Terraffic Pty Ltd

Traffic and Parking Consultants

ABN 83 078 415 871

30th September 2024
Ref: 24037

The General Manager
Northern Beaches Council
PO Box 82
Manly NSW 1655

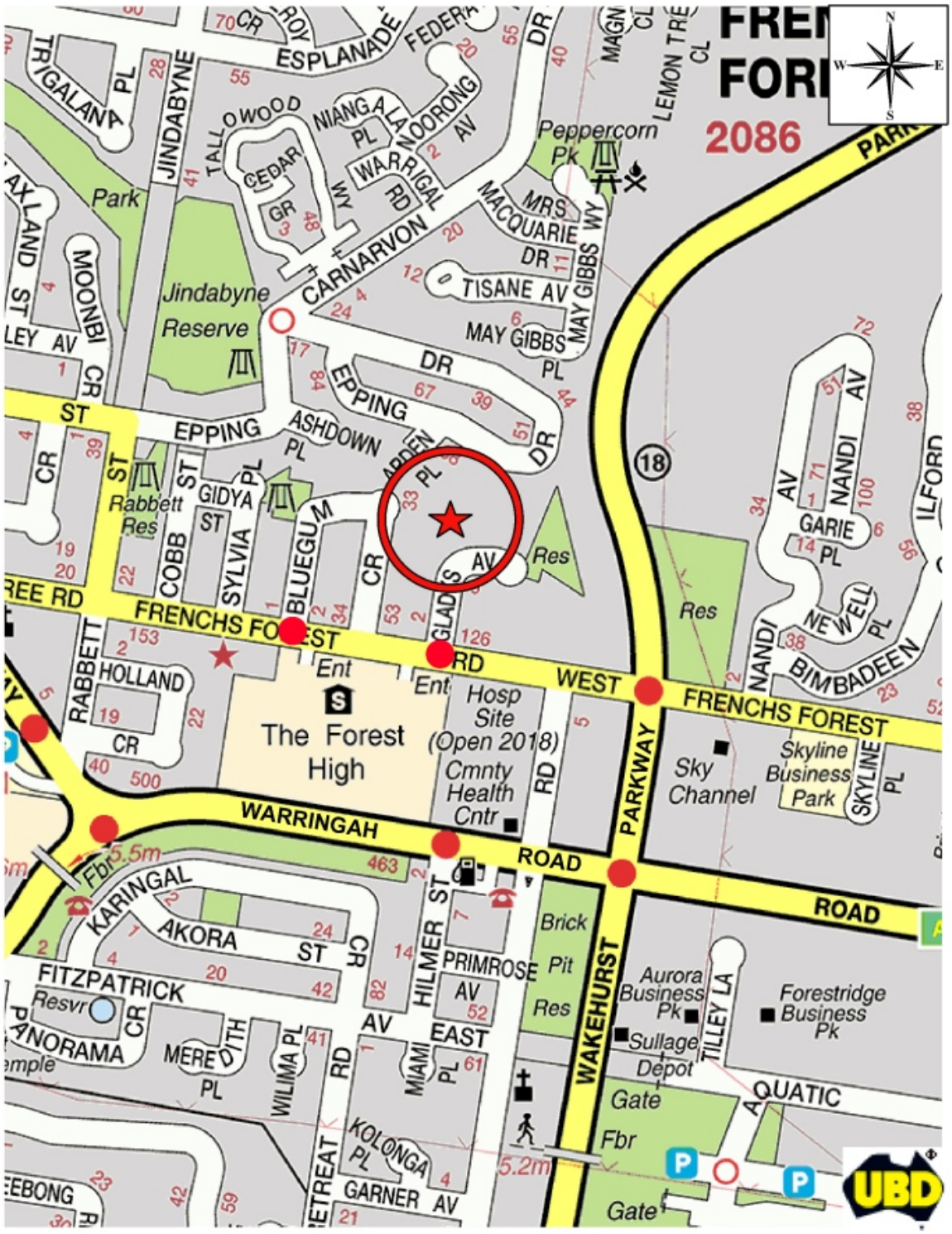
Dear Sir/Madam,

12-14 GLADYS AVENUE, FRENCHS FOREST
CONSTRUCTION TRAFFIC MANAGEMENT PLAN

Terraffic Pty Ltd has been engaged by the Republic of Gladys to prepare the following Construction Traffic Management Plan (CTMP) to review the traffic arrangements to be implemented during the site works for the redevelopment of 12-14 Gladys Avenue, Frenchs Forest (Figures 1 and 2).

Aerial photograph of the site

I can confirm that I have completed the necessary RMS Accreditation to *Prepare a Work Zone Traffic Management Plan*. My SafeWork NSW Accreditation Number is TCT000577.



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LOCATION

FIGURE 1

Basemap courtesy of SIX Maps

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SITE

FIGURE 2

Site Description

The development site is located on the western side of Gladys Avenue approximately 125m north of Frenchs Forest Road West. The site has a total area of 4,704m^2 with a frontage of 9.39m to Gladys Avenue.

The existing site development contains 2 dwellings (one on each lot). The dwellings gain vehicular access to Gladys Avenue via a single width accessway approximately 30m in length.

Photograph looking west from Gladys Avenue along the accessway

Proposed Development

The development proposal involves the demolition of the existing site development and construction of a Seniors Living development containing a total of 19 self contained dwellings.

The proposal will be served by a two level basement that gains vehicular access to Gladys Avenue via a two-way 5.5m wide combined entry/exit driveway. The dual width accessway narrows to a single lane approximately 16m into the site and extends for approximately 25m before widening again to a dual width access ramp that serves the basement carpark.

Road Network

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services (RMS) is illustrated on Figure 3 and comprises the following:

State Roads	**Regional Roads**
Forest Way	nil
Warringah Road	
Wakehurst Parkway	

Naree Road and Frenchs Forest Road West are unclassified *Local Roads* that perform a sub-arterial road function that links Forest Way to the west with Warringah Road to the east.

Frenchs Forest Road West carries 4 lanes of traffic (2 in each direction) with 24/7 CLEARWAY restrictions generally applying along both sides of the road.

Gladys Avenue is an unclassified *Local Road* with a primary function of providing access to properties along its length. It has a pavement width of approximately 6.1m with a NO PARKING restriction along the eastern alignment to facilitate passing traffic. The western alignment is unrestricted.

The existing traffic and parking controls in the vicinity of the site are illustrated on Figure 4. As can be seen, the intersection of Frenchs Forest Road West and Gladys Avenue is signalised and also provides access to the Northern Beaches Hospital.

Construction Program

The first phase of the site works will be the demolition of the existing dwellings and the site establishment. The excavation and construction works are to be carried out in two (2) stages with the first stage comprising the building at the rear of the site and the second stage comprising the building at the front of the site towards the accessway.

Depending on weather conditions, the duration of the construction program is to be approximately 28 months as follows:

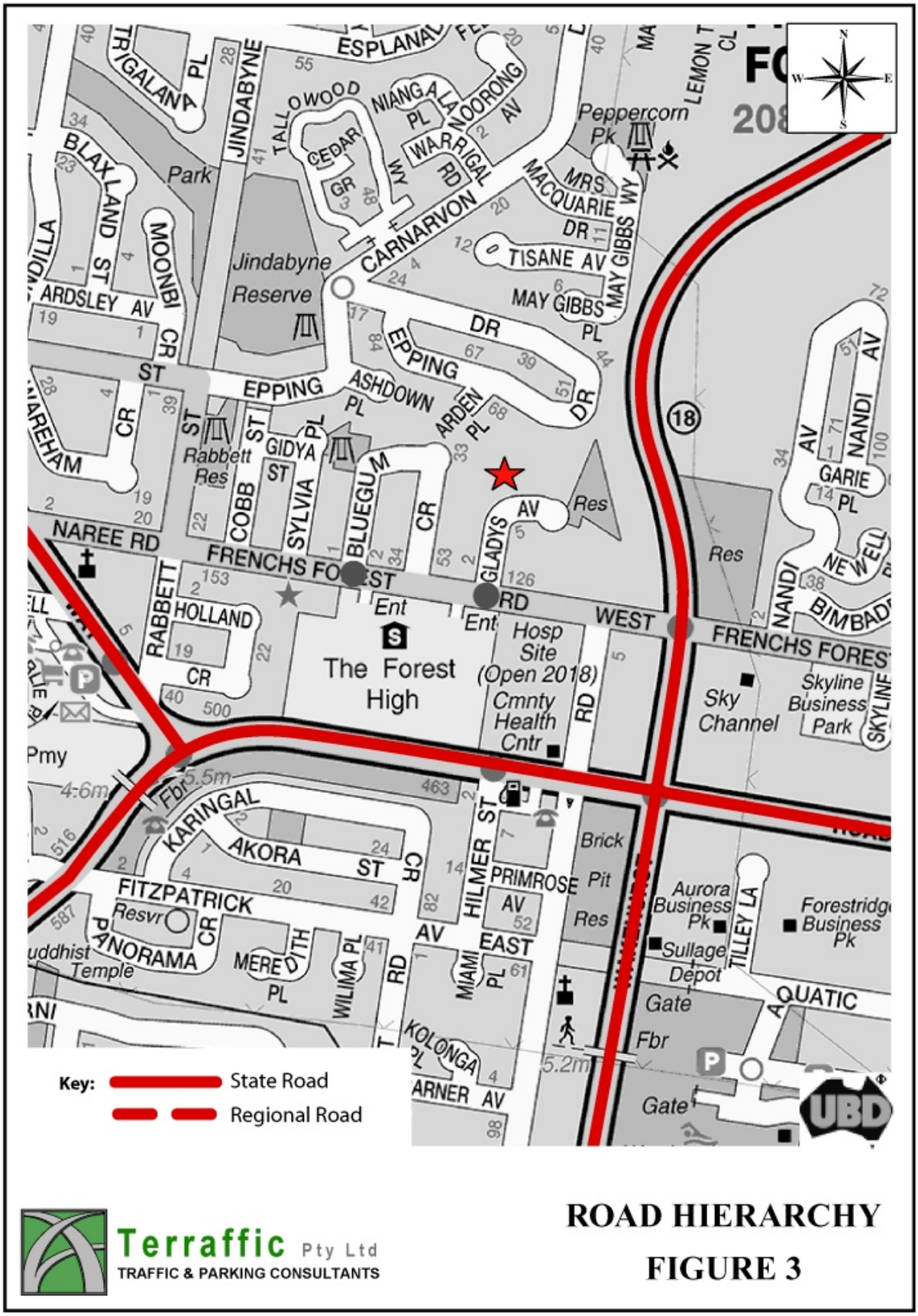
CONSTRUCTION PROGRAM

Phase	Work	Approximate Duration of Work
1	Demolition / site establishment	1 month
2	Stage 1 Excavation	1 month
3	Stage 1 Construction	12 months
4	Stage 2 Excavation	1 month
5	Stage 2 Construction	12 months

Subject to Council approval, all work on site (including demolition and earth works) must only occur between 7am and 5pm Monday to Saturday. No work is to be undertaken on Sundays or public holidays.

A Demolition Plan and an Excavation & Fill Plan are reproduced in Appendix A. The limits of the Stage 1 and Stage 2 works are also indicated on the Excavation & Fill Plan.

Prior to the start of the site works, an A-Class hoarding will be installed where necessary around the perimeter of the site with a 6.0m wide inward swinging gate installed at Gladys Avenue. The existing access driveway is to be utilised for access to the site.



ROAD HIERARCHY

FIGURE 3

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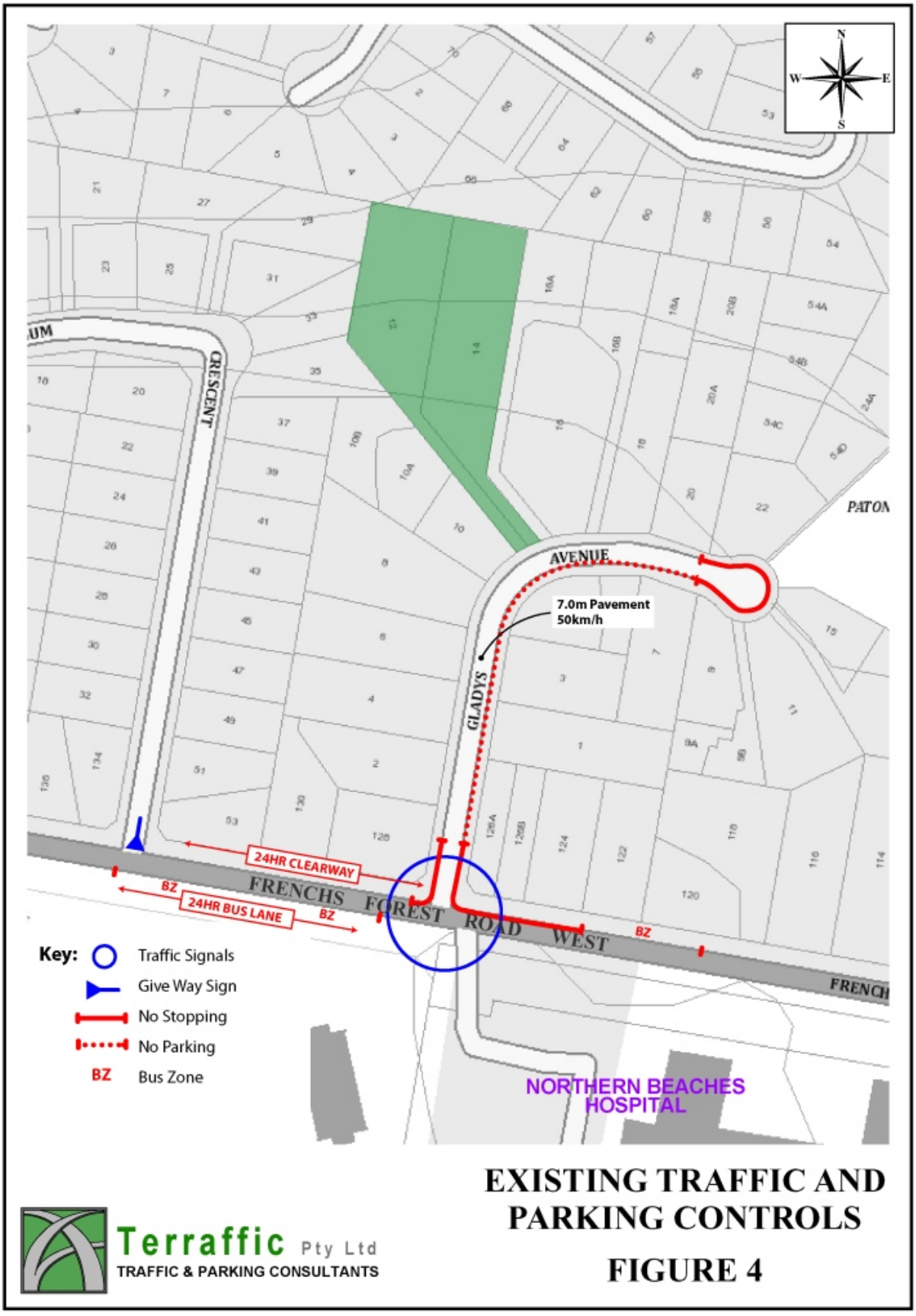

EXISTING TRAFFIC AND PARKING CONTROLS

FIGURE 4

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Due to the relatively narrow width of Gladys Avenue and an existing power pole adjacent to the access driveway, vehicular access to the site is restricted to 12.5m long trucks. The site will not be accessed by 19m long truck and dogs. As is standard practice, the driveway will be protected with timber slats across the footpath to protect the Council infrastructure.

There is the capacity for trade vehicles to park on-site during both stages of the site works. Trades will park along the accessway and on the ground level during the Stage 1 works. Trades will also be able to park in the basement once the second stage is constructed.

Vehicle Swept Paths

The following swept paths of the Australian Standard AS2890.2:2018 8.8m long Medium Rigid Vehicle (MRV) and 12.5m Heavy Rigid Vehicle (HRV) are reproduced in Appendix B:

1. The HRV entering the site from Gladys Avenue
2. The HRV departing the site onto Gladys Avenue
3. The HRV manoeuvring on the site during the demolition and excavation works
4. The MRV manoeuvring on the Stage 2 construction site

As can be appreciated, truck paths are not required during the Stage 1 works as the vehicle has the majority of the Stage 2 site to manoeuvre and exit in a forward direction.

In addition, a 10m WORKS ZONE will be required adjacent to the Gladys Avenue access driveway to restrict kerbside parking and facilitate access by these large vehicles.

Construction Vehicle Activity

The anticipated construction vehicle activity for each stage of the development is as follows:

Phase 1 Demolition and Site Establishment

Approximately 600m^3 of material will be removed from the site during the demolition phase and will be removed by bogie trucks with a 30m^3 capacity. This process will involve approximately 20 truck loads over a 4 week period. It is unlikely that more than 2 trucks will access the site on a given day during the demolition phase of the site works.

Phase 2 Stage 1 Excavation

There will be approximately 3,280m^3 of spoil removed from the site prior to Stage 1 construction. Excavated spoil will again be removed by bogie trucks with a 30m^3 capacity. It is estimated that there will be approximately 110 truckloads of spoil removed from the site over the 1 month period. This will equate to approximately 6 trucks a day

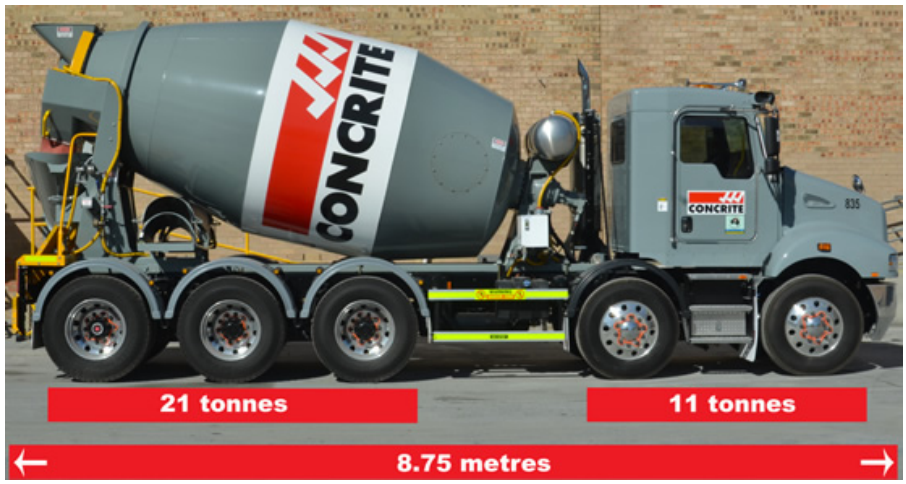
accessing the site during this phase of Stage 1. These trucks will be able to enter and exit the site in a forward direction.

Phase 3 **Stage 1 Construction**

Vehicular activity during the construction phase can vary from the occasional delivery of materials, to the concentrated delivery of concrete during a major pour. Depending on the size of the pour, it is possible to generate up to 6 concrete trucks per day to the site.

In addition to the accessway that has the capacity to store 3 standard concrete trucks, delivery vehicles and concrete trucks will have the majority of the Stage 2 site to queue.

Photograph of a typical 51m concrete boom pump that will Be utilised during the concrete pour phase



Photograph of a typical concrete delivery truck that will be utilised during the concrete pour phase

Phase 4 **Stage 2 Excavation**

There will be approximately 4,680m^3 of spoil removed from the site prior to the Stage 2 construction. It is estimated that there will be approximately 160 truckloads of spoil removed from the site over the 1 month period. This will equate to approximately 8 trucks a day accessing the site during this phase of Stage 2.

Phase 5 **Stage 2 Construction**

As noted above, vehicular activity during a construction phase can vary from the occasional delivery of materials, to the concentrated delivery of concrete during a major pour. Depending on the size of the pour, it is possible to generate up to 6 concrete trucks per day to the site.

As indicated on the swept path diagram, there is scope to store 2 delivery vehicles and provide sufficient space for an MRV to manoeuvre and exit in a forward direction.

In addition, the accessway has the capacity to store 3 standard concrete trucks. Drivers will also be radioed to the site when required in order to reduce any likelihood of vehicle queuing on local streets.

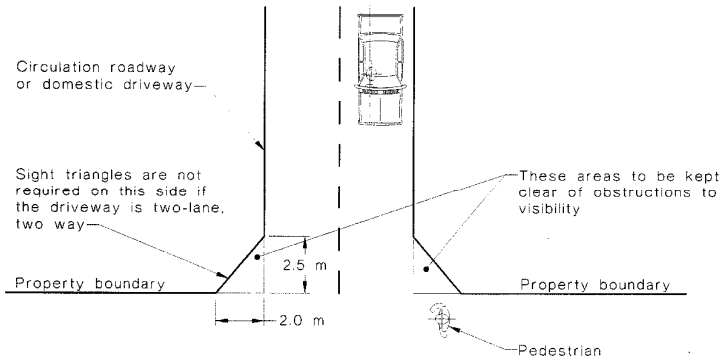
Construction Truck Routes

The Site Manager will ensure all construction vehicles approach and depart via the higher road network and utilise the truck routes illustrated on Figure 5. As can be seen, the larger trucks will not turn left into Gladys Avenue from Frenchs Forest Road West.

Proposed Traffic and Pedestrian Safety Measures

As all vehicles will enter and exit in a forward direction, it will not be necessary to prepare a TRAFFIC GUIDANCE SCHEME to control vehicle movements on Gladys Avenue. If deemed necessary, the Site Manager may station a controller at the Gladys Avenue access driveway to control vehicle movements.

Furthermore, the 9.4m wide accessway provides clear sight lines to pedestrians in accordance with Figure 3.3 of the Australian Standard AS/NZS2890.1:2004. To that end pedestrian safety is optimised.



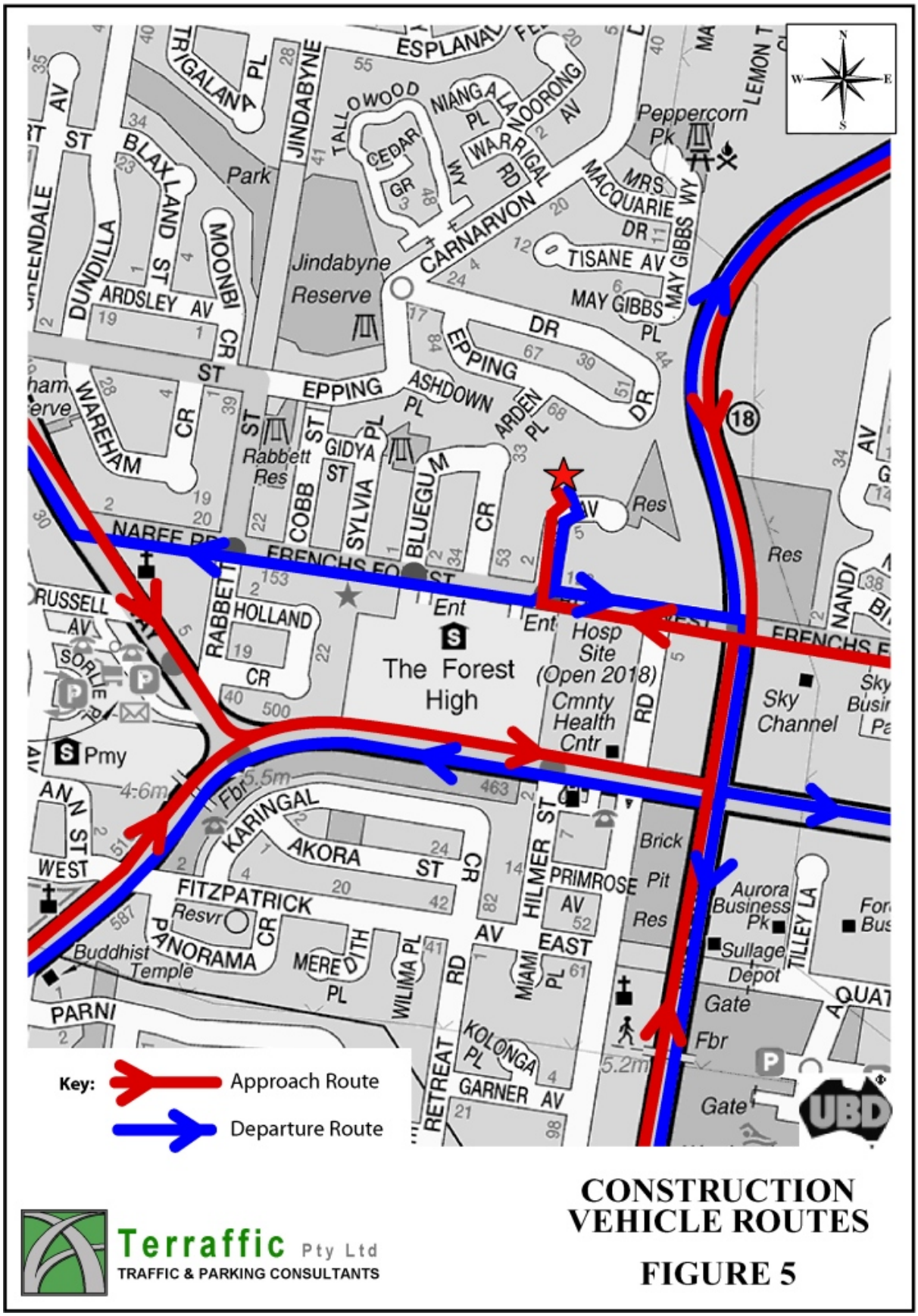
DIMENSIONS IN METRES

FIGURE 3.3 MINIMUM SIGHT LINES FOR PEDESTRIAN SAFETY

I trust this advice satisfies your requirements and will remain available during office hours should you require any further information.

Yours Faithfully,

Michael Logan *MTraff (Monash University)*
Director
Terraffic Pty Ltd



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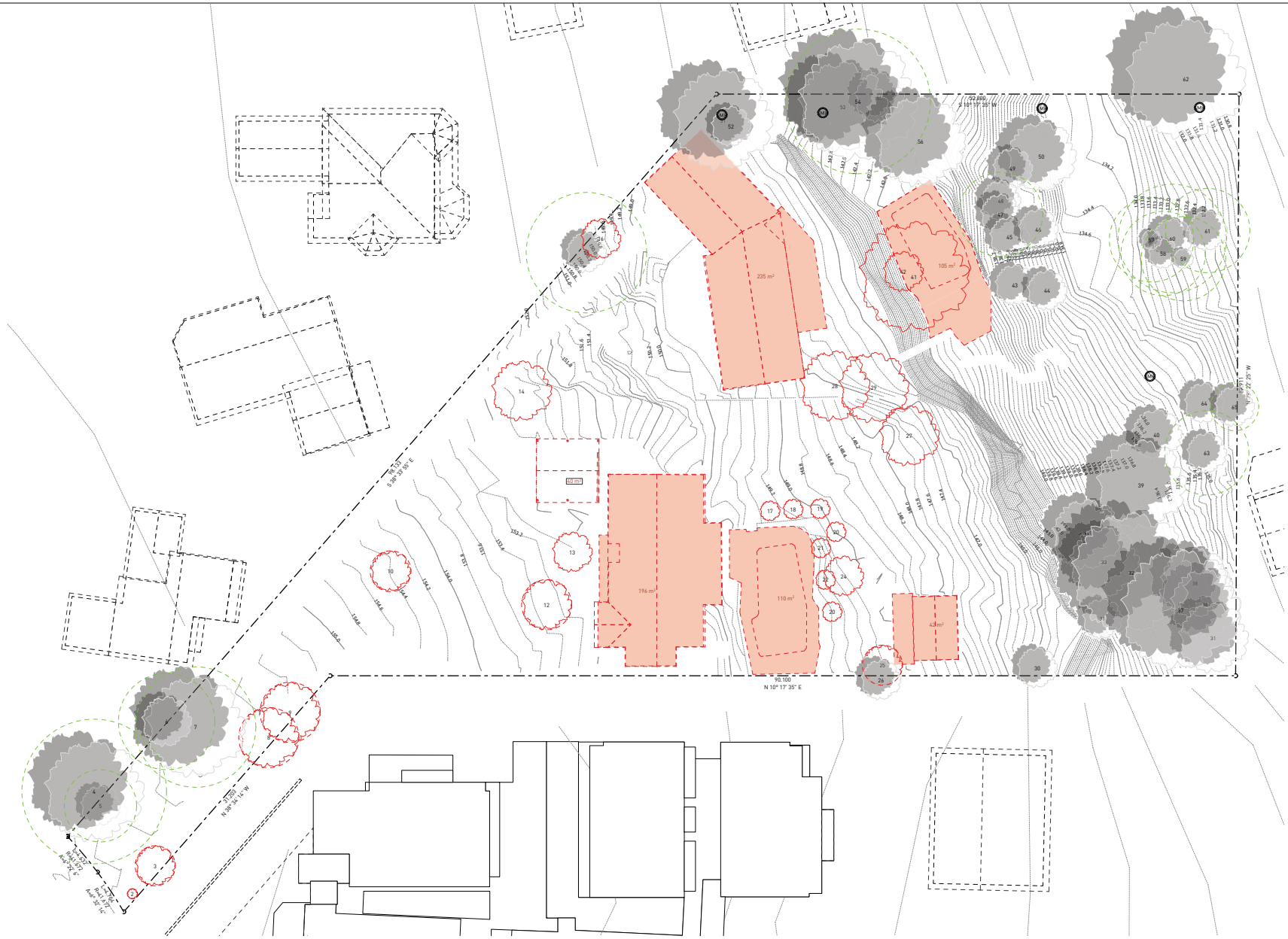
CONSTRUCTION VEHICLE ROUTES

FIGURE 5

APPENDIX A

CONSTRUCTION PLANS



1 DEMOLITION PLAN
1:200

NOTES

1. NEVER scale off drawings, use figured dimensions only.
2. Verify all dimensions on site prior to commencement & report discrepancies to the architect.
3. Drawings describe scope of works and general set out. These drawings are not shop drawings. Set out to to be undertaken by surveyor on site. Shop drawings should be prepared where required or necessary
4. The copyright of this design remains the property of SMITH & TZANNES. This design is not to be used, copied or reproduced without the authority of SMITH & TZANNES.
5. This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.

LEGEND

Refer to the notes page for a legend that includes further notes and an explanation of abbreviations.

NOTES REGARDING DEVELOPMENT APPLICATION DRAWINGS

Minor changes to form and configuration may be required when drawings are subsequently prepared for construction purposes after the grant of development consent.

The design is not in a form suitable for use in connection with building work.

LEGEND

- X — EXISTING TREE TO BE RETAINED
  X REFERRES TO TREE ID IN ARBORIST REPORT
- X — EXISTING TREE TO BE RETAINED WITH TREE PROTECTION ZONE
  X REFERRES TO TREE ID IN ARBORIST REPORT
- X — EXISTING TREE TO BE REMOVED PENDING COUNCIL APPROVAL
- x m² — EXISTING STRUCTURE TO BE DEMOLISHED

0 5 10

VERSION
FOR FINAL COORDINATION
REV 16 09 24 MODEL 24_041 Model-DD

DOCUMENT
DEMOLITION PLAN

STAGE
Developed Design

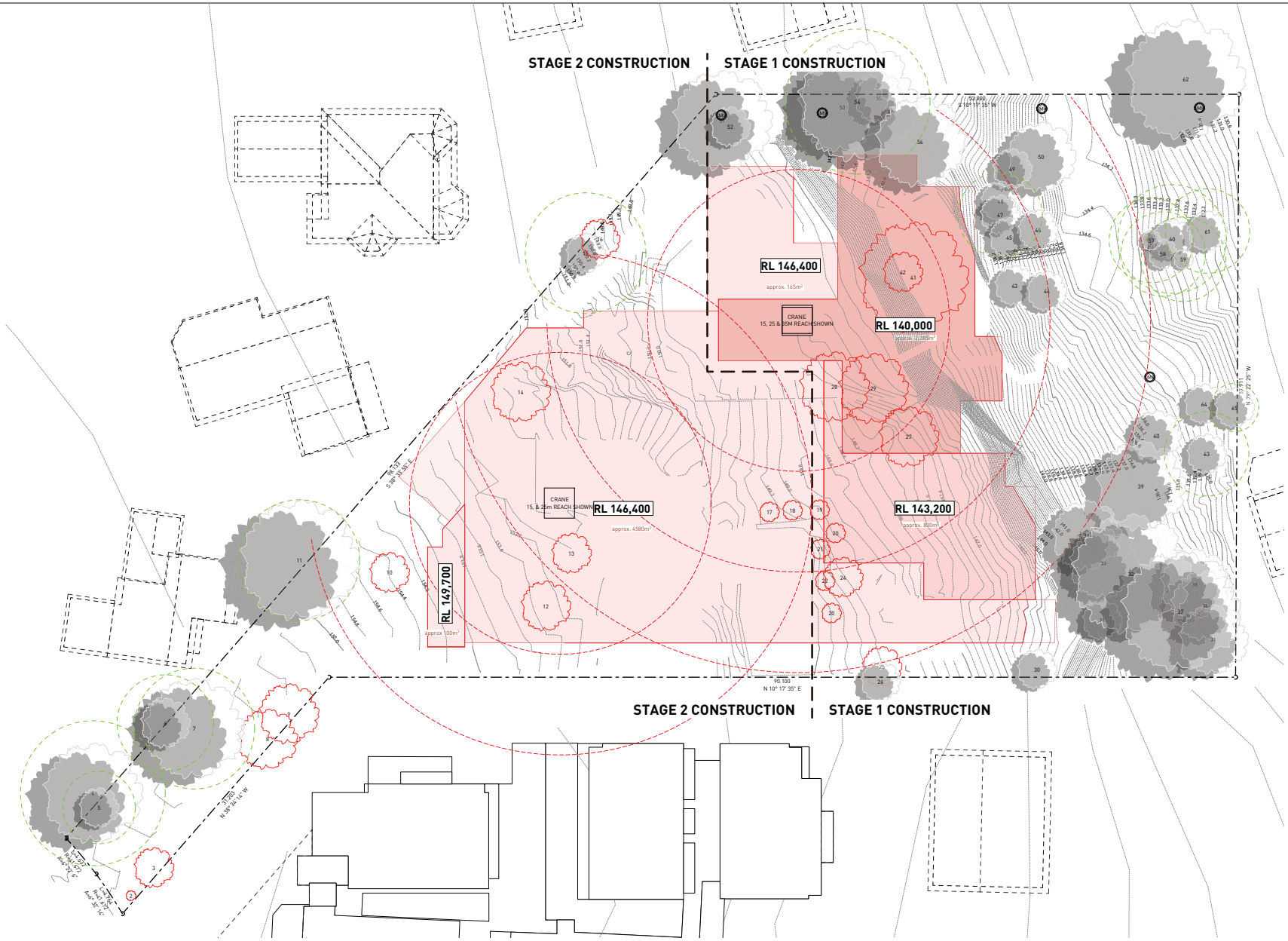
PROJECT
Seniors Housing
12-14 Gladys Avenue
Frenchs Forest

Lot A & B DP393276
88 Republic of Gladys

ARCHITECTURE URBAN PLANNING
M1/147 McEvoy St Alexandria NSW 2015
P 02 9516 2022 **E** email@smithtzannes.com.au
smithtzannes.com.au
Nominated Architect: Peter Smith ARN 7024

SMITH & TZANNES

24_041 DD-A-013



1 BULK EXCAVATION PLAN
1:200

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VERSION
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DOCUMENT
EXCAVATION & FILL PLAN

STAGE
Developed Design

PROJECT
Seniors Housing
12-14 Gladys Avenue
Frenchs Forest

Lot A & B DP393276
88 Republic of Gladys

ARCHITECTURE URBAN PLANNING
M1/147 McEvoy St Alexandria NSW 2015
P 02 9516 2022 **E** email@smithtzannes.com.au
smithtzannes.com.au
Nominated Architect: Peter Smith ARN 7024

SMITH & TZANNES

24_041 DD-A-014

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APPENDIX B

CONSTRUCTION VEHICLE MANOEUVRING PATHS

Path prepared using
Autodesk Vehicle Tracking

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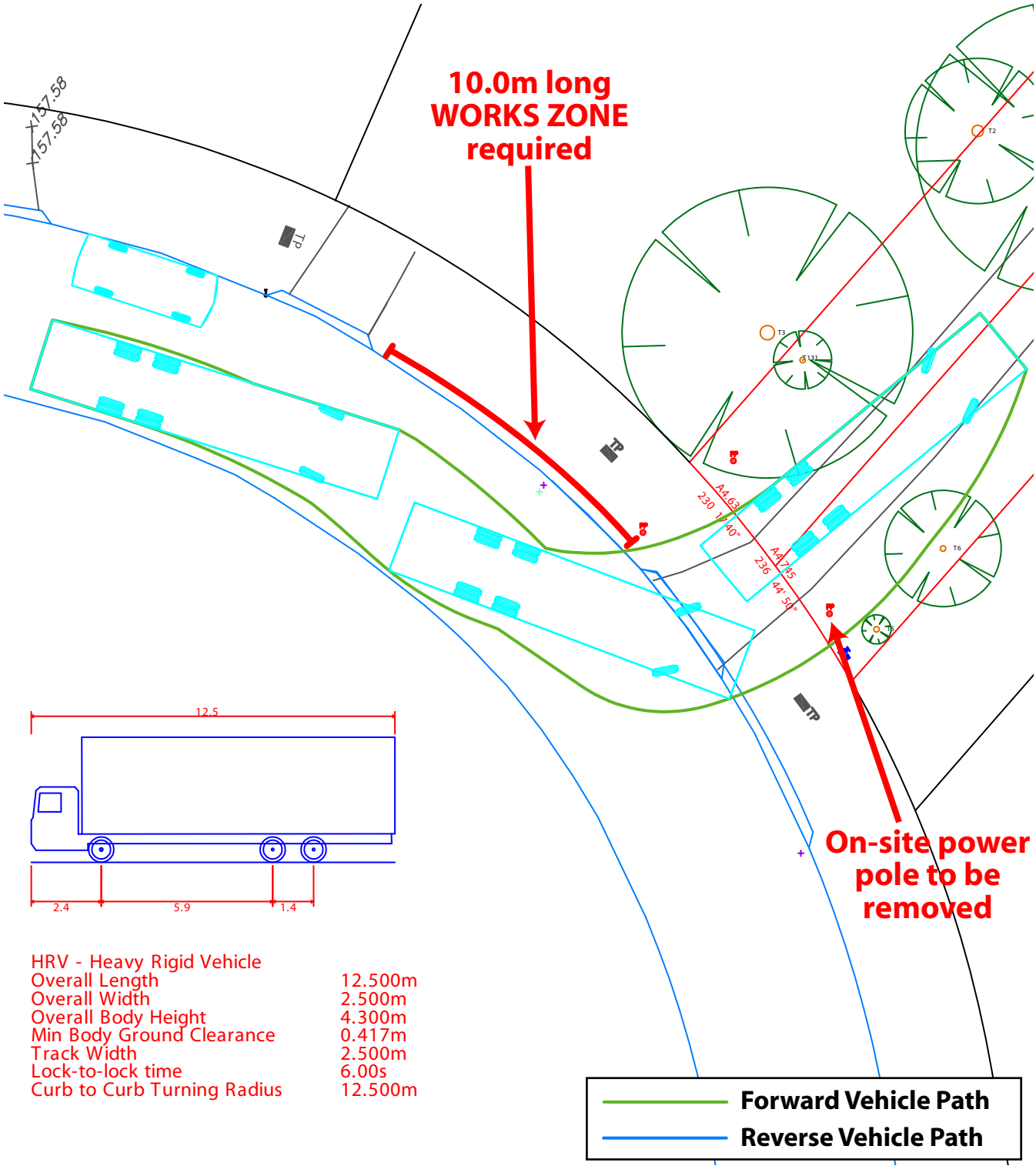

HRV - Heavy Rigid Vehicle

Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12.500m

Forward Vehicle Path
Reverse Vehicle Path

Manoeuvring Path of Australian Standard AS2890.2:2018 12.5m Heavy Rigid Vehicle (HRV) Entering Construction Site

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Path prepared using
Autodesk Vehicle Tracking

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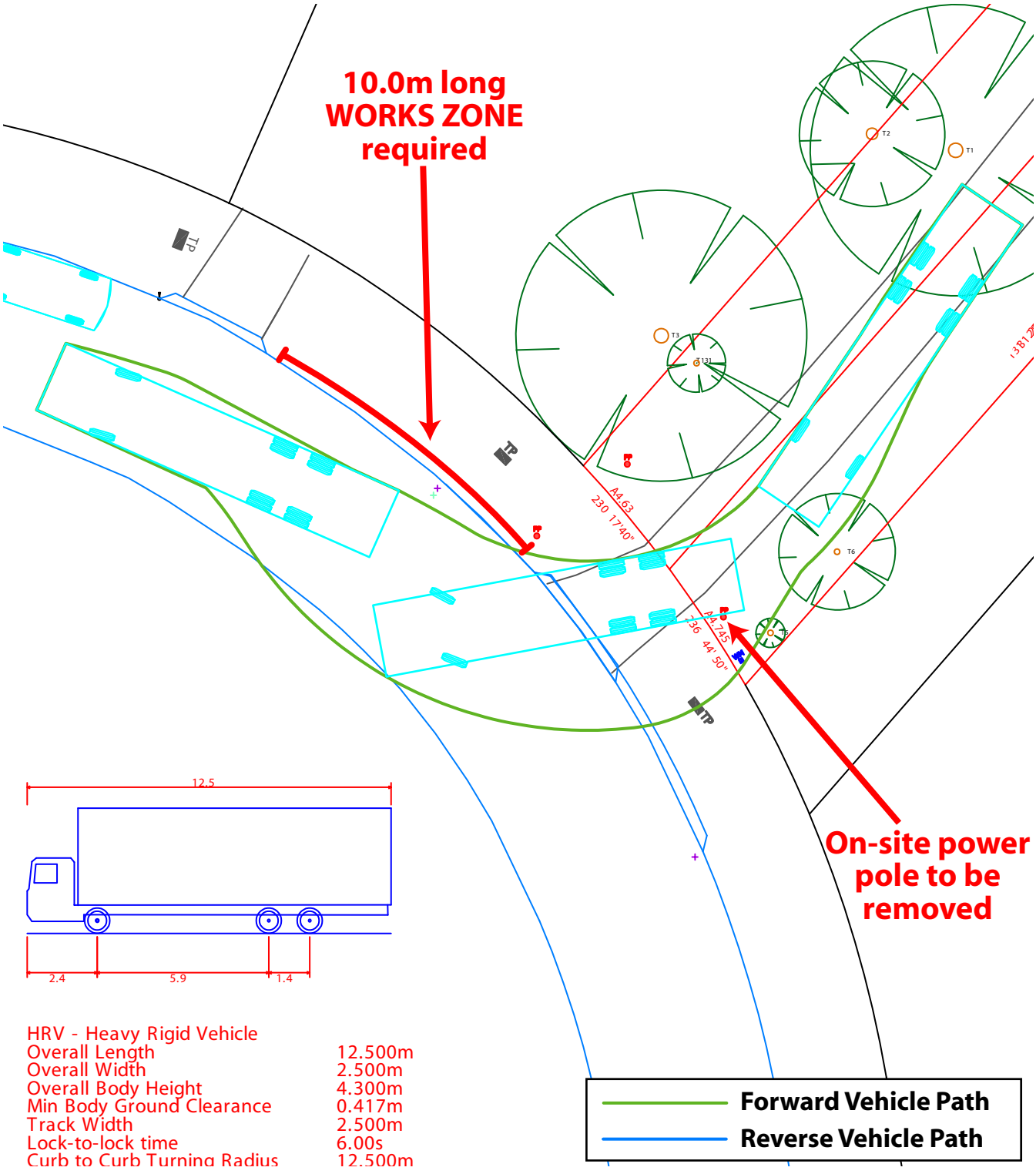
METRES
SCALE 1:200



HRV - Heavy Rigid Vehicle	
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Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12.500m

Manoeuvring Path of Australian Standard AS2890.2:2018 12.5m Heavy Rigid Vehicle (HRV) Exiting Construction Site

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Path prepared using
Autodesk Vehicle Tracking

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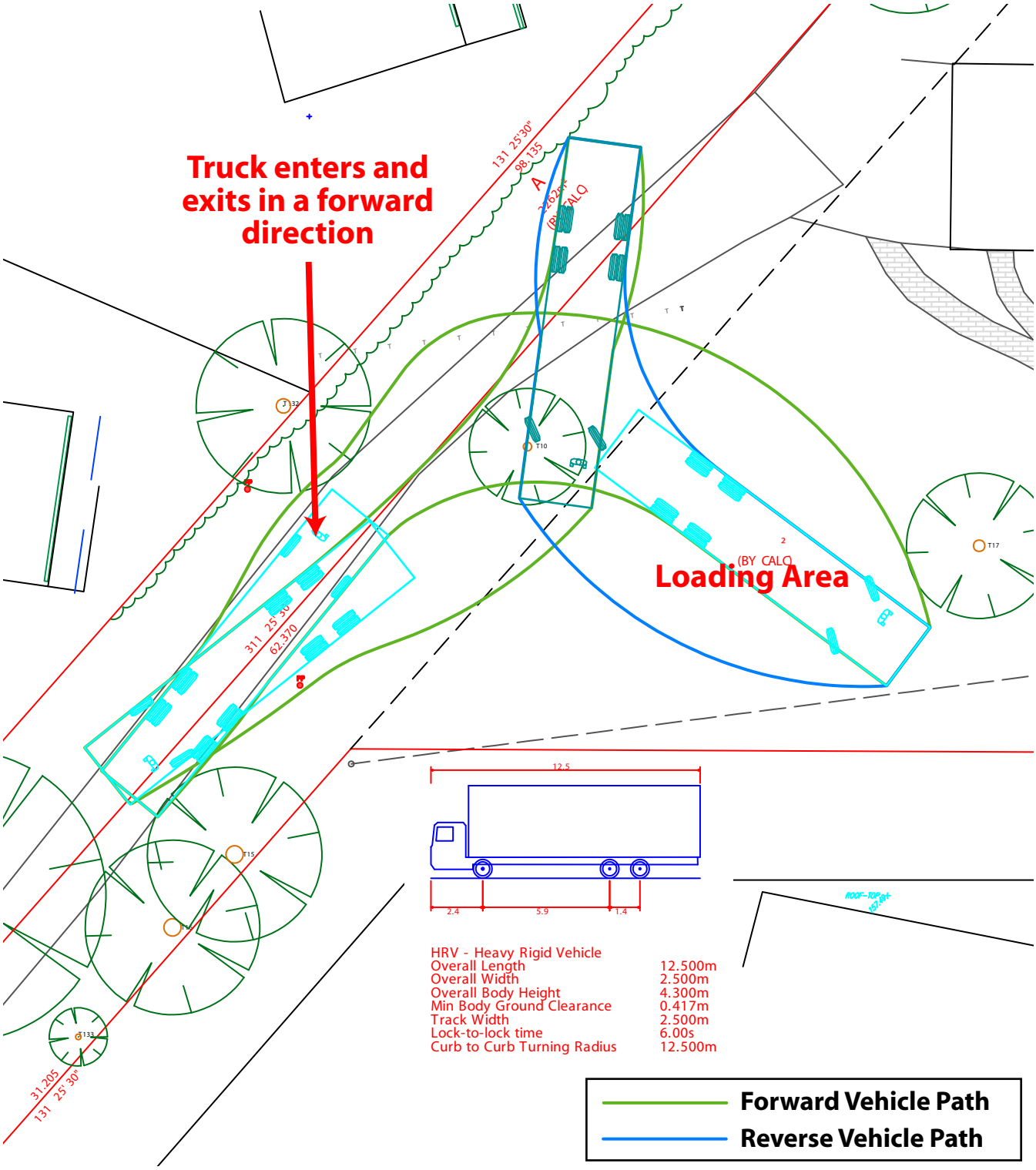
METRES
SCALE 1:200



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Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12.500m

Forward Vehicle Path
Reverse Vehicle Path

Manoeuvring path of Australian Standard AS2890.2:2018 12.5m Heavy Rigid Vehicle (HRV) accessing site during the demolition and excavation stage

Terraffic Pty Ltd
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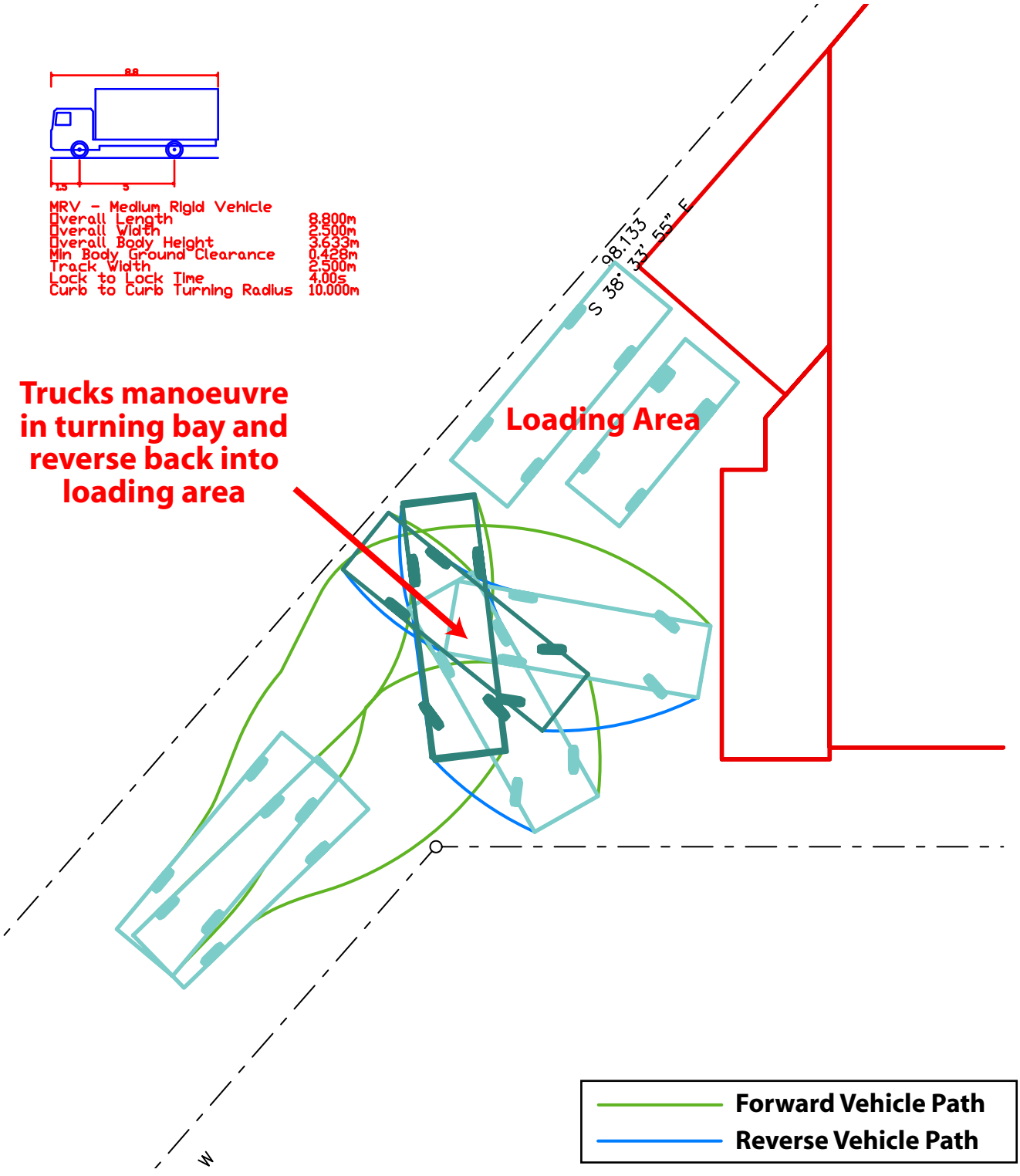
Path prepared using
Autodesk Vehicle Tracking

0 2 4 6 8 10 20
METRES
SCALE 1:200

MRV - Medium Rigid Vehicle

Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	3.633m
Min Body Ground Clearance	0.428m
Track Width	2.500m
Lock to Lock Time	4.00s
Curb to Curb Turning Radius	10.000m



Manoeuvring path of Australian Standard AS2890.2:2018 8.8m Medium Rigid Vehicle (MRV) accessing site during the Stage 2 Construction

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