

16 April 2019
Ref 19053

The General Manager
Northern Beaches Council
P.O. Box 82
MANLY NSW 1655

E: council@northernbeaches.nsw.gov.au

Dear Sir/Madam

**PROPOSED RESIDENTIAL DEVELOPMENT
95 BOWER STREET & 29, 31, 35 REDDALL STREET, MANLY
CONSTRUCTION TRAFFIC MANAGEMENT PLAN**

Introduction

This Construction Traffic Management Plan has been prepared on behalf of The Applicant, *Catholic Archdiocese of Sydney*, to review the traffic and parking arrangements to be implemented during construction of the abovementioned residential development, as per Council's pre-DA discussions.

All correspondence on this matter must be addressed to The Applicant's representative:

Allana Afshar
Squillace Architects
1/80 Albion Street
SURRY HILLS NSW 2010
P: 8354 1300
E: Allana@squillace.com.au

It should be noted that *Varga Traffic Planning* accepts full responsibility for the preparation of this Construction Traffic Management Plan but does not accept any responsibility for its implementation which is to be undertaken by others.

Site

The subject site is bounded by College Street, Bower Street and Reddall Street, with an existing public reserve adjoining the western boundary of the site, providing a pedestrian link between Bower Street and Reddall Street (Figures 1 and 2).

The site has street frontages of approximately 66m in length to College Street, approximately 26m in length to Bower Street and approximately 63m in length to Reddall Street. The site occupies an area of approximately 3,160m².

The site is currently occupied by four dwelling houses, with off-street parking. Vehicular access to the site is provided via driveways located off either Bower Street or Reddall Street. A recent aerial image of the site and its surroundings is reproduced below.



College Street has a pavement width of approximately 8.5m wide with one traffic lane in each direction. Time-restricted parking is generally permitted along western side of College Street, whilst No Parking/Bus Zone restrictions generally apply along the eastern side of College Street, including along the site frontage.

Bower Street in the vicinity of the site comprises a single lane traffic lane in each direction and is separated by a landscaped island west of Bower Lane, extending to the Cliff Street intersection. Unrestricted kerbside parking is generally permitted along both sides of Bower Street, including along the site frontage.

Reddall Street in the vicinity of the site comprises a single traffic lane in each direction, separated by a landscaped island. The lower level carriageway (i.e. along the site frontage) has a pavement width of approximately 6m wide with one-way eastbound traffic flow permitted, whilst the upper level carriageway also has a pavement width of approximately 6m, with one-way westbound traffic flow permitted. Time-restricted 2 HOUR parking is generally permitted along both sides of Reddall Street (Permit Holders Excepted), including along the site frontage.

Proposed Development

The proposed development involves the demolition of the existing dwellings on the site and the construction of a new residential development, comprising 4 terrace houses and an apartment building with 9 residential units.

Off-street parking is proposed beneath the respective buildings with vehicular access to the car parking areas provided via two separate driveways located off the College Street and Bower Street site frontages.

Construction Schedule

The construction activities are expected to be undertaken over a duration of approximately 20 months as set out below. Working hours are proposed from 7:00am to 6:00pm Monday to Friday and 7:00am to 1:00pm on Saturday, as per Council's standard working hours. No work is to be carried out on Sundays or Public Holidays.

CONSTRUCTION PROGRAM – APPROXIMATE DURATIONS		
Stage	Work	Duration
1	Demolition	1 month
2	Excavation	4 months
3	Construction	15 months

Demolition & Excavation Stages

All demolition and excavated spoil material will be loaded wholly within the site using bogey trucks up to and including 8.8m in length. All trucks will enter and exit the site via the existing driveways located at opposite ends of the Reddall Street site frontage, as illustrated on the attached swept turning path diagrams.

RMS-accredited traffic controllers will be present at all times during truck movements to assist with truck manoeuvring and pedestrian safety.

Concrete Pour & Construction Stage

Construction material deliveries (including concrete pumping), will be unloaded from the Reddall Street kerbside parking area, directly outside the site, as shown on the attached Works Zone plan. Deliveries are again expected to be undertaken using a variety of small and medium rigid trucks up to 8.8m in length. A tower crane will be installed to transfer materials onto site, along with B-Class hoarding above the Reddall Street footpath, directly outside the site, in order to allow the footpath to remain open to pedestrians. Once the basement and lower ground floor levels are complete, smaller deliveries can also load and unload within the basement and lower ground floor car parking areas.

RMS-accredited traffic controllers will again be present at all times during material deliveries and concrete pours to ensure the safety of the public. All materials are to be stored on site. At no time are materials to be stored on College Street, Bower Street, Reddall Street or any other road or Council property.

The site manager will ensure that multiple deliveries do not occur at the same time, unless they can all be accommodated on site or within the proposed Works Zone area.

Proposed Works Zone

A plan has been prepared which illustrates a 28m long Works Zone along the Reddall Street site frontage. The Works Zone will be long enough to accommodate two trucks simultaneously, such as a concrete pump and concrete truck. The Works Zone parking restrictions are to apply during construction hours only which are specified above and provided specifically for the set down and pick up of materials, not for the parking of private vehicles associated with the site.

It should be noted that Works Zones are subject to the approval of the Manly Traffic Committee.

Sediment Control

All practicable measures must be taken to ensure that vehicles leaving the site do not deposit mud or debris on the road. Any mud or debris deposited on the road must be cleaned up immediately in a manner that does not pollute waters (i.e. by sweeping or vacuuming).

Hoarding & Site Amenities

In order to protect Council and adjoining properties, as well as the general public, secure fencing with a suitable filtering mesh will need to be installed around the perimeter of the site at the commencement of the works.

As the building progresses, B-Class Hoarding will be installed above the footpath area along the entire Reddall Street site frontage for the protection of pedestrians.

As there will not be any loading/unloading from College Street and/or Bower Street, B-Class hoarding is not necessary. As such, secure fencing will continue to be used along the College Street and Bower Street site frontages.

It should be noted that hoarding installation require a separate application and approval by Council.

Amenities and site sheds will initially be placed within the site until the B-Class hoarding is installed. Scaffolding will also be used to facilitate works to the external face of the building as well as preventing tools/materials falling to the ground.

Neighbouring Properties

All neighbouring properties are to have their access maintained at all times unless agreed to in writing prior. All nearby residents and businesses will be updated on a regular basis and at key construction stages with respect to the construction process, particularly in relation to construction vehicles movements, and be provided with a phone number to contact the site manager.

Construction Truck Routes

All heavy vehicles involved in the demolition, excavation and construction of the proposed development would approach and depart the site via Pittwater Road or Sydney Road as indicated on Figure 3.

The site manager will ensure that the route map is prominently displayed on the site and that all contractors and employees are given a copy of the route map and understand their obligations as part of their site induction procedure.

Light traffic roads and those subject to load or height limits will be avoided as well as minimising heavy vehicle movements during school peak periods.

Truck Movements

The proposed development is expected to generate the following truck movements during demolition, excavation and construction:

1. Demolition – approximately 4 to 5 trucks carrying out approximately 2 to 3 loads per day. This would not be every day as they would not be loading out every day of the demolition period.
2. Excavation – approximately 5 to 8 trucks carrying out approximately 5 to 6 trips per day – i.e. 40 truck movements per day. This would not occur every day as they would not be loading out every day of the construction period.

3. Large Concrete Pours – there are approximately 15 major concrete pours and a similar number of minor pours. Major pours would take approximately 8 hours to pour with 6 trucks per hour or 40 to 50 truck movements per day. Smaller pours would have a similar amount of truck movements per hour however the duration would be a lot shorter say 3 to 4 hours maximum.
4. General Deliveries – these would occur intermittently throughout the project with the major deliveries being reinforcing steel, plasterboard and bricks. The remainder would generally comprise smaller truck deliveries.

Traffic Control Plans

Two Traffic Control Plans have been prepared to facilitate the demolition, excavation and construction activities on the subject site.

The first Traffic Control Plan (No.1) illustrates the traffic arrangements to be implemented when trucks are loading/unloading on-site. Key features of the Traffic Control Plan are:

- advance warning signs alerting approaching traffic of the presence of possible road works and traffic controllers ahead
- warning signs alerting pedestrians to watch their step as they walk along the northern side of Reddall Street along the site frontage
- two traffic controllers situated outside the construction vehicular access driveways in Reddall Street who will have three primary responsibilities when trucks are loading/unloading within the site:
 1. to ensure the safety of pedestrian movements along the Reddall Street site frontage, so that no pedestrian enters the zone of a heavy vehicle,
 2. to control heavy vehicle movements into and out of the site. The traffic controllers should wait for a safe gap in the passing traffic flows on Reddall Street before allowing the vehicle to exit the site, and
 3. to momentarily control local traffic movements along Reddall Street when trucks are entering and/or exiting the site.

The second Traffic Control Plan (No. 2) illustrates the traffic arrangements to be implemented when trucks are loading/unloading on-street via the Works Zone. Key features of the Traffic Control Plan are:

- advance warning signs alerting approaching traffic of the presence of possible road works and traffic controllers ahead
- B-Class Hoarding above the entire length of the footpath area along the Reddall Street site frontage which will allow the footpath to remain open at all times
- a kerbside loading/unloading area which is detailed above
- all construction vehicles should park as close to the kerb as possible thereby allowing local traffic, including emergency service vehicles, to pass at all times

- two traffic controllers situated in Reddall Street at opposite ends of the Works Zone who will encourage eastbound drivers to slow down as they drive past a loading truck in the kerbside area, or temporarily stop eastbound traffic whilst material is being loaded onto the truck. The traffic controllers will also monitor and assist pedestrian movements if required.

The Traffic Control Plans have been prepared generally in accordance with the former RTA's publication *Traffic Control at Works Sites (2010)* and the Standards Australia publication *AS1742.3: Traffic Control Devices for Work Sites on Road*.

Permits

All necessary permits such as hoarding, crane, roadway/footpath/nature strip occupation etc. will require separate approval from Council. Any related task-specific Traffic Control Plans will be prepared by the respective contractor and provided under separate cover.

Tradesmen and Contractor Parking

The site manager will ensure that there is adequate on-site parking available for employee, tradesperson and construction vehicles, where practical. Parking shall be provided in the basement and lower ground car parking area as soon as is practicable. In addition, staff will be encouraged to carpool and utilise public transport which will minimise traffic and parking impacts as a consequence of the construction process.

Site Inductions

The requirements of this Construction Traffic Management Plan must be followed by the demolition, excavation and construction contractors, builders, owner and any subcontractors. The site manager will ensure that site inductions occur on a regular basis or as deemed necessary.

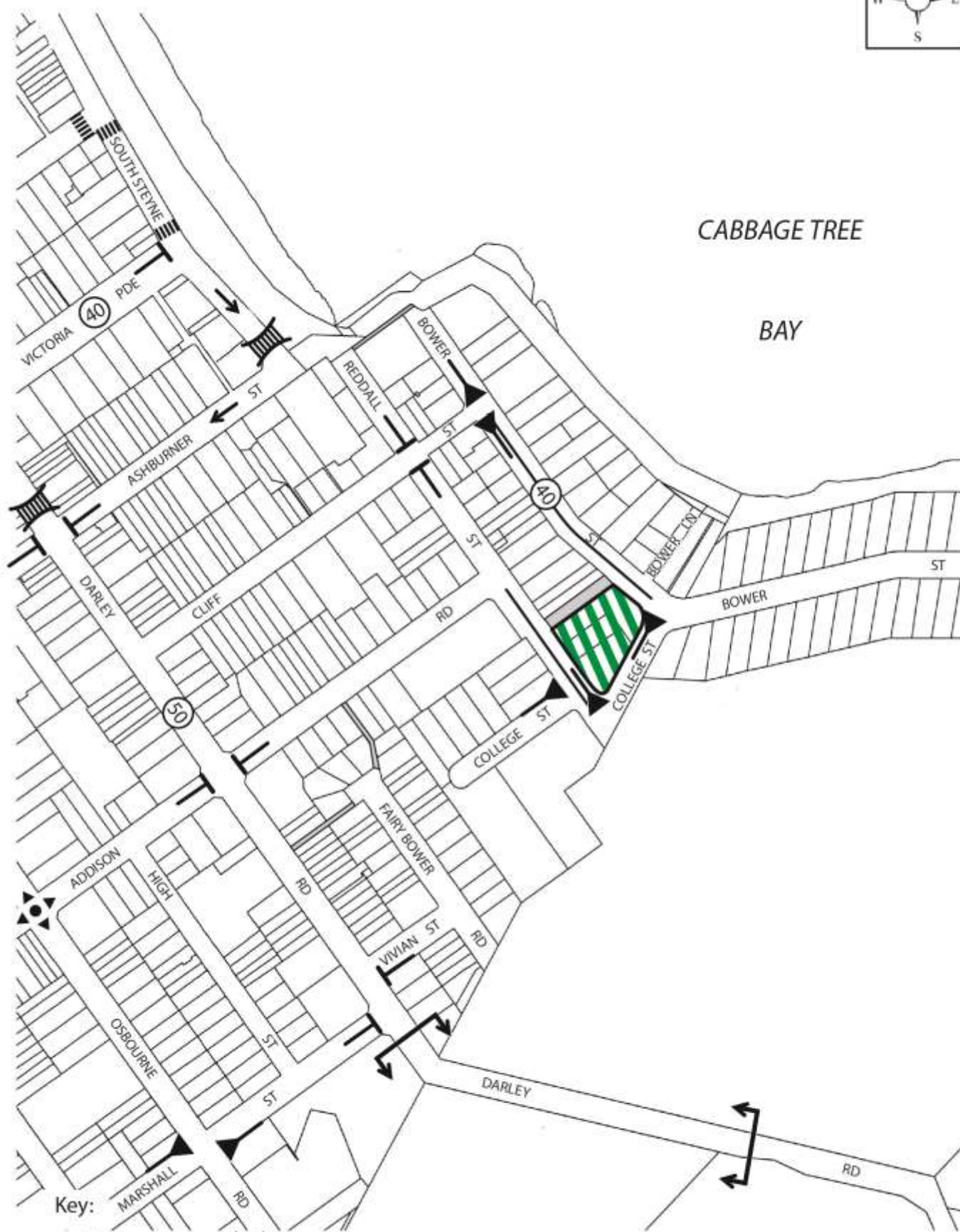
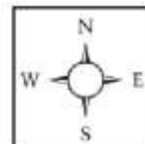
I trust this advice satisfies your requirements. Please do not hesitate to contact me on telephone 9904 3224 should you wish to discuss any aspect of the above.

Yours sincerely



Chris Palmer
Traffic Engineer B.Eng (Civil)
Varga Traffic Planning Pty Ltd





Key:

- | | | | | | |
|--|---------------|--|-------------|--|---------------------|
| | Give Way Sign | | School Zone | | Pedestrian Crossing |
| | Roundabout | | Speed Limit | | Speed Hump |
| | Stop Sign | | One-Way | | |

VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants



**SITE & EXISTING
TRAFFIC CONTROLS**
FIGURE 2



— Approaching Traffic

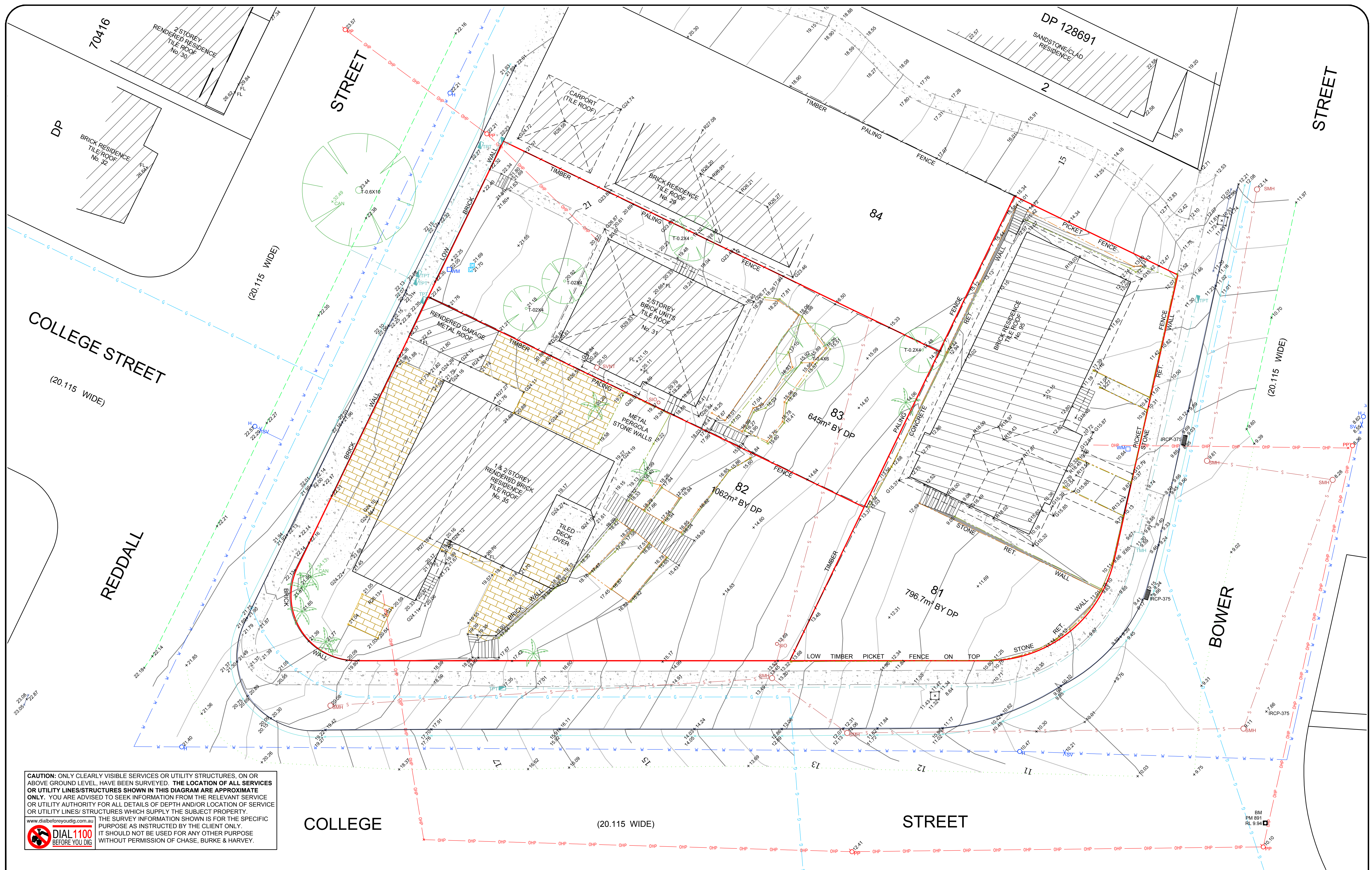
— Departing Traffic

VARGA TRAFFIC PLANNING Pty Ltd

Traffic and Parking Consultants



HEAVY VEHICLE ROUTE MAP FIGURE 3



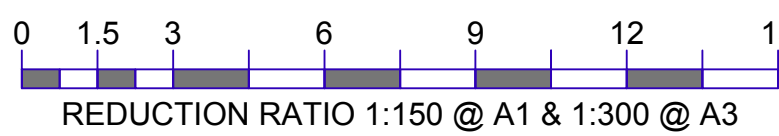
CAUTION: ONLY CLEARLY VISIBLE SERVICES OR UTILITY STRUCTURES, ON OR ABOVE GROUND LEVEL, HAVE BEEN SURVEYED. THE LOCATION OF ALL SERVICES OR UTILITY LINES/STRUCTURES SHOWN IN THIS DIAGRAM ARE APPROXIMATE ONLY. YOU ARE ADVISED TO SEEK INFORMATION FROM THE RELEVANT SERVICE OR UTILITY AUTHORITY FOR ALL DETAILS OF DEPTH AND/OR LOCATION OF SERVICE OR UTILITY LINES/ STRUCTURES WHICH SUPPLY THE SUBJECT PROPERTY.

THE SURVEY INFORMATION SHOWN IS FOR THE SPECIFIC PURPOSE AS INSTRUCTED BY THE CLIENT ONLY. IT SHOULD NOT BE USED FOR ANY OTHER PURPOSE WITHOUT PERMISSION OF CHASE, BURKE & HARVEY.



AUTHORISED OFFICER
THIS PLAN TO BE READ IN CONJUNCTION
WITH CBH REPORT WITH REFERENCE: 2015305
DRAWING No: D15305

REV	REVISION DETAILS	DATE



CLIENT: CATHOLIC ARCHDIOCESE OF SYDNEY
REF: 2015305
SURVEYED BY: D JOHNSON & J CLEASBY
DRAWN BY: E JACK
SURVEY FILE: 15-305MG
DATE OF SURVEY: 30/09/15
CHECKED BY: D JOHNSON

LOT No. 81-83
SECTION -
PLAN No. DP 8706
SUBURB MANLY
LGA MANLY
PARISH MANLY COVE
COUNTY CUMBERLAND

CONTOUR INTERVAL: 0.5m
DATUM: AHD
AUSTRALIAN HEIGHT DATUM
PM 891
R.L.: 9.95

SURVEYING | CIVIL | DEVELOPMENT
Erina: (02) 4367 7334
Hornsby: (02) 9482 9498
www.cbhsurvey.com.au
CHASE BURKE HARVEY

PLAN SHOWING LEVELS, FEATURES & CONTOURS FOR LOT 81-83 IN DP 8706
"No. 31-35 & 95" REDDALL STREET & BOWER STREET, MANLY

SHEET No. 2
No. of SHEETS: 3
DRAWING No: D15305
REV:

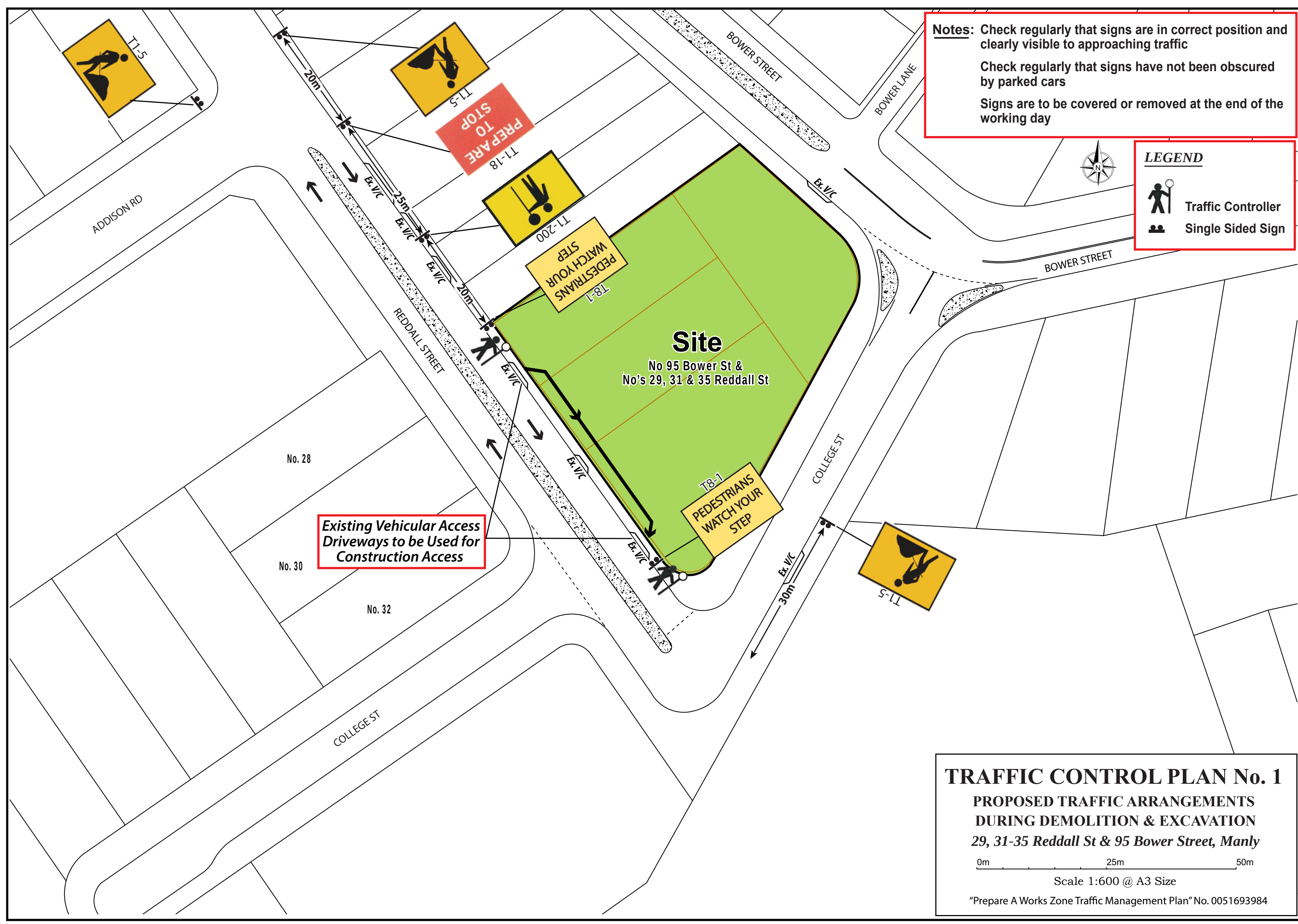
Notes: Check regularly that signs are in correct position and clearly visible to approaching traffic

Check regularly that signs have not been obscured by parked cars

Signs are to be covered or removed at the end of the working day

LEGEND

-  Traffic Controller
-  Single Sided Sign



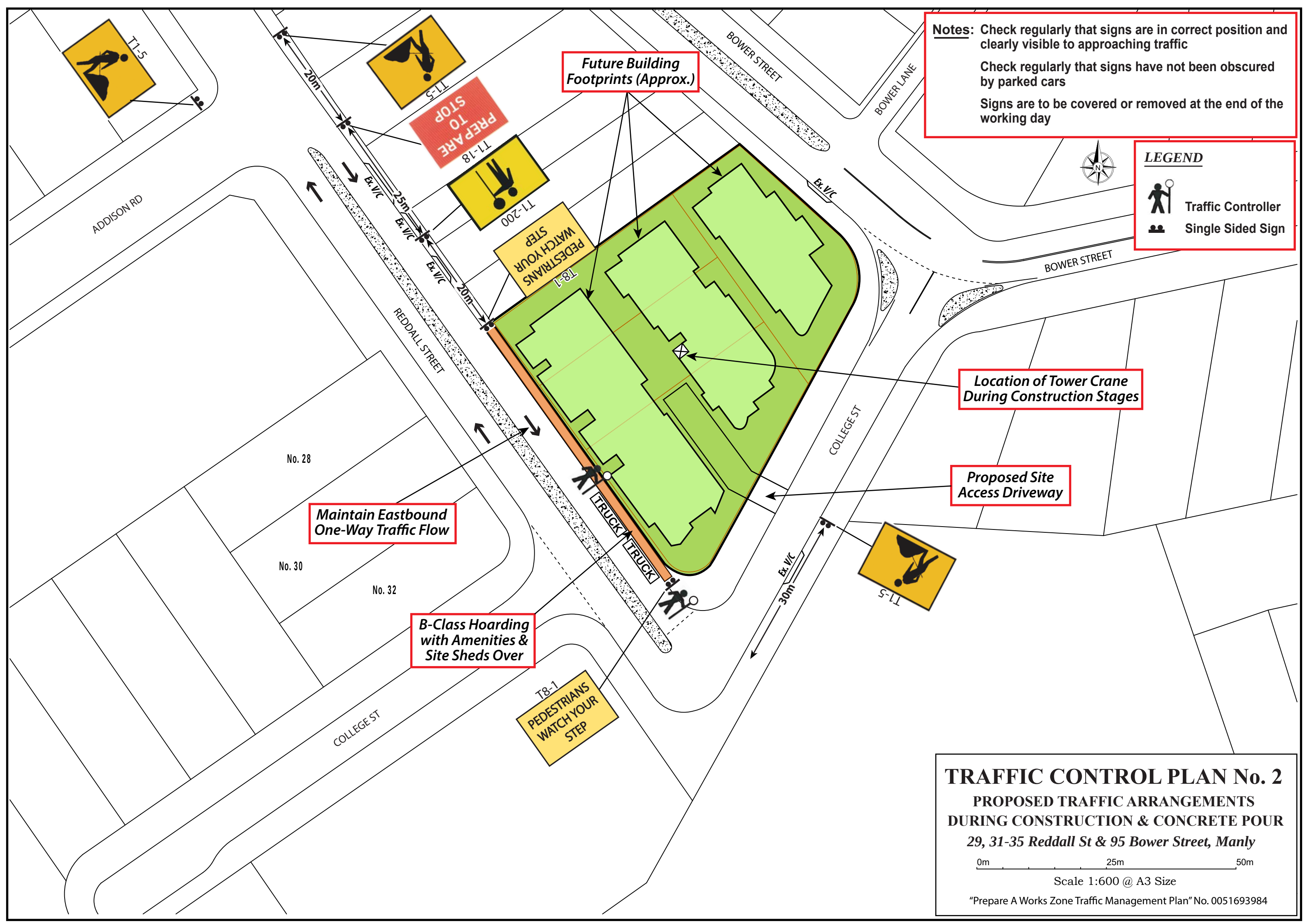
TRAFFIC CONTROL PLAN No. 1

**PROPOSED TRAFFIC ARRANGEMENTS
DURING DEMOLITION & EXCAVATION**
29, 31-35 Reddall St & 95 Bower Street, Manly

0m 25m 50m

Scale 1:600 @ A3 Size

"Prepare A Works Zone Traffic Management Plan" No. 0051693984



Notes: Check regularly that signs are in correct position and clearly visible to approaching traffic

Check regularly that signs have not been obscured by parked cars

Signs are to be covered or removed at the end of the working day

LEGEND

-  Traffic Controller
-  Single Sided Sign

Location of Tower Crane During Construction Stages

Proposed Site Access Driveway

Maintain Eastbound One-Way Traffic Flow

B-Class Hoarding with Amenities & Site Sheds Over

Future Building Footprints (Approx.)

TRAFFIC CONTROL PLAN No. 2

PROPOSED TRAFFIC ARRANGEMENTS DURING CONSTRUCTION & CONCRETE POUR

29, 31-35 Reddall St & 95 Bower Street, Manly

0m 25m 50m

Scale 1:600 @ A3 Size

"Prepare A Works Zone Traffic Management Plan" No. 0051693984



EXISTING & PROPOSED PARKING RESTRICTIONS

29, 31-35 Reddall St & 95 Bower Street, Manly

0

10

20

30

40

1:500 @ A4 size

METRES