street parking is proposed for a total of 8 cars in at grade car parking areas in accordance with Council's requirement. Dwellings A and B will each have a single lock-up garage plus an additional parking space on the driveways in front of the garages. Dwellings C and D will each have a double lock-up garage.

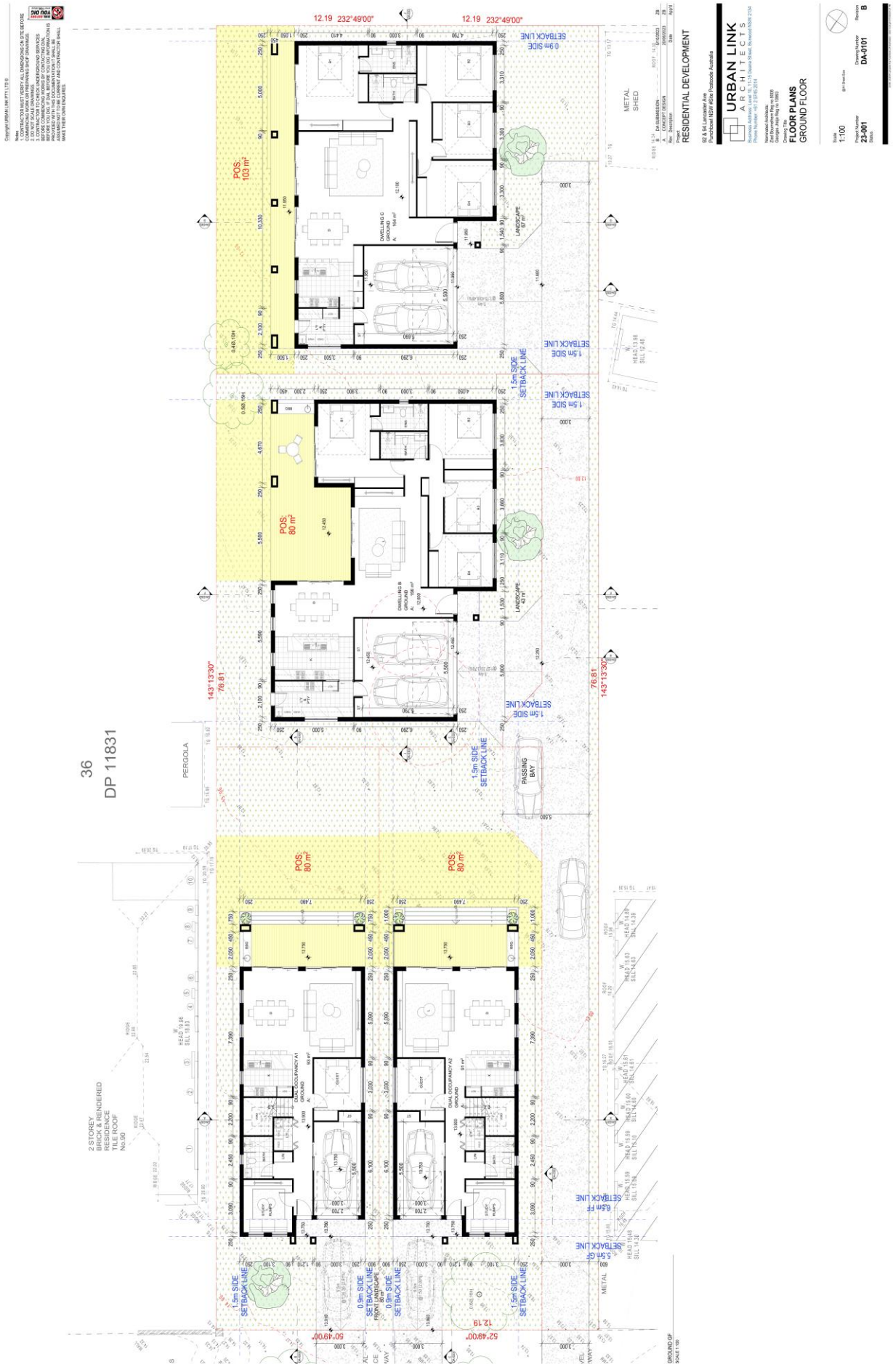
Vehicular access to the car parking facilitates is to be provided via a new entry/exit driveway located midway along the Lancaster Avenue site frontage for the dual occupancy Lot A, whilst a separate driveway will be provided near the southern boundary of the site for the single dwellings on Lots B and C.

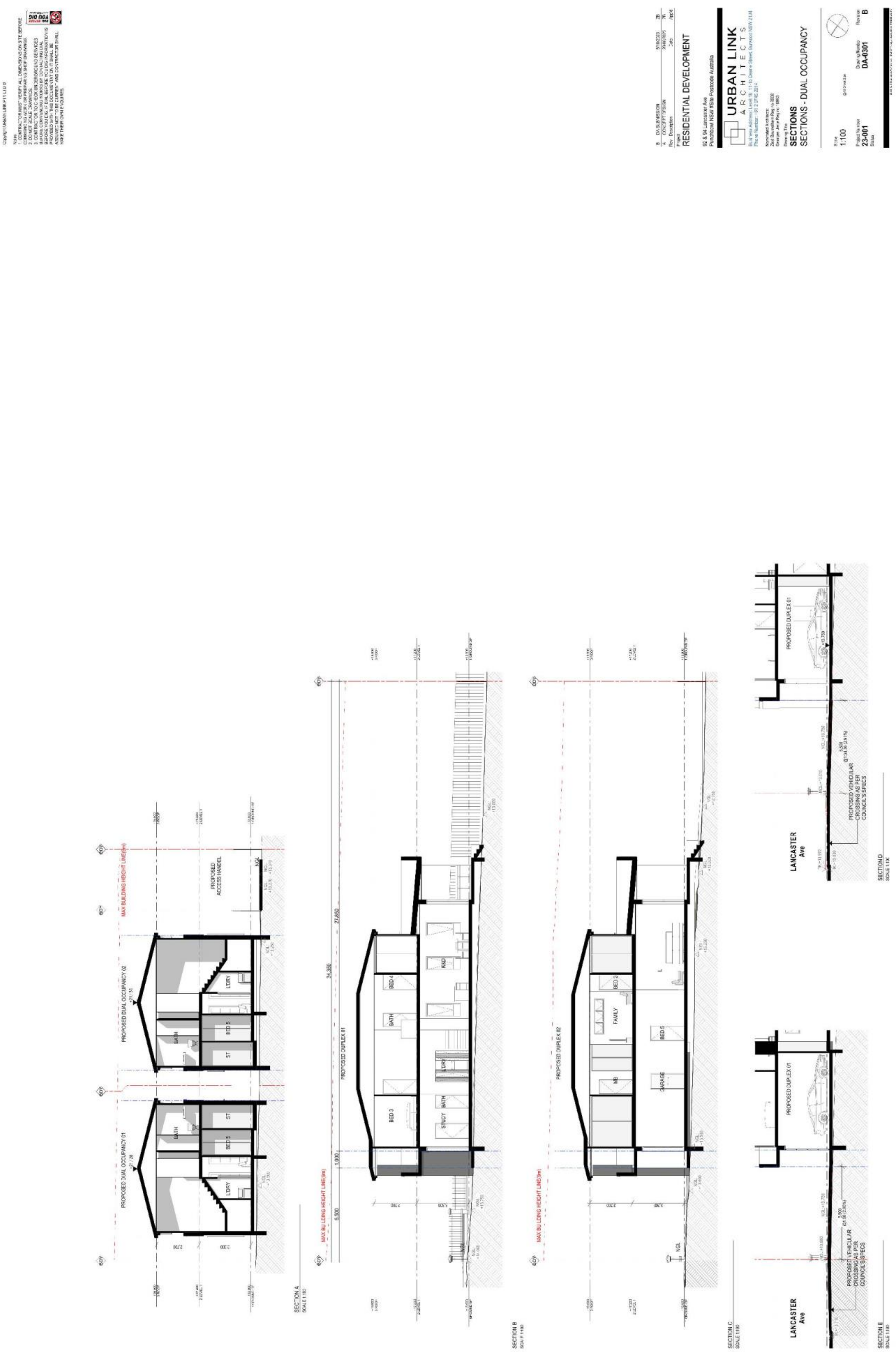
Garbage collection is expected to be undertaken by Council's waste contractor, with bins to be collected from the kerbside area along the Lancaster Avenue site frontage.

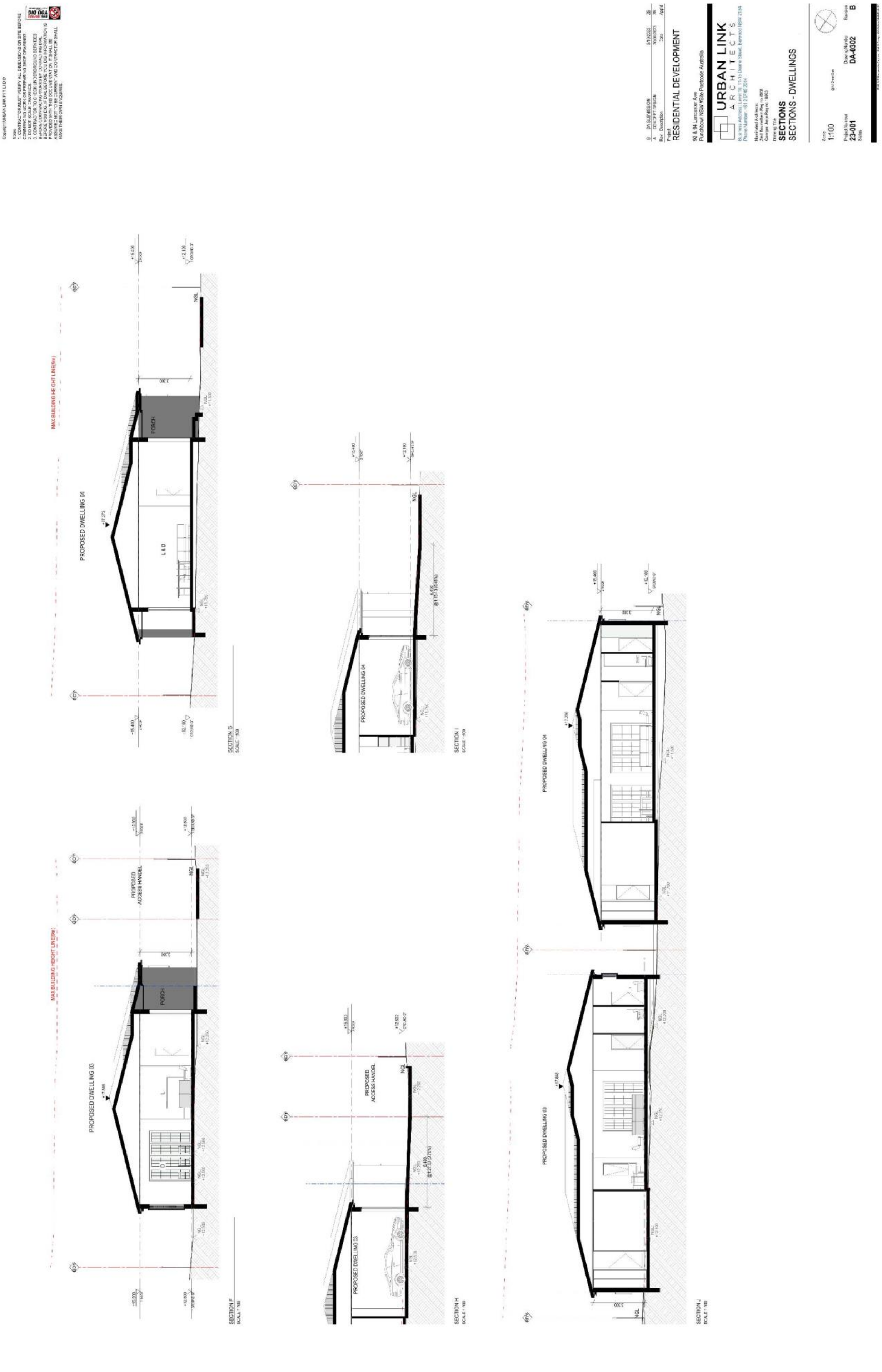
As requested by Council, it is also proposed to relocate the raised threshold in Lancaster Avenue to the northern part of the site, clear of both existing and proposed vehicular access driveways on this section of Lancaster Avenue.

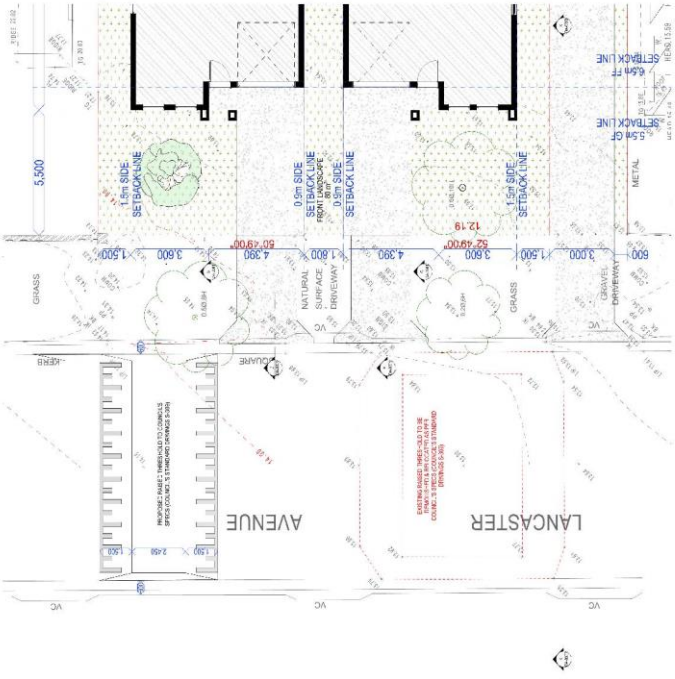
Plans of the proposed development have been prepared by *Urban Link Architects* and are reproduced in the following pages.


PROPOSED LOT A1:
357 m²
PROPOSED LOT A:
714 m²
PROPOSED LOT A2:
357 m²
PROPOSED LOT B:
450 m²
PROPOSED LOT B:
558 m² INCLUDING
ACCESS HANDLE AREA
PROPOSED LOT C:
500 m²
PROPOSED LOT B:
601 m² INCLUDING
ACCESS HANDLE AREA
- PROPOSED ROW EASEMENT (A):
BENEFITTING LOT B & C FOR PASSING BAY
- PROPOSED ROW & SERVICES EASEMENT (B):
BENEFITTING LOT C
- PROPOSED ROW & SERVICES EASEMENT (C):
BENEFITTING LOT B
RESIDENTIAL DEVELOPMENT
SITE
SUBDIVISION PLAN
URBAN LINK
ARCHITECTS
DA-4003


RESIDENTIAL DEVELOPMENT
62 & 64 Lancaster Ave
Punchbowl NSW 2196 Postcode Australia
URBAN LINK
ARCHITECTS
FLOOR PLANS
GROUND FLOOR
Scale
1:100
Project Number
23-001
Drawing Number
DA-0101
Revision
B
Status
12.19 232°49'00"
12.19 232°49'00"
0.9m SIDE SETBACK LINE
1.5m SIDE SETBACK LINE
1.5m SIDE SETBACK LINE
1.5m SIDE SETBACK LINE
1.5m SIDE SETBACK LINE
POS 103 m²
POS 80 m²
POS 80 m²
POS 80 m²
DWELLING C GROUND
DWELLING B GROUND
DUAL OCCUPANCY A1 GROUND
DUAL OCCUPANCY A2 GROUND
LANDSCAPE
PERGOLA
PASSING BAY
METAL SHED
143°13'30"
76.81
36
DP 11831
2 STOREY BRICK & RENDERED RESIDENCE TILE ROOF No.90
6.5m FS SETBACK LINE
5.5m GF SETBACK LINE
0.9m SIDE SETBACK LINE
FRONT LANDSCAPE SETBACK
0.9m SIDE SETBACK LINE
1.5m SIDE SETBACK LINE
60.49'00"
62.49'00"
12.19
GROUND GF
SCALE 1:100


RESIDENTIAL DEVELOPMENT
92 & 94 Lancaster Ave
URBAN LINK ARCHITECTS
SECTIONS
SECTIONS - DUAL OCCUPANCY
1:100
23-001
DA-0301
B
LANCASTER Ave


RESIDENTIAL DEVELOPMENT
URBAN LINK
ARCHITECTS
SECTIONS
SECTIONS - DWELLINGS
1:100
23-001
DA-0302
B
PROPOSED DWELLING 04
PROPOSED DWELLING 03
PORCH
PROPOSED ACCESS HANDEL
SECTION F
SECTION G
SECTION H
SECTION I
SECTION J


LANCASTER AVENUE
5,500
1.5m SIDE SETBACK LINE
0.9m SIDE SETBACK LINE
0.9m SIDE SETBACK LINE
1.5m SIDE SETBACK LINE
SETBACK LINE
SETBACK LINE
GRASS
NATURAL SURFACE DRIVEWAY
GRASS
GRAVEL DRIVEWAY
METAL
PROPOSED ACCESS HANDEL
PROPOSED VEHICULAR CROSSING AS PER COUNCIL'S SPECS
EXISTING TIMBER POLE TO BE RELOCATED IF REQUIRED BY COUNCIL'S STANDARD DRAWINGS
PROPOSED 5.5m WIDE CONCRETE DRIVEWAY
PROPOSED 1.2m WIDE CONCRETE FOOTPATH
PROPOSED 2.5m WIDE CONCRETE FOOTPATH
PROPOSED 1.2m WIDE CONCRETE FOOTPATH

3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by Transport for New South Wales (TfNSW) is illustrated on Figure 3.

Fairford Road/Stacey Street are classified by TfNSW as a *State Road* and provides the key north-south road link in the area. It typically carries three traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island. Parking is not permitted on either side of the road.

Canterbury Road is classified by TfNSW as a *State Road* and provides the key east-west road link in the area, linking Canterbury and Liverpool. It typically carries two traffic lanes in each direction in the vicinity of the site. Additional turning lanes are provided at key intersections. Parking is not permitted on either side of the road.

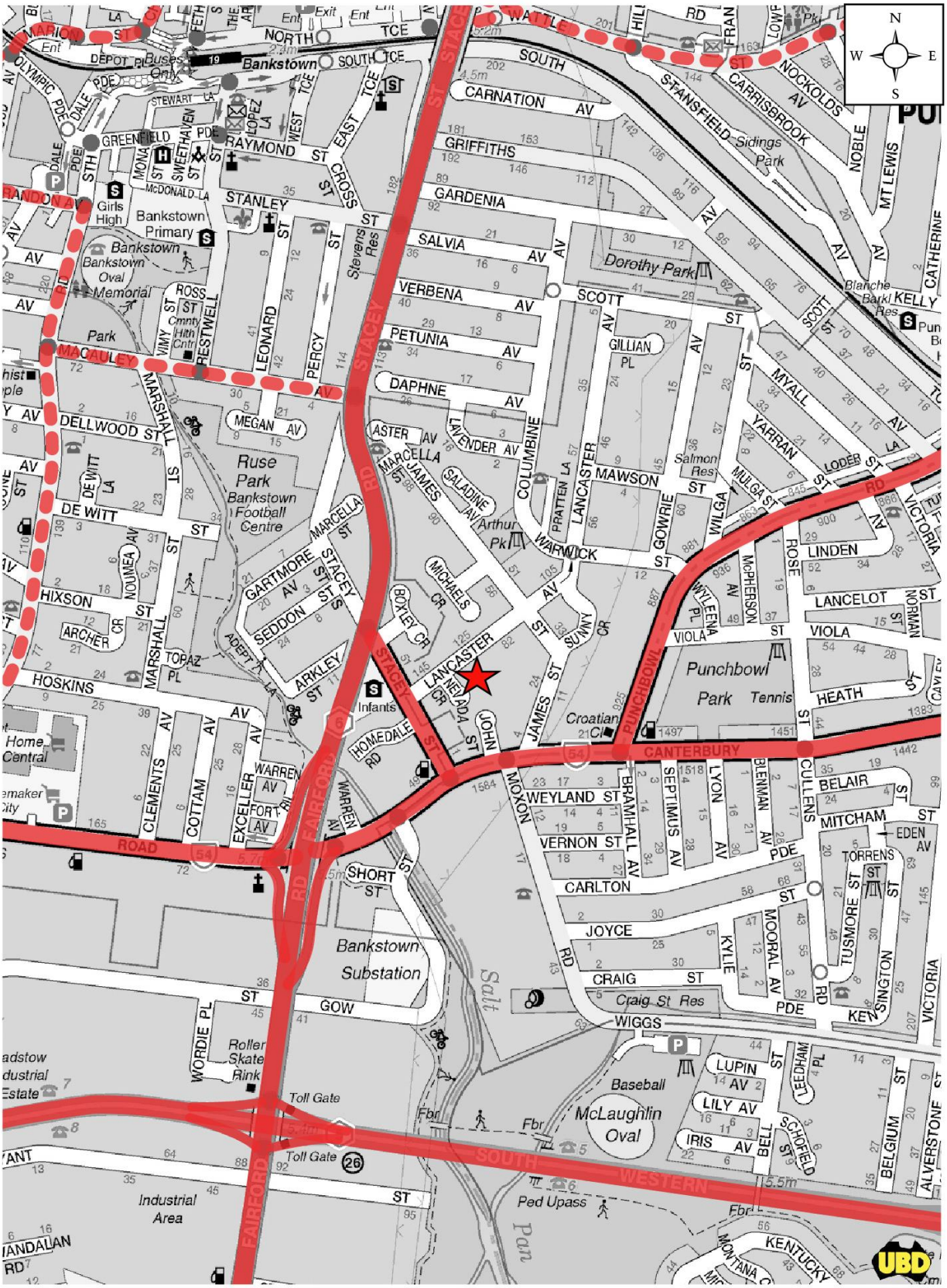
South Western Motorway is classified by TfNSW as a *State Road* and provides the key east-west road link in the area, linking Kingsgrove and Revesby. It typically carries three traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island.

Lancaster Avenue is a local, unclassified road which is primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted on both sides of the roads.

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 40 km/h SCHOOL ZONE SPEED LIMIT in the vicinity the Lancaster Avenue and Stacey Street intersection is near Bankstown South Infants School



Key: State Road

Regional Road

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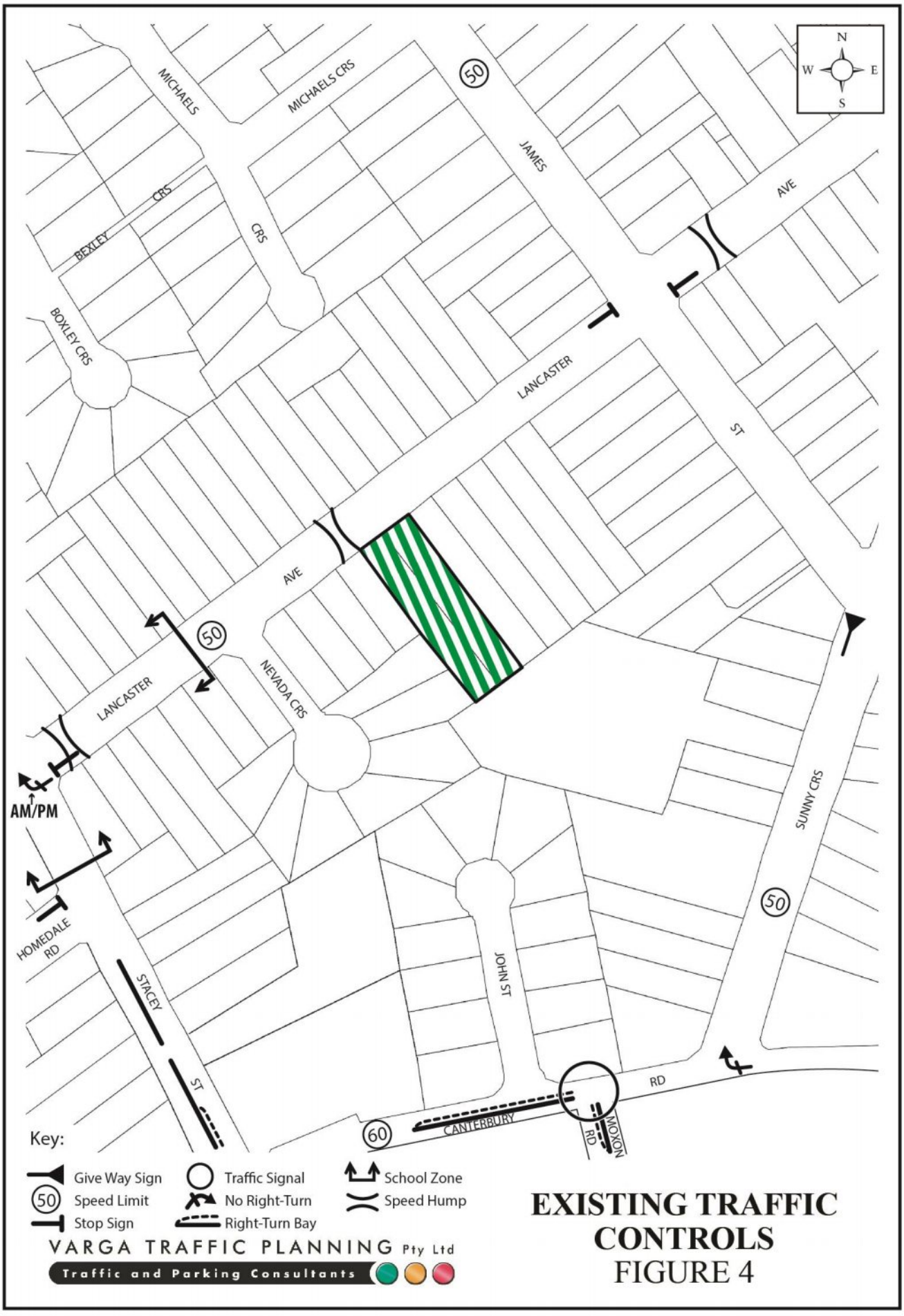
ROAD HIERARCHY

FIGURE 3


N
W
E
S
MICHAELS
MICHAELS CRS
50
JAMES
AVE
CRS
BEXLEY
CRS
BOXLEY CRS
LANCASTER
ST
AVE
50
LANCASTER
NEVADA CRS
AM/PM
HOMEDALE RD
STACEY
ST
JOHN ST
SUNNY CRS
50
RD
60
CANTERBURY
MOXON RD
Key:
Give Way Sign
Speed Limit
Stop Sign
Traffic Signal
No Right-Turn
Right-Turn Bay
School Zone
Speed Hump
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EXISTING TRAFFIC CONTROLS
FIGURE 4

- a 50 km/h SPEED LIMIT which applies to Lancaster Avenue, Sunny Crescent, James Street and all other local roads in the area

- a 60 km/h SPEED LIMIT which applies to Canterbury Road

- a SPEEDHUMP in Lancaster Avenue directly in front of the site (Note – Please show the speed hump on the plans to confirm that it does not affect the position of the proposed driveways)

- a STOP SIGN in Lancaster Avenue where it intersects with James Street and Stacey Street

- TRAFFIC SIGNALS in Canterbury Road where it intersects with Stacey Street

- a NO RIGHT TURN restriction in the AM & PM peak priority (bus excepted) in Lancaster Avenue where it intersects with Stacey Street

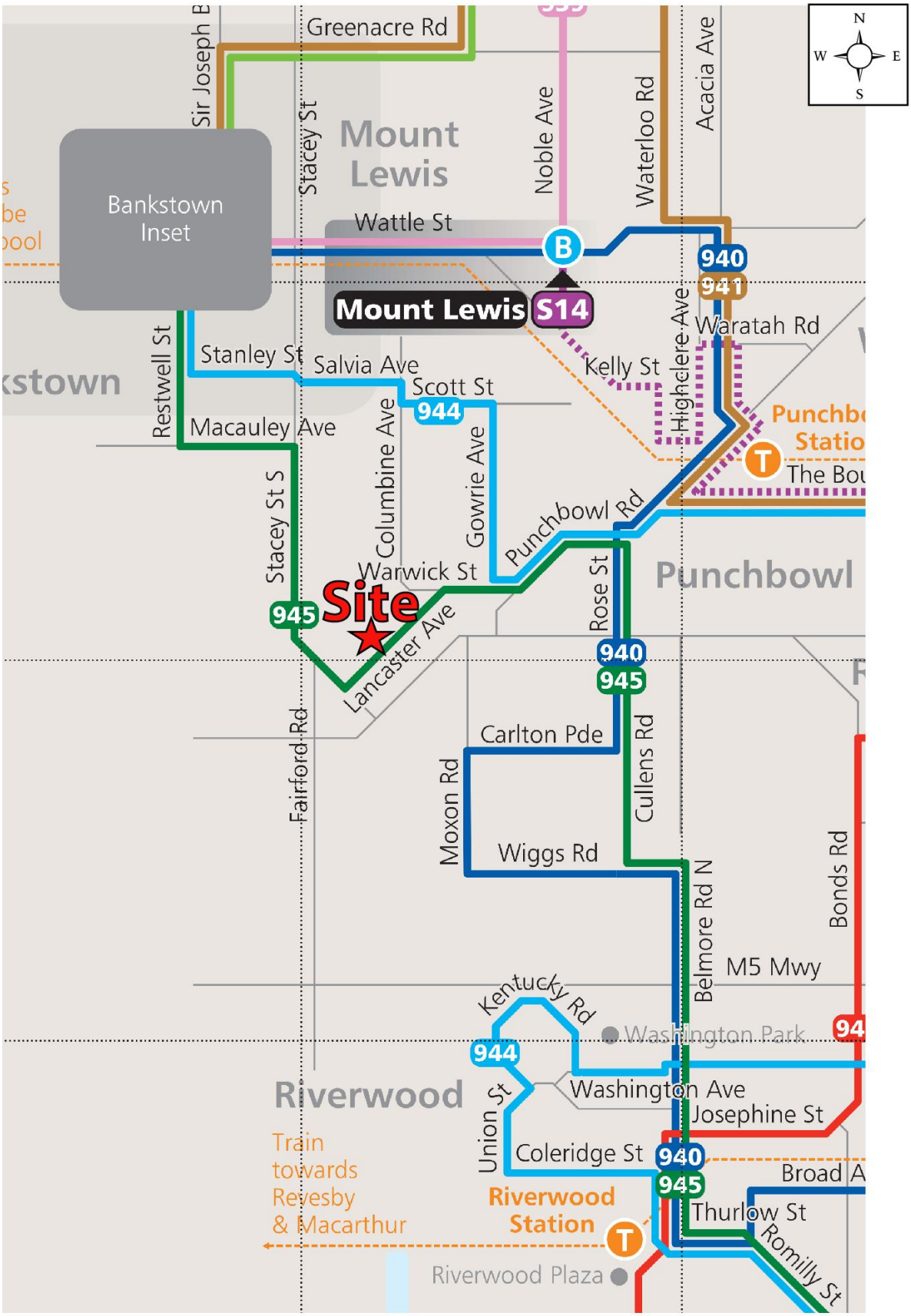
- a NO RIGHT TURN restriction in Canterbury Road of its intersection with Sunny Crescent

- RIGHT-TURN HOLDING BAYS in Canterbury Road where it intersects with Stacey Street and in Canterbury Road where it intersects with Moxon Road.

Existing Public Transport Services

The existing public transport services available in the vicinity of the site are illustrated in Figure 5A, 5B, 5C, and 5D.

There are currently 5 bus routes within 650m walking distance of the site. Approximately 360 bus services per day are available in the vicinity of the site on weekdays, and decreasing to approximately 211 bus services per day on Saturdays and 169 services per day on Sundays and public holidays.



PUBLIC TRANSPORT SERVICES
FIGURE 5A

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PUBLIC TRANSPORT SERVICES
FIGURE 5B

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PUBLIC TRANSPORT SERVICES
FIGURE 5C

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PUBLIC TRANSPORT SERVICES
FIGURE 5D

Bus Routes and Frequencies							
Route No.	**Route**	**Weekdays**		**Saturday**		**Sunday**	
		IN	**OUT**	**IN**	**OUT**	**IN**	**OUT**
487	Canterbury to Bankstown Central	26	25	20	20	9	9
944	Mortdale to Bankstown via Peakhurst Heights	26	25	11	11	9	9
945	Hurstville to Bankstown via Mortdale	47	45	28	29	24	25
M91	Parramatta to Hurstville via Chester Hill & Padstow	74	74	40	39	39	37
N30	City Town Hall to Macarthur	8	10	6	7	4	4
Total		**181**	**179**	**105**	**106**	**85**	**84**

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 during the morning and afternoon commuter peak periods.

An indication of the traffic generation potential of the development proposal is provided by reference to the TfNSW publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002)* and the updated traffic generation rates in the TfNSW *Technical Direction (TDT 2013/04a)* document.

The TfNSW *Technical Direction* document specifies that it replaces those sections of the TfNSW *Guidelines* indicated, and must be followed when TfNSW is undertaken trip generation and/or parking demand assessments.

The TfNSW *Guidelines* and *Technical Direction* are based on extensive surveys of a wide range of land uses and nominate the following traffic generation rates which are applicable to the development proposal:

Medium Density Residential

0.5-0.65 peak hour vehicle trips/dwelling (3 or more bedrooms)

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

> **Definition**
> A medium density residential flat building refers to a building containing at least 2 but less than 20 dwellings. This includes villas, town houses, flats, semi-detached houses, terrace or row houses and other medium density developments. This does not include aged or disabled persons' housing.

Application of the above traffic generation rates to the proposed 4 x 4/5-bedroom dwellings outlined in the development proposal yields a traffic generation potential of approximately 3 vehicle trips per hour (vph) during the weekday peak hours.

That projected future traffic generation potential should however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by the existing uses of the site, in order to determine the *nett increase (or decrease)* in traffic generation potential expected to occur as a consequence of the development proposal.

The TfNSW *Technical Direction* nominates the following traffic generation rates which are applicable to the existing development:

> **Low Density Residential Dwellings**
> AM: 0.95 peak hour vehicle trips per dwelling
> PM: 0.99 peak hour vehicle trips per dwelling

Application of the above traffic generation rates to the existing 2 residential dwellings on the site yields a traffic generation potential of approximately 2 vph during the AM peak hour and 2 vph during the PM peak hour.

Accordingly, it is likely that the development proposal will result in a *nett increase* in the traffic generation potential of the site of approximately 1 vph during both the weekday AM and PM peak hour, as set out below:

Projected Nett Increase in Peak Hour Traffic Generation Potential of the Site as a Consequence of the Development Proposal

	AM	**PM**
Projected Future Traffic Generation Potential:	2.6 vph	2.6 vph
Less Existing Traffic Generation Potential:	-1.9 vph	-2.0 vph
NETT INCREASE IN TRAFFIC GENERATION POTENTIAL:	**0.7 vph**	**0.6 vph**

That projected *nett increase* in the traffic generation potential of the site as a consequence of the development proposal is minimal, is consistent with the zoning objectives of the site, 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 6 and comprise:

- NO STOPPING restrictions at the of Lancaster Avenue and James Street intersection
- NO STOPPING restrictions at the of Nevada Crescent and Lancaster Avenue intersection
- BUS ZONES located at regular intervals along both sides of Lancaster Avenue, including just west and east of the site
- BUS ZONES located at regular intervals along both sides of Stacey Street

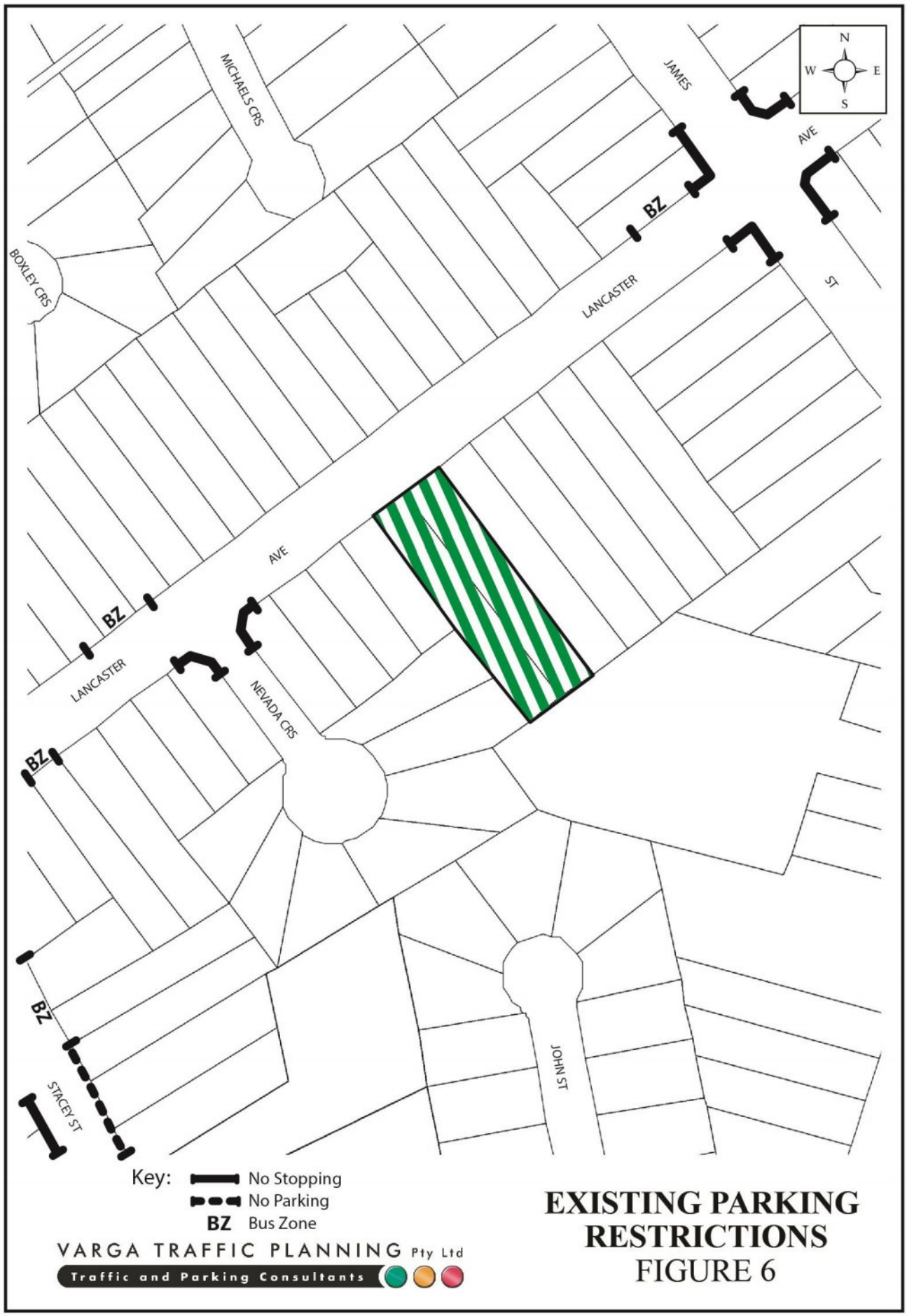
Off-Street Car Parking Provisions

The off-street car parking requirements applicable to the development proposal are specified in Council's *Canterbury Bankstown Development Control Plan 2023 – Chapter 3 General Requirements 3.2 Parking* document and are reproduced below:

Schedule: Off–street parking requirements	
Dual occupancies	1 car space per 2 or less bedrooms; or 2 car spaces per 3 or more bedrooms
Dwelling houses	2 car spaces

Application of the above parking rates to the 4 residential dwellings outlined in the development proposal yields a total off-street car parking requirement of 8 parking spaces.

The proposed development makes provision for a total of 8 off-street car parking spaces, thereby satisfying the number of car spaces specified by *Council's DCP* car parking code requirements.


MICHAELS CRS
JAMES
AVE
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W
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BZ
BOXLEY CRS
LANCASTER
ST
AVE
BZ
LANCASTER
NEVADA CRS
BZ
BZ
STACEY ST
JOHN ST
Key:
No Stopping
No Parking
BZ Bus Zone
VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants
EXISTING PARKING RESTRICTIONS
FIGURE 6

As noted in Chapter 2, it is proposed to relocate the raised threshold in Lancaster Avenue to the northern part of the site, clear of both existing and proposed vehicular access driveways on this section of Lancaster Avenue, as requested by Council.

A number of swept turning path diagrams have been prepared using the *Autodesk Vehicle Tracking 2023* program in accordance with the requirements of *AS2890.1* confirming that:

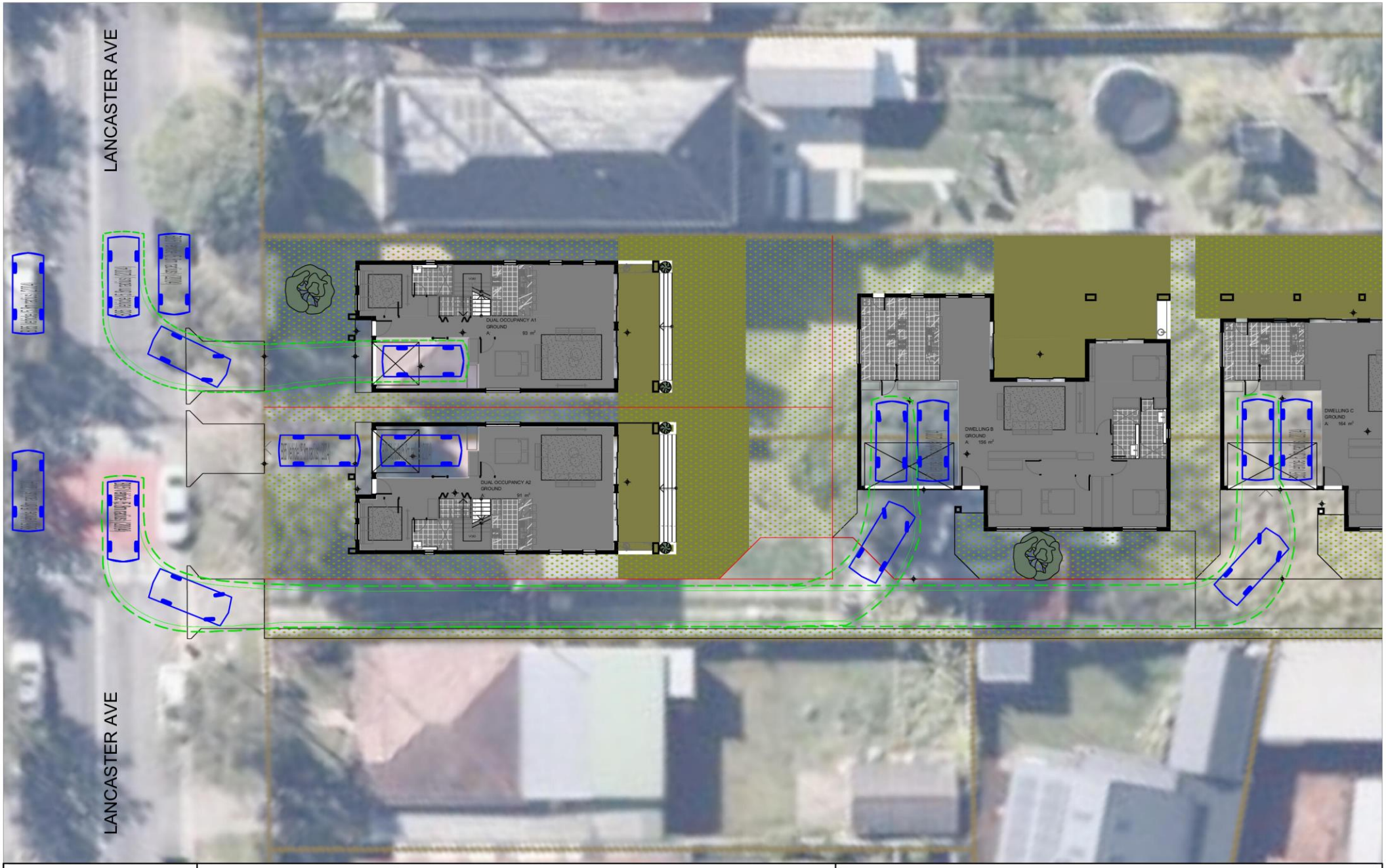
- all parking spaces can be accessed without difficulty in accordance with the requirements of *AS2890.1*, and

- all vehicles will be able to enter and exit the site whilst travelling in a forward direction only.

The geometric design layout of the proposed car parking facilities has been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1* and *Parking Facilitation Part 6: Off-Street Parking for People with Disabilities AS2890.6-2022* in respect of parking bay dimensions, overhead clearances, aisle widths and gradients.

Conclusion

In summary, the proposed parking and loading facilities satisfy the relevant requirements specified in Council's DCP, as well as the relevant aspects of Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable parking or loading implications.



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Neutral Bay, NSW 2089

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Neutral Bay, NSW 2089
www.vargatraffic.com.au
Sydney, Australia

PROJECT
RESIDENTIAL DEVELOPMENT

N

DRAWING TITLE
B85 Vehicle Turning Paths
Site Entry

ADDRESS
92-94 Lancaster Ave,
Punchbowl, NSW

PROJECT NO.
23175

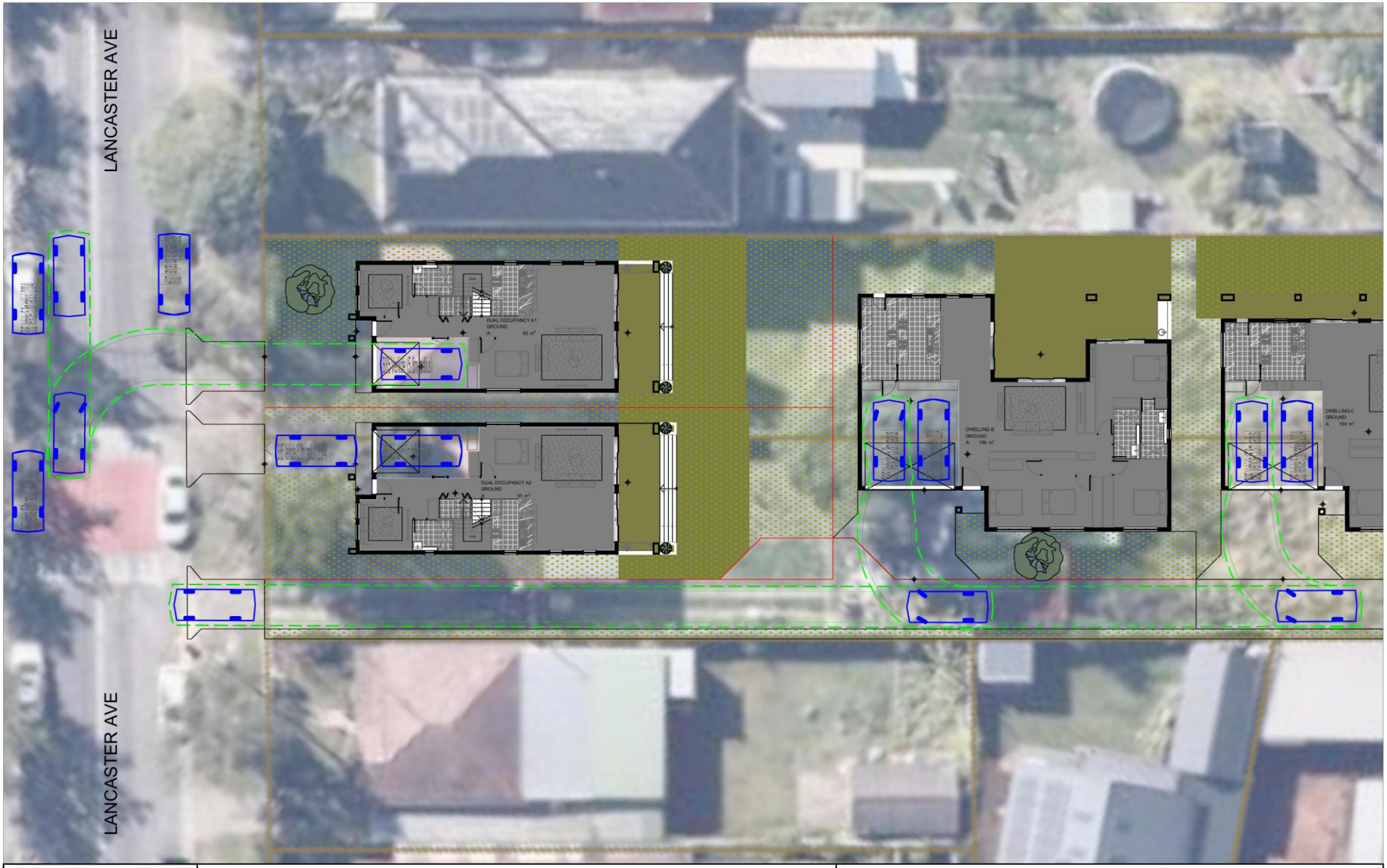
REVIEWED
Robert Varga

1:300 @ A4

DATE DRAWN
2023-10-9

PREPARED
Ilya Nazarov

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants



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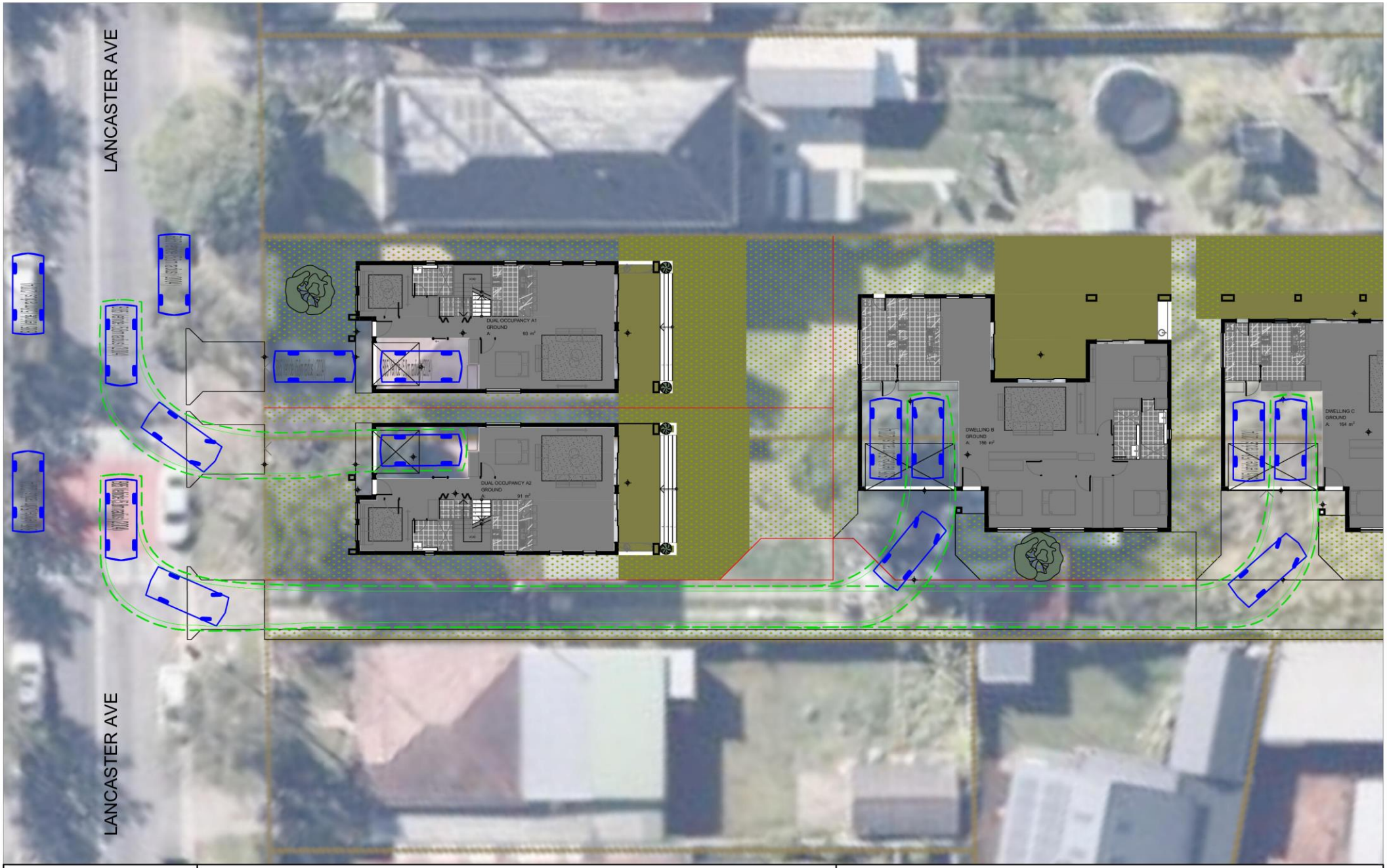

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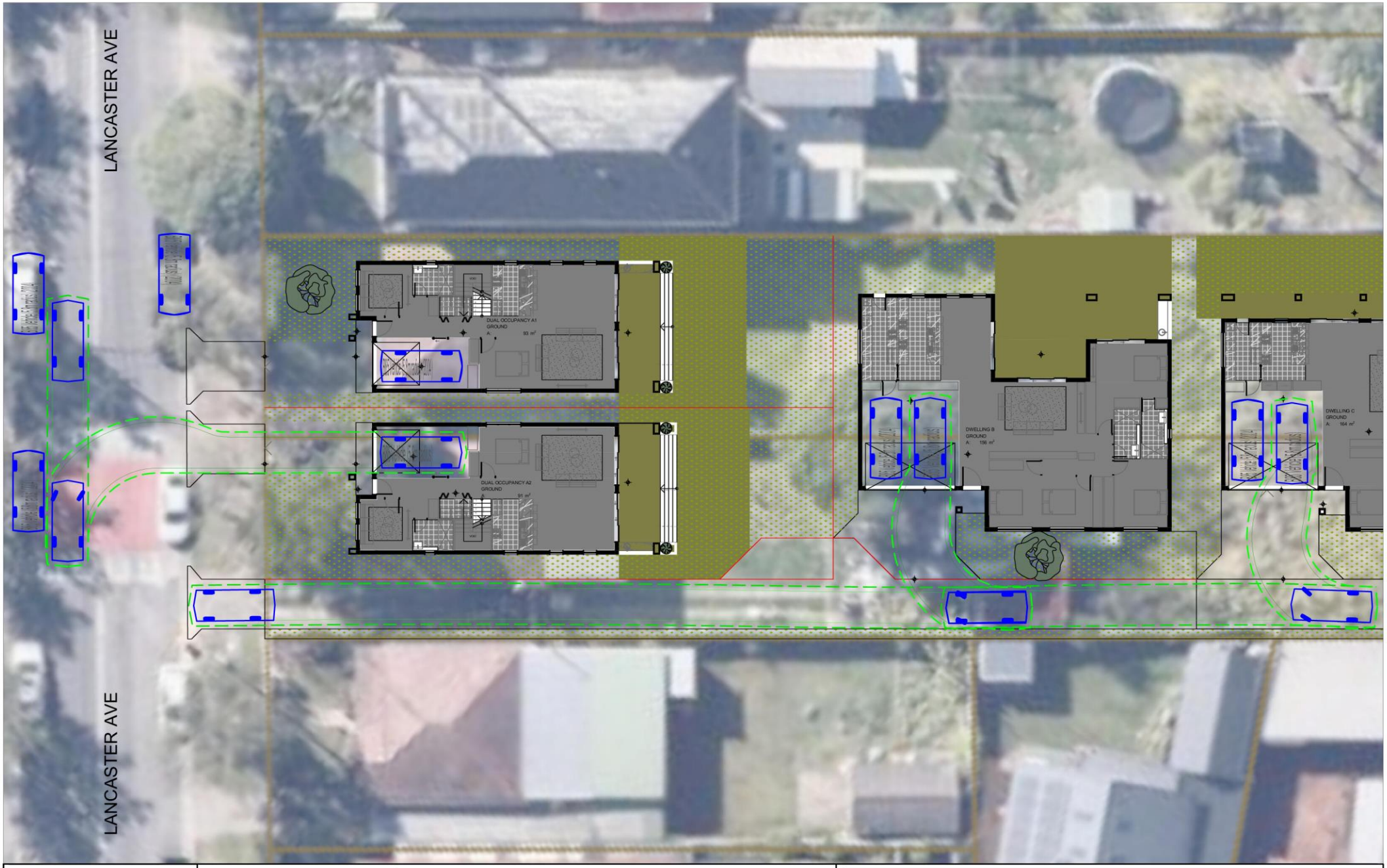

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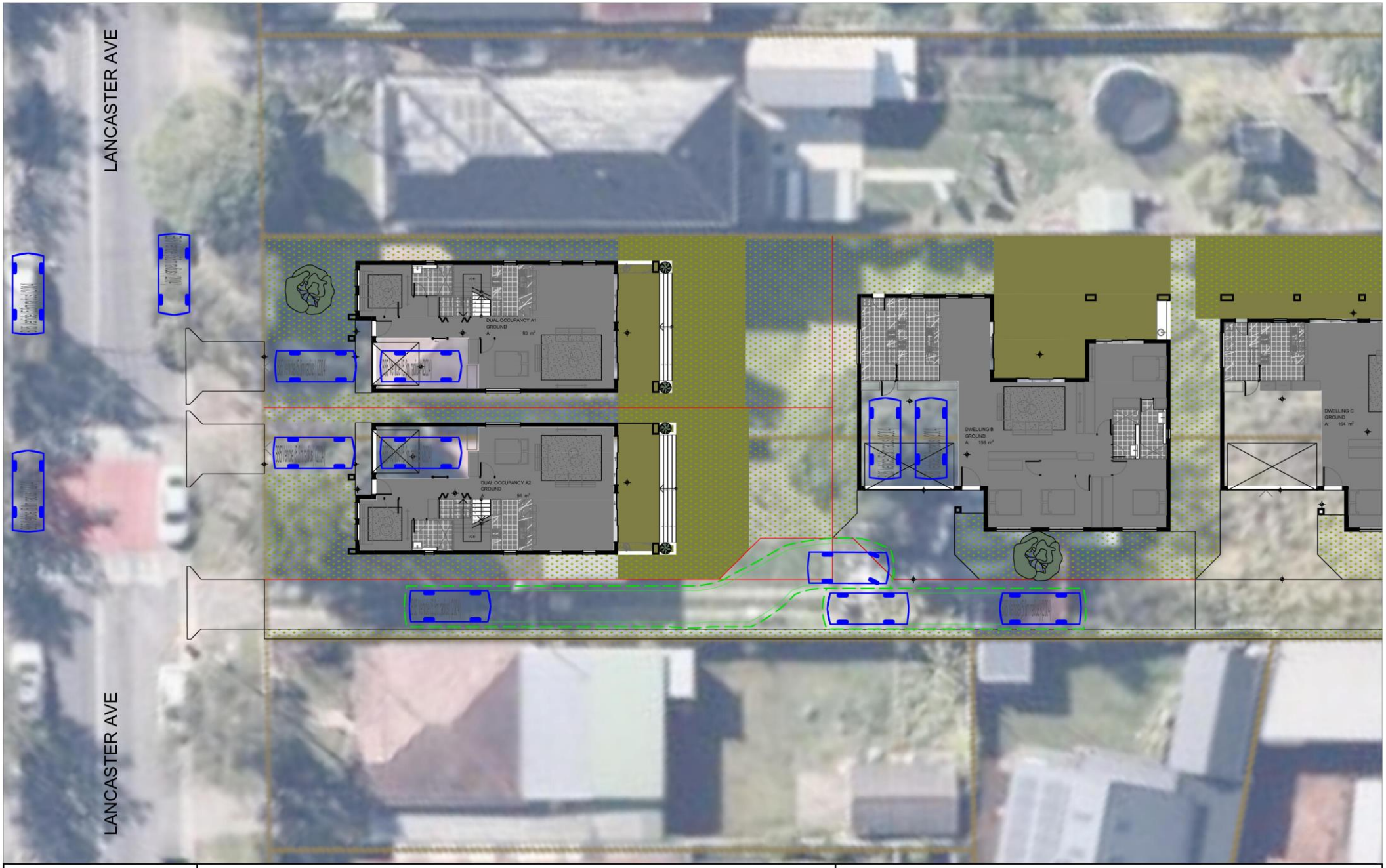

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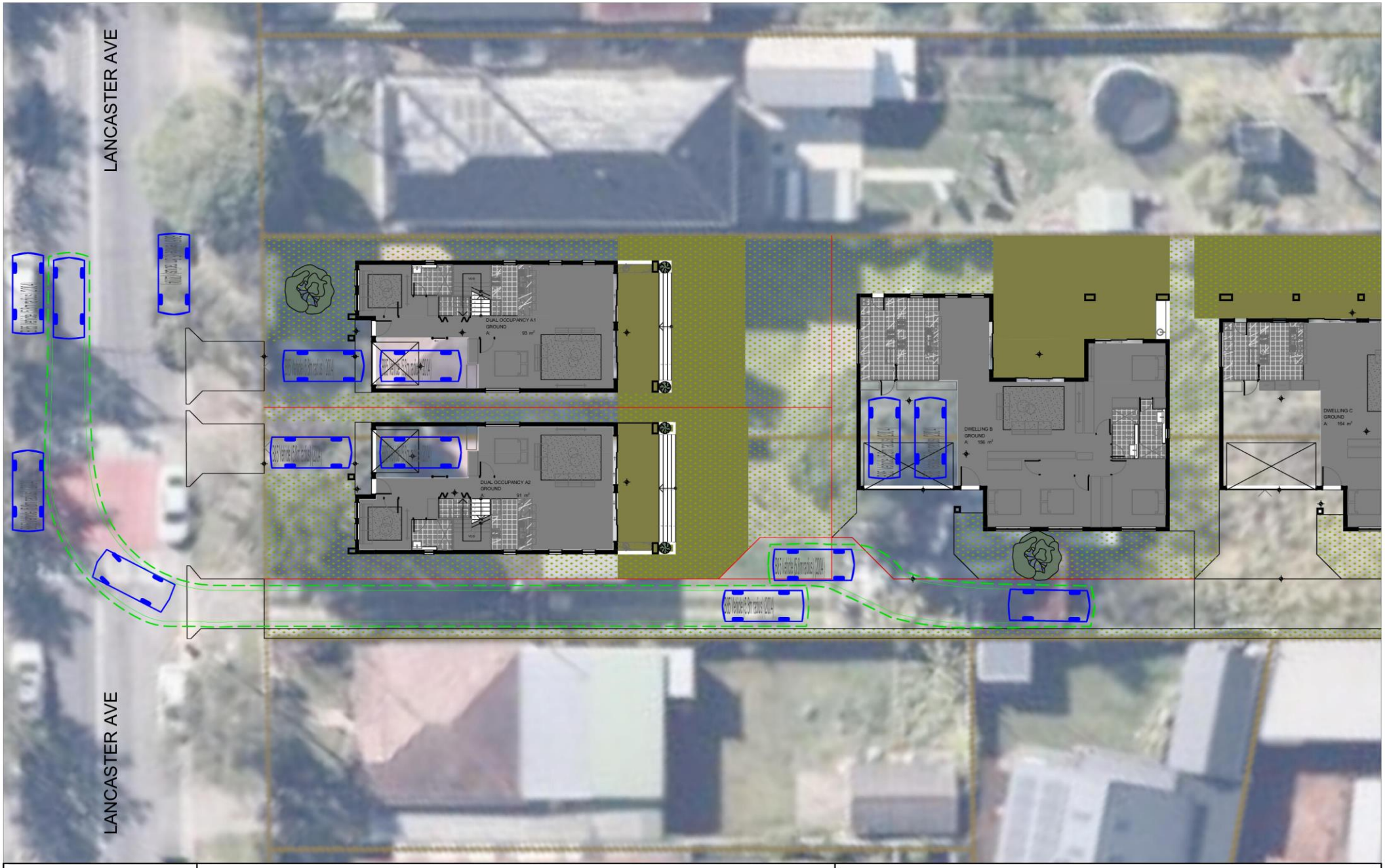

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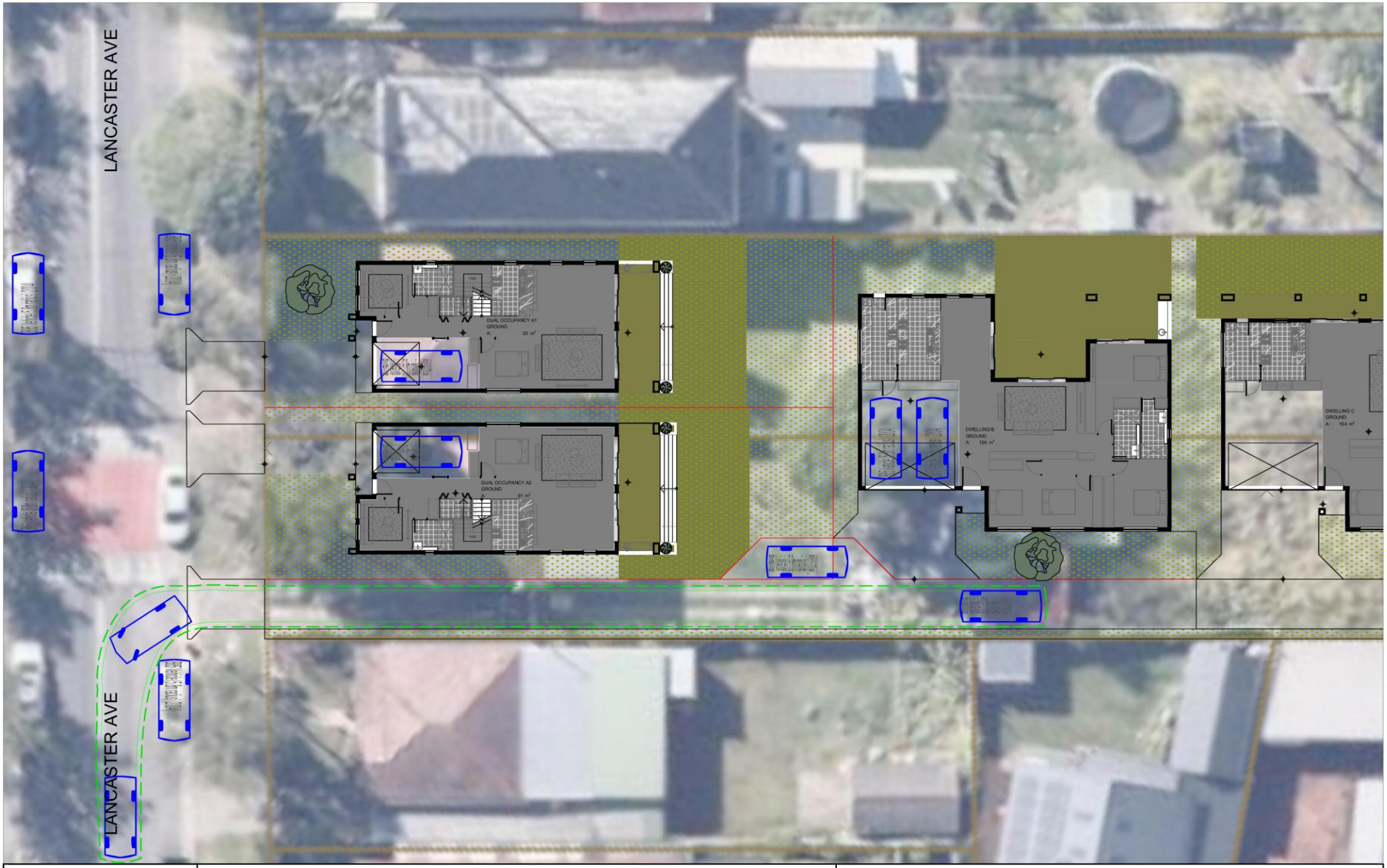
PREPARED
Ilya Nazarov

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants



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Sydney, Australia

PROJECT
RESIDENTIAL DEVELOPMENT

DRAWING TITLE
B85 Vehicle Turning Paths
Site Exit

ADDRESS
92-94 Lancaster Ave,
Punchbowl, NSW

PROJECT NO.
23175

REVIEWED
Robert Varga

1:300 @ A4

DATE DRAWN
2023-10-9

PREPARED
Ilya Nazarov

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