

CTMP;

**Nepean Hospital - Stage 2
Development (SSD-16928008)**

For Health Infrastructure
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1. Executive Summary

This initial Construction Traffic Management (CTMP) Plan prepared by **ptc.** has been submitted to Department of Planning and Environment (DPE) as part of the State Significant Development Application (SSD-16928008) for the Stage 2 expansion of Nepean Hospital.

As part of the SSDA approval, this Construction Traffic and Pedestrian Management (CTMP), has been prepared to describe the likely construction traffic measures associated with the construction project. At this stage of the project, a contractor has not been awarded the project and therefore there are details that will need to be confirmed in the final version of this document to be issued prior to the Construction Certificate.

On this basis, the purpose of this version of the CTMP is to accompany the SSDA application and demonstrate that the project can be constructed safely with suitable traffic control and access to and from the public road network, i.e. ensuring there is nothing fundamental in the building design that prevents or exacerbates the safe management of traffic and pedestrians.

The Stage 2 Redevelopment seeks to deliver significantly enhanced acute services, as well as a new campus main entry and drop-off area. It complements the recent Stage 1 Redevelopment (SSD 8766) approved in February 2019 and due for completion by early 2022.

The following are key points highlighted in this report:

- All works associated with the project will be restricted to the proposed time periods outlined in Section 7.2;
- Commercial trucks up to 19m articulated vehicles (AVs) and 'truck and dogs' will be utilised to complete the demolition, excavation and construction stages;
- All construction vehicles accessing and departing the subject site will be constrained to the State and Regional road network wherever practicable;
- All construction vehicles will be required to enter and exit the hospital property in a forward movement and will be performing their turning movements within the hospital boundary. In the event of an emergency or where a large vehicle cannot turn around within the confines of the site, a reverse manoeuvre to enter and exit the site can be performed at the direction of TfNSW accredited traffic controllers.
 - **Note:** Any adjustment to the CTMP should be developed in consultation with council and the contractor prior to being implemented onsite. A suitable Traffic Control Plan (TCP) will be required to be prepared by the appointed traffic management contractor.
- Due to the close proximity of train and bus services as well as site constraints, construction staff parking will not be provided on-site. The principal contractor will be encouraged to assist with the transportation of staff, and site personnel will be made aware of the available public transportation. Site personnel will also be encouraged to consider car-pooling;
- This report satisfies the following condition outlined within the Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning & Environment.

2. Response to SEARs

ptc. is engaged by Health Infrastructure (HI) to prepare a parking demand and traffic assessment report to accompany an SSDA for the construction of a hospital expansion within the existing Nepean Hospital campus.

This report has been prepared to address the traffic and transport related comments stated in Secretary's Environmental Assessment Requirements (SEARs) dated 22 April 2021 relating to the SSDA.

The following table presents the SEARs relevant to Transport and Accessibility and confirms that each of these items have been addressed in this report.

Table 1 - SEARs conditions and ptc. comments

SEARs	Comments and Reference
Item 5 – Transport and Accessibility	
<ul style="list-style-type: none"> • analysis of the impacts of the traffic generated during construction of the proposed development, including: <ul style="list-style-type: none"> o construction vehicle routes, types and volumes. o construction program (duration and milestones). o on-site car parking and access arrangements for construction, emergency and construction worker vehicles. o cumulative impacts associated with other construction activities in the locality (if any). o road safety at identified intersections near the site due to conflicts between construction vehicles and existing traffic in the locality. o measures to mitigate impacts, including to ensure the safety of pedestrian and cyclists during construction. • analysis of the impacts of construction works on the adjoining rail corridor prepared in consultation with the relevant rail infrastructure authority. • a preliminary Construction Traffic and Pedestrian Management Plan. • Note: Further guidance is provided in the TfNSW advice attached to the SEARs. 	<p>The traffic movements and truck routes associated with the construction process are described in Section 5 of this document, which should be read in conjunction with the Preliminary Construction Management Plan prepared by HI.</p>

3. Introduction

This Construction Traffic Management Plan (CTMP) has been prepared to accompany an SSDA to DPIE for the Stage 2 expansion of Nepean Hospital. The requirement for a CTMP is detailed in the SEARs and as such this version of the CTMP represents a preliminary report outlining the project and the likely construction management considerations associated with the project.

There is no building contractor assigned to the project at this stage, therefore certain details pertaining to the project programme, materials handling etc. are yet to be confirmed. However, the purpose of this report is to demonstrate to the authorities that the project is able to be constructed safely and with manageable impacts on the road network.

The Stage 2 development is located within the north-western part of the hospital campus with access from Barber Avenue and will involve the demolition of existing buildings to make way for the expansion building.

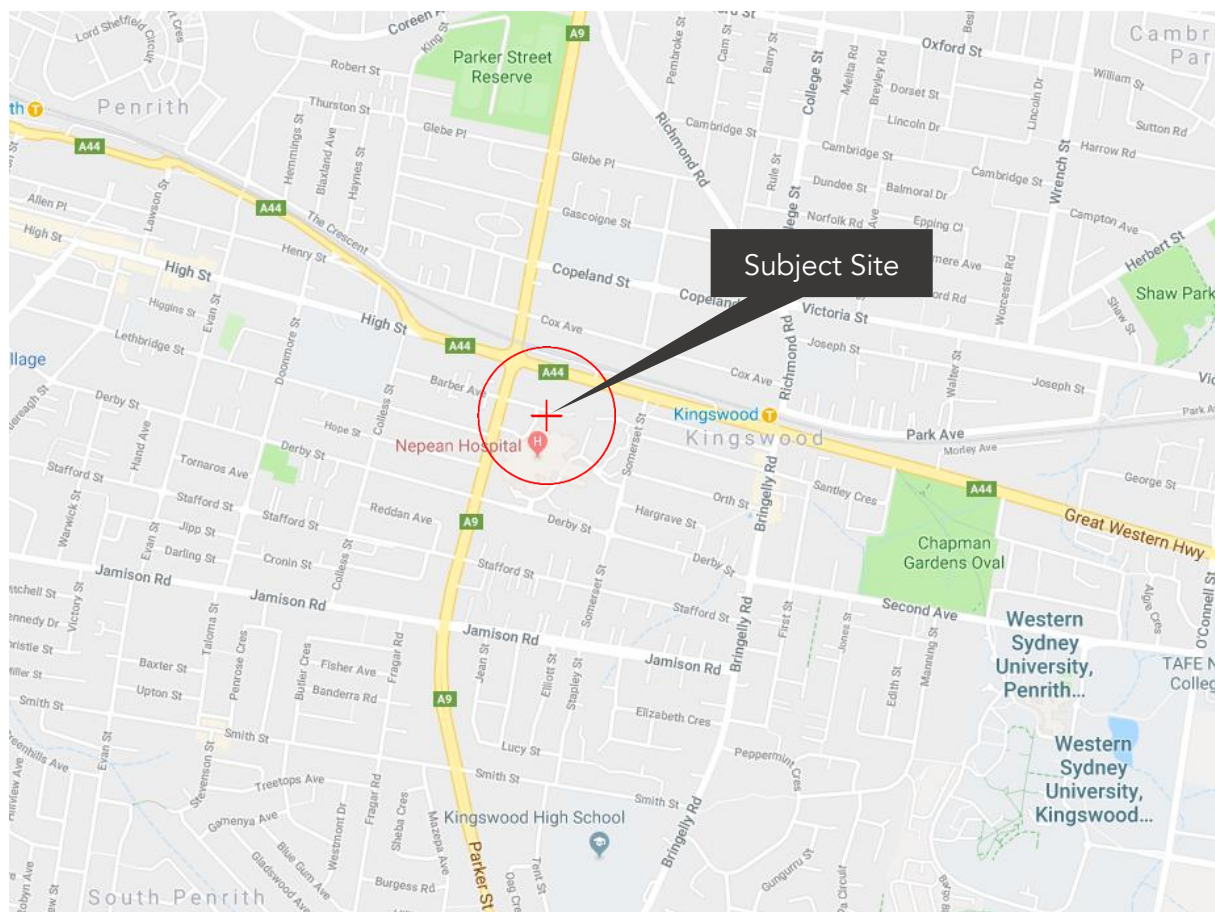


Figure 1 - Nepean Hospital Location (Source: Google Maps 2017)

4. Background

4.1 Site Context

The proposal is located within Lot No. 4 of DP1238301, which comprises the entire Nepean Hospital (the Hospital) and an area of 138,952m².

The Hospital campus is located in Kingswood, which is approximately 60km west of the Sydney CBD and 3km to the east of the Penrith City Centre. The Penrith Local Government Area (LGA) accommodates a population of approximately 198,000, which has experienced growth of approximately 11.9% between 2006 and 2015 according to ABS Census Data. It is expected that this growth will continue, and the expansion of the Hospital is required to respond to this growth.

The Hospital campus is bordered by the Great Western Highway and a private hospital to the north, Parker Street to the west, Derby Street to the south and Somerset Street to the east, outlined in Figure 2.

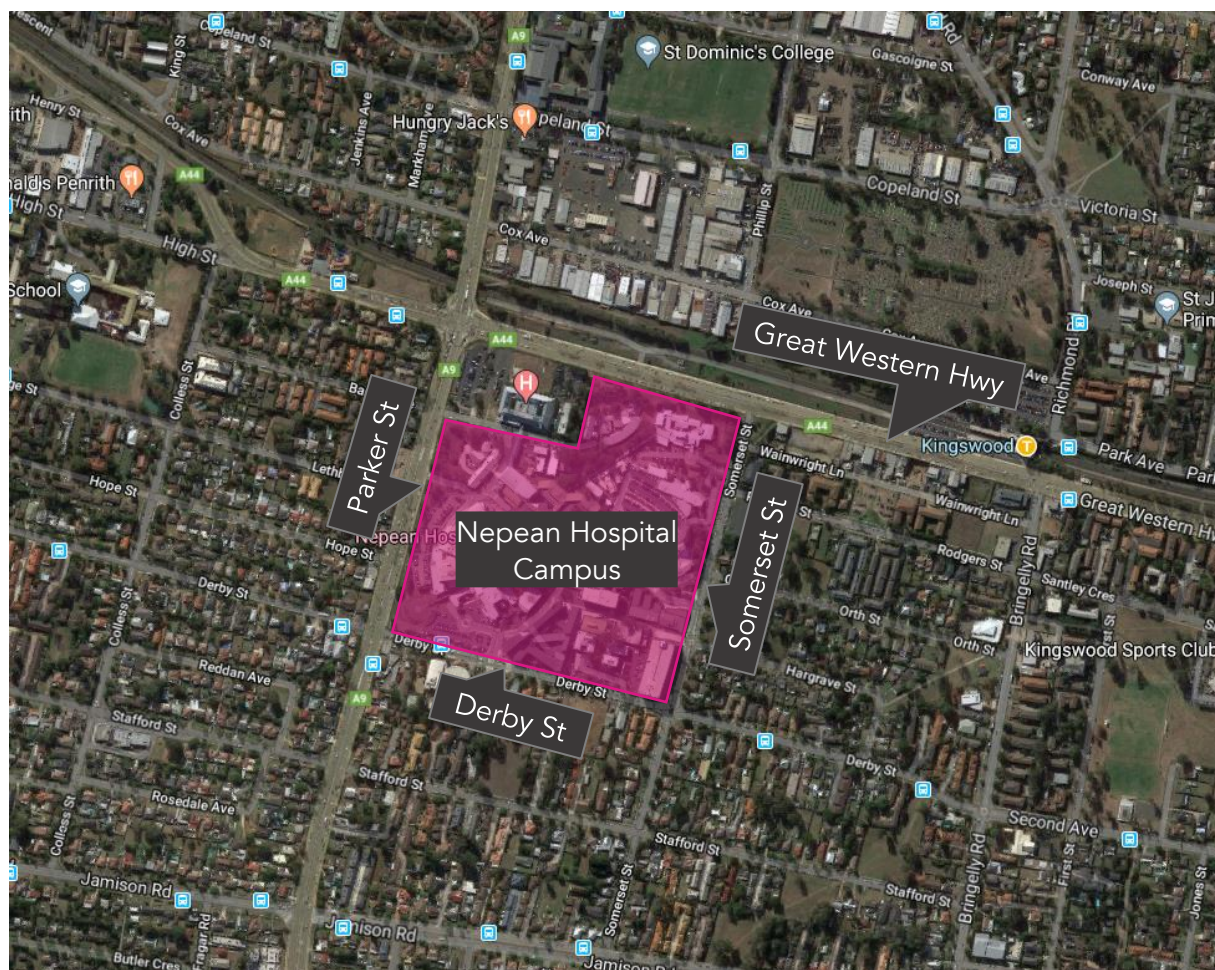


Figure 2 - Aerial View of the Nepean Hospital Campus (Source: Google Maps)

4.2 Surrounding Land Uses

In the context of the surrounding land use, the Hospital campus is classified as an Infrastructure Zone (SP2) and is surrounded by a variety of different land uses:

- The west of the hospital is characterised by Medium (R3) and High (R4) Density Residential housing.
- Immediately to the east and south of the hospital is a Mixed Use (B4) area, followed by Medium (R3) and High (R4) Density Residential housings and the Chapman Gardens Oval, zoned as Public Recreation (R1).
- To the north-east of the Hospital lies a General Industrial (IN1) area, accommodating railway tracks, the Kingswood Railway station and several automotive outlets along the Great Western Highway. Behind these is the Kingswood Cemetery, zoned as Special Activities (SP1).

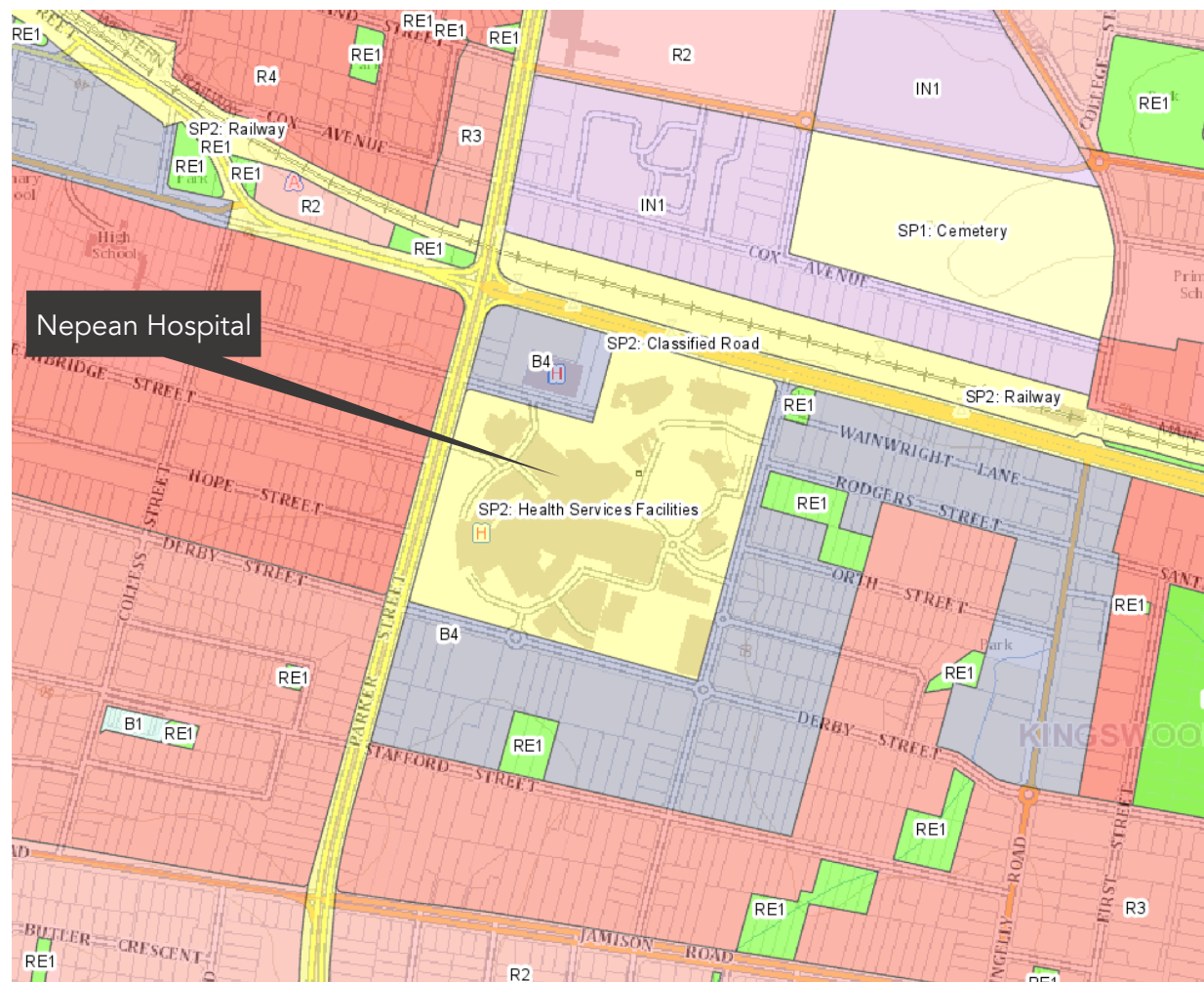


Figure 3 - Surrounding Land Use (Source: NSW Planning Portal 2021)

4.3 Current Site Use

Nepean Hospital is part of the Nepean Blue Mountains Local Health District, providing public health services to the Greater Western Sydney Region. The area is served by a number of hospitals including Hawkesbury Hospital, Springwood Hospital, Blue Mountains Hospital and Lithgow Hospital.

The Hospital is the principal referral hospital and regional trauma centre for Western Sydney and provides a diverse range of services including emergency, intensive care, cancer care, cardiology, community health, drug & alcohol, medical imaging, mental health, sexual health, rehabilitation, pharma & allied health, and surgical services (including dental, neurosurgery, orthopaedic, plastic & reconstructive, thoracic, breast & endocrine, ENT, urology and vascular).

The Hospital is also a teaching hospital of the University of Sydney. Medical, nursing, and allied health students are placed at the hospital for practical terms.

The existing Hospital Campus map is presented below:



Figure 4 - Existing Nepean Hospital Campus Map (Source: NSW Health)

It is noted that the Stage 1 building is currently under construction and will be completed prior to the target commencement date of the Stage 2 project, being 2023. For preliminary staging plans, please refer to the Preliminary Construction Management Plan prepared by HI.

Table 2 - Construction Programme

Stage / Works	Date
Commencement of demolition	May 2023
Commencement of bulk excavation	August 2023
Commencement of sub-structure works for Tower 2	November 2023
Commencement of super-structure works for Tower 2	February 2024
Completion of Tower 2	July 2025
Completion of public realm works	July 2025
Completion of operational readiness	October 2025

6. Existing Transportation Facilities

6.1 Road Hierarchy

The Hospital is served by a regional and local road network, which provides ready access to the City Centre and the surrounding region, while the Great Western Highway and Parker Street provide the primary connection to the Sydney CBD. The road network in this area is also comprised of State and Regional roads, as well as local roads providing access to the surrounding land uses.

The surrounding road network is illustrated in the following figure.

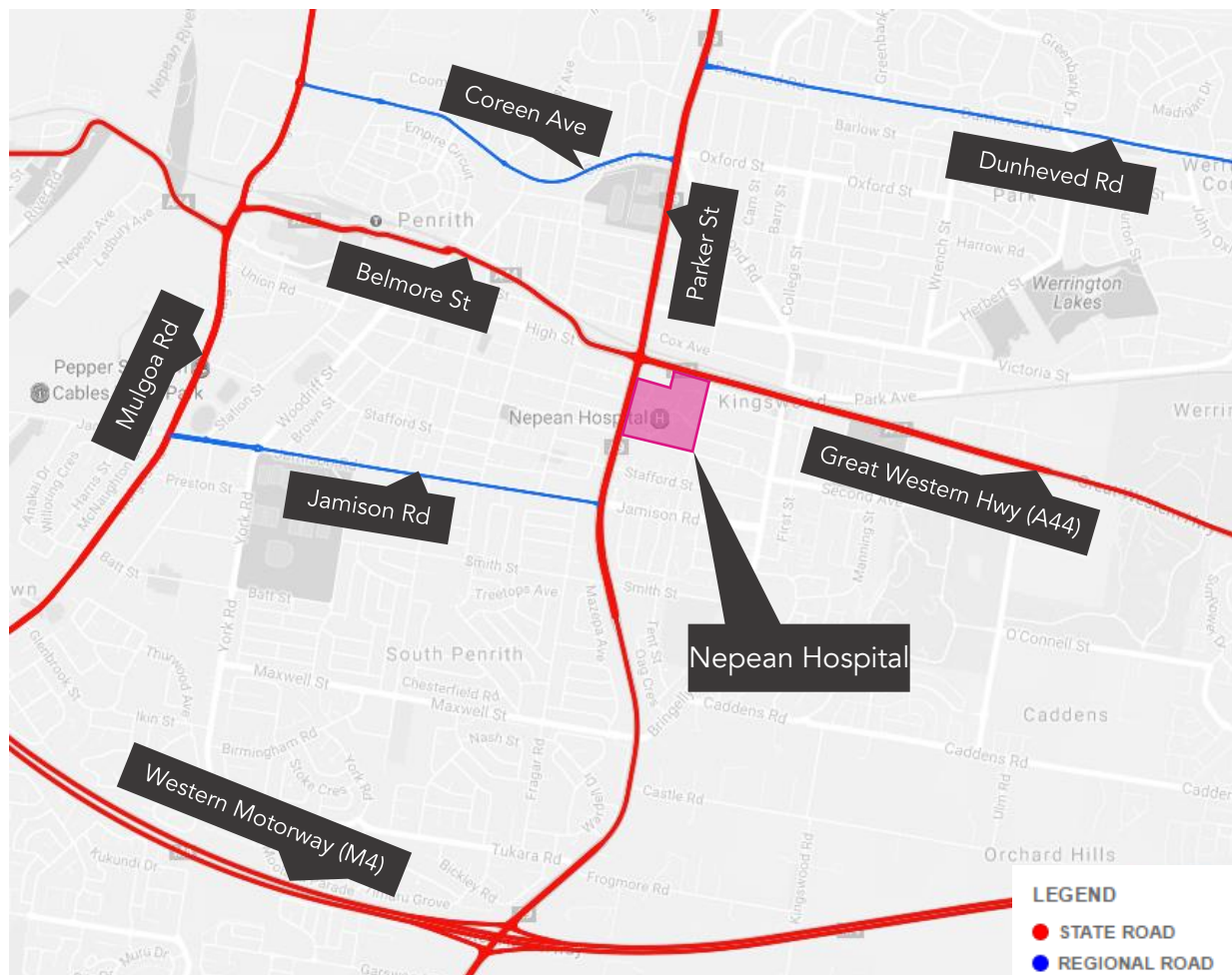


Figure 7 - Road Hierarchy (Source: TfNSW Road Hierarchy Review)

The NSW administrative road hierarchy comprises the following road classifications, which align with the generic road hierarchy as follows:

- State Roads: Freeways and Primary Arterials (TfNSW Managed)
- Regional Roads: Secondary or sub-arterials (Council Managed, Part funded by the State)
- Local Roads: Collector and local access roads (Council Managed)

The road network serving the site includes:

Great Western Highway

Road Classification	State Road
Alignment	East – West
Number of Lanes	3 lanes in each direction
Carriageway Type	Divided
Carriageway Width	22.5 metres
Speed Limit	60kph
School Zone	No
Parking Controls	Eastbound: unrestricted parking on the outer most lane; Westbound: partially unrestricted parking on the outer most lane, partially 'No Stopping'
Forms Site Frontage	Yes



Figure 8 - Streetview of Great Western Highway, Eastbound (Source: Google)

Parker Street

Road Classification	State Road
Alignment	North – South
Number of Lanes	3 lanes in each direction
Carriageway Type	Divided
Carriageway Width	22.5 metres
Speed Limit	70kph
School Zone	No
Parking Controls	Southbound: unrestricted parking on the outer most lane; Northbound: partially unrestricted parking on the outer most lane, partially 'No Stopping'.
Forms Site Frontage	Yes



Figure 9 - Streetview of Parker Street, Northbound (Source: Google)

Derby Street	
Road Classification	Local Road
Alignment	East – West
Number of Lanes	1 lane in each direction
Carriageway Type	Un-divided
Carriageway Width	12 metres
Speed Limit	50kph
School Zone	No
Parking Controls	Eastbound: partially 'No Stopping' and 'Bus Zone' areas, partially free 2 hour parking; Westbound: partially 'Bus Zone' and free 15 min parking, partially free 4 hour parking.
Forms Site Frontage	Yes



Figure 10 - Streetview of Dorby Street, Eastbound (Source: Google)

Somerset Street	
Road Classification	Local Road
Alignment	North – South
Number of Lanes	1 lane in each direction
Carriageway Type	Un-divided
Carriageway Width	12 metres
Speed Limit	50kph
School Zone	No
Parking Controls	Free 2 hour parking northbound and 4 hour parking southbound
Forms Site Frontage	Yes



Figure 11 - Streetview of Somerset Street, Northbound (Source: Google)

Barber Avenue

Road Classification	Local Road
Alignment	East – West
Number of Lanes	One lane for 2-way traffic
Carriageway Type	Un-Divided
Carriageway Width	9 metres
Speed Limit	50kph
School Zone	No
Parking Controls	Free 2 hour parking on the southern road side, 'No Stopping' on the northern road side
Forms Site Frontage	Yes



Figure 12 - Streetview of Barber Avenue, Eastbound (Source: Google)

6.2 Public Transport

Several public transport options are available in the vicinity of the Hospital in the form of buses and rail. The NSW Planning Guidelines for Walking and Cycling 2004 (the Guide) suggests a distance of 400m as a walkable catchment to access local amenities. The Guide also recommends that an 800m catchment is an acceptable, walkable distance if the development is within an area with public transport links. Furthermore, the document also suggests a distance of 1,500m is a suitable catchment for cycling for accessibility to public transport facilities and local amenities.

The Hospital location has been assessed in the context of available forms of public transport that may be utilised by prospective staff and visitors. Public transport options within the recommended catchments are shown in Figure 13.



Figure 13 - Public Transport Map

6.2.1 Bus Services

There are five bus stops within 400m of the Hospital, as summarised below in Table 3 and Figure 14.

Table 3 - Bus Service Summary¹

Route No.	Frequency	Coverage	Stop Location
677	Every 60-120mins on weekdays; every 120mins on weekends	Richmond to Penrith via Londonderry	• High St opp Kradle Kraysons
774	Every 30mins on weekdays; every 60mins on weekends	Mount Druitt to Penrith via Nepean Hospital	• Derby St before Somerset St • Derby St after Somerset St
775	Every 30mins on weekdays; every 60mins on weekends	Mount Druitt to Penrith via Erskine Park	• Derby St before Somerset St • Derby St after Somerset St
776	Every 25-30mins on weekdays; every 60mins on weekends	Mount Druitt to Penrith via St Clair	• Derby St before Somerset St • Derby St after Somerset St
780	Every 15-30mins on weekdays; every 60mins on weekends	Mount Druitt to Penrith via Ropes Crossing	• High St opp Kradle Kraysons

¹ <https://transportsw.info/>

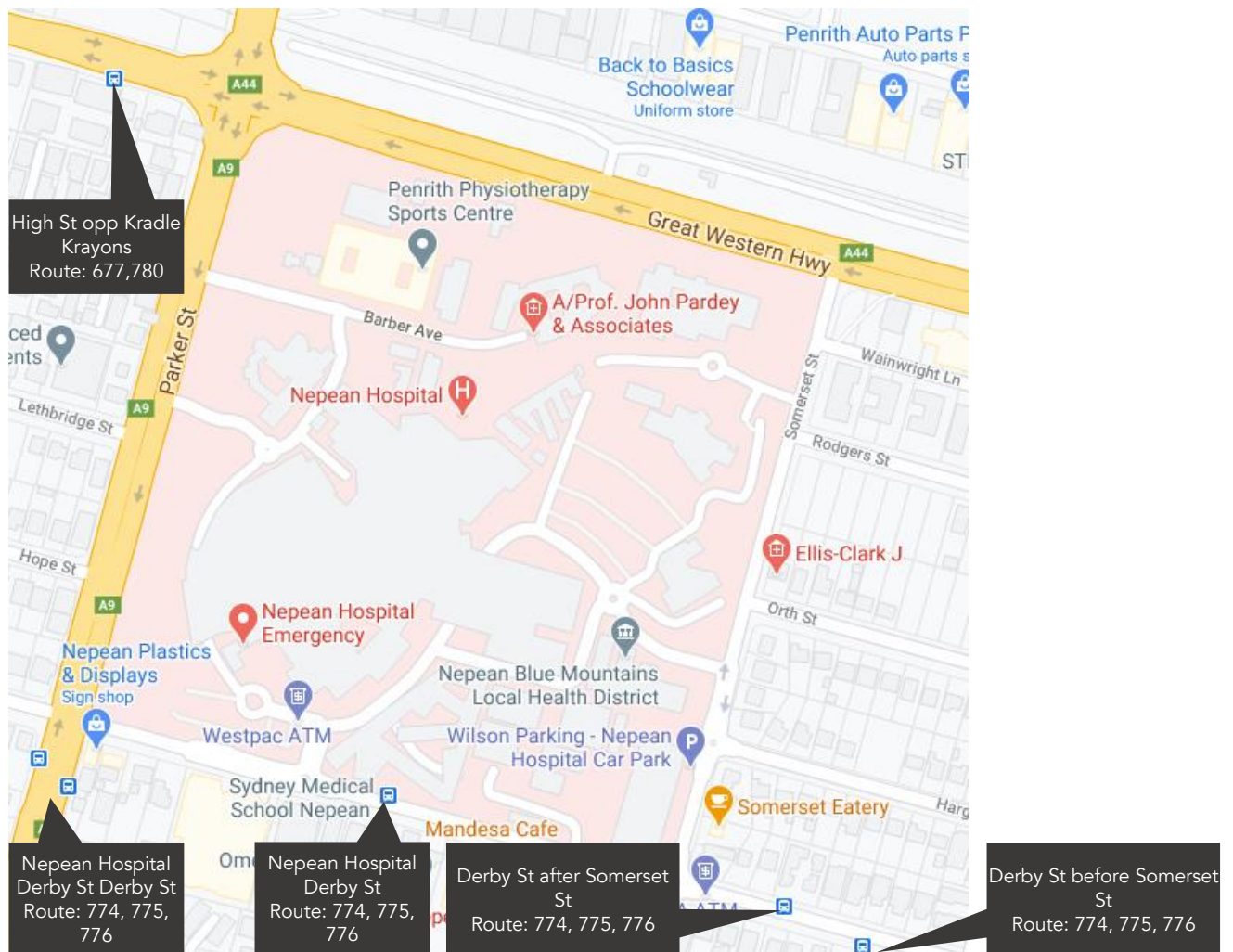


Figure 14 - Bus Stop Locations

The Hospital is relatively well serviced by buses, with a number of routes and regular services (approximately every 30 mins on weekdays) and therefore provides a reasonably attractive transport option for construction workers.

6.2.2 Train Services

Kingswood railway station is located approximately 400 metres (5-minute walk) from the western boundary of the Hospital, which is within reasonable walking distance for construction workers.

Kingswood Railway Station is operated by the Sydney Train Network and is served by the T1 Western Line, from Emu Plains and Richmond to the City. Services operate seven days a week with city-bound services approximately every 10-15 minutes on weekdays (3:16am-12:19am) and weekends (3:48am-12:02am)².

² <https://transportnsw.info/>

7. Traffic Management Plan

7.1 Objective

The traffic management plan associated with the construction activity aims to ensure the safety of all workers and road users within the vicinity of the construction site and the following are the primary objectives:

- To minimise the impact of the construction vehicle traffic on the overall operation of the road network;
- To ensure continuous, safe and efficient movement of traffic for both the general public and construction workers;
- Installation of appropriate advance warning signs to inform users of the changed traffic conditions;
- To provide a description of the construction vehicles and the volume of these construction vehicles accessing the construction site;
- To provide information regarding the changed access arrangement and also a description of the proposed external routes for vehicles including the construction vehicles accessing the site; and
- Establishment of a safe pedestrian environment in the vicinity of the site.

7.2 Hours of Work (Based on the Stage 1 SSDA Conditions)

All works, associated with the project will be restricted to the conditioned working hours associated with the construction activity. As a guide, SSDA Conditions C5 and C8 associated with the Stage 1 project were as follows:

C5. Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:

- *Mondays to Fridays inclusive* 07:00am to 06:00pm;
- *Saturdays* 07:00am to 05:00pm³; and
- *Sunday or public holidays* No works may be carried out.

C8. Rock breaking, rock hammering, sheet piling, pile driving, and similar activities may only be carried out between the following hours:

- *Monday to Friday* 09:00am to 12:00pm & 02:00pm to 05:00pm;
- *Saturday* 09:00am to 12:00pm; and
- *Sunday or public holidays* No works to be undertaken.

7.2.1 Exceptions

It is noted however, that the following *SSDA Condition C6* stated that activities may be undertaken outside the construction hours of work outlined in *Condition C5*, if required:

- by the Police or a public authority for the delivery of vehicles, plants or materials; or
- in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or

³ Justification of the hours for Saturday is provided within the Construction Management Plan

- where the works are inaudible at the nearest sensitive receivers; or
- where a variation is approved in advance in writing by the Planning Secretary or her nominee if appropriate justification is provided for the works.

7.3 General Requirements

All construction activities shall be wholly contained within the approved construction compounds, including, but not limited to plant, vehicles, materials, waste, site offices and amenities.

Any hoardings and barriers shall not impact pedestrians, maintaining worksite security, whilst providing appropriate pedestrian thoroughfare. Providing safe pedestrian visibility near any crossing points will be key criteria in the hoarding arrangements. Prior to any site establishment works, the hoarding arrangement will obtain approval from the relevant Certifying Authority. Upon completion of any stage, the dismantling of any hoardings or road-signage shall be done in accordance with the Traffic Control at Works Sites Manual.

In accordance with Traffic requirements, all vehicles transporting loose materials will have the entire load covered and/or secured to prevent any large items, excess dust or dirt particles depositing onto the roadway during travel to and from the site. All subcontractors must be inducted by the lead contractor to ensure that the procedures are met for all vehicles entering and exiting the construction site. The lead contractors will monitor the roads leading to and from the site and take all necessary steps to rectify any road deposits caused by site vehicles.

Vehicles operating to, from and within the site shall do so in a manner, which does not create unreasonable or unnecessary noise or vibration. No tracked vehicles will be permitted or required on any paved roads. Public roads and access points will not be obstructed by any materials, vehicles, refuse skips or the like, under any circumstances.

7.4 Construction Vehicle Types

As stated previously, the development involves the demolition of the existing public and staff car park, the excavation of the site and the construction of the Stage 2 Building, which will require removal and delivery of mixed materials. This will involve the use of commercial trucks up to 19m 'truck and dogs' and 19m articulated vehicles (AVs).

Any oversized vehicle that is required to travel to the site will be dealt with separately, with the submission of required permits to, and subsequent approval by the relevant authority prior to any delivery. It is also anticipated that some special oversize vehicles will be required, such as a crane. These vehicles will be subject to an access permit application to the National Heavy Vehicle Regulator (NHVR).

All construction vehicles are to enter and exit the site in a forward movement. In the event of an emergency or where a large vehicle cannot turn around within the confines of the site, a reverse manoeuvre to enter and exit the site can be performed at the direction of TfNSW accredited traffic controllers. The swept path analysis for a 19-meter articulated vehicle (AV) reversing manoeuvre entering and exiting the construction site is shown in Attachment 6.

Note: Any adjustment to the CTMP should be developed in consultation with council and the contractor prior to being implemented onsite. A suitable Traffic Control Plan (TCP) will be required to be prepared by the appointed traffic management contractor.

7.5 Construction Vehicle Routes

A consistent approach to traffic management is to be adopted throughout all phases of the proposed works. To ensure the minimisation of impacts to the local and regional road network from truck movements, trucks will adopt a 'forward in, forward out' principle for site access and egress, as well as to the proposed Works Zone, to ensure safety of pedestrians, cyclists and other motorists. The 'forward in' movement allows a safer environment for other road users and pedestrians. If required, TfNSW accredited traffic controllers will be engaged to regulate safe construction vehicle activity within the construction site vicinity.

In the event of an emergency or where a large vehicle cannot turn around within the confines of the site, a reverse manoeuvre to enter and exit the site can be performed at the direction of TfNSW accredited traffic controllers. The swept path analysis for a 19-meter articulated vehicle (AV) reversing manoeuvre entering and exiting the construction site is shown in Attachment 6.

Note: Any adjustment to the CTMP should be developed in consultation with council and the contractor prior to being implemented onsite. A suitable Traffic Control Plan (TCP) will be required to be prepared by the appointed traffic management contractor.

The site is located in Kingswood and the proposed construction vehicle routes have regard for the surrounding traffic arrangements within the vicinity of the site.

The proposed construction vehicle routes are outlined in Figure 15. These routes shall be communicated to construction staff during the induction process. As a general requirement however, all drivers and associated companies are responsible for adhering to the road rules and regulations.

Construction vehicle access will be limited to the State and Regional road network wherever practicable to minimise the impact on the surrounding road network.

Construction vehicles travelling to the site from the north are able to travel southbound along Parker Street, turn east into Barber Avenue towards the site. Vehicles travelling from the east and west are able to utilise the Great Western Highway, turn south onto The Northern Road, into Barber Avenue towards the site.

For egress routes, vehicles travelling towards the south, east and west will be able to travel south along Parker Street, turn to access the M4 Motorway or continue south.

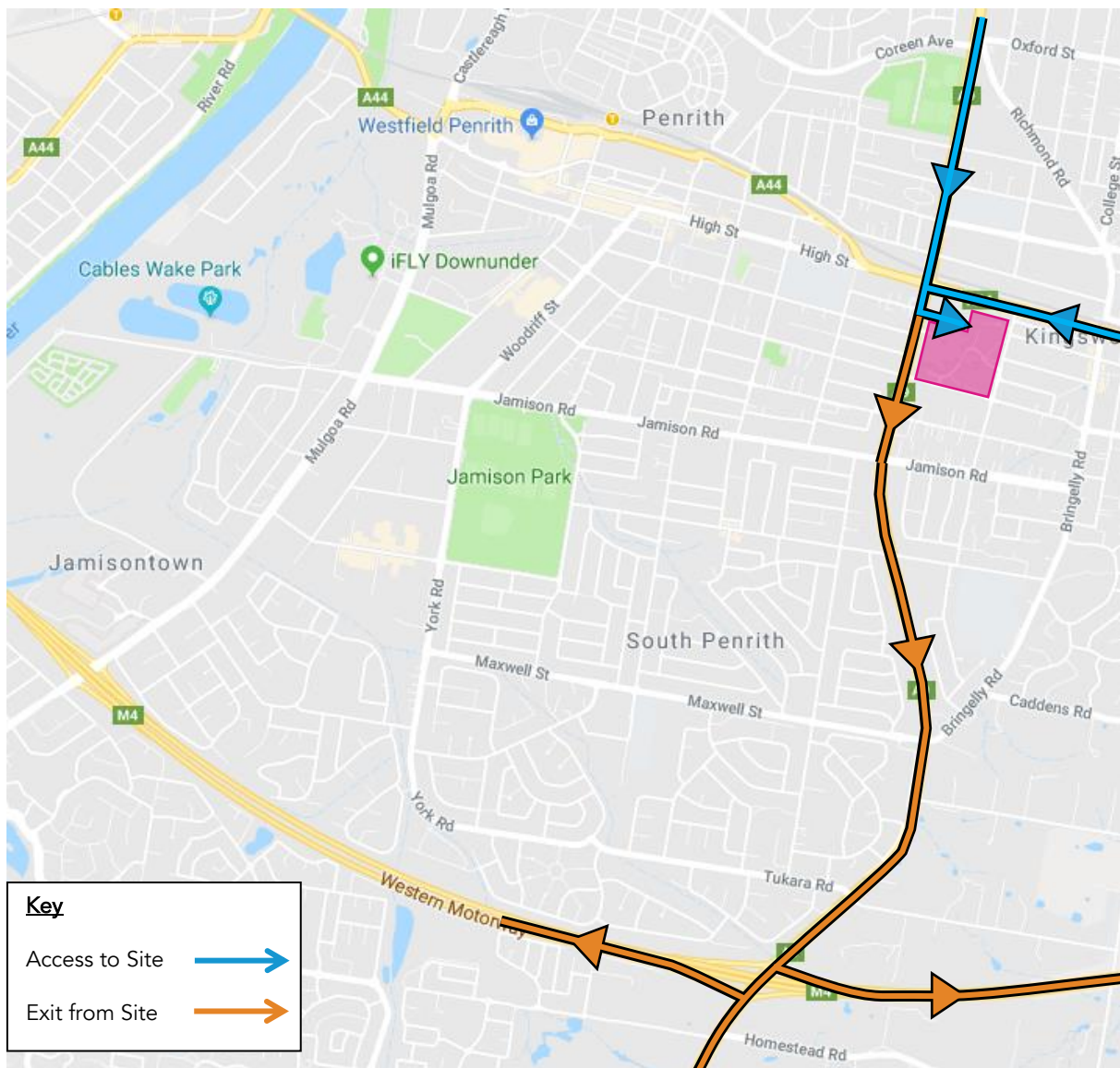


Figure 15 - Proposed Construction Vehicle Routes during Stage 2

7.6 Construction Impacts & Stakeholders

7.6.1 Construction Activity

The construction worker population and truck volumes will be determined by the contractor when engaged.

It is estimated that there will be approximately construction workers on site with up to workers during the peak construction phases.

It is estimated that the truck movements associated with bulk excavation deliveries will involve up to trucks per day. It is noted that bulk excavation is scheduled to occur for a duration of weeks in total. In light of this information, it is estimated that there will be approximately heavy vehicle movements during the peak hour, assuming 10% of truck movements occurring during the peak.

As there is limited parking available within the vicinity of the site and due to the lack of parking for construction staff, driving to the site is not considered an attractive mode of travel for workers. As such, it is not anticipated that there will be a significant traffic impact in regard to light vehicles.

Given the close proximity of the State and Regional road network to the hospital, it is anticipated that the increase in traffic volumes will be within tolerance of the local road network.

7.6.2 Impacts on Road Network (TBC)

7.6.3 Impacts on Pedestrians and Cyclists (TBC)

7.6.4 Impact on the Bus Network

As shown in Figure 13, the existing bus stops are located away from the construction site access. Therefore, no impact on the bus network is expected.

7.6.5 Impact on the Rail Network

There are no impacts on the rail network arising from the construction activity or the truck routes associated with the construction site.

7.6.6 Stakeholders

Stakeholders should be identified, and informed of the proposed works, potential timing, and possible impacts. These details will be better understood upon further development progression. Some of the initial stakeholders are listed in the following section.

- Health Infrastructure (Proponent);
- Department of Planning & Environment (Approval Authority);
- Penrith City Council;
- Transport for NSW
- State Transit Authority (STA); and
- Local Employees and Residents.

7.7 Traffic Control Measures

Traffic Control Plans (TCP) will be developed by the proponent in due course; TCPs shall be developed in accordance with the Australian Standards and the Traffic Control at Works Sites Guidelines.

Traffic controllers may be required to assist in coordinating traffic to allow construction vehicle access and egress movements. Any traffic controllers engaged on-site shall be accredited by TfNSW, and act in accordance with TfNSW Standard Conditions, including:

- No stopping of traffic on public streets; and
- No stopping of pedestrians in anticipation of truck movements. Pedestrians may only be held for short periods, for their safety, whilst a truck is entering or leaving the site.

No marshalling or queuing of trucks shall be permitted on the public road.

7.8 Method of Communication Traffic Changes

Traffic control plans in accordance with Australian Standards (AS 1742.3 – Traffic Control Devices for Works on Roads) and the Traffic Control at Worksites manual will advise motorists of upcoming changes in the road network.

During construction the contractor shall each morning, prior to work commencing, ensure all signage is erected in accordance with the TCP and clearly visible. Each evening, upon completion of work, the contractor is to ensure signage is either covered or removed as required. Sign size is to be size “A”.

Any variation to the layout of the TCP on site is to be recorded and certified by authorised TfNSW accredited personnel. The associated TCP road signage will inform drivers of works activities in the area including truck movements in operation.

Prior to commencement of works on site, the contractor is to inform neighbouring properties of proposed works and provide site contact information by means of a letter box distribution.

7.9 Pedestrian Access

To provide segregation and protection for pedestrians, temporary fencing is to be established to define the extents of the works site.

All access points are to be securely locked when construction activities are not in progress.

7.10 Works Zone

At this stage it is not anticipated that Works Zones will be required in relation to the demolition works or the construction of the Stage 2 building, however the works within Barber Avenue may require temporary changes to the parking controls while the modification works are underway.

Work Zone applications will be submitted to the Local Traffic Committee by the head contractor as required.

7.11 Road Occupancies

At this stage it is not anticipated that Road Occupancies will be required in relation to the demolition works or the construction of the Stage 2 building, however the works within Barber Avenue may require occupancy of the carriageway while the modification works are underway.

Road Occupancy applications will be submitted to the Local Traffic Committee by the head contractor as required.

7.12 Special Deliveries

Whilst not anticipated, any oversized vehicle that is required to travel to the site will be dealt with separately, with the submission of required permits to and subsequent approval by the relevant consent authority prior to any delivery.

7.13 Driver Code of Conduct

All heavy vehicle drivers are required to follow the ingress and egress routes in a “forward in, forward out” manner as specified in Section 7.5, whilst adhering to all road rules and regulations. This is essential to minimise the impacts of earthworks and construction on the local and regional road network. In the event of an emergency or where a large vehicle cannot turn around within the confines of the site, a reverse manoeuvre to enter and exit the site can be performed at the direction of TfNSW accredited traffic controllers. The swept path analysis for a 19-meter articulated vehicle (AV) reversing manoeuvre entering and exiting the construction site is shown in Attachment 6.

Note: Any adjustment to the CTMP should be developed in consultation with council and the contractor prior to being implemented onsite. A suitable Traffic Control Plan (TCP) will be required to be prepared by the appointed traffic management contractor.

Furthermore, construction traffic activity shall only occur within the permitted hours of work (see Section 7.2) to minimise road traffic noise.

This code of conduct will be advised to all drivers engaged on site at the staff induction, where all demolition and construction vehicles (excluding worker vehicles) are to be contained wholly within the Site and must enter the Site completely before stopping.

7.14 Construction Staff Parking

Due to site constraints and the very close proximity of a number of regular bus services, parking will not be provided on-site. To minimise car usage, the contractor will be encouraged to assist in the transportation of workers to the site and all site personnel will be made aware of the public transport options available in the vicinity of the site and encouraged to utilise these facilities. Site personnel will also be encouraged to consider car-pooling wherever practicable. Staff related with the construction works should not park on the public road.

7.15 Construction Staff Induction

All construction staff and subcontractors engaged on site will be required to undergo a site induction. The induction will include the Driver Code of Conduct, permitted ingress/egress routes to and from the construction site for all vehicles, as well as standard environmental, WH&S, driver protocols and emergency procedures. Additionally, the lead contractor will discuss CTMP requirements regularly as part of a toolbox talks and advise workers of public transport and car-pooling opportunities.

7.16 Work Site Security

To provide security to the works site and protection to the general public, the construction site is to be secured via the use of temporary fencing (e.g. construction site fencing with shade cloth), which will define the extent of the works site. All access points are to be securely locked when construction activities are not in progress.

7.17 Emergency Vehicle Access

The initial entry into the project site will be provided via Barber Avenue, until the permanent access loop road is constructed. The access loop road is constructed, all construction related and emergency vehicular access to the site will occur this road.

Emergency vehicles will always be given priority during operation hours. Outside of operation hours, on-site staff will be present and will be able to provide access to emergency vehicles, if required.

7.18 Access to adjoining properties

Access to all adjoining properties is to be maintained throughout the works. Access to all adjoining properties will be maintained throughout the works. The adjacent landowners will be notified of works via letter box distribution and road signage to advised of anticipated truck movements in operation with access to adjoining properties being maintained at all times.

7.19 Work Health and Safety

Any workers required to undertake works or traffic control within the public domain shall be suitably trained and will be covered by adequate and appropriate insurances. All traffic control personnel will be required to hold TfNSW accreditation in accordance with Section 8 of Traffic Control at Worksites.

7.20 Monitoring Program

The effectiveness of this management plan should be monitored regularly, should an update of this document be required due to any changes to design, surrounding road network, Council, TfNSW or other authority requirements.

7.21 Contact Details for On-Site Enquiries and Site Access

Project Engineer: TBC

8. Summary

This CTMP has been prepared to outline the construction traffic measures to improve site safety to the public and workers and the construction process.

While the impacts of the project will be assessed once the contractor has been engaged and the traffic activity can be established. This document outlines the key considerations and requirements of the final CTMP and establishes that the project can be constructed while maintaining safe access and use of the road network.

It is envisaged that this document will be continually reviewed and amended if required, due to changes in design, or additional requirements of DPIE, Penrith City Council, TfNSW or any other authority requirements.

Attachment 1 Construction Vehicle Route Swept Paths

To Be Prepared