

## 4.0 Overview of Construction Activities

### 4.1 Scope of Works

The John Palmer Public School scope of works has 2 stages that include, but is not limited to, the following:

- Stage 1 – Construction of a new three-storey building with new learning spaces, staff facilities and specialist teaching spaces, in addition to the construction of a new single-storey performance arts pavilion. Including site establishment, services diversions and earthworks, commissioning and handover with landscaping.
- Stage 2 – Refurbishment of wood/metal and food tech units, provision of an additional support learning space, ICT workshops, a new administration and staff facilities, end of trip facilities, upgrades to the existing library building and ancillary utility infrastructure, commissioning and handover.

### 4.2 Site Layout and Access

The construction vehicles would access the site via Pebble Crescent. RCC has proposed to provide a circulation area for construction trucks within the site zone located to the north of the site. Figure 4.1 shows an overview of the proposed site layout plan. Based on the site layout shown below, the construction vehicles will enter and exit the site from/to south access at Pebble Crescent. A detailed site layout plan is available in Appendix A of this report.

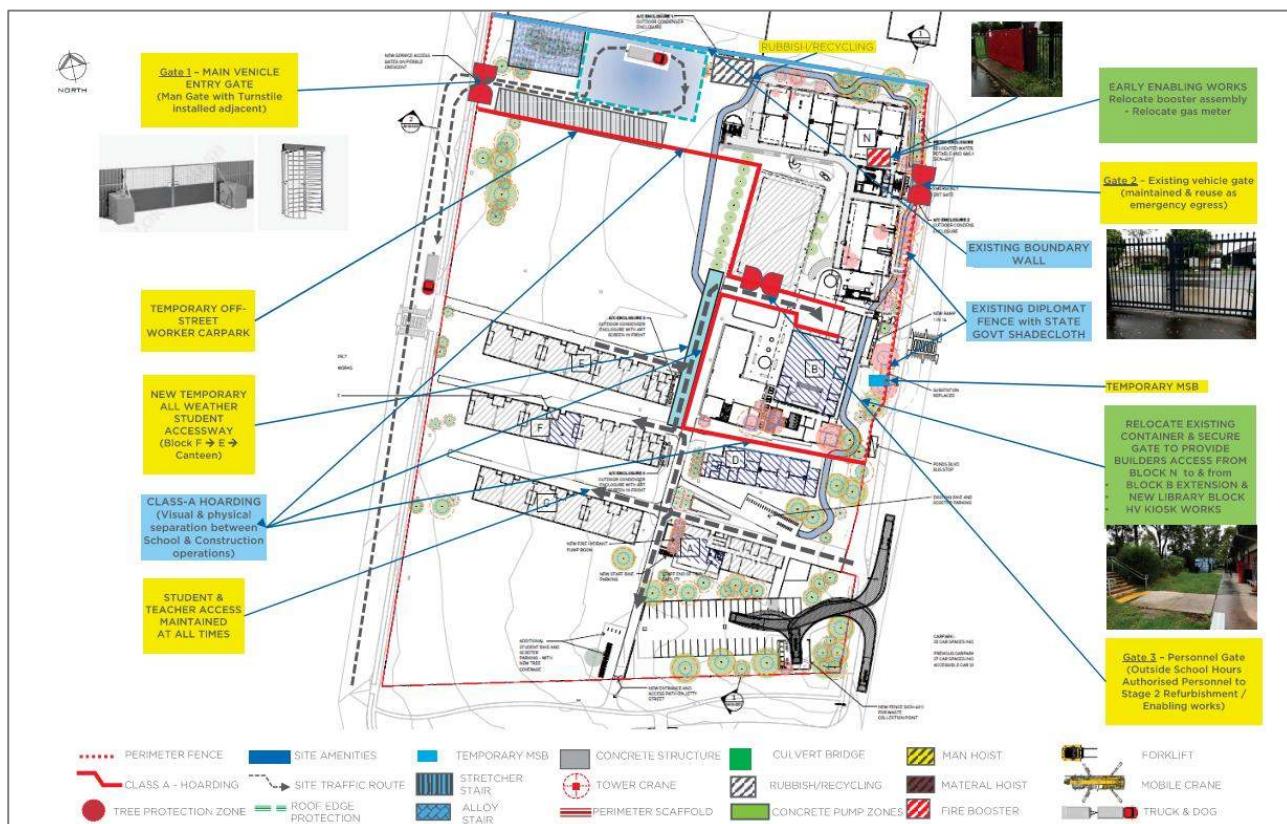


Figure 4.1: Site layout

Swept path analysis for movements to the site are provided at Appendix C.

## 4.3 Construction Stages

The proposed construction works would be completed in approximately 12 months, with an anticipated start in June 2022 and completion by May 2023. It is anticipated that the project will be divided into two stages, the anticipated duration of each stage is provided in Table 4.1. The below outlined construction stages may overlap each other during the course of construction.

**Table 4.1: Construction staging**

Work Stages	Description of Works	Duration (no. of days)	Start	Finish
1	<b>Stage 1</b>			
	Library and Hall	140	01/06/2022	15/12/2022
	Building F	26	01/06/2022	29/10/2022
2	<b>Stage 2</b>			
	New Building	239	01/06/2022	25/05/2023
	Building A	74	23/01/2023	16/05/2023
	Buidling D	69	23/01/2023	10/05/2023

Work Stages	Description of Works	Start	Finish
<b>Stage 1 ( Library, Hall &amp; Building F)</b>			
1	Site Establishment	30/05/2022	16/06/2022
2	Demoliton Works	17/06/2022	29/06/2022
3	Bulk Earthworks & Piling	30/06/2022	06/07/2022
4	Sub-structure & Detail Excavation	30/06/2022	01/08/2022
5	Structure	02/08/2022	24/08/2022
6	Envelope (Roof & Façade)	13/08/2022	12/10/2022
7	Internal Finishes & Services	25/08/2022	26/11/2022
8	External Works /Landscape	7/10/2022	23/11/2022
<b>Stage 2 ( New Building, Building A&amp; D)</b>			
1	Site Establishment	30/05/2022	16/06/2022
2	Demoliton Works	17/06/2022	23/06/2022
3	Bulk Earthworks & Piling	24/06/2022	17/08/2022
4	Sub-structure & Detail Excavation	12/08/2022	26/09/2022

5	Structure	20/09/2022	11/11/2022
6	Envelope (Roof & Façade)	21/10/2022	14/01/2023
7	Internal Finishes & Services	21/10/2022	18/05/2023
8	External Works /Landscape	23/01/2023	21/04/2023

#### 4.4 Hours of Operation

Construction activities are only to be carried out during the following approved hours of work:

- Monday to Friday 07:00 AM to 06:00 PM
- Saturday 08:00 AM to 01:00 PM
- No work on Sundays and Public Holidays

RCC will be responsible for instructing and controlling all sub-contractors regarding the hours of work. Any works outside the proposed construction hours will be subject to specific prior approval from the appropriate authorities. Such work may include delivery of cranes and oversized equipment required to the site.

#### 4.5 Construction Workforce

The construction workforce would vary based on work schedule requirements. The anticipated workforce would remain at around 50 workers, with the peak anticipated workforce during Stage 4 and 5 of the construction works.

## 5.0 Construction Traffic Management

### 5.1 Construction Traffic Volumes

Construction traffic will primarily include trucks up to 20 metres long semi-trailer trucks for excavation, for the delivery of large size construction material and civil works, with occasional use of 50T mobile crane up to 12.5m for lifting works. Based on the extent of the project and proposed construction stages, Table 5.1 outlines the anticipated number of construction trucks for each stage of the project.

**Table 5.1: Construction traffic volumes**

Work Stages	Description of Works	Estimated construction vehicles	
		Average Movements (one-way) Per Day	Vehicles per hour <sup>1</sup> (maximum)
1	Site Establishment	6	1
2	Demolition Works	6	1
3	Bulk Earthworks & Piling	6	1
4	Sub-structure & Detail Excavation	6	1
5	Structure	6	1
6	Envelope (Roof & Façade)	6	1
7	Internal Finishes & Services	6	1
8	External Works /Landscape	6	1

Vehicle volumes for a development of this scale are likely to be on the order of no more than 6 vehicles per day (equivalent to 1-2 vehicles per hour). At these volumes, the local road network could easily accommodate the proposed standard construction vehicle movements subject to appropriate management.

Construction vehicle management will be subject to local traffic control by qualified traffic controllers.

Where possible, concrete pours and deliveries will occur outside of the road network and during school peak periods to minimise traffic impact and associated road network.

Any oversize vehicle needs to approach the site via surrounding roads, which would require Council's approval. RCC would be responsible for submitting an application for an Over Size Vehicle Access Permit and obtaining approval prior to such traffic movement.

### 5.2 Construction Vehicle Routes

Generally, construction vehicles will approach the site from a wide range of locations throughout the greater Sydney area. However, all construction vehicles will use the State, and Regional road network, as well as the TfNSW approved heavy vehicle route network where practicable. The recommended construction vehicle routes are detailed below and shown in Figure 5.1.

<sup>1</sup> Assuming trucks will arrive and depart between eight hours of total daily operation.

Truck drivers will be advised of the designated truck routes to and from the site, as shown in Figure 5.1. No queuing of construction vehicles will be permitted on the surrounding road network, with call-up procedures to be put in place to manage arrivals.

As detailed in Section 0, access will be to/from Pebble Crescent on the eastern boundary of the site.

The nearest state roads are Schofields Road to the north and Sunnyholt Road to the south.

To access the site from Schofields Road, the following vehicle routes would likely be utilised:

- From Schofields Road, turn left to The Ponds Boulevard
- From The Ponds Boulevard, turn right towards Jetty Street
- From Jetty Street turn right to Pebble Crescent
- Then turn right to the site

To access the site from Sunnyholt Road, the following vehicle routes would likely be utilised:

- From Sunnyholt Road, turn to Stanhope Parkway
- From Stanhope Parkway, turn right to The Ponds Boulevard
- Turn left to Jetty Street
- Right turn to Pebble Crescent
- Then turn right to the site

The median island along Jetty Street-Pebble Crescent intersection, restricts construction vehicles to turn left from Pebble Crescent to Jetty street. Therefore, departing vehicles from the site should turn right at Pebble Crescent then two left turns towards Jetty Street. From Jetty Street, vehicles could use identical routes to and from the site.



**Figure 5.1: Construction vehicle routes**

The state road network is constructed to a high standard and would comfortably accommodate all construction vehicles. Similarly, Stanhope Parkway is a sub-arterial road which will also accommodate these vehicles.

On the local road network along The Ponds Boulevard, two roundabouts at Greenview Parade and Spearmint Street appear to be sized for local traffic only and should not be used for U-turns by construction vehicles, particularly large rigid vehicles or semi-trailers. The anticipated construction vehicle routes would use these roundabouts for through traffic only, which would not be an area of concern given the available geometry.

When accessing and using Jetty Street, construction vehicles will need to be aware of local traffic (which may include students walking). Additionally, the pedestrian refuge island near the intersection of Pebble Crescent may restrict the movements of large vehicles. As part of the detailed Construction Traffic Management Plan (to be prepared by the appointed contractor), swept path analysis for this area should be undertaken and modifications or treatments may be required. Detailed measures would be refined in consultation with Council prior to any implementation.

### **5.3 Construction Traffic Management**

Truck loading and unloading will occur wholly within the site compound.

Traffic controllers will be implemented at the site entries as required to ensure safe and efficient movement of vehicles, pedestrians and the safety of workers within the site.

All deliveries are to be made within the approved work hours. Truck movements to and from the site will be scheduled outside of network peak hours to reduce impacts to the local road network, which includes busy town-centre areas and high pedestrian volumes.

All construction vehicles enter and leave the site in a forward direction unless in specific exceptional circumstances under the supervision of accredited traffic controller/s.

During days of high estimated vehicle movements, communication between the site, vehicles will be maintained to stagger the arrival of vehicles, for them to be accommodated within the worksite and to minimise traffic disruptions. This will not impact the surrounding roads as activities will be managed within the site boundary with trucks entering and exiting in a forward direction.

A Traffic Control Plan showing appropriate warning signages addressing all the construction stages is provided in the **Appendix B**.

### **5.4 Work Zones**

As discussed above, all the loading/unloading activities will occur within the site. Therefore, the proposed construction works do not require an on-street works zone for such activities.

### **5.5 Driver Conduct and Construction Worker Transport**

The following Driver Code of Conduct and Construction Worker Transportation Strategy have been prepared to address Condition B23 and B25 respectively. These shall be distributed to site workers and drivers as required.

The objectives of the Driver Code of Conduct are to minimise the impacts on the road network, to minimise conflicts with other road users, to minimise road traffic noise; and ensure drivers use the specified routes for approaching and exiting the site.

The objective of the Construction Worker Transport Strategy is to minimise demand for parking in nearby public and residential streets or public parking facilities. Temporary on-site parking may be available within the construction site, however this will be subject to construction phasing and site compound arrangements, and workers are therefore advised to find alternative means of transport.

# Driver Code of Conduct

## Minimise Impacts to Road Network

To minimise the impacts of earthworks and construction on the local and regional road network:

- Always obey all applicable road rules and laws
- Drivers to obey road speed limit and reduce the speed while approaching nearby intersections. Heavy braking can damage the roads.
- Drivers should avoid local, narrow roadways where possible
- Drivers should follow specified truck routes (see Figure 5.1 and enquire if unsure)

## Minimise Conflicts with other Road Users

To minimise conflicts with other road users including pedestrians, cyclists or private vehicle drivers:

- Drivers should be mindful of pedestrians and cyclists along all haulage routes
- Drivers should not obstruct access to any public roads, residential driveways, or pedestrian footpaths
- All loading and unloading will occur wholly within the site
- Drivers should exit the site in a forward motion and check their left and right twice while exiting to ensure the safety of pedestrians, cyclists and other vehicles is maintained
- Upon exiting, drivers must wait for a suitable gap in traffic. The Roads Act does not give any special treatment to trucks exiting a construction site, but the vehicles on the road have the right-of-way
- Drivers should obey the traffic controllers while entering and exiting the site
- Drivers should be aware of site's surrounding conditions including speed limits, other traffic controls and pedestrian routes. This information can be presented to drivers during site inductions
- Drivers should be aware that construction vehicle movements are to be scheduled outside of peak traffic periods where possible.

## Minimise Road Traffic Noise

To minimise the noise impacts on the community resulting from driving heavy vehicles:

- Drivers should reduce speed to reduce instances and severity of compression braking, including when approaching speed humps or raised zebra crossings
- Limit any excessive or unnecessary use of horns, in particular outside of working hours

## Environmental Control

For safe environmental management:

- Construction vehicle wheels shall be cleaned prior to leaving the site to prevent transport of dust, dirt, or gravel from the worksite onto the road network or pedestrian footpaths.
- All loads are to be sealed or covered when entering or leaving the site. Loading of disposable material into vehicles leaving the site is to occur only within site.

# Construction Worker Transportation Strategy

## **Preferred Travel Modes**

All workers should be aware that car parking may not be available on the construction site and should consider alternative means of transport to/from the site. Where possible based on your personal situation, the following travel modes are recommended in order of priority:

- Walking
- Cycling
- Public transport
- Carpooling (including rideshare)
- Driving

## **Bus Options**

If you can make your way to Schofields or Blacktown train stations, bus route 734 will connect you to site in just 10 minutes to/from Schofields or 20 minutes to/from Blacktown. The following is a brief summary of some departure and arrival times for current bus services, and you can find at more at <https://transportnsw.info/>. Please note that all bus times listed below may be subject to change, and you should check the latest data.

- **Morning arrivals:**
  - Depart Blacktown 6:38am, arrive 6:57am; dep 7:00am arr 7:23am; dep 7:40am arr 8:03am
  - Depart Schofields 6:54am, arrive 7:03am; dep 7:35am arr 7:44am; dep 8:01am arr 8:10am
- **Afternoon departures:**
  - Depart 5:14pm, arrive Schofields 5:25pm; dep 5:44pm arr 5:53pm; dep 6:08pm arr 6:17pm
  - Depart 5:25pm, arrive Blacktown 5:52pm; dep 5:55pm arr 6:20pm, dep 6:22pm arr 6:47pm

## **The Ponds On Demand Service**

The Ponds On Demand service, operated by Cooee Busways, connects customers in Schofields, The Ponds and Kellyville Ridge to Tallawong, Rouse Hill and Schofields stations and The Ponds and Stanhope Village shopping centres.

If you live in the local area, or can make your way to nearby stations at Rouse Hill (metro) or Schofields (train) you may be able to utilise the On Demand service to travel to and from The Ponds Shopping Centre, adjacent to our site.

Find out more: <https://transportnsw.info/travel-info/ways-to-get-around/on-demand/ponds-on-demand-service>

## **On-Street Car Parking**

If you do choose to drive to site, please be aware of the following:

- Remember to investigate carpooling options that may be available with other workers
- Where possible, try to park in locations that are not along residential frontages, such as outside Second Ponds Creek and Plaza Park to the west of the site, to reduce impact to our neighbours.
- Please do not park within 100 metres of the school boundary, to ensure parking availability and reduce traffic congestion during drop-off and pick-up periods.
- Remember that many street parking locations around the site are time-limited, and you may not be able to park all day in vacant zones.
- You are responsible for following all regulatory signage and parking restrictions around the site.

## 6.0 Project Impact

### 6.1 Local Traffic

Local traffic patterns during construction are expected to remain consistent with the existing conditions. All public roads will remain in operation at full capacity. Traffic impacts from the construction works are expected to be limited to the volume of construction vehicles only, with minimal contractor traffic during peak hours only.

The number of daily vehicles is expected to be minimal in comparison to the total volumes of traffic on local roads. Truck movements to and from the site will be scheduled outside the network peak hours where possible to reduce impacts to the area.

All deliveries and construction works are to take place within site with no impact to passing traffic. Existing travel lanes along all local roads will remain in operation at full capacity.

Manoeuvring and merging of construction trucks at Pebble Crescent is to be managed carefully by on-site traffic controllers such that traffic flow is maintained. For small deliveries, traffic is not to be held up in advance to allow vehicles to exit the site, and vehicles are to use suitable gaps in traffic (as per the normal right-of-way scenario).

If the relevant loading area is found to be full at the time of vehicle arrival, vehicles are not to queue on the roadway. In this instance, vehicles shall store appropriately within other areas of the site (and shall not reverse out of the site) or be turned away and rescheduled if necessary. If recirculating to the site, vehicles shall only park legally in designated parking zones and in accordance with any relevant road rules, and only for as long as necessary.

### 6.2 Parking

Heavy vehicles will be provided parking on site. The Builder will ensure that construction heavy vehicles associated with the development does not utilise public and residential streets or public parking facilities.

As discussed in Section 0, construction workers would park at available unrestricted on-street parking in the vicinity of the site. A Construction Worker Transportation Strategy has been prepared in order to minimise demand for parking in nearby public and residential streets or public parking facilities.

Based on the above, the proposed works would not generate any significant impact on the surrounding streets.

### 6.3 Pedestrians

The footpath to the west of Pebble Crescent remains operational and construction traffic movements are unlikely to interrupt any pedestrian facility in the vicinity of the site. Pedestrian access along the existing trail along the eastern boundary of the site would be maintained throughout all phases of the project. Therefore, the proposed construction works would not impact any pedestrian activity in the surrounding.

The safe movement of pedestrians around the site, particularly during drop-off and pick-up periods, would be accommodated by the proposed construction methodology.

### 6.4 Cyclists

There are no changes to dedicated cycleways in the area. Cyclists on public roads will be required to follow directions from traffic controllers as per standard vehicles. The cycle access along the existing trail along the eastern boundary of the site would be maintained throughout all phases of the project.

## **6.5 Public Infrastructure**

On infrequent occasions when particularly large vehicles are required to access the site, some mounting or crossing of public kerbs and medians may be necessary. The builder shall repair any resultant damage to this infrastructure if large vehicles are required to mount the devices. Any other road markings damaged as a result of vehicles associated with the construction shall be repaired as a responsibility of the builder.

## **6.6 Emergency Services**

The contractor will ensure that access to all emergency services should be maintained, and the site surrounds.

## **6.7 Site Safety**

All construction work and operations are to be contained within the site. Hoarding Class A is to be implemented on-site, this will ensure that the existing footpath will be separated from the site. Safety for passing traffic, including pedestrians, shall be maintained at all times.

## **6.8 Neighbouring Properties**

Construction truck access to the site shall be predominantly via the Pebble Crescent that provides access to the John Palmer Public High School site, with construction activities contained within the site. Pebble Crescent will generally be accessible at all times during construction. Properties adjacent to the construction zone perimeter will not be impacted by the works.

Minimal construction traffic access will be imposed through the Pebble Crescent, where users will be made aware of construction traffic movement via warning signages as outlined in the relevant TCP.

Based on the above, all the surrounding properties will remain accessible throughout the construction period as per existing conditions.

## 7.0 Further Information

### 7.1 Certificate and Approvals

Approval may need to be obtained from Transport for NSW, Blacktown City Council and other relevant authorities. Approval may be required for items including but not limited to:

- Road occupancy approvals
- Hoarding/fencing approvals
- Oversize vehicle usage on local roads.

Responsibility for acquiring the necessary certificates, permits, and/or approvals rests with the builder (through managed subcontractors where relevant), and must be completed prior to commencement of the associated works.

Only certified personnel will be used on-site to implement, monitor, and carry out the Traffic Control Plans.

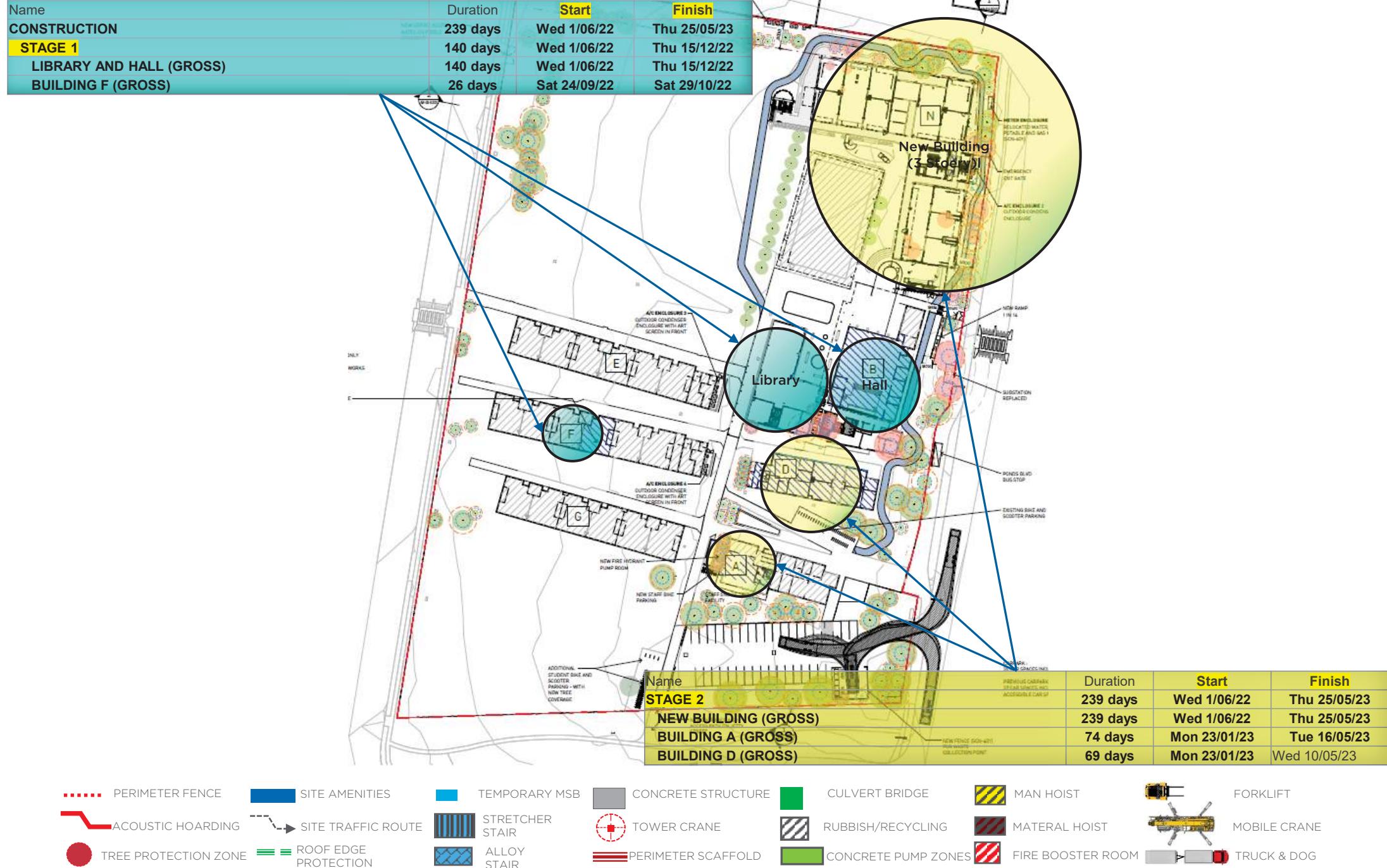
### 7.2 Other Responsibilities

Richard Crookes Construction personnel are responsible for, but not limited to:

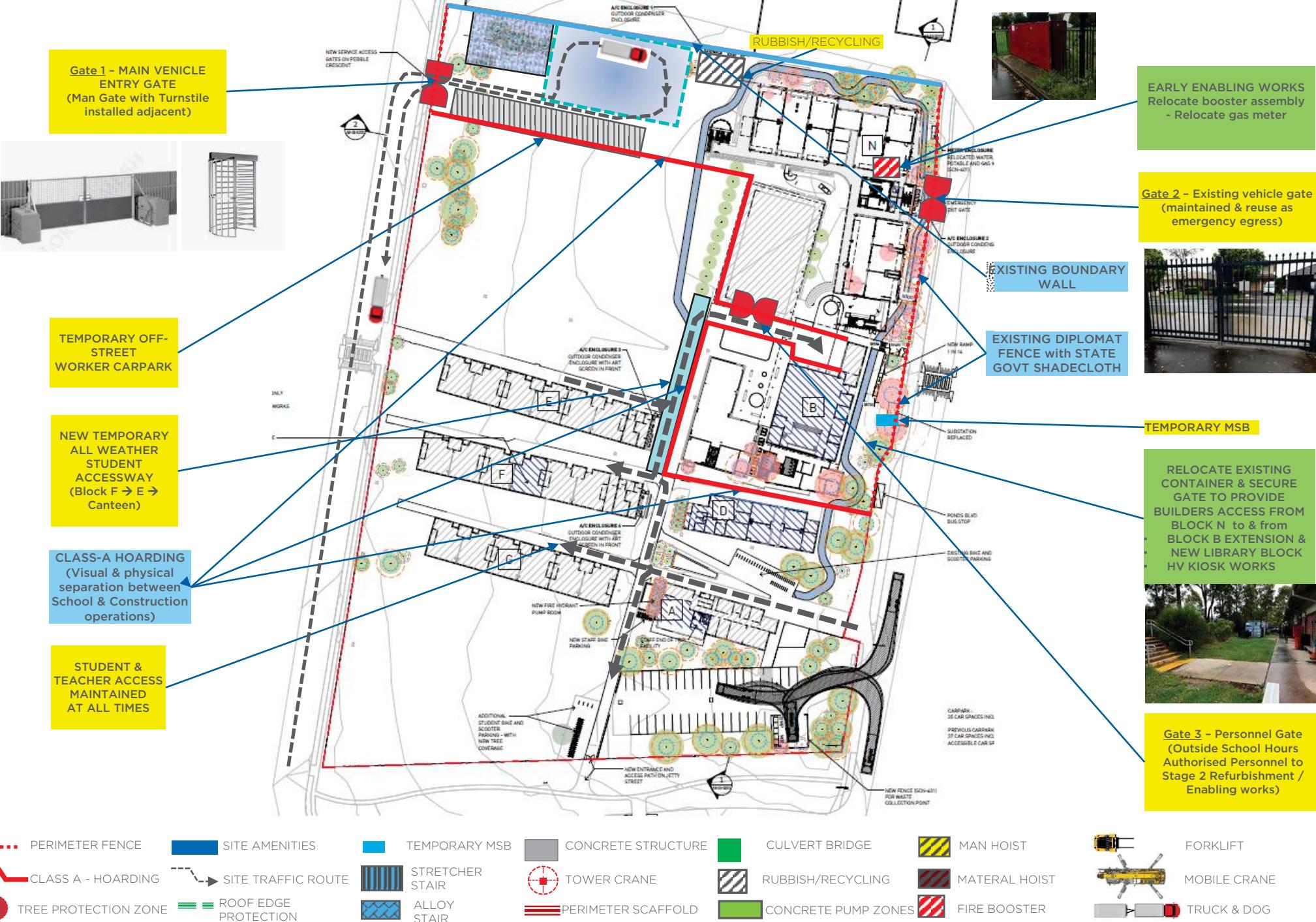
- Implementing the Construction Traffic Management Plan and associated TCP
- Informing sub-contractors of the requirements of the Construction Traffic Management Plan
- Undertaking site inspections to ensure all signage is clearly visible and not damaged
- Monitoring the implementation of the Construction Traffic Management Plan
- Reporting on incidents
- Obtaining permits.

As part of the site induction procedures, all site workers and sub-contractors will be made aware of this Construction Traffic Management Plan, the relevant Traffic Control Plan, and their responsibility to adhere to these plans.

## Appendix A – Site Establishment Plans



## STAGE 1 & 2: GENERAL STAGING & WORKFLOW



## STAGE 1 & 2 - EARLY WORKS: SITE ESTABLISHMENT PLAN



NORTH

**Gate 1 - MAIN VEHICLE ENTRY GATE**  
(Man Gate with Turnstile installed adjacent)

## LEGEND

CONSTRUCTION  
VEHICLE TRAFFIC FLOW

MATERIALS HANDLING  
ZONE

DELIVERY VEHICLE

CRANE RADIUS

MOBILE CRANE

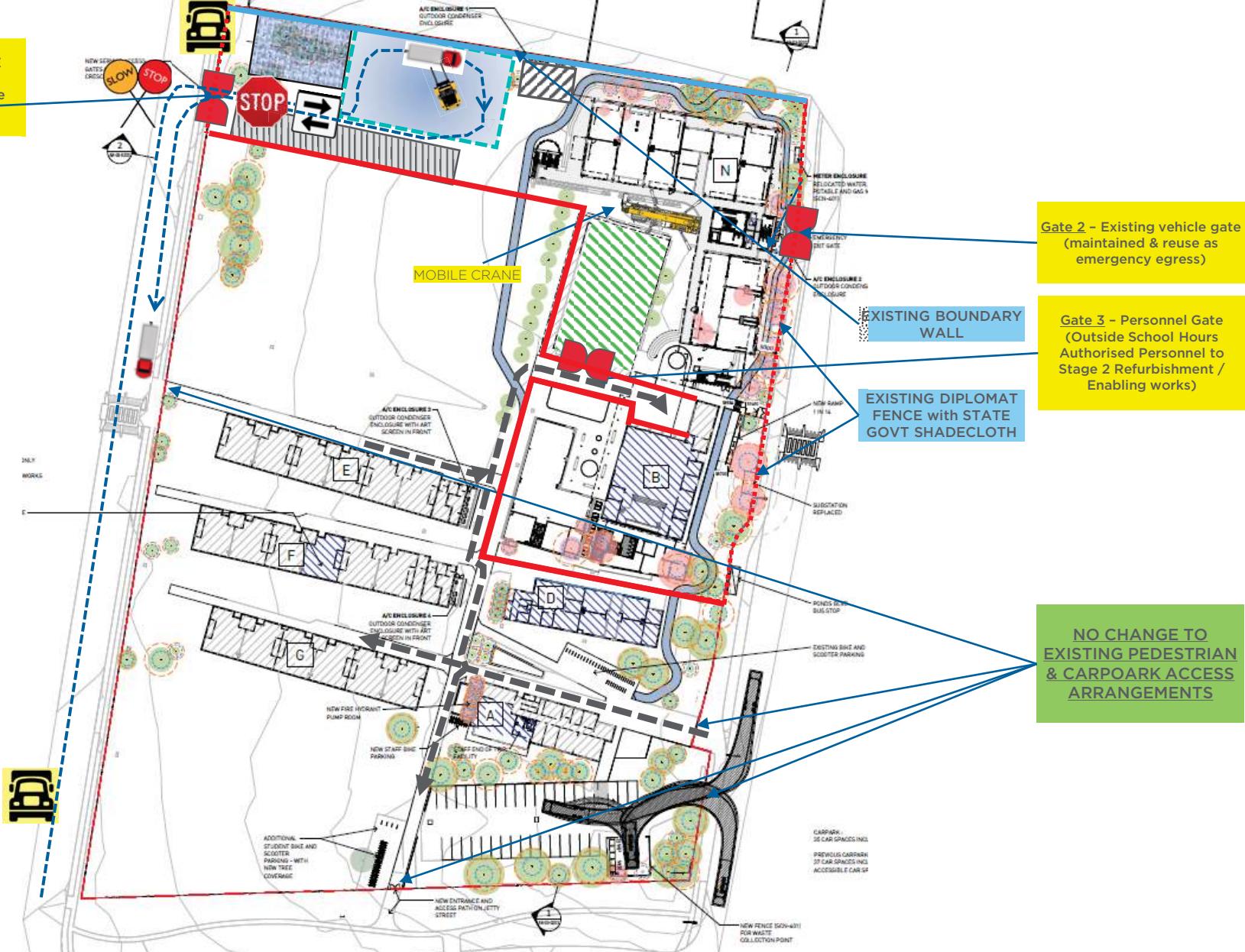
SITE ESTABLISHMENT  
COMPOUND

**GATE NO. 1: DELIVERIES**

- EARLY WORKS &
- EMERGENCY EGRESS

**GATE NO. 3: PERSONNEL  
GATE (OUTSIDE SCHOOL  
HOURS) to ACCESS STAGE  
2 REFURBISHMENT /  
ENABLING WORKS**

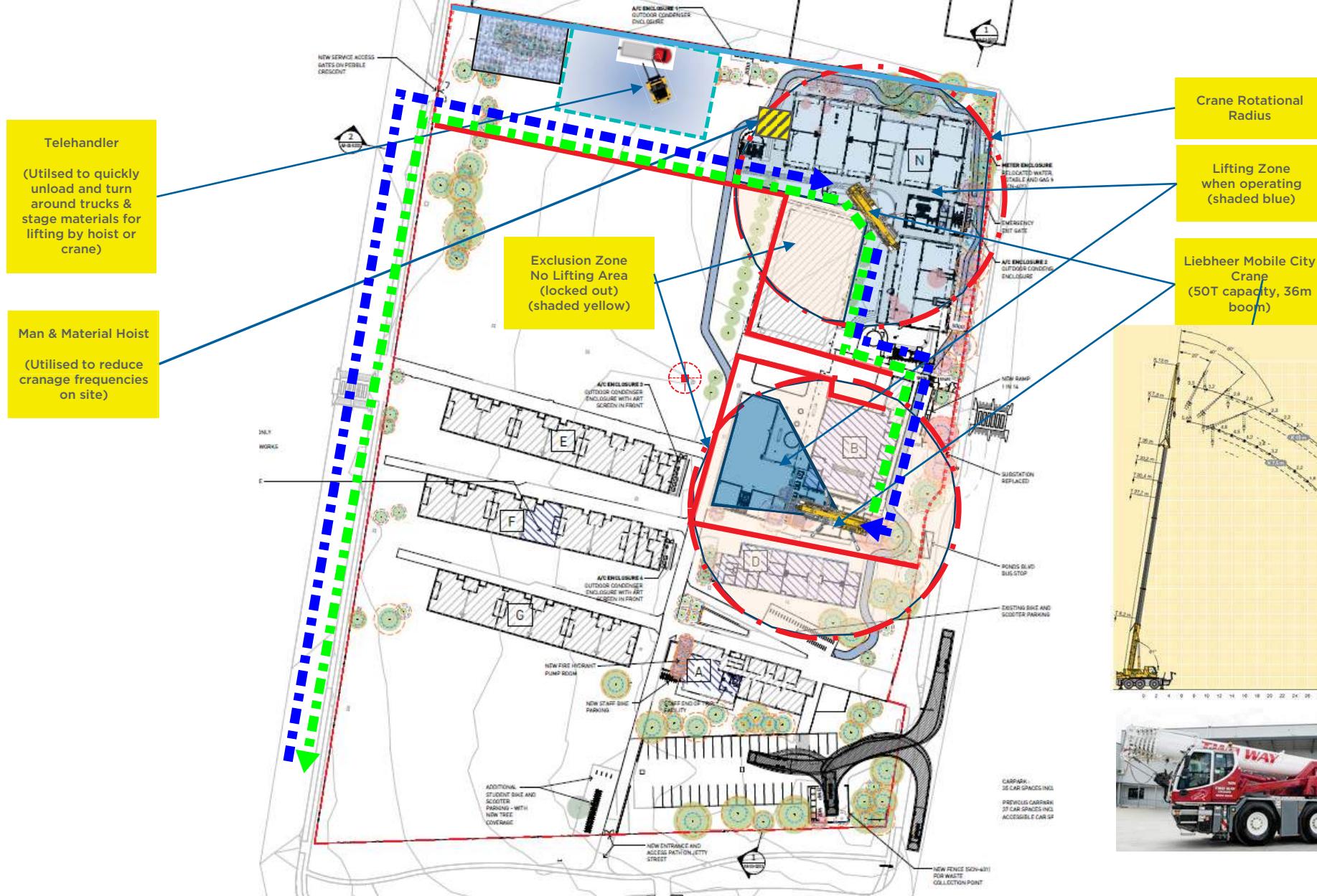
TRAFFIC CONTROL



## STAGE 1 & 2: PEDESTRIAN & TRAFFIC MANAGEMENT PLAN



NORTH



## STAGE 1 & 2: CRANEAGE, MATERIALS HANDLING (PLAN) STAGE 1 NEW LIBRARY & STAGE 2 NEW HOMEBASE

## LEGEND

Gate 1 - MAIN VEHICLE  
ENTRY GATE  
(Man Gate with Turnstile  
installed adjacent)

## CONSTRUCTION VECHICLE TRAFFIC FLOW

PEDESTRIAN WORKER  
ROUTE

## COMPOUND

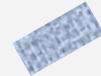


## DELIVERY VEHICLE

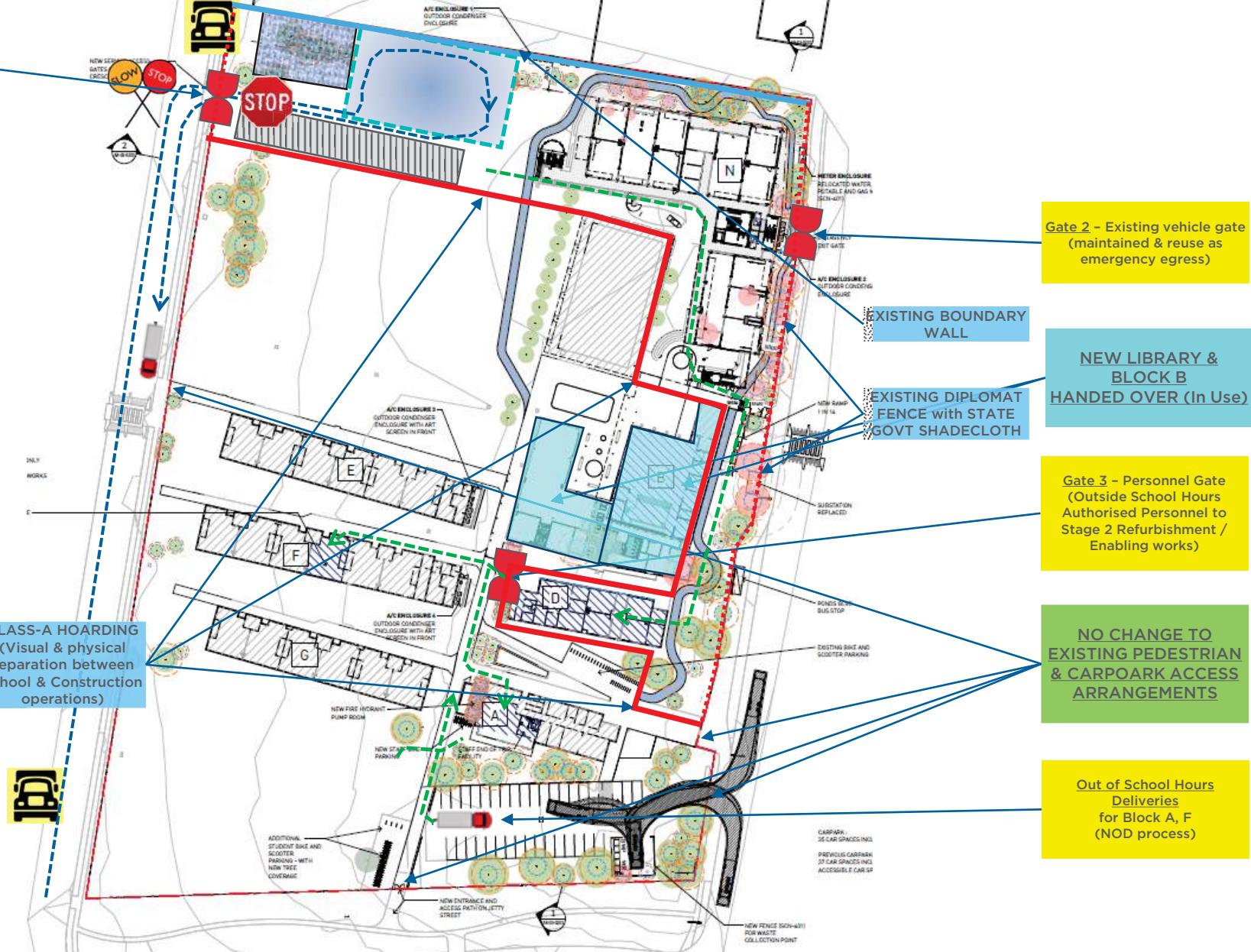
ZONE

- **BLOCK A,D,E** (via West end of Forman Ave Dropoff)
  - **BLOCK J** (via Forman Ave gateway)

## SITE ESTABLISHMENT COMPOUND



TRAFFIC CONTROL



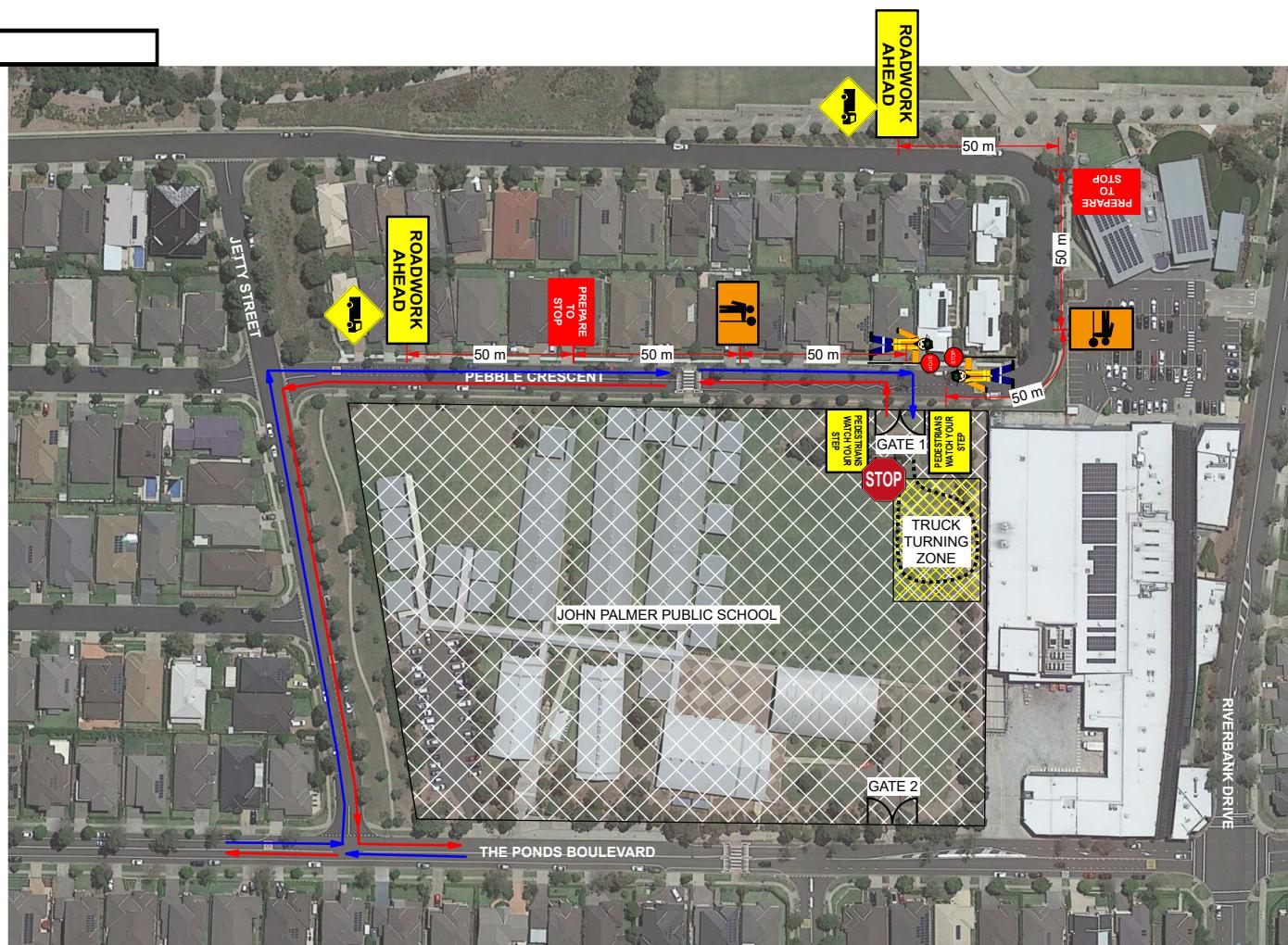
## **STAGE 1 & 2: REFURBISHMENT - BLOCK A, D (Existing Library), F FENCING/HOARDING, PEDESTRIAN & TRAFFIC MANAGEMENT PLAN**

## Appendix B – Traffic Control Plans



TGS ID TC22511

Legend
Access Gate
Traffic Controller
Ingress Route
Egress Route



CLIENT: TTW

PROJECT: John Palmer Public School

LOCATION: 85 The Ponds Blvd, The Ponds NSW 2769

SCOPE OF WORKS: Work Site Access Management - Stages 1 &amp; 2

LCA &amp; MUNICIPALITY: Blacktown City Council

DATE: 11/5/2023 TCP EXPIRY: 11/5/2023

TMP LICENCE: TCT0041658 TYPE: PWZ

AUTHOR: Kyle Fieg SIGNATURE: K. Fieg

THIS TRAFFIC GUIDANCE SCHEME IS BASED ON THE NSW RMS TCAW MANUAL V6.0 &amp; AS1742.3-2019

APPROVALS / PERMITS TO BE ONSITE AT ALL TIMES

Device Spacing:  
Purpose and usage  
Recommended traffic km/h

Approach speed of traffic km/h

max spacing, m

Taper Lengths:  
Existing Speed: Existing Speed  
Traffic Control: Traffic Control  
Lateral Shift Taper: Lateral Shift Taper  
Merge Taper: Merge Taper

km/h

m

45 or less

15

30

15

15

46 to 55

15

30

30

56 to 65

60

30

60

60

60

60

70

70

115

76 to 85

12

80

130

86 to 95

18

90

145

96 to 105

100

160

Greater than 105

110

180

Distance between signs:

Single sign: 2D for speeds greater than 66 km/h

and 1D for speed zones of less than 65 km

Multiple signs: 1D for all speed zones

This document has been prepared solely as a guide only for traffic management purposes. The traffic planner (TTP) disclaims all responsibility & all liability (including without limitation, liability in negligence) for all expenses, losses, damages & costs. May incur as a result of the information being inaccurate or incomplete in any way, and for any reason, TTP does not accept any responsibility for compliance of this document if set up by others. Some distances not to code due to site constraints. The positions of the signs & equipment are only the suggested locations, as they may need to be revised onsite to improve visibility and/or effectiveness. Figured distances shall take precedence to signage locations. Any changes onsite are to be noted on this document, recorded on the appropriate worksite paperwork and signed off by the site supervisor prior to implementation. All traffic control plans & traffic management plans are copyright and property of TTP & is not transferable unless authorised by TTP.

Traffic Guidance Scheme has been prepared in accordance with AS1742.3-2019 "Traffic Control Devices for Works on Roads", Road Management Act 2004, Code of Practice Traffic Management 2010 & the TNSW Roads and Traffic Control Work Sites (TCAWS) Technical Manual V6.

All approvals/consent documents shall be on site at all times. Traffic controller to wear correctly fitted PPE (personal protective equipment) to AS/NZS 4602 as assess in the site safe work method statements (SWMS), hazard risk assessment. Location of signs shown may be varied slightly during implementation preventing a tripping hazard, improve visibility, effectiveness & not impact on pedestrian walkways (1.2m+ clearance, 1.5m+ curved footpath), cyclists, parking or deliveries unless footpath is closed. Signage is to be class 1 retroreflective signage as per AS/NZS 1742.3-2019. Note that additional traffic controllers/signage may be required.

Traffic controller instructions: all traffic management items must be in place prior to the commencement of the works. Onsite traffic management must have their TNSW traffic controller ticket (use the stop-slow bat to control traffic), and TNSW (implement traffic control plans) as a minimum to implement this plan. Traffic controllers will assist local buses & emergency vehicles through the worksite where required. Traffic controllers to remain onsite at all times and ensure the pedestrian and the travelling public's safety at all times. If leaving the site for any reason, they must inform the site supervisor.

Pedestrians are to be physically separated from the worksite at all times with para-webbing or similar to ensure they do not walk into the work site, with 'pedestrians watch your step' signage placed on all approaches to work site. Where pedestrians are to come on/off the kerb a non-slip surface ramp per AS1428.4 must be provided by the client. Minimum mounting height for all short term signage should be 200mm.

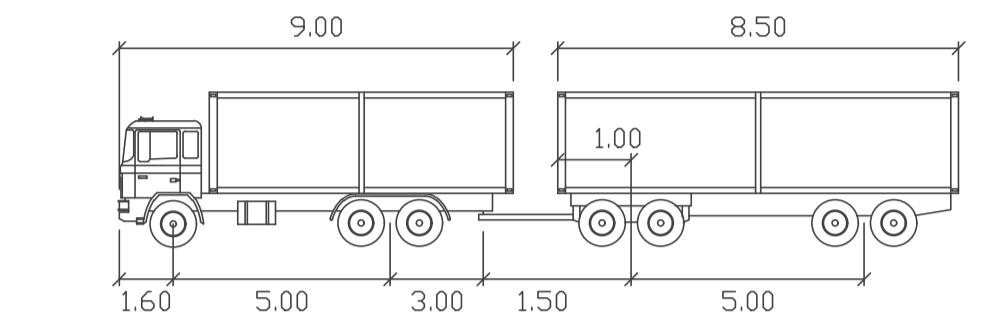
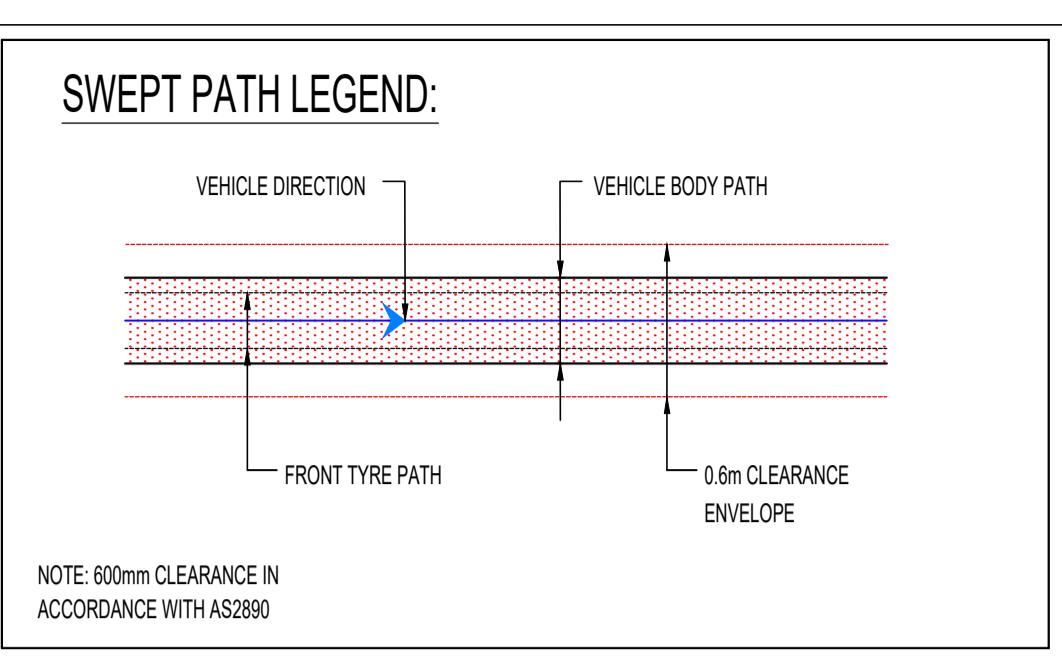
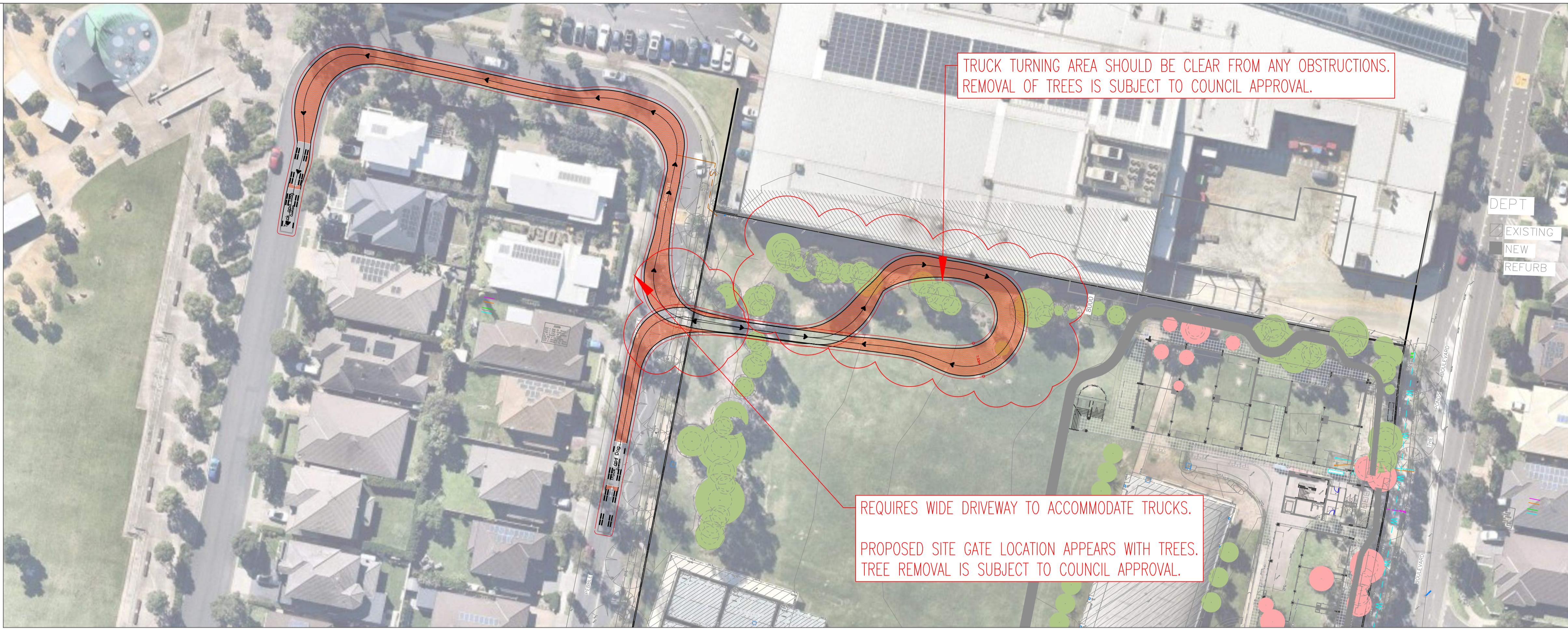
EXISTING POSTED SPEED LIMIT: **50**

PLAN SCALE: NTS

SHEET SIZE: A3



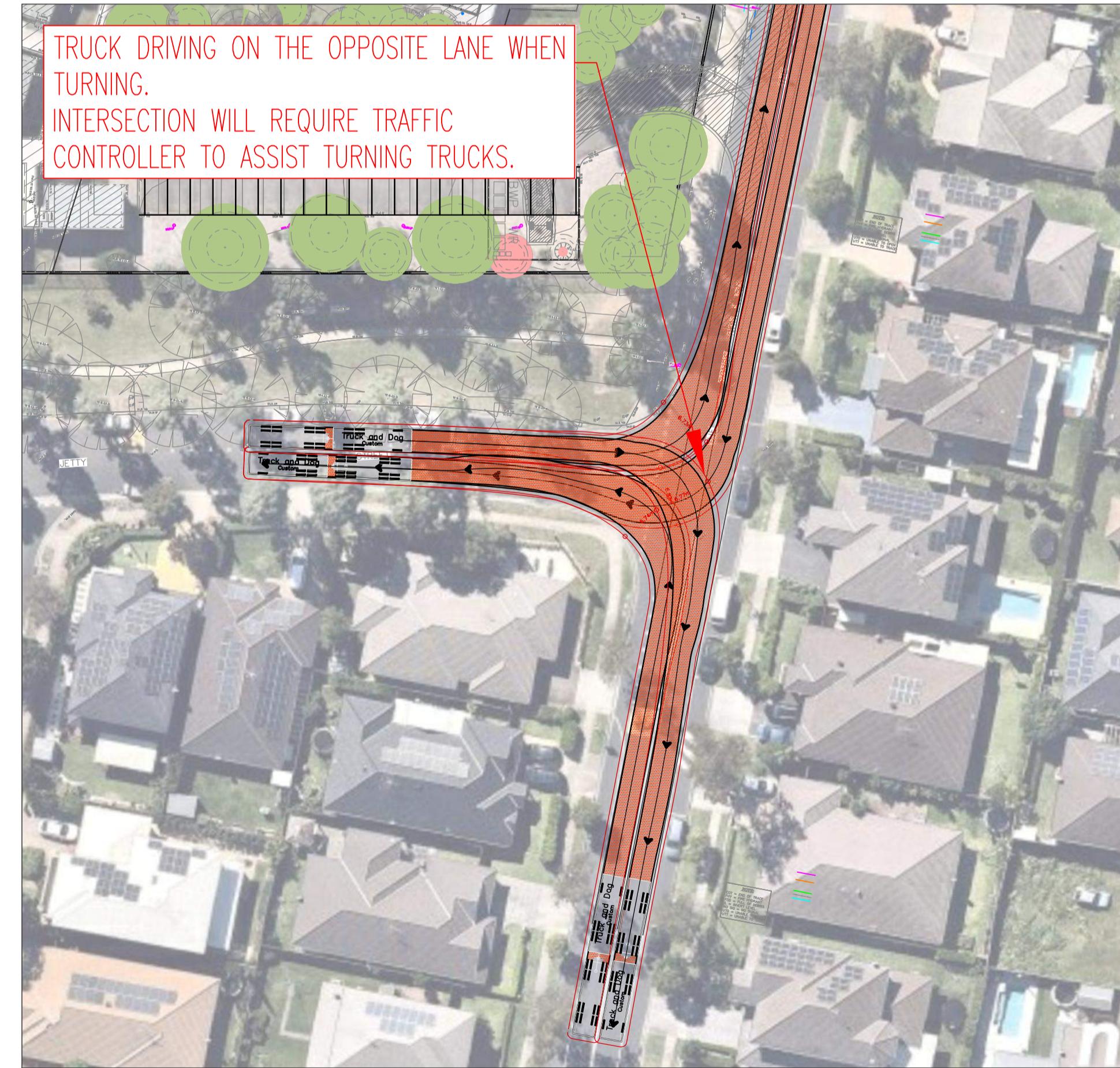
## Appendix C – Swept Path Analysis



Meters

First Unit Width : 2.50	Lock to Lock Time : 6.0
Trailer Width : 2.50	Steering Angle : 30.0
First Unit Track : 2.50	Articulating Angle : 70.0
Trailer Track : 2.50	

### PEBBLE CRES TO/FROM THE SITE



### PEBBLE CRES TO/FROM JETTY STREET

A1.....0 1 2 3 4 5 6 7 8 9 10

Architect	Engineer	Project	Sheet Subject
PTW LEVEL 11, 88 PHILIP STREET SYDNEY NSW 2000	Structural Civil Traffic Façade <b>TTW</b> 612 9439 7288   48 Chandos Street St Leonards NSW 2065	JOHN PALMER PUBLIC SCHOOL	SWEPT PATH ANALYSIS 18.6m TRUCK AND DOG
			Scale: A1 1:500 Drawn MB
			Authorised
P1 PRELIMINARY	NB NB 06.06.22		
Rev Description	Eng Draft Date	Rev Description	Eng Draft Date

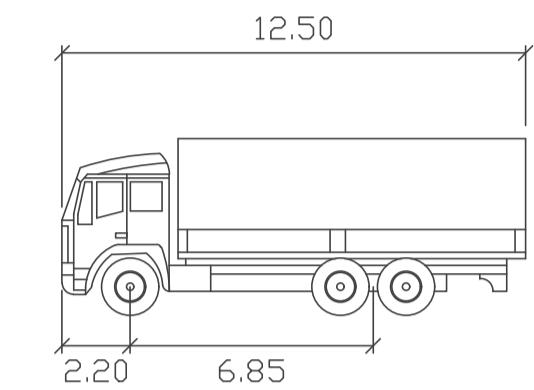
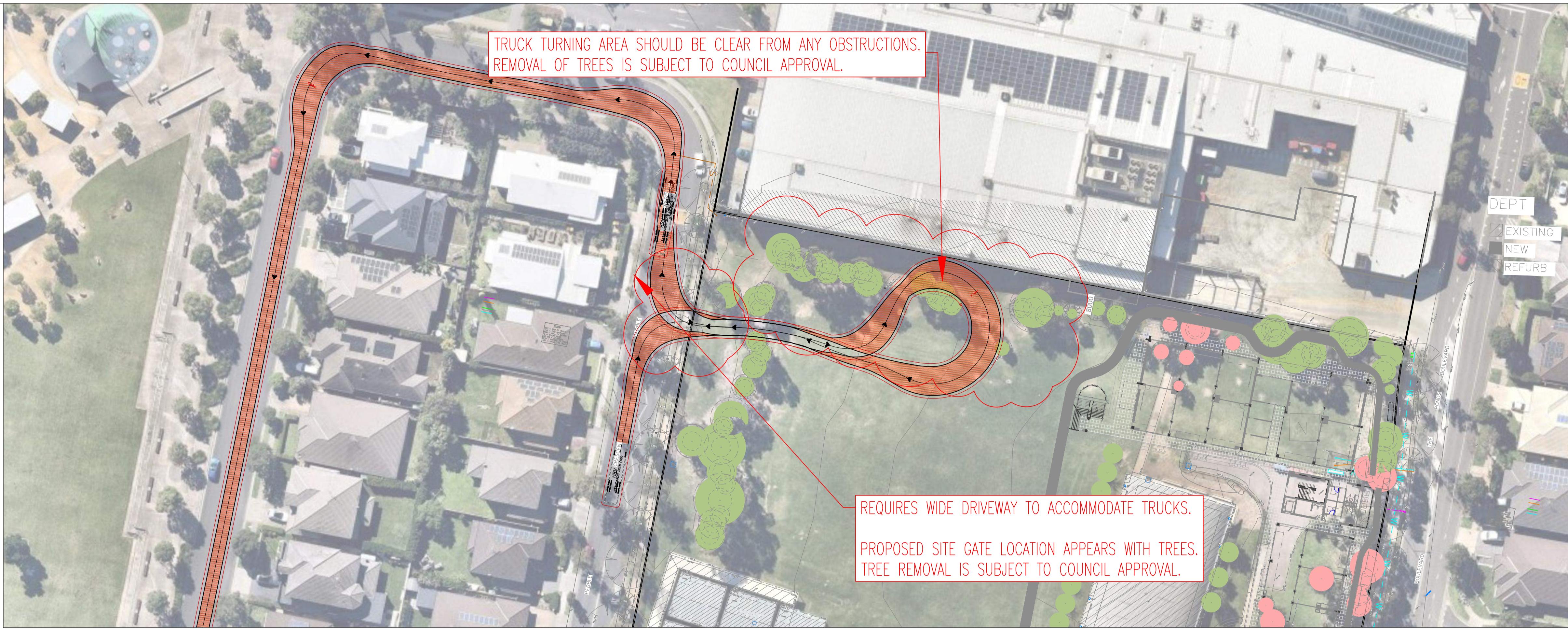
### THE PONDS BOULEVARD TO/FROM JETTY STREET

**PRELIMINARY**  
NOT TO BE USED  
FOR CONSTRUCTION

Scale: A1  
1:500  
Drawn MB  
Authorised

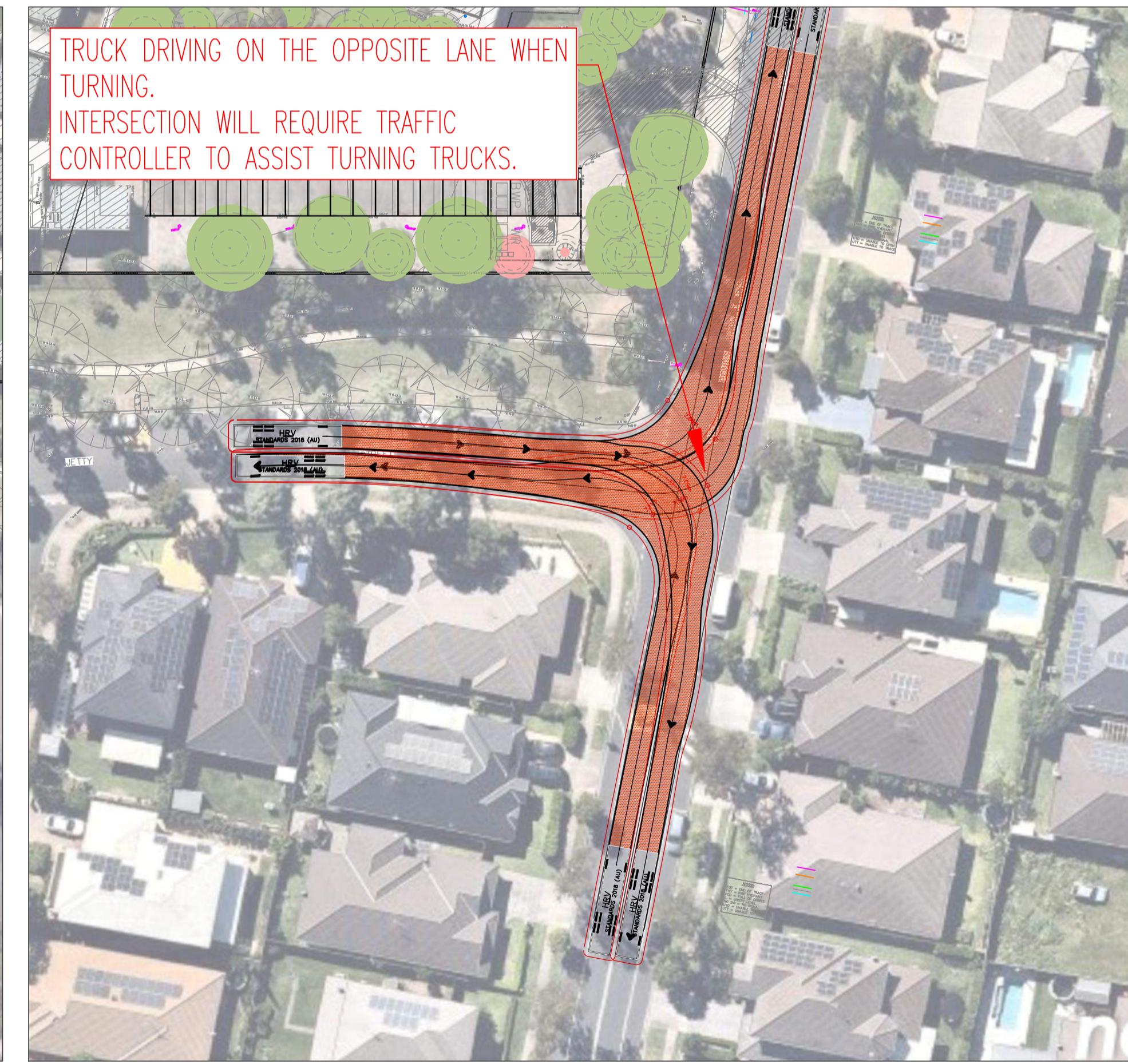
Job No 211395 Drawing No T01 Revision P1

Plot File Created: Jun 06, 2022 - 2:32pm



meters

### PEBBLE CRES TO/FROM THE SITE



### PEBBLE CRES TO/FROM JETTY STREET

A1 0 1 2 3 4 5 6 7 8 9 10

P1	PRELIMINARY	NB	NB	06.06.22	Rev Description	Eng	Draft	Date	Rev Description	Eng	Draft	Date

Architect  
**PTW**  
LEVEL 11, 88 PHILIP STREET  
SYDNEY NSW 2000

Engineer  
**TTW** Structural Civil Traffic Façade  
612 9439 7288 | 48 Chandos Street St Leonards NSW 2065

Project  
**JOHN PALMER PUBLIC SCHOOL**

Sheet Subject  
**SWEEP PATH ANALYSIS  
HEAVY RIGID VEHICLE  
(HRV - 12.5m)**

**PRELIMINARY**  
NOT TO BE USED  
FOR CONSTRUCTION

Scale : A1 Drawn : MB Authorised : -

1:500

Job No : 211395 Drawing No : T02 Revision : P1

Drawing File Created: Jun 06, 2022 - 2:32pm

## Appendix D – Relevant Curriculum Vitae (CV)



# Nathaniel Borja

## Traffic Engineer

Bachelor of Science in Civil Engineering

Nathaniel.Borja@ttw.com.au

## Experience

### 2019 – Current

Traffic Engineer, TTW, Sydney

### 2018 – 2019

Transport Engineer, Campbelltown City Council, Campbelltown

### 2016 – 2018

Transport Engineer, DCE, Abu Dhabi, UAE

### 2013 – 2016

Transport Engineer, CRTC, Abu Dhabi, UAE

### 2012 – 2013

Estimation Engineer, Smartbox, Dubai, UAE

### 2010 – 2011

Quantity Surveyor, CAPPMC, Abu Dhabi, UAE

### 2007 – 2009

Quantity Surveyor, City Engineering, Dubai, UAE

### Accommodation + Residential

19-27 Cross Street, Double Bay  
Cardinal Gilroy Village, Merrylands West  
Majestic Apartments, Rouse Hill  
Baxter Road Hotel, Mascot

### Community + Public

Sydney Football Stadium, Sydney  
Ryde Central, Ryde  
Luna Park, Milsons Point  
Sydney Airport, Sydney  
Brookvale Oval, Brookvale  
St. Bartholomew's Cemetery, Prospect

### Commercial

458-468 George Street, Sydney  
700 George Street, Sydney  
1 Eden Park Drive, Macquarie Park  
The Bond, Bella Vista

### Education

Smalls Road Public School, Ryde  
Pendle Hill High School, Toongabbie  
Carlingford West Public School, Carlingford  
Cumberland High School, Carlingford  
Parramatta East Public School, Parramatta  
Macquarie Boys Technology High School, Parramatta  
Greenwich Public School  
- Kingslangley Road Campus and Greenwich Road Campus, Greenwich  
UNSW Village Green, Kingsford  
UNE, Parramatta

### Health

Concord Hospital, Concord  
Liverpool Hospital, Liverpool  
Headspace, Mount Druitt  
Buronga HealthOne, Buronga  
Wyong Hospital, Wyong  
Sutherland Hospital, Sutherland  
Bankstown-Lidcombe Hospital, Bankstown

## Appendix E – Authority Consultation

## **Michael Babbage**

---

**From:** Andy Karklins <Andy.Karklins@blacktown.nsw.gov.au>  
**Sent:** Tuesday, 5 July 2022 7:56 AM  
**To:** Michael Babbage  
**Cc:** Nadeem Shaikh  
**Subject:** RE: John Palmer PS - CTMP for Council comment

**[External Email]: Do not click links or open attachments unless you recognize the sender and know the content is safe.**

Good morning Michael

We have reviewed the attached Construction Traffic and Pedestrian Management Sub Plan (CTPMSP) for John Palmer public School -TCP prepared by The Traffic Planner. It appears to be in order based on the information provided.

It is the project managers responsibility to implement the traffic control measures as identified in the TMP.

Regards



**Andy Karklins**  
**Traffic Management Officer**

9839 6305

Andy.Karklins@blacktown.nsw.gov.au  
PO Box 63 Blacktown NSW 2148  
[blacktown.nsw.gov.au](http://blacktown.nsw.gov.au)

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**From:** Nadeem Shaikh  
**Sent:** Monday, 4 July 2022 2:07 PM  
**To:** Andy Karklins <Andy.Karklins@blacktown.nsw.gov.au>  
**Subject:** FW: John Palmer PS - CTMP for Council comment

Hi Andy  
Pl. review the CTPMSP and respond to Michael Babbage.  
Thanks

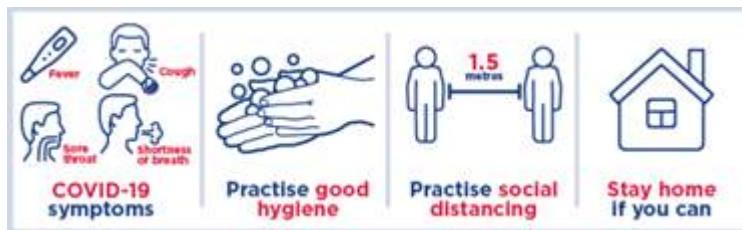


**Nadeem Shaikh**  
**Coordinator Traffic Management**

9839 6017  
0409 735 657  
[Nadeem.Shaikh@blacktown.nsw.gov.au](mailto:Nadeem.Shaikh@blacktown.nsw.gov.au)

PO Box 63 Blacktown NSW 2148  
blacktown.nsw.gov.au

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**From:** Michael Babbage <[michael.babbage@ttw.com.au](mailto:michael.babbage@ttw.com.au)>  
**Sent:** Friday, 1 July 2022 2:37 PM  
**To:** Nadeem Shaikh <[Nadeem.Shaikh@blacktown.nsw.gov.au](mailto:Nadeem.Shaikh@blacktown.nsw.gov.au)>  
**Cc:** Paul Yannoulatos <[Paul.Yannoulatos@ttw.com.au](mailto:Paul.Yannoulatos@ttw.com.au)>; Amir Lahouti <[amir.lahouti@ttw.com.au](mailto:amir.lahouti@ttw.com.au)>; [CoubroughJ@richardcrookes.com.au](mailto:CoubroughJ@richardcrookes.com.au); [StubbsJ@richardcrookes.com.au](mailto:StubbsJ@richardcrookes.com.au)  
**Subject:** John Palmer PS - CTMP for Council comment

Hi Nadeem,

Hope you are well. As you may be aware, Richard Crookes Constructions will be working on the redevelopment at John Palmer PS under SSD-23330227. TTW are working with RCC for the construction traffic management of the project.

As per the consultation requirements under Condition B17(b) of the development consent, please find attached Revision 1 of the CTPMSP. We are requesting any comments or feedback that you might have on the current plan, for consideration in any future updates to the document. This document is a developed version of the early strategies we presented at the second Transport Working Group meeting on 19/08/2021, and I know at that meeting you had mentioned that Council would need to see the developed CTMP, which has now been prepared.

Could you please let us know if you have any comments, or alternatively if we should be speaking to anyone else within Council for consultation on this document instead of (or in addition to) yourself.

Many thanks,  
Michael

**Michael Babbage | Associate (Traffic)**

+61 2 9439 7288 | +61 2 8986 5530  
Level 6, No. 73 Miller Street, North Sydney NSW 2060  
[We have a new Sydney office, read about it here](#)



## **Michael Babbage**

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**From:** Michael Babbage  
**Sent:** Friday, 1 July 2022 3:09 PM  
**To:** Felix Liu  
**Subject:** FW: John Palmer PS (SSD-23330227) - CTMP for TfNSW comment  
**Attachments:** 220607 John Palmer Public School - Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) - Rev1.pdf

Hi Felix,

Hope you are well. As per the below email we have requested consultation on the CTMP for John Palmer Public School. As per previous advice I have sent this to the CTMP email address but as you were previously involved in the project and the SSDA assessment this may be more appropriate to be directed to yourself. Could you please let us know if you have any comments, or if you know who at TfNSW this should be directed to instead.

Cheers,  
M

---

**From:** Michael Babbage  
**Sent:** Friday, 1 July 2022 3:08 PM  
**To:** 'development.ctmp.cjp@transport.nsw.gov.au' <development.ctmp.cjp@transport.nsw.gov.au>  
**Cc:** Paul Yannoulatos <Paul.Yannoulatos@ttw.com.au>; Amir Lahouti <amir.lahouti@ttw.com.au>; 'Joshua Stubbs' <stubbsj@richardcrookes.com.au>; Joel Coubrough <CoubroughJ@richardcrookes.com.au>  
**Subject:** John Palmer PS (SSD-23330227) - CTMP for TfNSW comment

Hi TfNSW CTMP team,

As you may be aware, Richard Crookes Constructions will be working on the redevelopment at John Palmer Public School under SSD-23330227. TTW are working with RCC for the construction traffic management of the project.

As per the consultation requirements under Condition B17(b) of the development consent, please find attached Revision 1 of the CTPMSP. We are requesting any comments or feedback that you might have on the current plan, for consideration in any future updates to the document. This document is a developed version of the early strategies we presented to TfNSW representatives at a Transport Working Group meeting on 19/08/2021 (part of a series of pre-SSDA consultation meetings), and I know that TfNSW had also provided brief feedback in a submission during the SSDA process.

Could you please let us know if you have any comments, or if we should be directed to anyone specific within the TfNSW team.

Many thanks,  
Michael