Construction Traffic Management Plan

116-120 Frenchs Forest West and 11 Gladys Avenue, Frenchs Forest

Proposed Residential Development

GT23018

Prepared for

Young Assets Holding Pty Ltd

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1 Introduction

1.1 Background

This Construction Traffic Management Plan has been prepared to accompany a DA submission to the Northern Beaches Council for proposed residential development at 116-120 Frenchs Forest West and 11 Gladys Avenue, Frenchs Forest (Figure 1-1).

Figure 1-1 Site



Source: Mecone

The proposed development involves a multi-storey residential complex containing 127 apartments with an associated basement car park.

1.2 Scope of Works

The purpose of this report is to satisfy the Council's requirements to provide a Construction Traffic Management Plan outlining the relevant strategy and management of the affected road users.

1.3 Reference Documents

Reference has been made to the following documents when preparing this report:

Traffic Control at Worksites Technical Manual, TfNSW (Issue 6.1, 2022)



2 Existing Conditions

2.1 Site and Surrounding Context

The development site (Figure 2-1) is a consolidation of Lots 1, 2, 14 and 24 in DP 213608 and DP 25713 located at 116-120 Frenchs Forest West and 11 Gladys Avenue, Frenchs Forest. The site occupies an irregular-shaped area of 5,740m² and is bounded by Frenchs Forest Road West to the south and Gladys Avenue to the north.

Figure 2-1 Site Context



Source: Metromap (modified by Genesis Traffic)

Four (4) residential dwellings occupy the site at present, with vehicle accesses located at French Forest Road West and Gladys Avenue. Surrounding the site are predominantly residential developments. The Northern Beaches Hospital and The Forest High School are on the southern side of Frenchs Forest Road.

The subject site is located within the Frenchs Forest Town Centre - a new town centre accommodating multiple land uses including retail, medium and high-density residential blocks, and commercial zonings.



2.2 Road Network

The road network (Figure 2-2) serving the site area comprises:

Figure 2-2 Road Network



Source: TfNSW (modified by Genesis Traffic)

- Warringah Road an east-west Classified Main Road (MR 328) connecting Pittwater Road in the east and Babbage Road in the west. It is subject to a 70km/h speed limit and generally consists of 3 traffic lanes in either direction on a divided carriageway. On-street parking is not permitted along the outer lanes in both directions.
- Frenchs Forest Road West an east-west local road between Warringah Road in the east and Naree Road in the west. It is subject to a 50km/h speed limit near the site. At the intersection of Frenchs Forest Road and Gladys Avenue, Frenchs Forest Road consists of 2 eastbound lanes and 3 westbound lanes. The outer lanes operate as Bus Lanes.
- Gladys Avenue a deadend cul-de-sac and a local road that connects to Frenchs Forest Road. It is subject
 to a 50km/h speed limit and permits a single traffic lane in either direction with a carriageway width of
 7m. On-street parking is permitted along the western side of the street.

2.3 Traffic Controls

The traffic controls on the road system in the vicinity of the site comprise:

• the traffic control signal along Frenchs Forest Road (including the intersection at Gladys Avenue and Frenchs Forest Road)



- the Bus Lane at French Forest Road West between Wakehurst Parkway and Gladys Avenue
- the 40km/h School Zone speed restriction along Frenchs Forest Road between Gladys Avenue and Bluegum Crescent

2.4 Public Transport Services

The nearest bus stop (Frenchs Forest Road opposite Northern Beaches Hospital) is located at the site frontage, providing several bus services in the locality. These bus services are tabulated in Table 2-1.

Table 2-1 Bus Services Provision

Bus Line	Bus Route	
141	Austlink to Manly via Frenchs Forest & Seaforth	
155	Bayview Garden Village to Narrabeen and Frenchs Forest	
160X	Dee Why to Chatswood via Frenchs Forest (Express Service)	
166	Frenchs Forest to Manly via Dee Why Beach	
193	Warringah Mall to Austlink via Frenchs Forest	
280	Warringah Mall to Chatswood	

2.5 Existing Traffic Conditions

Observations in the site's locality reveal some minor delays on Frenchs Forest Road during peak commuting periods however the intersection with Gladys Avenue operates satisfactorily. The arterial flow on Frenchs Forest Road West is managed by the SCATS coordinated signals along Frenchs Forest Road.

Gladys Avenue was observed to be generally free-flowing with no apparent capacity constraint. Nevertheless, it is observed that on-street parking demand is high on Gladys Avenue and that unauthorised parking occurs on the eastern side of the street.



3 Approved Development

The approved development scheme involves demolishing the existing buildings and outbuildings on the site, undertake excavation to provide three (3) level basement car park and a level building platform on the site, on which a building will be constructed comprising:

- A total of 127 apartments in the following composition:
 - o 9 x one-bedroom apartments
 - o 85 x two-bedroom apartments
 - o 33 x three-bedroom apartments
- Three (3) basement levels will be provided to accommodate car parking spaces including accessible parking spaces in the following composition:
 - o 139 x Residents
 - 13 x Visitors
 - o 17 x Car Share
 - o 3 x Electric Vehicle Charging Space
 - o 3 x Car Wash Bay
 - o 13 x accessible
 - o 64 x motorcycle
 - o 254 x bicycle parking (residents)
 - 32 x bicycle parking (visitors)

Vehicle access will be provided at Gladys Avenue.



4 Construction Process

4.1 Construction Program

Table 4-1 summarises a projected works program (weather permitting):

Table 4-1 Works Program

Phase	Estimated Period
Site Establishment	2 weeks
Demolition	4 weeks
Earthworks	20 weeks
Construction/Concrete Pour	40 weeks
Fitout	20 weeks

4.2 Site Establishment

The nominated building team will establish A Class Fencing along the site perimeter and Construction Zone on Gladys Avenue, Frenchs Forest Road West and install site access gates on Gladys Avenue. Adequate site identification signage will be provided on both street frontages.

The total number of workers involved in this process will be 6-8 workers per day at peak. The largest delivery truck will be an 8.8m Medium Rigid Vehicle (MRV). It will enter the site forwards via Gladys Avenue, unload/load materials, and depart in a forward manner onto Gladys Avenue.

4.3 Demolition

The demolition of the existing building elements follows the erection of A-Class perimeter fence.

The process is expected to take 4 weeks to complete. During this period, the number of workers on the site at any one time will be 6-10 workers.

The transport of demolition materials will be undertaken using a 12.5m Heavy Rigid Vehicle (HRV). The HRV will undertake one reverse movement to access the site to load/unload materials and depart the site in a forward manner. The swept path diagrams in **Attachment 4** demonstrate the associated truck movements. It is anticipated that there will be an average of 4 visitations per day.

A tool drop-off and storage facility will be established on site to allow tradespersons to drop-off and store their tools and machinery, enabling them to use public transport to travel to/ from the site on a daily basis. Workers will also be informed of the appropriate tool/ equipment drop-off and storage arrangement made within site sheds and amenities provided on site. Bus schedules will be provided to all workers during the site induction to promote alternative modes of transport.



4.4 Excavation/Earthworks

The earthworks will commence once the site establishment process has been completed. The number ofworkers onsite will be 8-10 persons. The site will be levelled, and all excavated materials will be transported from the site using 12.5m HRV in a similar manner to the demolition process. The excavation process anticipates 3-5 trucks a day with an expected duration of 20 weeks.

Construction vehicles associated with the excavation process will continue to utilise the existing driveway to access the site. Trucks will enter in forward manner into the site, and depart forwards. Refer to sheet 03 of **Attachment 3**.

4.5 Construction

The construction phase will be the process of the longest duration in the entire program (40 weeks), and at peak activity involves in the order of up to some 20-30 workers on the site any one time. The largest truck size during this phase will be a 12.5m Heavy Rigid Vehicle (HRV). Whilst the activity on the site will be more intense during this period, heavy vehicle movements will reduce to an average of around 6-8 visitations per day with more during concrete pours (expecting in the order of 15 trips a day).

Subject to the car park being safely accessible at this stage, workers will be permitted to park in the on-site car park.

All necessary oversized mobile crane/truck access will be subject to a separate permit issued by the Council before the planned event.

4.6 Fitout

The fitout process is the last phase of the works and will take up to 20 weeks to complete. The fitout process will involve up to 15 workers on-site at any one time - predominantly traderpersons whose utility vehicles/vans can park in the car park at this stage.

Truck visitations will be minor at this stage, generally involving white goods deliveries. These are anticipated to be 4-6 small trucks per week. Deliveries of goods during this period will generally involve small to medium rigid trucks of up to 8.8m long and undertake one reverse movement to stand in the site and departs forwards. Trucks and utility vans will enter the site forwards via Gladys Street and utility vans may use the completed basement carpark during the fitout process.

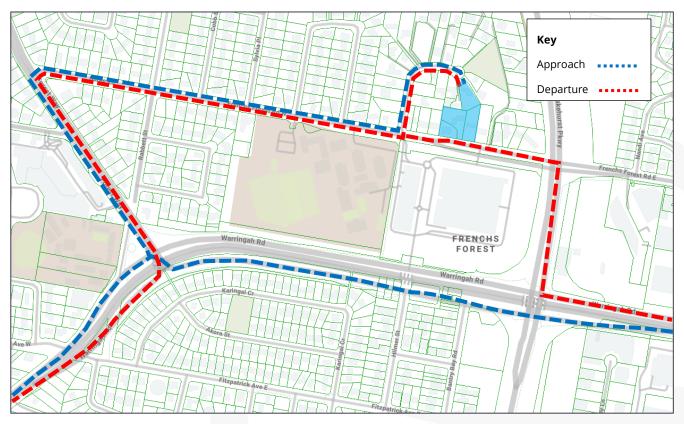


5 Construction Traffic Management

5.1 Nominated Truck Routes

Truck movements associated with the construction processes will access the site via the nominal routes illustrated in Figure 5-1. No queuing of heavy vehicles is to occur on the surrounding streets unless previously approved by the Council.

Figure 5-1 Truck Routes



Source: Mecone (modified by Genesis Traffic)

5.2 Construction Vehicle Program

Table 5-1 summarises the envisaged truck visitation levels for each work phase:

Table 5-1 Truck Movements

Phase	Estimated Trips per Day
Site Establishment	1-2 trips
Demolition	4 per day (average)
Earthworks	3-5 per day (average)
Construction/Concrete Pour	10-15 per day (average)



Fitout	2-3 per day (average)
Treat	, , , , , , , , , , , , , , , , , , , ,

5.3 Construction Hours

Table 5-2 summarises the approved construction hours:

Table 5-2 Permitted Work Hours

Phase	Permitted Work Hours
Mondays to Fridays	8.00am to 5.00pm
Saturdays	8.00am to 1.00pm
Sundays	No Work
Public Holidays	No Work

5.4 Fencing/Perimeter Separation

Class A fencing will be erected along the construction site perimeter to cordon off the Construction Zone from pedestrian movements along Gladys Avenue, Frenchs Forest Road West and neighbouring properties where applicable.

5.5 Site Contact

The contact person who is to have authority without reference to other persons to comply with instructions issued by the Council's Traffic Engineer or the Police is as follows:

Name: To be appointed Contact Number: Email Address:

5.6 Works Zone

A Works Zone will not be necessary throughout the construction. Loading and unloading will be undertaken on site.

5.7 Site Induction

All workers and visitors employed on the site by the appointed contractor (including sub-contractors) will be required to undergo a formal 'site induction' process and all the inductions will be performed specifically to each trade according to Workcover OH & S requirements.

The induction will include details of approved access routes to and from the construction site for site staff and delivery vehicles, parking arrangements, as well as standard environmental, WHS, driver protocols and emergency procedures. The agreed work hours must be included as part of this induction.



5.8 Traffic Guidance Scheme

The TGS sets out a suite of site traffic management principles in accordance with the TfNSW Traffic Control at Work Sites Technical Manual Version 6.1 dated 28 February 2022. The control of traffic at work sites must be undertaken with reference to Workcover requirements and the contractor's Constructions Workplace Health and Safety Manuals.

The TGS have been prepared by a Certified Traffic Controller (under RMS regulations) in accordance with Australian Standards 1742.3. are reproduced in **Attachment 5**.

5.9 Other Construction Management Principles

- 1. Removed or damaged parking signs shall be replaced immediately.
- 2. Damaged trees shall be repaired/replaced to the satisfaction of the Council.
- 3. Traffic and pedestrian control shall be in accordance with the TfNSW Traffic Control at Work Sites Technical Manual and Australian Standard AS1742.3 Manual of uniform traffic control devices Part 3 Traffic control for works on roads.
- 4. Reservation of on-street parking shall not occur without prior Council approval. All on-street parking spaces outside the site are to remain available for the use by the general public during the approved work hours unless Council signage is installed to the contrary.
- 5. Barricades, delineators (including bollards, witches hats, barrier boards etc.) shall not be placed in the kerbside parking lane outside or adjacent to the site to reserve on street parking spaces without Council's prior approval.
- 6. A separate application to and approval from Council will be submitted for occupation of any road related area (traffic and parking lanes, verge, footpath etc.).



6 Project Impact

6.1 Impact on Public Transport Services

The nominated heavy vehicle haulage routes will largely be limited to arterial and sub- arterial roads which are designed to accommodate heavy vehicle movements. As such, there will be no adverse impact on existing public transport services.

While the truck route will overlap with the bus routes during the construction period, traffic generation of no more than 15 vehicle visitations per day is expected to have no material effect on the existing bus service.

6.2 Impact on Pedestrians

During construction, pedestrian movements along the footpath of the site frontage are to operate and be maintained as existing at all times unless prior approved by Council. All construction-related traffic movements along the frontage will occur under the supervision of accredited traffic controllers, with trucks escorted between the site access and associated frontage.

6.3 Impact on Emergency Vehicle Access

A site personnel will be on-site regularly with contact details prominently displayed on the site frontage (fencing). The construction activities must not affect access to the site and neighbouring sites by emergency vehicles. There will be no adverse impacts on emergency vehicle access to the site or other neighbouring properties due to the proposed activities.

6.4 Road Serviceability

The nominated contractor will be responsible for ensuring that the road pavement, kerb, and gutter along each road frontage shall remain in clean and serviceable states during the construction at no cost to the Council.

6.5 Spoil Management

Where essential, a wheel wash station will be positioned at the entry/exit points to ensure that soil/excavated material is not transported on wheels or tracks of vehicles or plant and deposited on surrounding roadways. All arriving and departing construction vehicles must have their loads covered during demolition and excavation.



6.6 Cranage and Materials Handling

All materials will be loaded, unloaded and stored within the site boundary at all times. No materials are to be stored outside the site boundary at any time.

Mobile cranes will be used during the course of the program and specific areas will be available for loading/unloading, materials handling and storage in relation to the crane.

6.7 Public Notification & Communication

The nominated contractor shall prepare notification letters, under the approval of Council, that would be delivered to nearby properties, to advise of the construction works and timing thereof. A minimum notice period of 7 days shall be applicable for all external communications.

The nominated contractor shall also engage with the surrounding building teams at the time of construction to establish the extent of truck delivery movements with an aim to minimise overlapping movements on the same routes.

6.8 Site Setout

The principal elements of the traffic management plan are indicated in Figure 6-1.

Figure 6-1 Site Setup

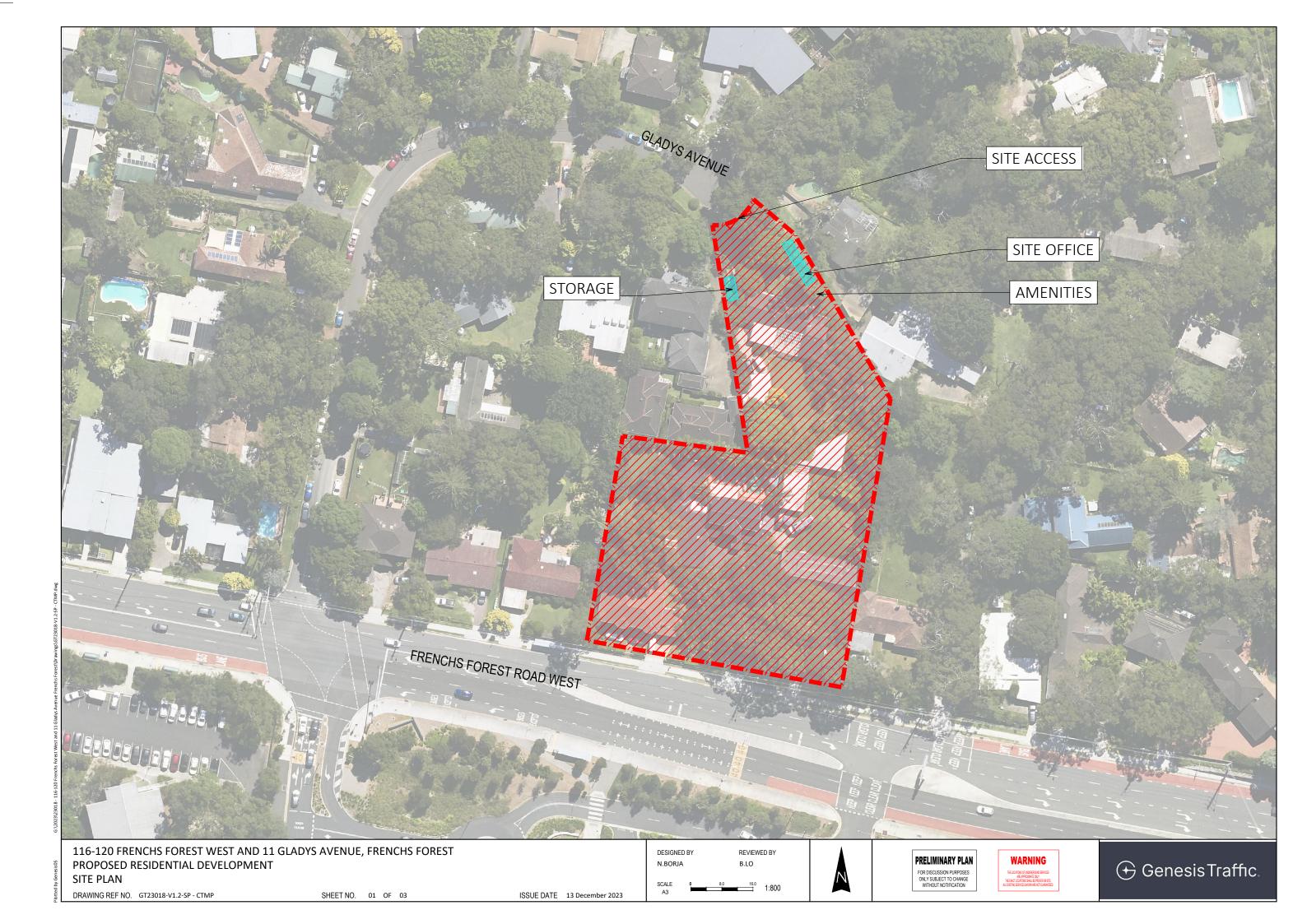


Source: Metromap (modified by Genesis Traffic)



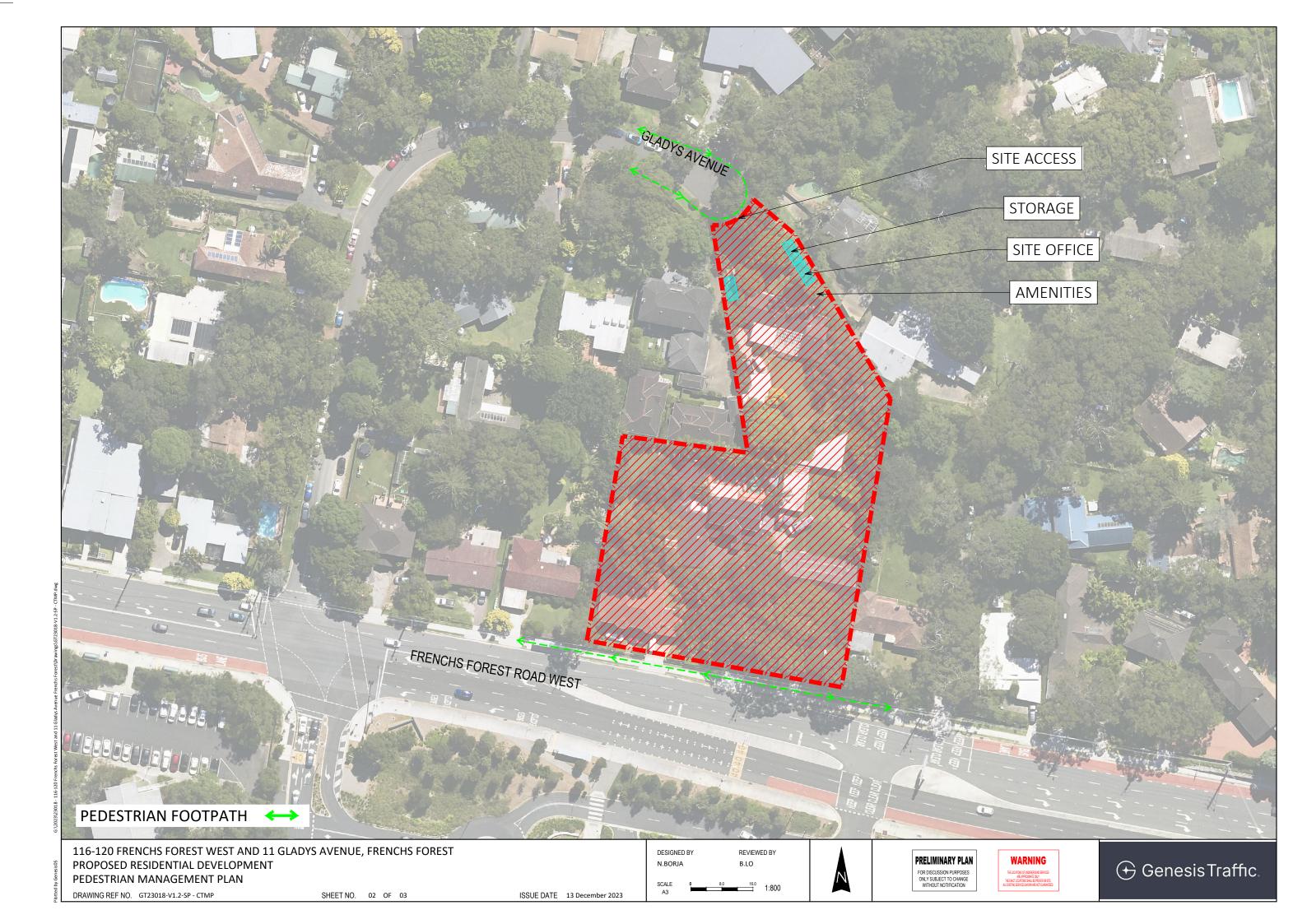
Site Plans





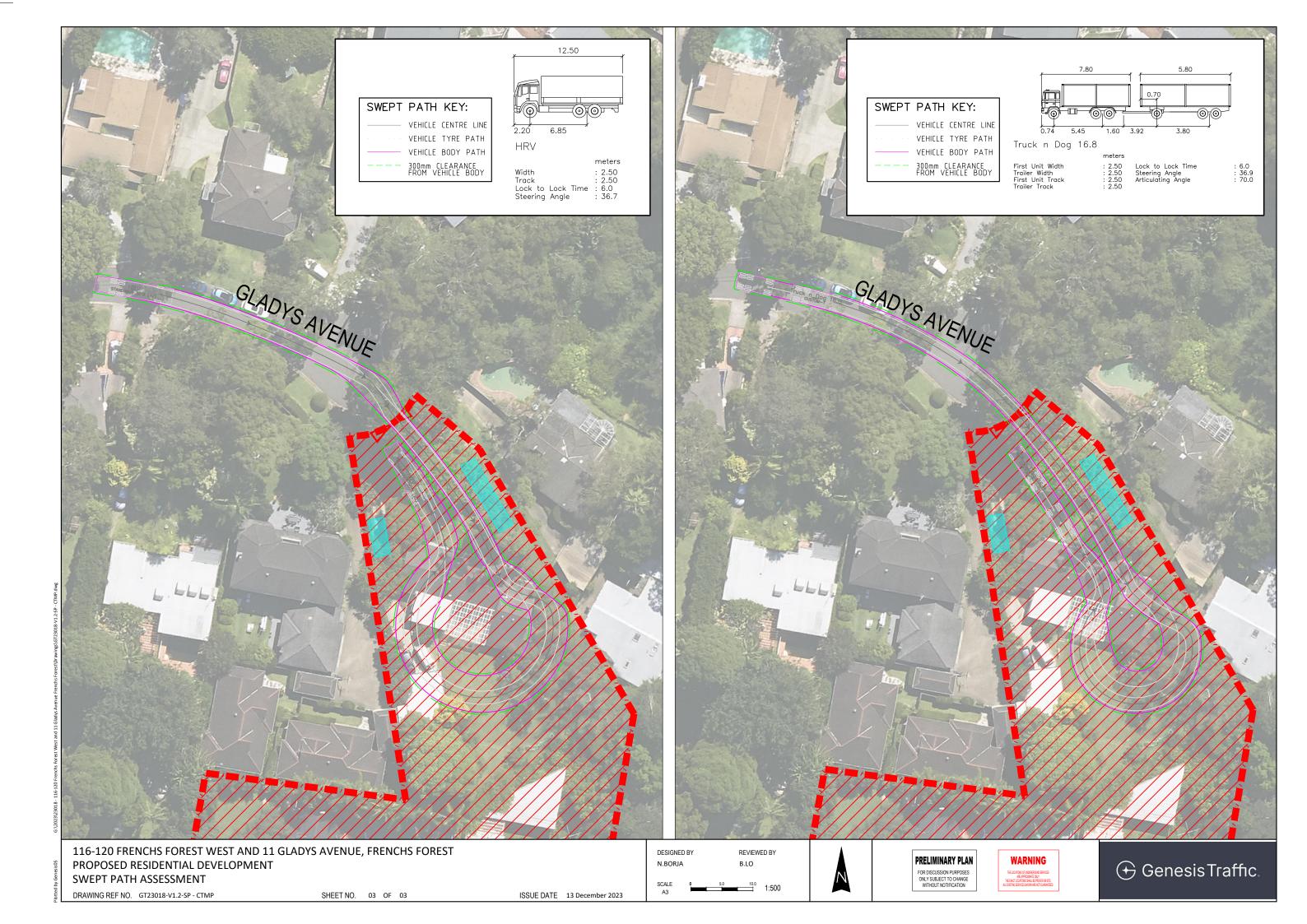


Pedestrian Management Plan





Turning Path Assessment





Traffic Guidance Schemes

