Attachment 2.

Green Travel Plan

Australian Technology Park
Work Travel Plan

Client //	Mirvac Group
Office //	NSW
Reference //	N117430
Date //	26/09/17

Australian Technology Park

Work Travel Plan

Issue: A 26/09/17

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GTA Consultants Office: NSW

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
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1. Introduction

1.1 Background

Mirvac's vision for the Australian Technology Park (ATP) is to create a vibrant new precinct that combines world class work, retail and community spaces. Mirvac will conserve, interpret and celebrate the precinct's rich and significant heritage assets and stories.

The redevelopment of the ATP precinct commenced in January 2016, and includes the delivery of three new buildings for commercial, retail, and community purposes, as well as landscaping and public domain improvements to ensure that ATP connects to the wider precinct and local community.

Construction is well underway and Mirvac is now exploring redevelopment opportunities for the Locomotive Workshop. Mirvac's wider vision is to realise the true potential of ATP by celebrating its significant heritage value to create a place that people love.

Ensuring that employees and visitors to the site have sustainable and convenient transport arrangements to the site is critical in ensuring that the precinct achieves its broader access objectives. One of the ways that a precinct can achieve transport sustainability is by developing a Work Travel Plan (WTP).

A Work Travel Plan is a way in which the developments will be able to manage the transport needs of employees and visitors. The aim of the WTP is to reduce the environmental, traffic and economic impact of travel to/from and in association with the operation of the Australian Technology Park site. More specifically, and of utmost consideration, the plan encourages the reduced use of motor vehicles as well as using alternatives to the single occupant motor cars.

This plan develops a range of strategies aimed at encouraging walking, cycling, public transport and car-pooling for travel to and from work and a shift away from the reliance on single occupant vehicle travel. This will aid in mitigating the effect of the development on the local road network, particularly during peak travel times.

1.2 Planning Consent

The Planning Assessment Commission (PAC) granted development approval for SSD7317 at the ATP site on 20 December 2016. Condition F14 specified the following:

The applicant shall prepare a work place travel plan, in consultation with TfNSW, for the proposed development which must be approved by the Secretary prior to the issue of the first Occupation Certificate. The plan shall be included in the staff induction information for incoming employees and shall aim to achieve the following:

- *Facilitate the sustainable and safe travel of staff*
- *Encourage high modal share for public transport, cycling, and working with flexible working arrangements*
- *Provide appropriate facilities at the site to enable staff and visitors to commute by sustainable transport modes*
- *Reduce the need to travel for work related activities*
- *Avoid parking on local streets in residential areas*
- *Establish a means of monitoring the mode share employees and visitors*
- *Raise awareness of sustainable transport amongst staff*

- *Reduce the number of car journeys associated with business travel by staff and visitors*

An annual report shall be submitted to the Secretary providing details of the Work Place Travel Plan implementation, and mitigation actions to improve performance if required.

Further, as part of the Locomotive Workshop development (referred to as State Significant Development Application 8449 / SSDA 8449) a specific requirement of the Secretary's Environmental Assessment Requirements (SEAR's) is as follows:

Table 1.1: Secretary's Environmental Assessment Requirements

Green Travel Plan to:
○ demonstrate how the development will support Government strategies in promoting sustainable travel choices, and determine the adequacy of pedestrian and cycle facilities to meet the likely future demand of the proposed development and give consideration of measures to be implemented; and
○ outlines the measures to be implemented to encourage users of the development, including workers and visitors, to make sustainable travel choices, including walking, cycling, public transport and car sharing, particularly the provision of end-of-trip facilities, and wayfinding strategies;

1.3 Site Location

The ATP site is located approximately 5km south of the Sydney CBD, 8km north of Sydney airport and within 300m of Redfern Railway Station. The site, with an overall area of some 13.2 hectares, is located within the City of Sydney local government area (LGA).

Figure 1.1 provides a graphic representation of the site location and broader context, with Figure 1.2 providing an aerial image of the ATP site and Figure 1.3 providing site context in relation to the other site developments.

Figure 1.1: Site Location

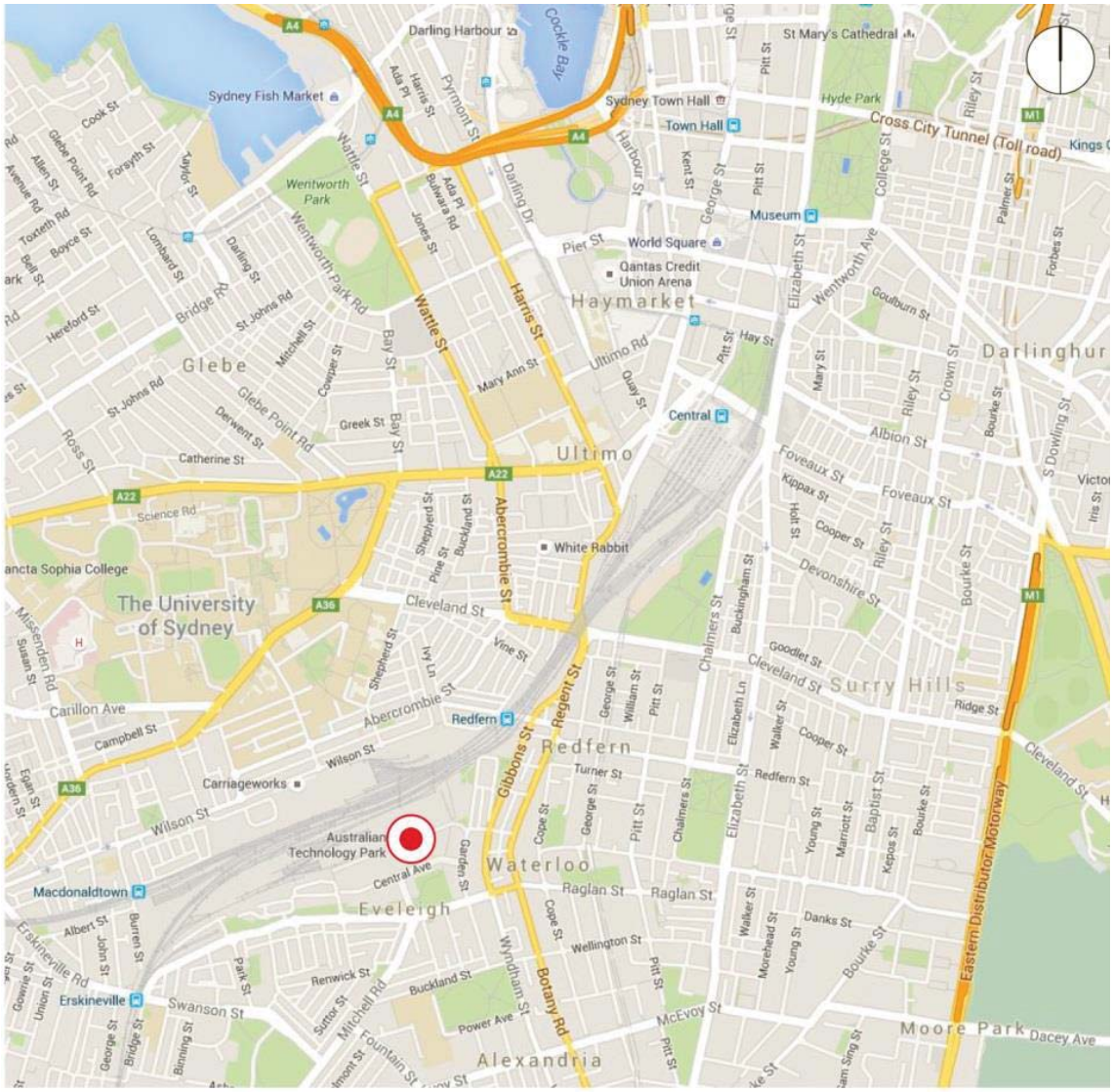
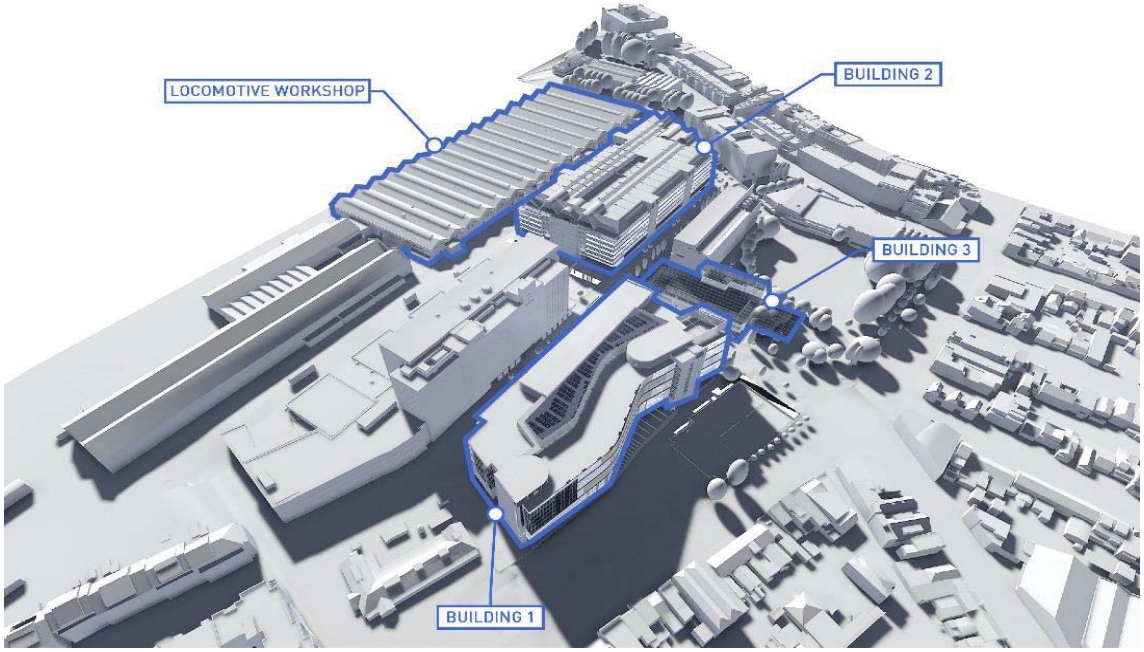


Figure 1.2: Existing Site Layout

Figure 1.3: Locational context of the Locomotive Workshop



2. Work Travel Plan

2.1 Introduction

Transport is a necessary part of life which has effects that can be managed. The transport sector is one of the fastest growing emissions sectors in Australia and therefore a travel plan provides an opportunity for reducing greenhouse gases, and for managing traffic congestion (which has adverse economic, health and social outcomes). As well as delivering better environmental outcomes, providing a range of travel choices with a focus on walking, cycling and public transport will have major public health benefits and will ensure strong and prosperous communities.

The limited parking ratios permissible in the planning controls for the ATP site and the physical infrastructure being provided as part of the development forms a major part of the initiatives to encourage reduction of vehicle transport use. However, the WTP will ensure that the services and policies to the site are tailored to the users and co-ordinated to achieve a sustainable and desirable outcome.

2.2 What is a Work Travel Plan?

A WTP is a package of measures aimed at promoting and encouraging sustainable travel and reducing reliance on the private car. The WTP for the ATP will aim to mitigate (as far as possible) private car commuting. The purpose of a WTP is not to be 'anti-car', but to make apparent, encourage and support people's aspirations for carrying out their daily business in a more sustainable way. WTPs can provide both:

- measures which encourage reduced car use (disincentives or 'sticks')
- measures which encourage or support sustainable travel (also known as Active Transport), reduce the need to travel or make travelling more efficient (incentives or 'carrots').

Active transport relates to physical activity undertaken as a means of transport. It includes travel by foot, bicycle and other non-motorised vehicles. Use of public transport is also included in the definition as it often involves some walking or cycling to/ from pick-up and drop-off points.

The WTP would promote the use of transport, other than the private car, for choice of travel to and from the ATP site, which is more sustainable and environmentally friendly. Ultimately however, end users will determine their most suitable means of transport. This WTP clearly also benefits from the high level of public transport accessibility available from the site.

2.3 Walk Score & Transit Score

A walk score and transit score provide an assessment of how accessible a development is to public transport, parks, restaurants, entertainment centres and schools, that is, in terms of walking distance. A higher walk score and transit score correlates to a reduced need for a car.

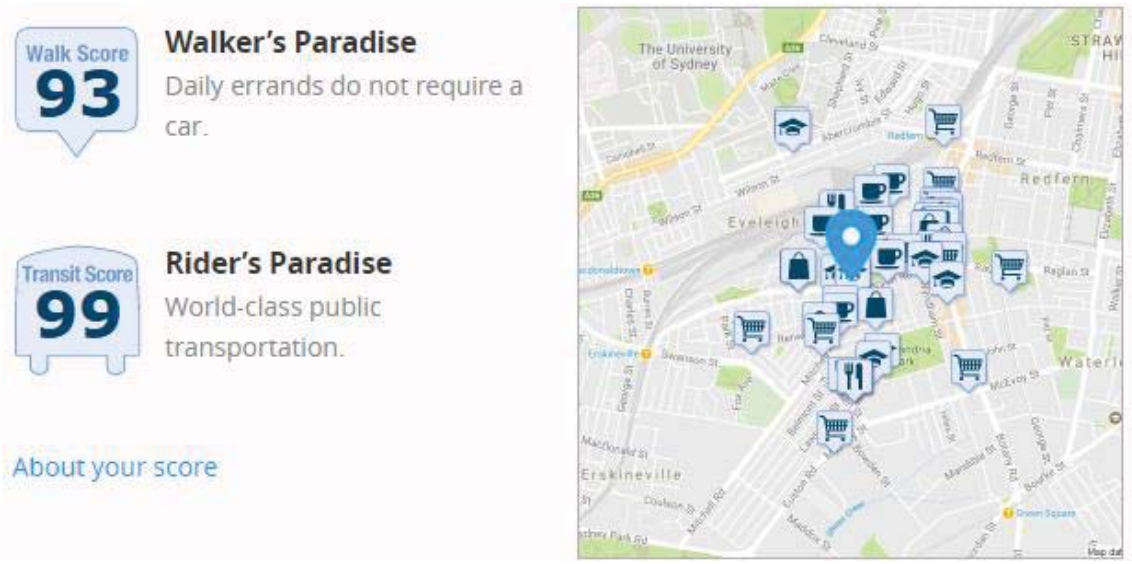
The walk score and transit score are provided by walkscore.com (https://www.walkscore.com/). Whilst there is no official recognition of the walk score and transit score by any transportation authority, the score gives insight into how accessible an area is for people travelling without a car. The score lies on a scale between 0 and 100. The site gives descriptions on what each score means as outlined in Table 2.1.

Table 2.1: Walk Score and Transit Score

Score	Walk Score Meaning	Transit Score Meaning
90 – 100	**Walker's Paradise** Daily errands do not require a car	**Rider's Paradise** World-class public transportation
70 – 89	**Very Walkable** Most errands can be accomplished on foot	**Excellent Transit** Transit is convenient for most trips
50 – 69	**Somewhat Walkable** Some errands can be accomplished on foot	**Good Transit** Many nearby public transportation options
25 – 49	**Car-Dependent** Most errands require a car	**Some Transit** A few nearby public transportation options
0 – 24	**Car-Dependent** Almost all errands require a car	**Minimal Transit** It is possible to get on a bus

Eveleigh is designated a walk score of 93 and a transit score of 99. This is reflective of a highly amenable and accessible area by walking and public transport.

Figure 2.1: Walk and Transit Score



Source: https://www.walkscore.com/score/eveleigh, accessed 18 July 2017

2.4 Existing Transport Provision

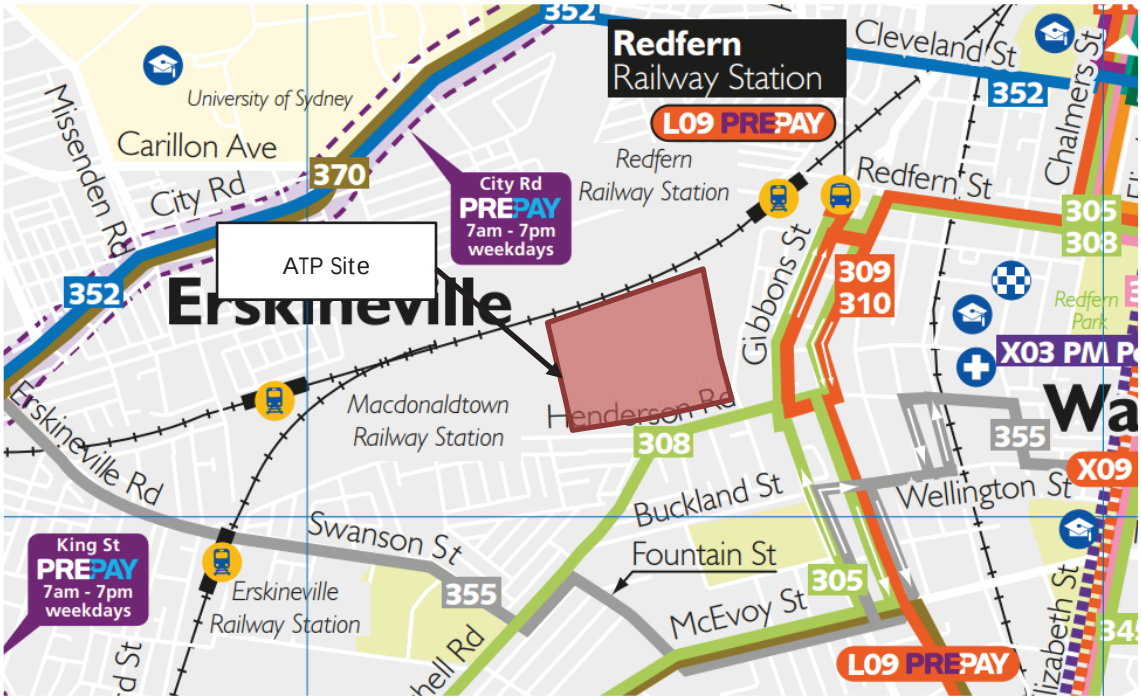
There are a wide range of public and active transport options that are available for future employees of the ATP site.

- Bus services
- Rail services
- Cycling infrastructure.

Whilst not currently existing infrastructure, the ATP site will also be a beneficiary of future transport infrastructure development.

The existing rail and bus services are shown in Figure 2.2. Existing and proposed bicycle links are shown in Figure 2.3.

Figure 2.2: Existing Rail and Bus Services



Base Map Source: Transport for NSW

2.4.1 Bus

The site and its surroundings is serviced by a number of bus routes operating within the vicinity of the site. These routes include:

- 305 – Mascot to Railway Square
- 308 – Marrickville Metro to Sydney CBD
- 309 – Port Botany to Sydney CBD
- 310 – Eastgardens to Sydney CBD
- 355 – Bondi Junction to Marrickville Metro
- L09 – Port Botany to Redfern (Peak only, limited stops)

Table 2.2: Availability of bus services in vicinity of the subject site

Route	Description	Location of Stop	Frequency	
			Peak	Off-Peak
305	Mascot to Railway Square	Wyndham Street at Boundary Street	30 mins	N/A
308	Marrickville Metro to Sydney CBD		30 mins	30 mins
309	Port Botany to Sydney CBD		15 mins	20 mins
310	Eastgardens to Sydney CBD		15 mins	20 mins
355	Bondi Junction to Marrickville Metro	Cope Street near Raglan Street	20-30 mins	20-30 mins
L09	Port Botany to Redfern (Peak only, limited stops)	Redfern Street at Renwick Street	10-20 mins	N/A

2.4.2 Pedestrian Infrastructure

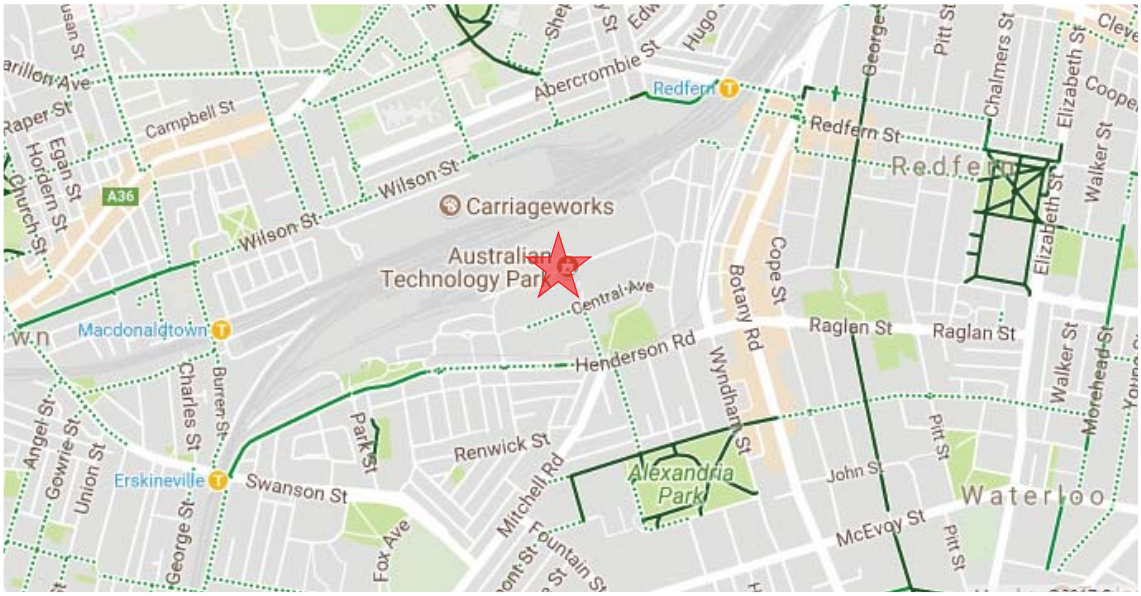
Footpaths are generally provided along all streets surrounding the ATP site. Footpaths provide access to/ from the ATP site to surrounding points of interest. As traffic access is heavily restricted to vehicles specifically accessing the uses within the site, most internal roads (with the exception of

Davy Road and Central Avenue) function as *quasi*-shared zones. This is reinforced by a lack of kerb and gutter on many internal roads. At the perimeter of the site, easy access is provided to the public transport services.

2.4.3 Cycle Infrastructure

The subject site is well serviced by cycling infrastructure being in proximity to the George Street cycleway. The surrounding cycling network is shown in Figure 2.3. The site will also be aided by future cycleway development including the Wilson Street cycleway and Burren Street cycleway.

Figure 2.3: Availability of Cycleway Routes in Vicinity of the ATP Site



Source: http://www.sydneycycleways.net/map/, accessed 18 July 2017

2.4.4 Rail

Existing

Redfern Railway Station is located approximately 300m north-east of the ATP site and is within a 4 minute walk. The station is a major stop in the Sydney Trains network, with frequent services on four rail lines, namely T1 North Shore, Northern & Western Line, T2 Airport, Inner West & South Line, T3 Bankstown Line, T4 Eastern Suburbs & Illawarra Line. The services are shown in Table 2.3.

Table 2.3: Rail Service Provision

Lines	Frequency Peak Period	Frequency Off Peak
T1 North Sore, Northern & Western Line	3 minutes	4 minutes
T2 Airport, Inner West & South Line	5 minutes	5-15 minutes
T3 Bankstown Line	10-15 minutes	15 minutes
T4 Eastern Suburbs & Illawarra Line	3 minutes	5-10 minutes

Data Source: www.transportnsw.info (accessed 24 July 2017)

Future

A future railway station will be provided at Waterloo as part of the Sydney Metro Project, linking Northwest to Bankstown, via the CBD.

The project includes the construction of 66km of new tracks, 31 new metro stations and will have a capacity of 40,000 passengers per hour. The entire project is scheduled to be constructed and operational by the end of 2024.

The proposed station at Waterloo is located between Botany Road and Cope Street, Raglan Street and Wellington Street, approximately 500m from the site. The new rail link will further connect the site to the greater metropolitan Sydney area.

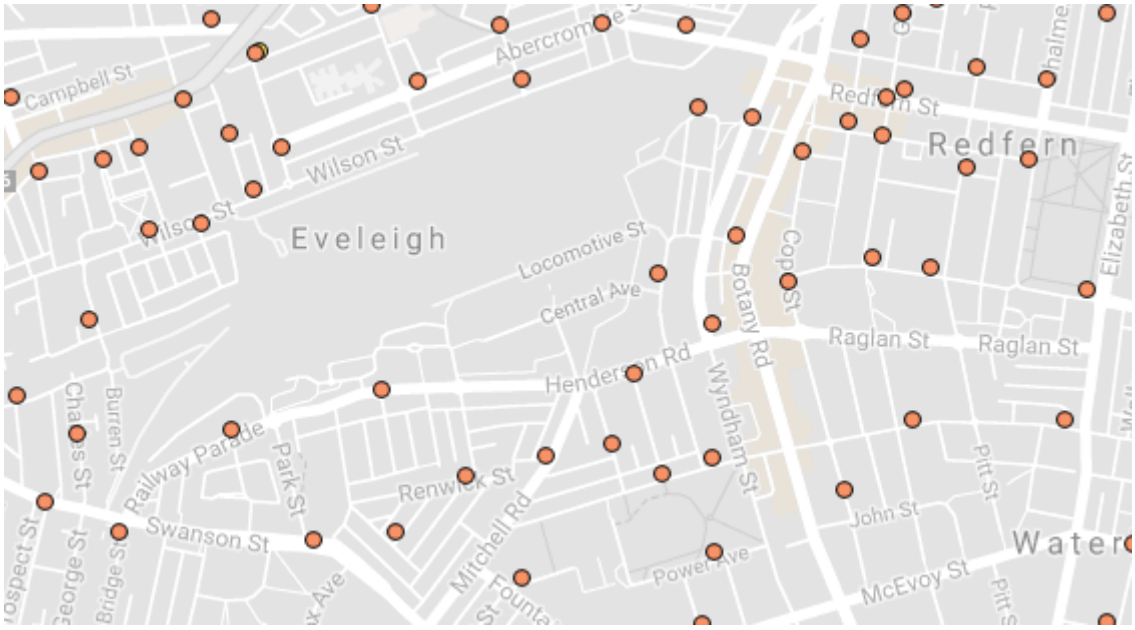
2.4.5 Car Share

Car share is a concept by which members join a car ownership club, choose a rate plan and pay an annual fee. The fees cover fuel, insurance, maintenance, and cleaning. The vehicles are mostly sedans, but also include SUVs and station wagons. Each vehicle has a home location, referred to as a "pod", either in a parking lot or on a street, typically in a highly-populated urban neighbourhood. Members reserve a car by web or telephone and use a key card to access the vehicle.

Traditionally, car share is more suited to 'origin' points (for example a residential development). However, there are still benefits to car share being in a commercial location in that the various tenancies can have a 'shared fleet' of vehicles.

GoGet, a car share company, has a substantial number of vehicles positioned in proximity to the site. GoGet currently operates several GoGet pods around the ATP site with Figure 2.4 showing the location of these vehicles. The City of Sydney provides guidance on appropriate car share allowances for new developments.

Figure 2.4: Location of GoGet Pods in the Vicinity of the Subject Site



Source: http://www.cityofsydney.nsw.gov.au/live/residents/car-sharing, accessed 18 July 2017

2.4.6 Parking Restrictions

On-street car parking is typically provided on both sides of each of the roads in the vicinity of the ATP site. The surrounding on-street car parking is subject to a variety of restrictions, including 1P, 2P permit excepted and unrestricted spaces.

The time restricted spaces are typically provided on the low density residential frontages are intended to protect residential amenity.

Observations indicate that car parking occupancies are high for the unrestricted spaces, particularly during the day. Occupancies for the time restricted spaces (1P and 2P) are typically lower than the unrestricted spaces.

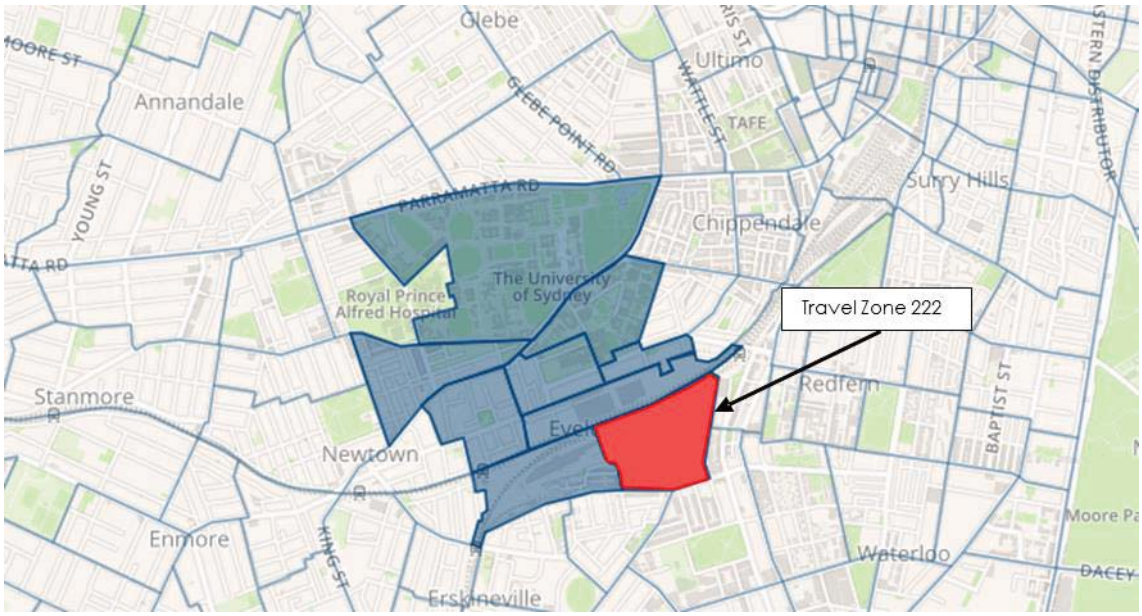
Parking within the site is typically restricted to on-street loading and 1P or 2P restricted parking.

2.4.7 Existing Transport Use

The 2011 Census Journey to Work (JTW) data provides the most robust picture of existing travel patterns to and from the development. The smallest geographical area for which JTW data is available is known as a travel zone.

The subject site is located within Travel Zone (TZ) 222 as shown in Figure 2.5. JTW data for TZ 222 and selected adjoining Travel Zones were analysed to understand the current mode of travel to work for people employed within the broader area. This is to provide a better understanding of existing employee travel patterns in the vicinity of the site. The results of this analysis are shown in Table 2.4. The travel zone incorporating the University of Sydney was included in the analysis due to the comparable intensity of land uses, with similar access arrangements anticipated.

Figure 2.5: Australian Technology Park Travel Zones



Background Image Source: Bureau of Transport Statistics website (http://visual.bts.nsw.gov.au/jtwbasic/#)

Table 2.4: 2011 Census Journey to Work Data (Travel Zone 222)

Travel Mode	Travel Zone 222 (n=1,881)	Surrounding Travel Zones (n=11,156)
Car (as driver or passenger)	48%	41%
Train	40%	26%
Bus	2%	12%
Walked	6%	15%
Other	4%	5%
Total*	**100%**	**99%**

Data Source: Bureau of Transport Statistics website (http://visual.bts.nsw.gov.au/jtwbasic/#222)

*excluding mode unknown/unstated (0-1%)

Table 2.4 shows that mode split in TZ 222 and its surrounding travel zones There are some differences in travel mode preferences between people working in TZ 222 and the surrounding travel zones.

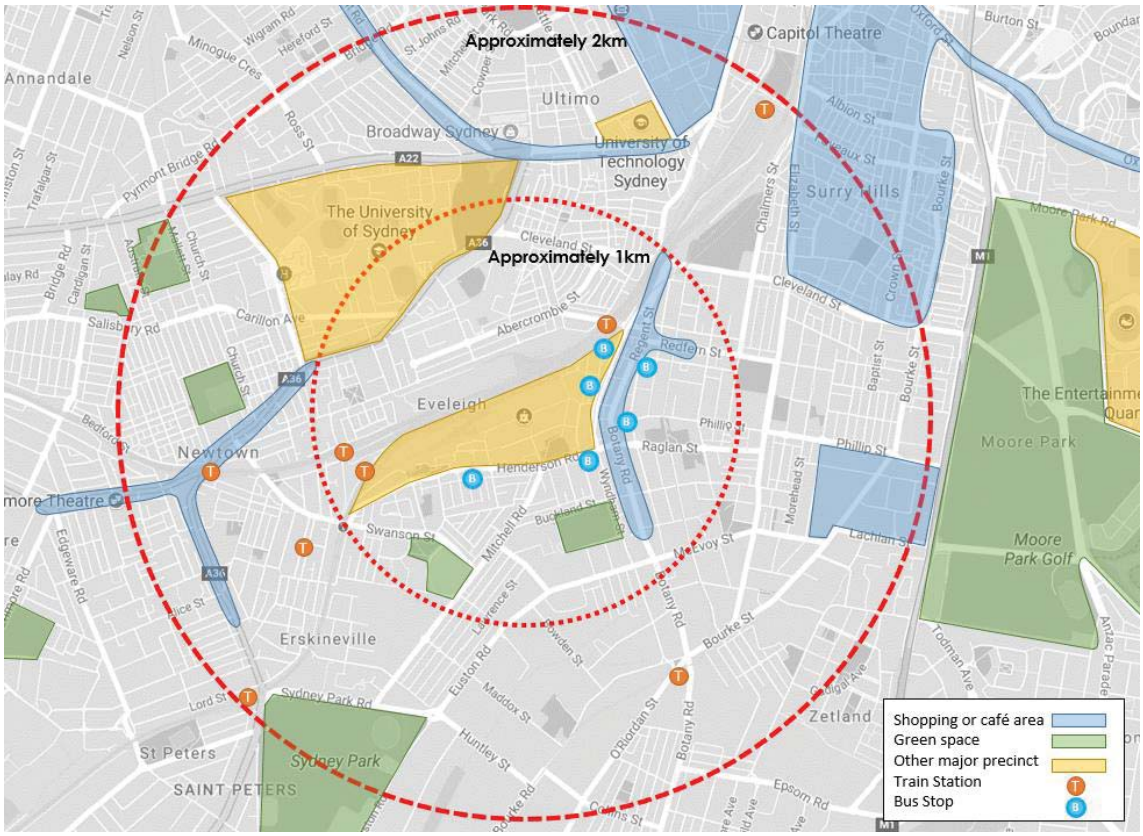
Analysis of the 2011 Census JTW data for the travel zones reveals the following:

- People working within the travel zones have a slight preference for private vehicle (as driver or passenger).
- TZ 222 is within walking distance of Redfern train station and has a higher proportion of train usage in TZ 222 (40%) compared to the surrounding area (26%).
- Public transport (bus and train) usage is similar within the travel zones, accounting for 42% in TZ 222 and 38% in the surrounding areas.
- People working within the surrounding travel zones (15%) have a higher preference for making their journey to work by walking only compared to TZ 222 (6%)

2.4.8 Local Environment

A key retail spine exists along the Wyndham Street which runs in a north-south alignment to the east of the subject site. Figure 2.6 illustrates some surrounding areas of interest in terms of green space, shopping and special land uses. There are a range of shopping areas and green spaces which would support active workspaces (for example, coffee and lunch breaks, as well as lunch time leisure/fitness activities) which are identified below.

Figure 2.6: Surrounding facilities



3. Objective and Targets

3.1 Overview

Based on the transport network reviewed in Section 2 above, this section identifies potential scenarios to change travel patterns to the ATP site. This section identifies three approaches towards implementing the WTP and provides reasonable estimates of the outcomes of each approach.

The methodology of each scenario builds on the walking and public transport networks already available around the site, as well as the limited on-site car parking provision, identifying transport modes which may be best suited to meet the travel demand for the site. This guides the program selection in Section 4, to respond to available transport infrastructure and current travel patterns in the local area.

3.2 Scenario Analysis

Scenario 1: No Action

If no green travel actions are taken, it is likely that the new employees would adopt travel patterns similar to those currently employed in the existing and surrounding Travel Zones. In this way, the current employee travel behaviour is a suitable proxy to identify current travel patterns and future travel patterns if no actions are applied.

Should no specific action be taken, it might be reasonable to expect that new employees of the ATP site would adopt travel patterns not dissimilar to those identified in Table 2.4. In this regard, up to 50% of employees would be expected to drive.

This would not be a desirable outcome for the site.

Scenario 2: Passive Approach

By targeting employee behaviour with quality information about transport options, the site can achieve more walking, cycling and public transport use. Providing wayfinding and public transport information to new employees is an opportunity to demonstrate good transport practice and encourage employees to adopt these travel modes from the day they begin work.

Adopting a passive approach is generally better than no action. However, a passive approach will only appeal to employees that are proactive about utilising sustainable transport. A passive approach would reduce employee reliance on private vehicles but may not meet 'stretch' transport mode share objectives.

Scenario 3: Active Approach

The ATP may proactively pursue initiatives to incentivise employees who walk, cycle and use public transport and dis-incentivise private vehicle journeys. To achieve Council's mode share targets, prototype projects and initiatives which promote 'active transport' would be required to minimise car use by employees.

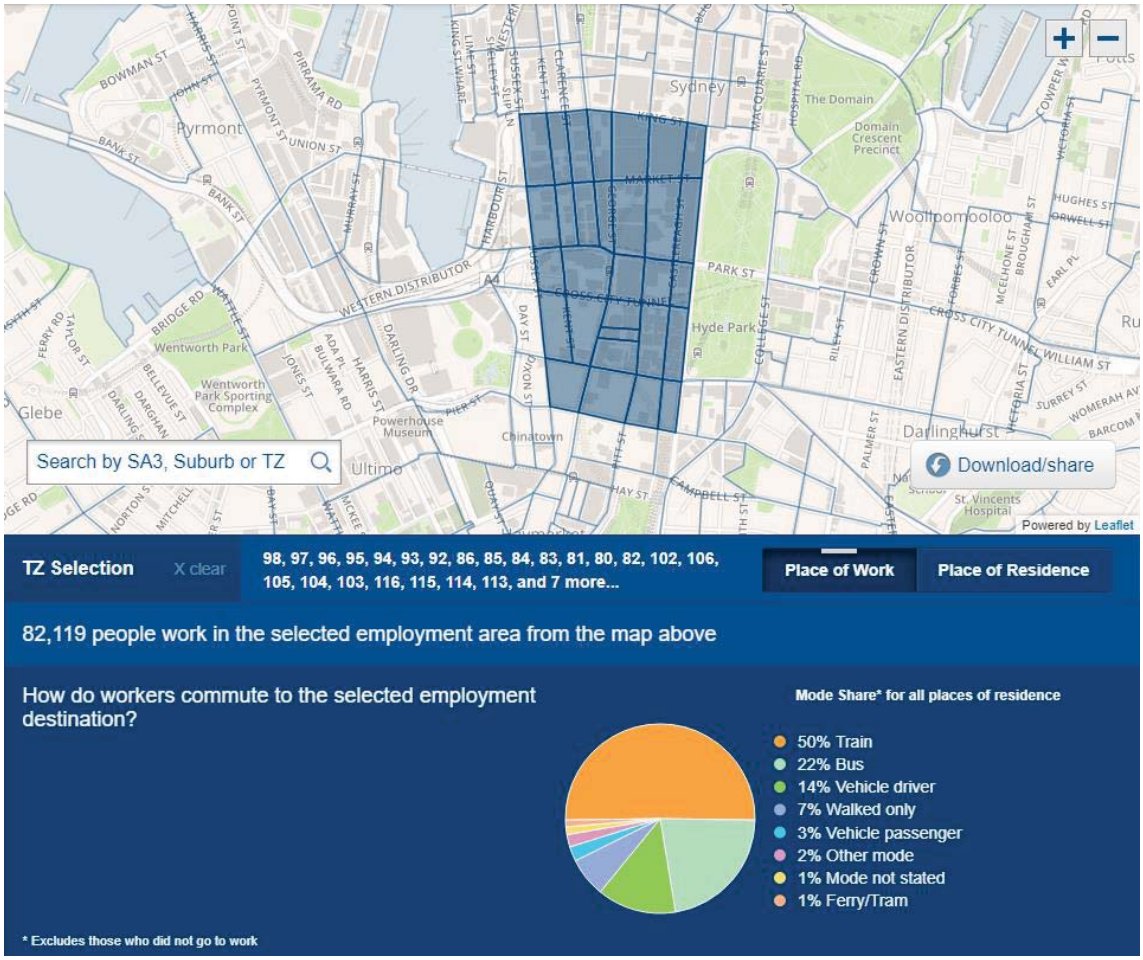
The primary travel mode of employees travelling to work would be either via the rail network at Redfern Station or the Wyndham Street/Botany Road Bus Corridor. The future site's objectives would lie in ensuring a greater percentage of employees choosing to catch public transport, or walk/cycle to work.

Based on the JTW data shown in Table 2.4 and with consideration of anticipated transport requirements, it is considered that the site adopt the following estimates for mode choice targets:

- 40-60% of employees arriving by train (including Metro post-2023)
- 15%-25% of employees arriving by bus
- 5%-10% of employees arriving by cycling
- 5%-15% of employees arriving by walking
- <10% arriving by private vehicle

Whilst these travel mode splits are optimistic compared to existing conditions, they are broadly comparable to what has already been observed in the Sydney CBD in the 2011 Census, and both areas have similar access to high quality public transport services, and both are readily accessible from the City of Sydney's cycling network, as is shown in Figure 3.1.

Figure 3.1: CBD Commuting Modes



Post-2023, CBD Metro operations will also commence, and the site will be accessible from the new Waterloo station. Whilst there will be high quality services, the above outlined mode shares would likely remain applicable.

A regular travel survey would provide a base case for these assumptions and allow the site to refine these assumptions and inform programs as part of this Work Travel Plan.

3.3 Target Modes and Actions

The target mode and actions discussed in this section aim to encourage and incentivise public and active transport opportunities to access the ATP site.

The location of the site, in terms of its proximity to Redfern Station and sub-arterial bus corridors are a key attribute in implementing this WTP. The WTP will then put in place measures to further influence the travel patterns of those people employed within the site with a view to encouraging modal shift away from cars. The measures provided in this WTP and their success can inform the travel plans for subsequent developments within the ATP.

Typical recommendations/options include:

i **Implementation of the WTP**

- Appoint a Travel Plan Coordinator (TPC) to ensure the successful implementation and monitoring of the WTP. This should be coordinated in an integrated format for the entire precinct.
- Undertake annual travel surveys to establish travel patterns in the area and assess success of the WTP. This is to be managed by the appointed TPC. Allow surveys to incorporate suggestions from employees to improve green travel arrangements.

ii **Increase walking, running and cycling to work by employees**

- Ensure that sufficient bicycle end of trip facilities for employees exist, including bicycle parking, shower and lockers, as set out in Council's DCP.
- Promote walking and cycling by offering (for example) subsidies to music subscription providers such as Deezer or Spotify for employees who choose to walk or cycle to work.
- Promote local bicycle facilities, shops and learn-to-ride or bike maintenance courses available through Sydney Cycleways to employees to encourage and facilitate an increase in cycling.
- Have 'bicycle friendly shops' around the ATP site. A loyalty card program could be organised between employees who cycle to work and surrounding cafes / shops. This could be based on the Rapha store on Crown Street, Surry Hills.
- Establish groups on platforms such as (for example) Strava, FitBit or Qantas Assure to encourage friendly competition about walking and cycling distances. Prizes might be considered for (as an example) most steps or furthest distance cycled.

iii **Increase public transport use**

- Provide Opal card subsidies for the initial occupation of the space so that employees will be encouraged to make public transport their modal choice from the day they begin work. The Opal cards would be collected from the on-site building representative upon request. The advantage of this measure lies in the ability to influence people's future travel patterns by guiding their travel habits from 'day one'. This would be promoted via leaflets for employees (a Transport Access Guide) and can also be communicated with sales and letting agents.

iv **Increase car share use**

- Allocate space for a car-share pod on the premises.
- Encourage employees who cannot practically use public transport to participate in a car-pooling. This may be coordinated by a 'transport champion', an appointed employee, senior management or formally appointed by the TPC.

- Encourage tenants to utilise car share schemes instead of having their vehicle fleets.

v **Increase awareness and knowledge of available transport options by employees**

- Provide a Transport Access Guide (TAG) to every new employee. This document would be based upon facilities currently available in the vicinity of the site and would be updated regularly to reflect changes in public transport service, active travel facilities and other relevant pieces of information. The TAG should include public transport timetables, stop / station locations, walking times/ distances etc.). The TAG can be updated annually to reflect employee travel patterns.
- Provide real time information on public transport arrival / departure times (and inform of the presence of apps such as TripView). Many multi-level buildings have information screens in the lobby identifying occupants of each floor along with the local weather and a rolling newsfeed. A similar display could be arranged to show train departure times from Redfern station and selected bus stops as well as estimated walking times to each location.

For reference, Section 4 identifies a checklist of potential actions which could be adopted to achieve desired travel behaviour outcomes. These targets are measurable, through car parking occupancy surveys or through employee travel surveys. Using these metrics, the TPC can quickly track performance against the travel plan objectives to recognise what programs are working and link program funding to results.

The above noted items are expected to be translated into specific tenant driven outcomes closer to the completion of each individual development. These outcomes will prioritise sustainable travel modes over single occupant travel trips. Details of specific sustainable travel facilities are provided within the traffic impact assessment reports for each of the proposed devleopments.

3.4 Information and Communication

Several opportunities exist to provide employees with information about nearby transport options. Connecting employees with information would help to facilitate journey planning and increase their awareness of convenient and inexpensive transport options which support change in travel behaviour.

Transport NSW info

- Bus, train and ferry routes, timetables and journey planning are provided by Transport for New South Wales through their Transport Info website: http://www.transportnsw.info/

Sydney Cycleways

- City of Sydney provides a number of services and a range of information to encourage people of all levels of experience to travel by bicycle. http://sydneycycleways.net/

4. Actions

4.1 Overview

The following provides a checklist of potential actions which could be adopted to achieve desired travel behaviour outcomes. It is expected that this list will be refined and target to each individual land use (and/or tenant) once further information about the employees and requirements of those land uses are known. As such, it is expected that this draft GTP would be updated and finalised as a later date.

4.2 General

Action	Timeframe
Identify a staff member or employee to complete travel coordinator duties involved in this plan for up to a year	
Provide a welcome pack for each new employee which includes a TAG and information regarding public transport and car pooling services	

4.3 Walking

Action	Timeframe
Identify employees living near the site that may be suited to walking to work	
Produce a map showing safe walking routes to and from your site with times, not distances, to local public transport stops	
Negotiate with the City of Sydney for improvements to footpaths used by employees. This is most effective when specific footpaths are identified and their benefits stated.	
Take part in 'National Walk to Work Day'	
Implement TravelSmart (travelsmart.gov.au) Get to Work days encouraging employees to come by alternative modes of transport	
Encourage use of the Qantas Assure or Strava app (or similar). Qantas Assure rewards people with Qantas frequent flyer points for walking specified numbers of steps per day.	

4.4 Cycling

Action	Timeframe
Appoint a WTP Coordinator to promote the personalised bike route finding service on www.sydneycycleways.net/map	
Establish an internal Bicycle Users Group (BUG). BUGs are formed by people who want to work together to improve facilities for cyclists and encourage cycling	
Develop a 'bike buddy' scheme for inexperienced cyclists	
Organise a cyclists' breakfast. A potential location would be a cafe in proximity of the ATP site. Doing so would strengthen relationships with the local businesses.	
Organise an after work ride. It doesn't have to be long or strenuous, and could end somewhere for dinner or drinks. The idea is to encourage people who might be reluctant to cycle to give it a go! A ride might be organised to go to Centennial Park.	
Monitor and provide sufficient bicycle parking to meet peak needs	
Ensure bicycle parking is clearly visible or provide signage to direct people to cycle bays consistent with the DCP	
Provide secure bicycle lockers consistent with the DCP	
Review condition of existing on site bicycle routes	
Supply a workplace toolkit consisting of puncture repair equipment, a bike pump, a spare lock and lights.	
Organise a local bike repairer to outsource all required bike repairs. One example is Pedal Pushers in the nearby Rosebery. This particular example specialises in bike fitting but also repairs and sells bicycles.	
Provide an on-site bicycle maintenance service (either as a special one-day event or on a regular basis)	
Produce a map showing more leisurely bicycle routes to work	
Participate in annual events such as 'Ride to Work Day'	
Encourage use of the Strava app (or similar), with an 'ATP' group. Offer incentives and friendly competition about commuting and physical activity.	

4.5 Public Transport

Action	Timeframe
Develop a map showing public transport routes to work	
Put up a digital notice board with maps showing the main public transport routes to and from work as well as departure times and estimated walking times to Mascot Station and nearby bus stops	
Place information on the work intranet with links to appropriate external websites e.g. TfNSW.	
Provide leaflets or timetables with payslips	
Provide free or subsidised opal cards for the probationary period of new employees	

4.6 Car Use

Action	Timeframe
Retain existing site access restrictions to discourage car use	
Restrict salary packaging of motor vehicles by employers of the site (if applicable)	

4.7 Carpooling and Car Share

Action	Timeframe
Allocate priority spaces for car-pooling employees on the premises	

5. Monitoring and Review

5.1 Overview

For this WTP to be effective, it must be reviewed on a regular basis. It is important to ensure that the WTP is meeting its objectives and having the intended impact on car use and transport choices for employees. The Plan should be reviewed on a yearly basis with staff travel surveys and in consultation with Council's Planners or Sustainable Transport Officer. The Plan should be updated and modified to reflect changing circumstances.

5.2 Travel Survey

It will clearly be important to understand people's reasons for travelling the way they do, any barriers to changing their behaviour and their propensity to change. This will enable the most effective initiatives to be identified, and conversely less effective initiatives can be modified or replaced to ensure the best outcomes are achieved.

To monitor the travel plan, a travel questionnaire should be conducted of all employees. Surveys results should be reported annually by the TPC or senior management and used to inform funding allocation for successful programs/ removal for unsuccessful programs. This would be in consultation with Council Planners or Sustainable Transport Officer, as required. Based on the review the travel plan should be updated to reflect changing circumstances.

An example format for the survey is provided below.

Q1: What is your post code? ____

Q2: How do you usually travel to work? (Select one)

- Walk / run
- Bicycle
- Bus
- Train
- Combination bus and train
- Drive a car
- Passenger in a car
- Other (explain)_____

Q3: *What time do you usually leave for work in the morning?*

Q4: Other than travelling to work, what is your main mode of transport around Sydney? (Select one)

- Walk / run
- Bicycle
- Bus
- Train
- Combination bus and train
- Drive a car
- Passenger in a car
- Other (explain)_____

Q5: To facilitate transport programs, may we share your contact details with green travel champions?

- Yes – I'll walk
  If 'yes' please provide your email here: _____
- Yes – I'm a cyclist
  If 'yes' please provide your email here: _____
- Yes – I'm a public transport passenger
  If 'yes' please provide your email here: _____
- No

5.3 Review In-house Programs

The annual employee travel survey would assist the TPC in the review of the Work Travel Plan. If required, the plan would be updated, in consultation with Council Planners or Sustainable Transport Officer.

Other feedback provided to the travel coordinator should be used to update programs as well. Sample feedback could include: email responses to programs, monitoring the bike/ car parking spaces used and transport complaints.

People in any organisation like to be part of a successful plan. Employees should be kept informed of green travel achievements, e.g. send out email bulletins, make announcements during meetings, or have a dedicated column within internal/ external publications. Advertise success to employees as part of a sustainability and green campaign for the estate.

5.4 Gaps

It may occur that transport deficiencies are identified. Some examples may include:

- provision of car-pool priority spaces may be required as demand grows
- bicycle spaces and lockers for employees and visitors as demand grows.

Transport deficiencies would be tracked by the travel coordinator, with these issues potentially needing to be revisited if identified as an issue during monitoring.

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Attachment 3.

Construction Traffic Management Plan

Australian Technology Park, Eveleigh
Locomotive Workshop Development
Construction Pedestrian & Traffic

Client //	Mirvac Projects Pty Ltd
Office //	NSW
Reference //	N117430
Date //	13/11/17

Australian Technology Park, Eveleigh

Locomotive Workshop Development

Construction Pedestrian & Traffic

Issue: C 13/11/17

Client: Mirvac Projects Pty Ltd
Reference: N117430
GTA Consultants Office: NSW

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A	26/09/2017	Final	Sam Janda	Nicole Vukic	Kane Williams	-
B	03/11/17	Revised Final	Sam Janda	Nicole Vukic	Kane Williams	-
C	13/11/17	Revised Final	Sam Janda	Nicole Vukic	Kane Williams	

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1. Introduction

1.1 Preface

This report supports a State Significant Development Application (SSDA) submitted to the Minister for Planning pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The Application (referred to as SSDA 8449) seeks approval for the adaptive reuse and redevelopment of the western portion of the Locomotive Workshop Building (being Bays 5-15) within Australian Technology Park (ATP), Eveleigh as described in the Project Description section of this report.

The Application (referred to as SSDA 8517) seeks approval for the adaptive reuse and redevelopment of the eastern portion of the Locomotive Workshop (being Bays 1-4a) within the Australian Technology Park (ATP), Eveleigh as described in the Proposed Development Description section of this report.

This report speaks to the management of construction traffic for both SSDAs.

The ATP site has been continuously developed since its establishment in 1996, but has been underutilised as a technology and business precinct for some time. UrbanGrowth NSW has actively encouraged new development and employment opportunities at the site for the past 15 years, and Mirvac intends to continue with this and deliver upon the precinct's full potential,

1.2 Background

Historically, ATP was used for railway maintenance, storage and other associated industries. Use of the site as marshalling yards and workshops formed part of a large railway-based precinct on both sides of the main railway line, dating from 1882 and growing in size until its closure in 1989. Since this time, the precinct has been progressively redeveloped and repurposed.

In 2014, the NSW Government resolved to offer development sites within the ATP for sale through a selective tender process conducted by Urban Growth NSW Development Corporation (UGDC). In November 2015 Mirvac Projects Pty Ltd (Mirvac) was named as the successful party and ownership and development rights of the precinct were subsequently transferred.

In December 2015, an SSDA was submitted to the Department of Planning & Environment for a multi-building redevelopment (i.e. Buildings 1, 2 and 3 shown in Figure 2) of the ATP to provide new commercial office, retail and community uses and a significant upgrade to the ATP public domain. Following public exhibition, and the submission of additional information, the development was approved by the Planning Assessment Commission on 20 December 2016. The construction of Buildings 1, 2 and 3 is currently underway.

The redevelopment of the Locomotive Workshop is also part of Mirvac's redevelopment strategy for the ATP. The Locomotive Workshop building is to be redeveloped in its entirety, however planning approvals are sought through the submission of two separate SSDAs. This Application relates to the western portion of the Building and is envisaged to be the next phase of urban regeneration within the ATP.

The proposed development within the Locomotive Workshop seeks to create up to a maximum of 27,866sqm for employment uses. It is noted that the retail land uses component within Bays 5-15 are predominantly intended to service employees of ATP and the surrounding residents, rather than

operate as a traditional standalone or destination centre. The major retail floor space is subject to a separate Development Application with the indicative maximum yields of 11,940sqm for retail and 1,206sqm of light industrial land uses. The proposed development is also in addition the existing approval for Buildings 1 and 2, which once complete will deliver 107,400sqm of additional floor area. These Building are currently under construction (as of 2017).

1.3 Project Context

This construction pedestrian and traffic management plan (CPTMP) accompanies a State Significant Development (SSD) application relating to the redevelopment of the existing Locomotive Workshop building within the Australian Technology Park (ATP). The SSD applications seek approval for two components, retail and commercial. Mirvac has commissioned GTA Consultants (GTA) to prepare the CPTMP to examine the impacts of the construction works on the surrounding road network and to detail the proposed construction traffic and pedestrian management measures.

This CPTMP has been prepared in accordance with the City of Sydney Standard Requirements for Construction Traffic Management Plans and Mirvac proposes to undertake all works in accordance with this CPTMP. The requirements are attached in Appendix A.

The overall principles of traffic management during the construction activity include:

- provide an appropriate and convenient environment for pedestrians
- minimise the impact on pedestrian movements
- minimise the impact on cyclist movements
- maintain appropriate capacity for pedestrians at all times on footpaths around the site
- maintain appropriate public transport access
- minimise the loss of parking wherever possible/applicable
- maintain access to/from adjacent buildings
- restrict construction vehicle movements to designated routes to/from the site
- manage and control construction vehicle activity in the vicinity of the site
- carry out construction activity in accordance with City of Sydney's approved hours of works.

1.4 Purpose of this Report

This report addresses the traffic and transport impacts during the construction phases of the redevelopment of the Locomotive Workshops to satisfy the Secretary's Environmental Assessment Requirements (SEARs).

The objectives of this report are to:

- provide a detailed description of the project and construction activities
- examine and consider the proposal's likely impact to traffic on the surrounding road network
- provide mitigating measures to address any traffic and transport impacts
- provide a Green Travel Plan for workers.

This report has been prepared and checked by engineers who hold the Roads and Maritime Services (RMS) Select/Modify Traffic Control Plans (Red Card) or Prepare a Work Zone Traffic Management Plan certification.

1.5 References

In preparing this report, reference has been made to the following:

- an inspection of the site and its surroundings
- Procedures for use in the Preparation of a Traffic Management Plan (TMP), RMS, December 2001 (Version 2.0)
- Traffic Control at Work Sites manual, RMS, June 2010
- Australian Standard AS1742.3 – 2009 'Manual of Uniform Traffic Control Devices – Part 3: Traffic control for works on roads'.

2. Existing Conditions

2.1 Site Description

The ATP site is located approximately 5km south of the Sydney CBD, 8km north of Sydney airport and within 300m of Redfern Railway Station. The site, with an overall area of some 13.2 hectares, is located within the City of Sydney local government area (LGA).

Figure 2.1 provides a graphic representation of the site location and broader context, with Figure 2.2 providing an aerial image of the ATP site and Figure 2.3 providing site context in relation to the other site developments.

Figure 2.1: Site Location

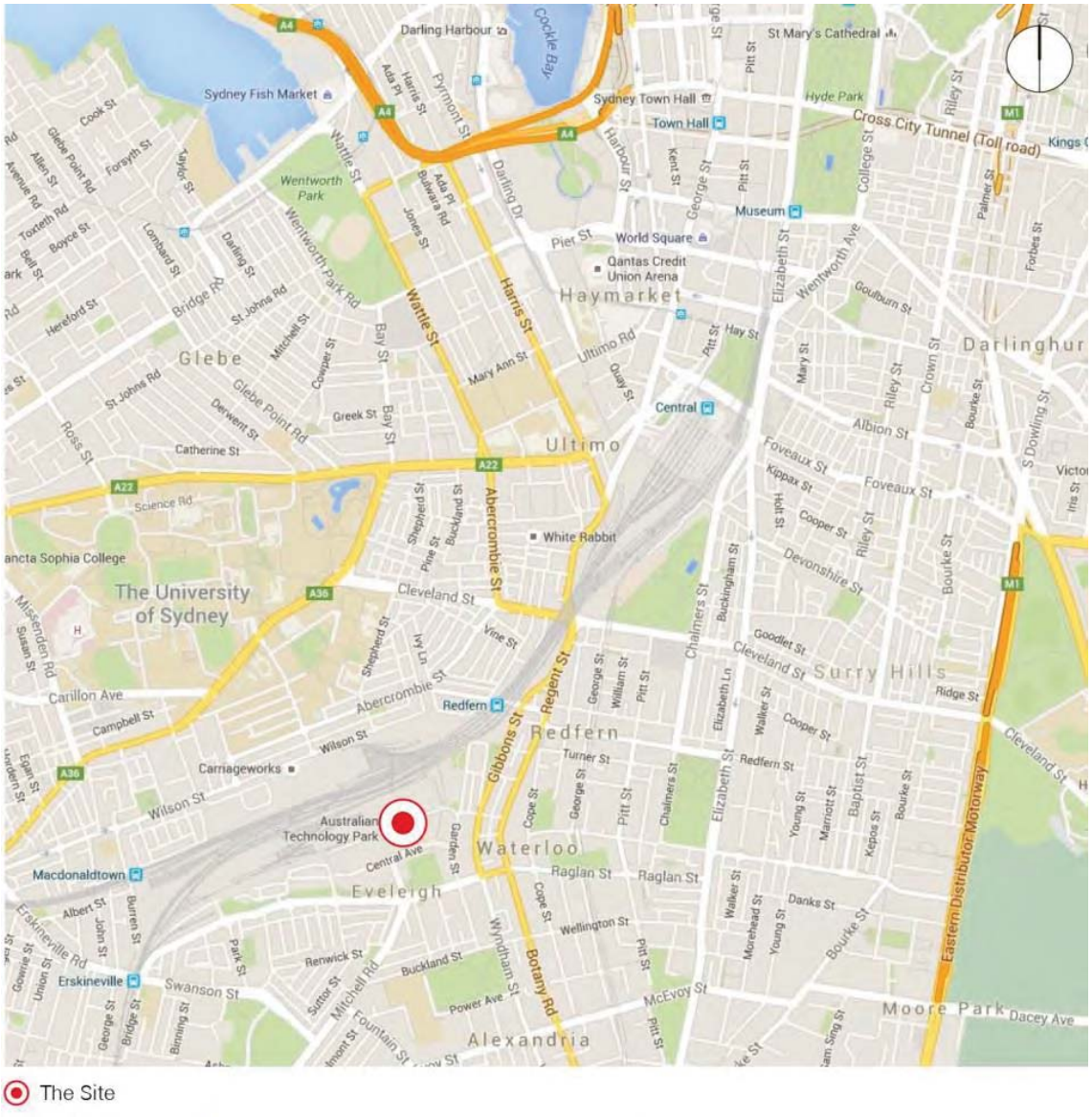


Figure 2.2: Existing Site Layout

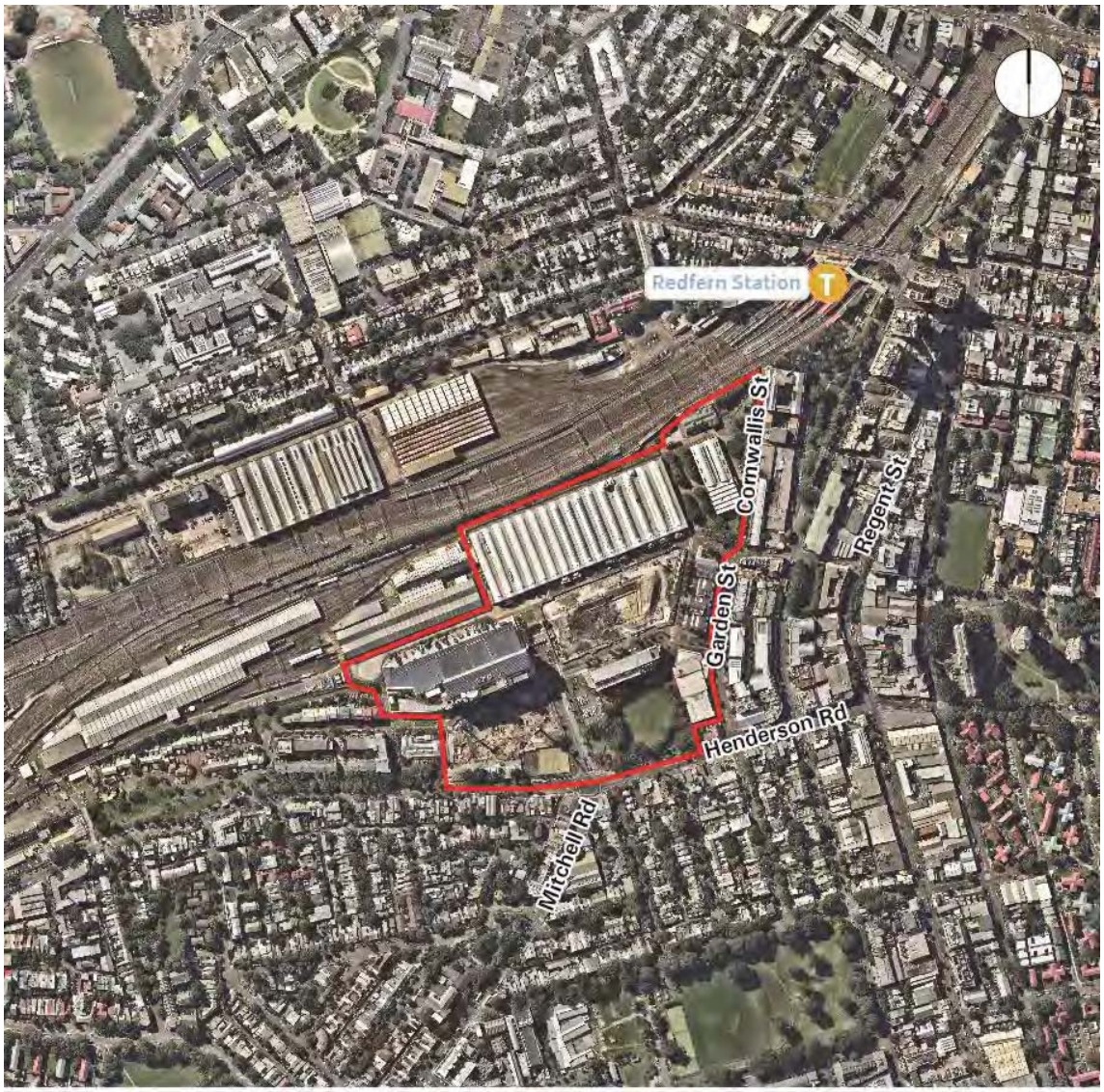
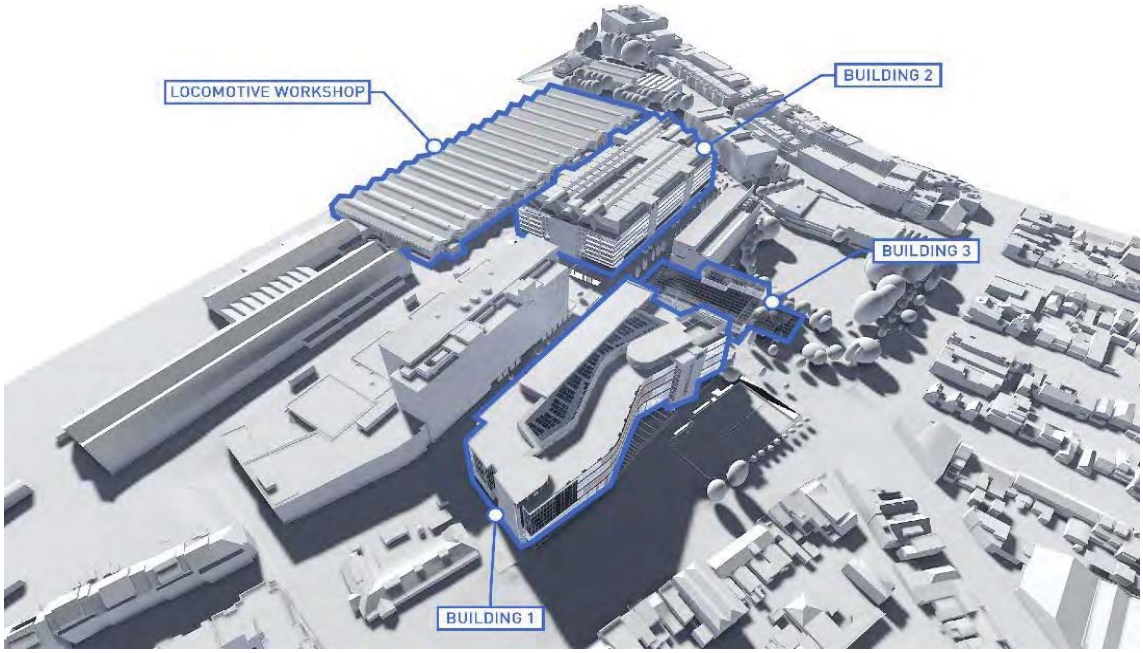


Figure 2.3: Locational context of the Locomotive Workshop



2.2 Road Network

2.2.1 Overview

The subject site is generally bounded by local streets with Garden Street and Cornwallis Street located to its east and Henderson Road located to its south. On the site's northern boundary runs the railway line. The ATP site is accessed by two internal roads, namely at Central Avenue from Garden Street and Davy Road from Henderson Road. A description of the roads in the immediate vicinity of the site is summarised below.

Henderson Road

Henderson Road is a two-way road aligned in an east-west direction.

Henderson Road is a four-lane road to the east of Davy Road and a two-lane road to the west of Davy Road. Henderson Road is a regional road which is owned by Roads and Maritime Services (RMS), but maintained by Council with funding from the State Government. It contains a carriageway width of 14 to 17 metres within an approximately 25 metre road reserve.

At intersections, Henderson Road includes auxiliary turning lanes. Kerbside parking lanes are also available on both sides of the road.

Garden Street

Garden Street is a two-way, two-lane local road aligned in the north-south direction.

It has a 12 metre wide carriageway with kerbside parking within a 25 metre wide road reserve. North of Central Avenue, the carriageway widens to allow 90 degree parking on the western side of the road. Garden Street bends to the east at its intersection with Cornwallis Street and continues in an east-west alignment to the Gibbons Street intersection with Wyndham Street.

Cornwallis Street

Cornwallis Street continues in a north-south alignment from Garden Street to Redfern Station. Cornwallis Street is a one-way local road in the southbound direction configured with a 6 metre carriageway within a 12 metre wide road reserve. Kerbside parking is permitted on the eastern side of the road.

ATP Internal Roads

Locomotive Street is an internal two-way road configured with kerb along its southern side and bollards and planter boxes along the northern side, on a 6m wide carriageway.

Central Avenue is an internal two-way road configured with two lanes separated by a central median, on a 20 metre wide carriageway and with a 30 metre wide road reserve.

Davy Road is an internal two-way road configured with four lanes separated by a central median on a 15 metre carriageway and a 25 metre wide road reserve. At the intersection with Henderson Road, Davy Road includes an additional southbound, right turn lane.

Locomotive Street, Central Avenue and Davy Road are private roads.

2.2.2 Surrounding Intersections

The following intersections currently exist in the vicinity of the site:

- Henderson Road-Davy Road-Mitchell Road (signalised)
- Henderson Road-Garden Street(signalised)
- Garden Street-Central Avenue (non-signalised)
- Garden Street-Cornwallis Street-Locomotive Street (non-signalised), and
- Henderson Road-Alexander Street (roundabout).

2.3 Public Transport

2.3.1 Train Services

Existing

Redfern Railway Station is located approximately 300m north-east of the ATP site and is within a 4 minute walk. The station is a major stop in the Sydney Trains network, with frequent services on four rail lines, namely T1 North Shore, Northern & Western Line, T2 Airport, Inner West & South Line, T3 Bankstown Line, T4 Eastern Suburbs & Illawarra Line. The services are shown in Table 2.1.

Table 2.1: Rail Service Provision

Lines	Frequency Peak Period	Frequency Off Peak
T1 North Sore, Northern & Western Line	3 minutes	4 minutes
T2 Airport, Inner West & South Line	5 minutes	5-15 minutes
T3 Bankstown Line	10-15 minutes	15 minutes
T4 Eastern Suburbs & Illawarra Line	3 minutes	5-10 minutes

Data Source: www.transportnsw.info (accessed 24 July 2017)

2.3.2 Bus Services

Regular scheduled bus services also service the area. Bus stops are located within 2 minute walking distance from the site including on Henderson Road and Wyndham Street. The available bus services are summarised in Table 2.6.

Table 2.2: Bus Service Provision

Service	Route	Route Description	Location of Stop	Distance to Nearest Stop	Frequency On/Off Peak
Bus	305	Mascot (Stamford Hotel) to Railway Square	Wyndham St near Boundary Street	120m	30 minutes 6am to 9am and 3pm to 6.30pm
Bus	308	Marrickville Metro to City	Wyndham St near Boundary Street	120m	15 minutes peak/ 30 minutes off peak
Bus	309	Port Botany to Railway Square	Wyndham St near Boundary Street	120m	5-15 minutes peak/ 20 minutes off peak
Bus	310	Eastgardens to Railway Square	Wyndham St near Boundary Street	120m	15 minutes peak/ 20 minutes off peak

Data Source: www.transportnsw.info (accessed 24 July 2017)

2.4 Pedestrian Infrastructure

Pedestrian footpaths are located on both sides of all streets, surrounding and internal to the site.

Public roads include footpath widths of 1.5-2 metres along Henderson Road, and 2.5 metres along Garden Street. Locomotive Street has a pedestrian path which runs along its northern side. Hoarding for the construction of Building 2 currently sits along the southern edge of Locomotive Street which prevents any pedestrian activity along this area.

Marked foot crossings are provided at all signalised intersections within the area including along Henderson Road, and on the western and southern legs of the Wyndham and Garden Street intersection, which is located on the way to Redfern Railway Station from the site.

2.5 Cycle Infrastructure

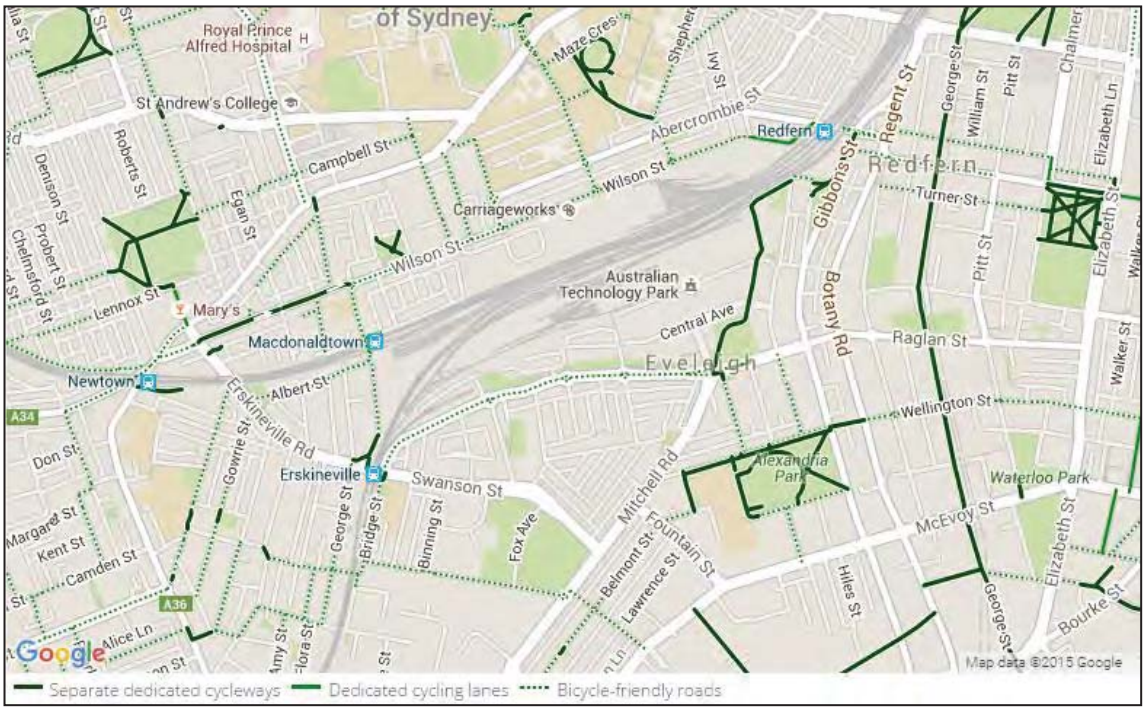
The ATP site is well situated within Sydney's cycle network with cycle routes surrounding the site and an off-road cycle route passing the site itself. A shared path between Henderson Road and Cornwallis Road runs through the site via the Vice Chancellors Oval and Mitchell Way (internal road).

Bicycle parking facilities are provided throughout the ATP site with bicycle racks located at the following locations:

- the top of Cornwallis Street
- Innovation Plaza
- 8 Central Avenue
- near the Biomedical Building, and
- at Mitchell Way.

The bicycle network surrounding the site is shown in Figure 2.4.

Figure 2.4: Cycle Network



Source: http://www.sydneycycleways.net/map/ (accessed 05 November 2015)

2.6 Existing Car Parking Supply

AT the time this report was prepared, the B1, B2 and B3 developments were under construction. As such, the parking supply at the site is reflective of this and is follows:

- Spaces accessible from Davy Road, Central Avenue and Locomotive Street:
  - Channel 7 Building Visitor Parking 363 spaces
  - Channel 7 Building Staff Parking 339 spaces
  - Biomedical Building Staff Parking 33 spaces
  - Locomotive Workshop 4 spaces
  - **Sub-Total** **739 spaces**
- Spaces not accessible from Davy Road, Central Avenue and Locomotive Street:
  - Nicta Building 66 spaces
  - NIC Building 4 spaces
  - IBC Building 17 spaces
  - **Sub-total** **87 spaces**
- **Total** **826 spaces**

3. Overview of Construction Activities

3.1 Description of Construction Activities

The following works are to be undertaken under this project:

- site preparation works, including interior demolition and strip-out of existing services
- construction and remediation of structure and roof
- commissioning, fit-out and façade works.

The project is scheduled to be carried out in stages with works to commence in late 2018/ early 2019 and to be completed by mid-2020. Importantly, this timeframe coincides with the construction programme for Buildings 1, 2 and 3. Works will overlap with the existing construction associated with Buildings 1, 2 and 3. The stages[1] are generally to be completed as follows:

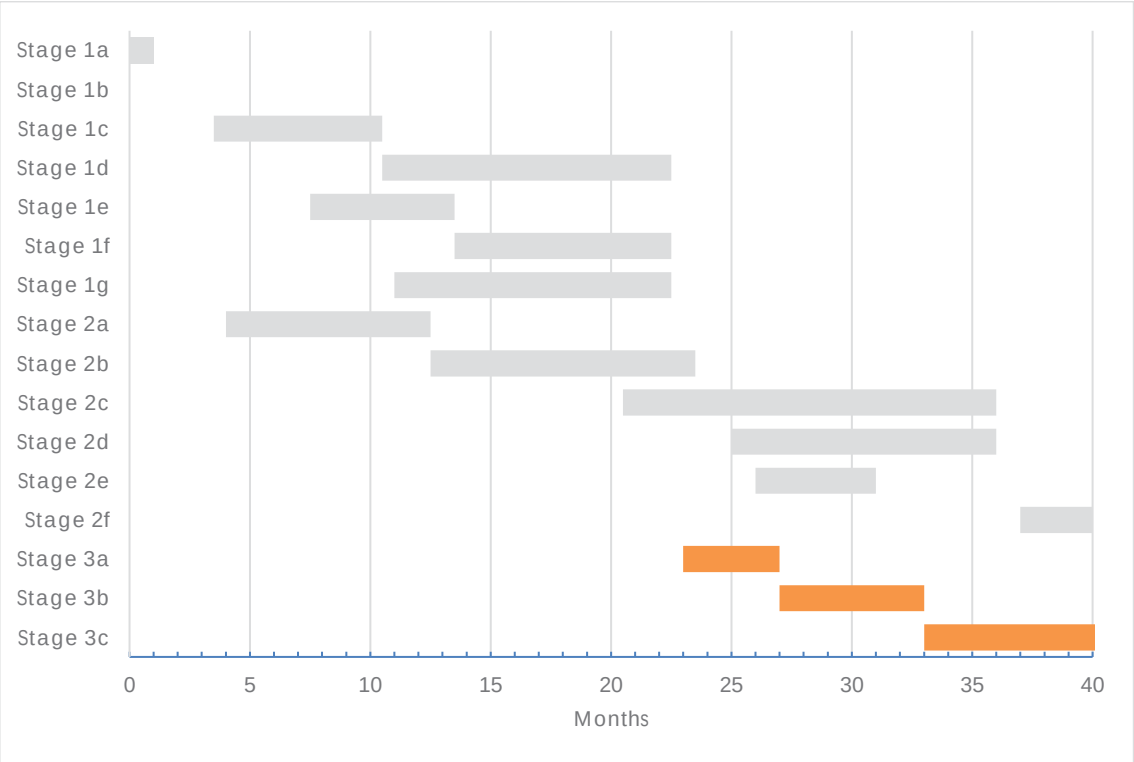
- Site establishment/ strip-out/ demolition 3-4 months
- Structure and roof works 5-6 months
- Fit-out/ commissioning/ external works 6-8 months

Table 3.1: Construction Description and Duration

Stage	Phase	Description	Duration
Stage 1 (approved works – currently under construction)	**1a.** Building 1 Piling Works	Foundation piling	1 month
	1b. Building 1 Excavation	Bulk excavation and detailed excavation Below Ground Services	2.5 months
	1c. Building 1 Structure Construction	Construction of 12 storey structure	7 months
	1d. Building 1 Fit out	Fit out works for commercial, retail and childcare uses	12 months
	1e. Public Domain Works – Building 1	Public Domain works surrounding Building 1 including Central Avenue.	11.5 months
Stage 2 (approved works – currently under construction)	**2a.** Building 2 and Building 3 Excavation and Piling	Retention wall piling Bulk excavation Bulk and Detailed excavation Foundation piling Below ground services	8.5 months
	2b. Building 2 and Building 3 Structure Construction	Construction of 7 storey structure. Construction of a 4 storey structure.	11 months
	2c. Building 2 and Building 3 Fit out	Fit out works for commercial and retail uses for Building 2 Fit out works for commercial, retail & childcare uses for Building 3	15.5 months
	2d. Public Domain Works – Building 2	Public Domain works surrounding Building 2 including roads.	11 months
	2e. Public Domain Works – Leisure Courts	Public Domain works to Leisure Courts	5 months
	2f. Public Domain Works – Vice Chancellor's Oval	Public Domain works to Oval	3 months
	2g. Public Domain Works – Building 3	Public domain and forecourt works	3 months
Stage 3 (Locomotive Workshop)	**3a.** Site Establishment (Begin October 2017)	Strip-out/ Demolition	4 months
	3b. Structure and Roof Works	Above ground structural works Roofing improvement works	6 months
	3c. Locomotive Workshop Fit-out	Fit our works for commercial and retail uses	8 months

[1] Staging is subject to changes and refinement as project progresses.

Figure 3.1: Indicative Construction Staging and Duration



Note: Schedule subject to change based on final planning

3.2 Work Hours

The permitted hours of work will be conditioned in the development approval. However, construction work hours for construction sites within the City of Sydney would typically be as follows:

- Monday to Friday 7:30 am – 5:30 pm
- Saturday 7:30 am – 3:30 pm
- No work will be carried out on Sundays and Public Holidays without prior approval by the relevant authorities.

Works outside of the approved hours will be subject to agreement and approval by City of Sydney Council and/or the relevant approving authority.

3.3 Contact Details

Mirvac representatives will be on-site during all construction works. The roles and contact details of key Mirvac personnel are detailed in Table 3.2.

Table 3.2: Contact Details

Organisation	Project Role	Contact Name	Contact Number
Mirvac	Senior Site Manager	Warren Henson	0411 026 687
Mirvac	Project Manager	Adam Sutherland	0407 022 501
Emergency			000
NSW Police (Sydney City LAC)			02 8303 5199
NSW Fire and Rescue (Redfern Fire Station)			02 9698 1161

3.4 Site Access

The project is wholly confined to the Locomotive Workshop building and immediate curtilage. As such, access arrangements are limited due to the location of the site. The only existing vehicle access to the site is via Locomotive Street. This road will provide the only site vehicle access for both entry and egress.

Disruption to the existing tenants that utilise Locomotive Street will be minimised. Loading and taxi access is to be maintained for the existing tenants at the Channel 7 building and Bay 15 within the Locomotive Workshop.

All vehicles entering and exiting Locomotive Street will do so from Garden Street via the Henderson Road intersection. No vehicles will be permitted to travel eastbound from the Locomotive Street intersection with Garden Street.

The existing Locomotive Workshop has a number of constraints, namely heritage requirements to that prevent alterations to the building façade. As such, the vehicle access locations into the subject site are dictated by existing door/opening locations.

In this regard, there are three vehicle entry location proposed to be provided along the southern edge of the subject site via Locomotive Street. These are located in bays 4, 8 and 14. In addition, a further vehicle access is proposed to be provided in the northeast corner of the building. Refer to Figure 3.2 below.

Locomotive Street is currently boom gate controlled. During the construction period, it is proposed to have a traffic controller stationed at the boom gates to direct and control construction vehicles, together with assisting the management of other vehicles required to enter the site. Traffic controllers would ensure there is no conflict between construction vehicles, general and pedestrians.

Figure 3.2: Vehicle Site Access Points

3.5 Works Zone

Construction activities will involve the delivery to site of construction materials and the removal of demolition and building waste. Two works zones are proposed to be provided to facilitate these activities. These are proposed to be provided in the following locations and as shown in Figure 3.3:

- Work Zone 1 – located along the eastern edge of the building. Access to this work zone will be via a gate at its southern end and will be traffic controlled.
- Work Zone 2 – located along the southern end of the building at bays 12-13. Access to this work zone will require construction vehicles to travel to the western end of Locomotive Street and perform a U-turn. The vehicle will then enter from the western end of the work zone and exit via the eastern end.

The proposed works zones would be installed so as not to interrupt traffic flow along the roads and/or pedestrian amenity. These will be managed at all vehicle access point.

The works zone proposed is along an internal road within the ATP site. No work zones are proposed along public roads or footpaths.

Figure 3.3: Work Zone Locations

3.6 Plant and Equipment

The materials and equipment required for the subject construction works are generally as follows:

- articulated flatbed trucks for delivery of site sheds and hoarding materials
- truck and dog (eight-wheel) demolition trucks for removal of material
- mini excavators, bob cats, scissor lifts
- truck and trailers for the exportation of excavated material off site
- concrete trucks for delivery of ready mix concrete
- mobile cranes of various sizes for placement of site sheds, demolition, structural steel, materials

- prime mover and enclosed flatbed trailer for delivery of materials
- medium rigid vehicles, small rigid vehicles, vans and couriers to deliver smaller materials.

From the above, the largest truck would be a 12.5-metre heavy rigid vehicle. Use of any larger vehicles will require approval from Council in a separate application.

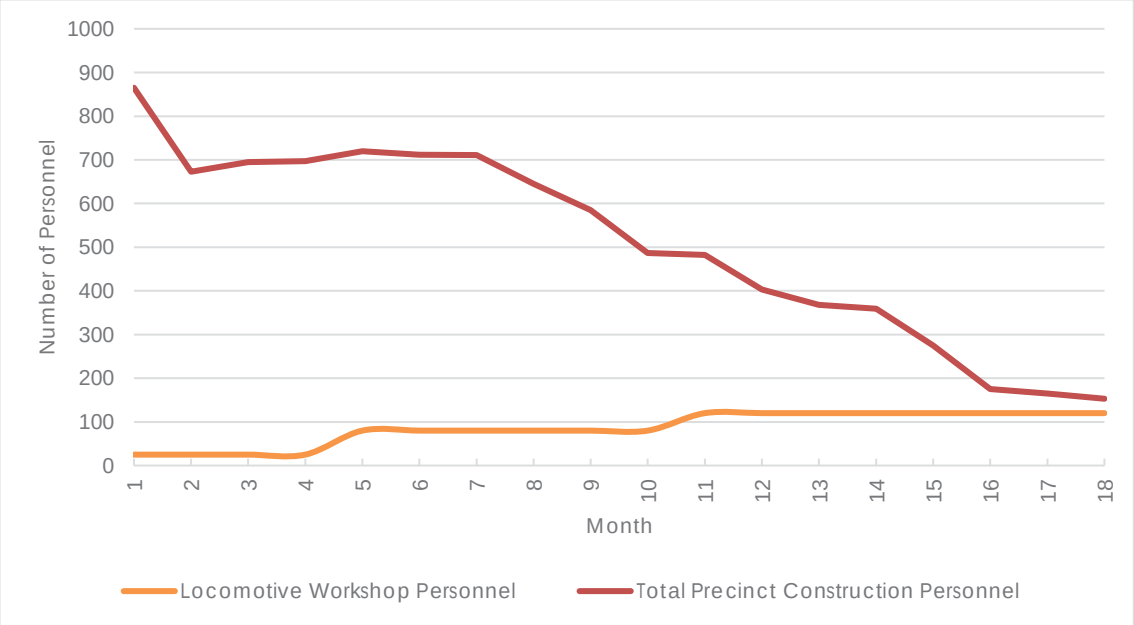
3.7 Construction Workers

The number of construction workers at the site would vary throughout each stage of the project. It is acknowledged that the total number of construction staff on site will include workers on site from other construction projects within the precinct. The proposed number of works specifically for the construction of the Locomotive Workshop is as follows:

- Stage 3a – 25 people
- Stage 3b – 80 people
- Stage 3c – 120 people.

The number of workers on site, and across the precinct as part of other approved developments, is shown in Figure 3.4. It is anticipated that the peak number of personnel on site would occur within the first month of activity, where cumulative works from sites would see approximately 865 workers coming to the ATP site in a day. Mirvac have implemented a Green Travel Plan for current construction works and will continue to do so for any future works to strongly encourage workers to alternative transport methods and thereby mitigate the impact to surrounding residents. All staff will be encouraged to utilise public transport to access the site. Mirvac will prohibit any staff member to park on-street within the local road network. These parking controls and travel demand measures will be communicated to staff during the site induction process.

Figure 3.4: Number of Site Personnel per Month



4. Construction Traffic Assessment

4.1 Construction Traffic Volumes

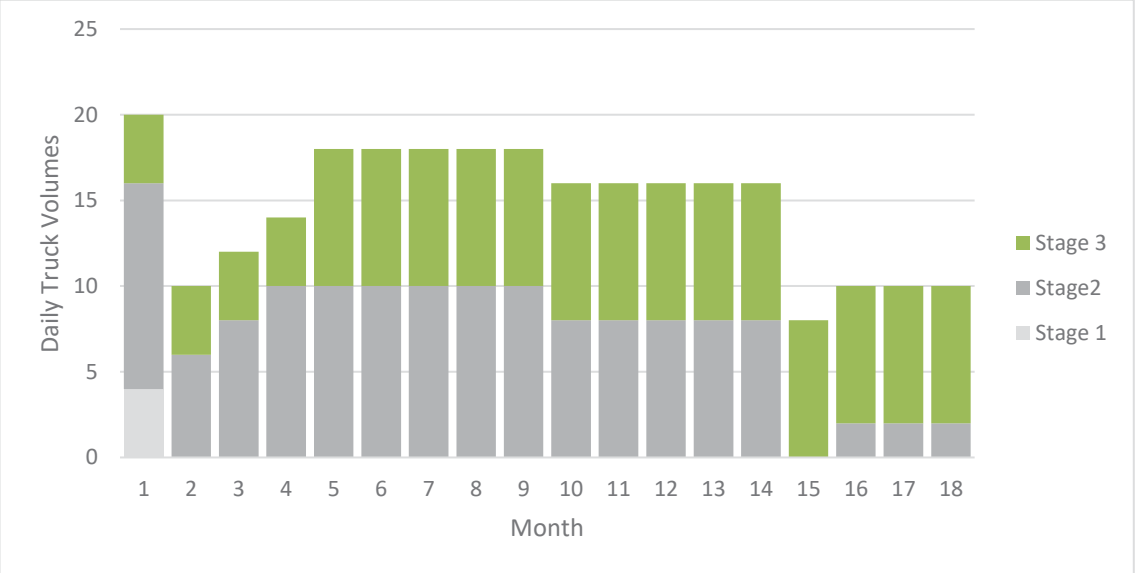
The estimated number of (two-way) construction vehicle movements per day and type of vehicle is detailed in Table 4.1 for each construction stage.

Table 4.1: Indicative Construction Traffic Volumes

Construction Stage	Average No. of Trucks Per Day	Average No. of Truck Movements Per Day	Cumulative Truck Movements per Day [1]	Cumulative Truck Movements per Hour [1]	Vehicle Type/ Size
3a. Site Establishment	4	8	40	4	8.8m Medium Rigid 12.5m Large Rigid
3b. Structure and Roof Works	8	16	36	4	8.8m Medium Rigid 12.5m Large Rigid
3c. Locomotive Workshop Fit-out	8	16	16	2	8.8m Medium Rigid 12.5m Large Rigid

[1] These volumes indicate the cumulative truck movements per day/ hour at the commencement of each stage.

Figure 4.1: Daily Cumulative Truck Volumes



Based on Table 4.1, on average, the maximum vehicle volumes per day would be eight vehicles per day (or 16 two-way movements per day). Taking cumulative works into consideration as shown in Figure 4.1, the average peak vehicle volumes would be 20 vehicles per day (40 two-way movements per day). It is not expected that this low level of daily traffic movements would create any adverse impact on the surrounding road network from an operation or safety perspective.

4.2 Staff Traffic

As per Council's standard requirements, all vehicles associated with the development shall be parked wholly within the site. All site staff related with the works are to park in a designated off-street area or be encouraged to use public transport and not park on the public road. It is noted, no staff parking will be provided for staff during the construction period.

All staff will be encouraged to utilise public transport to access the site. The following measures will be in place to strongly encourage staff to use public transport:

- during the induction and regular management meetings, staff will be informed of restricted parking conditions on site and the surrounding streets
- during the induction and regular management meetings, staff will be instructed to use public transport to access the site and public transport timetable information will be made available and displayed at prominent locations
- the above measures will be included in contract documents between Mirvac and its subcontractors
- a Green Travel Plan will be implemented to encourage workers to alternative transport methods and thereby mitigating the potential impact on surrounding residents.

As such, it is not expected there would be any staff generated traffic during the construction stage.

4.3 Construction Vehicle Routes

Generally, construction vehicles will have origins and destinations from a wide variety of locations throughout the Sydney metropolitan area. However, all construction vehicles will be restricted to the State and Regional Road network, where possible.

As such, dedicated construction vehicle routes have been developed with the aim of providing the shortest distances to/from the arterial road network whilst minimising the impact of construction traffic on streets within the vicinity of the site.

Truck drivers will be advised of the designated truck routes to/ from the site. No queuing or marshalling of trucks will be permitted on public roads.

All construction vehicles accessing and leaving the site will be advised and directed not to use Mitchell Road or Boundary Street. The truck routes are detailed below and shown in Figure 4.2 and Figure 4.3.

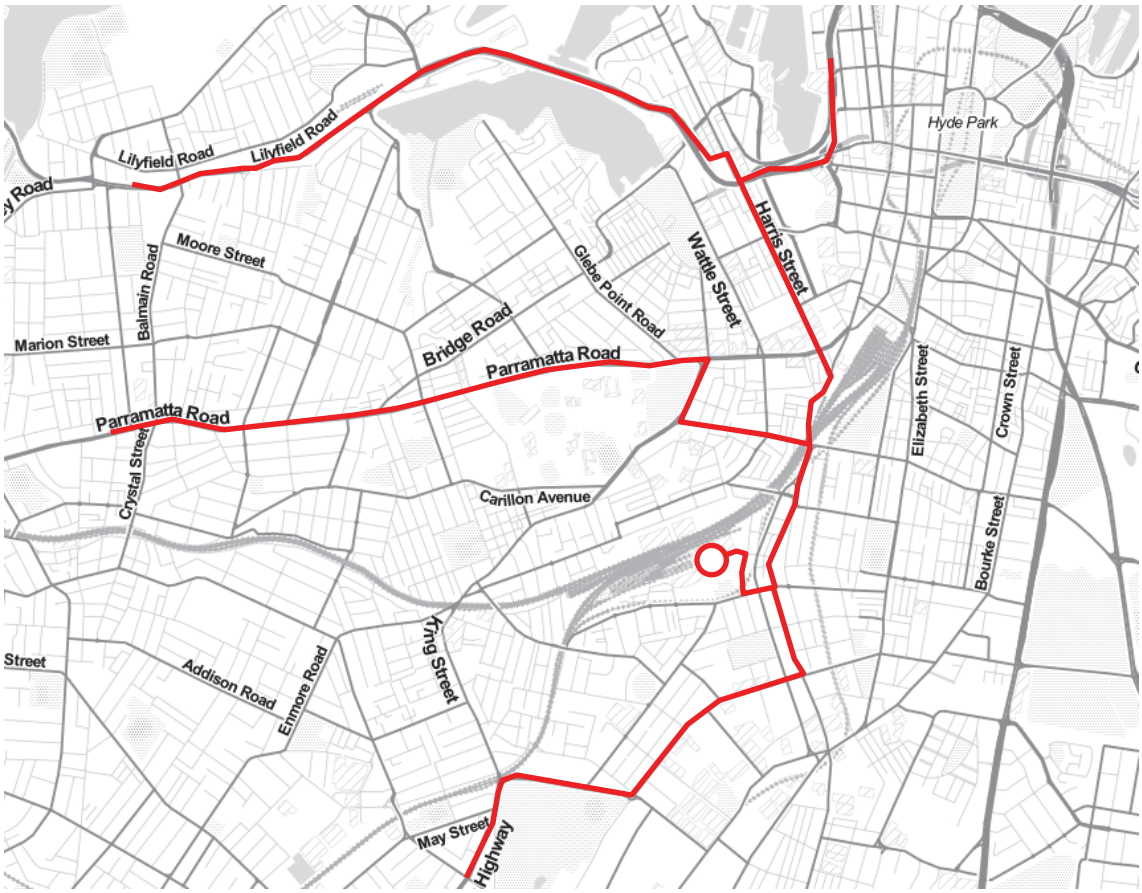
Approach Routes

- **North:** Cahill Expressway, Western Distributor Freeway, Harris Street, Regent Street, Botany Road, Henderson Road, Garden Street, Locomotive Street
- **West:** M4 Western Motorway, Parramatta Road, Princes Highway, Cleveland Street, Regent Street, Botany Road, Henderson Road, Garden Street, Locomotive Street
- **Northwest:** Western Distributor Freeway, Harris Street, Regent Street, Botany Road, Henderson Road, Garden Street, Locomotive Street
- **South:** M5 South Western Motorway, Princes Highway, Sydney Park Road, Euston Road, McEvoy Street, Botany Road, Henderson Road, Garden Street, Locomotive Street.

Departure Routes

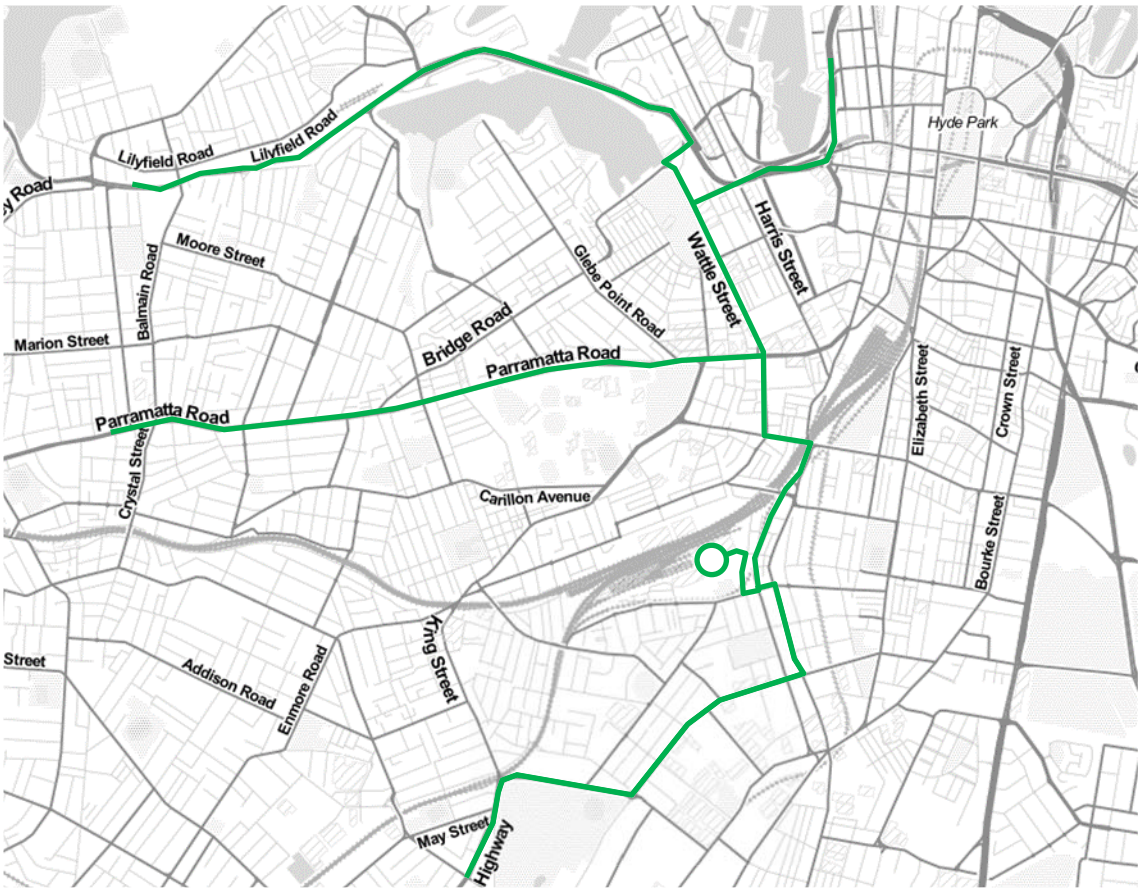
- **North:** Locomotive Street, Garden Street, Henderson Road, Wyndham Street, Gibbons Street, Regent Street, Cleveland Street, Western Distributor Freeway, Cahill Expressway.
- **West:** Locomotive Street, Garden Street, Henderson Road, Wyndham Street, Gibbons Street, Regent Street, Cleveland Street, Princes Highway, Parramatta Road, M4 Western Motorway.
- **Northwest:** Locomotive Street, Garden Street, Henderson Road, Wyndham Street, Gibbons Street, Regent Street, Cleveland Street, Abercrombie Street, Wattle Street, Pyrmont Bridge, Western Distributor Freeway.
- **South:** Locomotive Street, Garden Street, Henderson Road, Botany Road, McEvoy Road, Euston Road, Sydney Park Road, Princes Highway, M5 South Western Motorway.

Figure 4.2: Construction Traffic Approach Routes



Basemap Source: OpenStreetMaps, Stamen

Figure 4.3: Construction Traffic Departure Routes



4.4 Construction Staff Parking

The constraints of the site mean that it is not possible to provide any designated parking within the site for construction workers.

It is noted, there will be no on-site parking or the ability for construction staff to park on nearby public roads. However, an existing drop-off zone has been provided on-site as part of the Building 1 and 2 CTMP. As such, this drop-off zone will be utilised to provide access for construction workers to bring tools and equipment to site. The designated pick-up/drop-off points will be limited to during construction hours only and will not be available outside of these periods.

The proposed facility will differ depending on construction stage. This includes:

- During Stage 1 and 2, drop-off points will be provided in the designated construction zones. This will be managed by traffic marshals, similarly to other construction traffic; or
- During Stage 3 during fit-out and finishes, pick-up and drop-off will occur through gates which will be provided in the hoarding to provide access to loading docks and car park areas in each building.

Mirvac will implement a Green Travel Plan to encourage workers to alternative transport methods and thereby mitigate the impact to surrounding residents.

4.5 Staff Induction

All staff and subcontractors engaged on site will be required to undergo a site induction. The induction will include permitted access routes to and from the construction site for all vehicles, as well as standard environmental, WHS, driver protocols and emergency procedures. All new staff will be informed that they are not to park on the surrounding roads. If adopted, the measures described in the Green Travel Plan, will be presented to all new staff during the staff induction.

4.6 Traffic Control Plan

The proposed traffic control plans for the construction works is included in Appendix C. The plan presents the principles of traffic management and is subject to WorkCover requirements and modification to suit latent conditions.

Detailed information for work site operations is contained in the Traffic Control at Work Sites manual (RMS, 2010). The control of traffic at work sites must be undertaken with reference to WorkCover requirements and the contractor/ builder's own Workplace Health and Safety manuals.

The proposed traffic control plans for the work site (see Appendix C) includes the following considerations:

- Warning signage for vehicles and pedestrians at site entry and exit points to alert them to the presence of construction traffic.
- Construction vehicle activity, including the loading/ unloading of trucks to be conducted within the work site and the designated works zones for each building site.
- Construction staff to manage pedestrian and control activity on the individual site accesses.
- The movement of trucks to/ from the Work Zone will be under normal traffic conditions.
- Traffic cones will be installed around any vehicle within the Work Zone to provide delineation for passing traffic.
- Pedestrians and all passing vehicles will maintain priority at all times.
- Clear definition of the work site boundary to be provided by erection of construction hoarding/ fencing around site boundaries adjacent to roads.
- Pedestrians to be guided around the site via existing footpaths using signage.
- Traffic controllers will be present at the site accesses during truck movements to control interaction between construction vehicles and pedestrians.
- All signage will be clean, clearly visible and not obscured.
- All construction vehicle activity will be minimised, where possible, during peak periods.
- All temporary traffic control measures will be removed at the end of each shift and reinstated at the start of the next shift.

It is noted that traffic controllers are not to stop traffic on public streets to allow construction vehicles to exit the site. Instead they are to assist construction vehicles leaving the site by seeking a suitable gap in the traffic.

4.7 Public Transport Services

The proposed construction works will not affect public transport services near the site.

Most workers at the site would utilise public transport to access the site well outside the peak commuter periods and therefore construction worker patronage would not have any negative impacts on the capacity of the transport systems.

4.8 Pedestrian and Cyclist Access

Pedestrian and cyclist facilities within the ATP site and those along public roads such as Garden Street and Henderson Road will be maintained as much as practical during the construction stage.

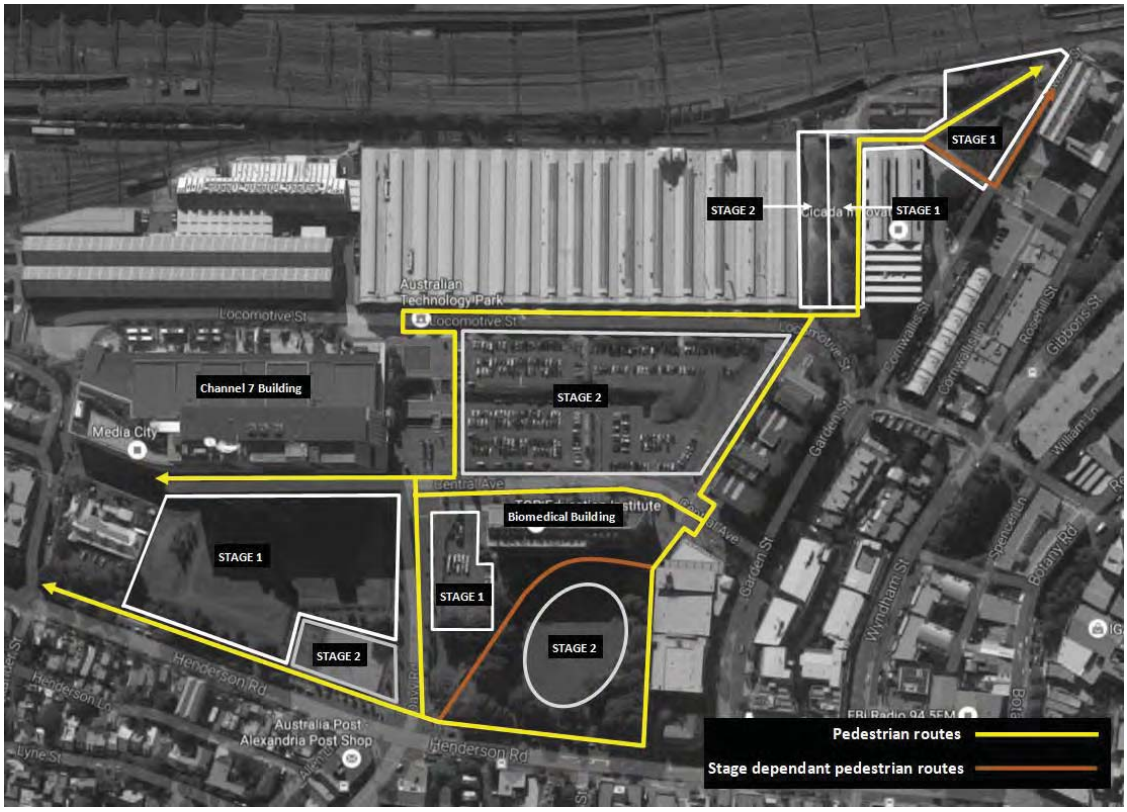
To enable vehicle access to Bay 1, approximately one-third of the pedestrian plaza will be closed off to provide the required space for site loading. This is the only pedestrian/cyclist space to be directly affected by the construction works. Pedestrian access along Locomotive Street is to be maintained at all times. Any interaction with a proposed vehicle access will be managed with priority given to pedestrians where possible.

Within high pedestrian areas, authorised traffic controllers will be deployed to manage the movement of pedestrians and cyclists through the areas. This would include providing traffic controllers at the main access points of the ATP site.

It is noted, detailed vehicle and pedestrian traffic control plans will be prepared and implemented. All plans prepared will be done in consultation with all stakeholders including existing tenants and retailers on the site and approval authorities. Furthermore, any agreed proposal will be communicated to the workforce during their induction and as the construction staging evolves.

Key pedestrian routes within the site are highlighted below in Figure 4.4.

Figure 4.4: Pedestrian Management Plan



4.9 Emergency Vehicle Access

At this stage, access to the neighbouring sites by emergency vehicles would not be affected by the works as public roads would be unaffected.

Internally to the ATP site, traffic flow would be maintained on all internal roads.

Emergency access to the subject site will be maintained as existing, through the internal roads, Central Avenue, Davy Road and Locomotive Street.

Emergency protocols on the site would include a requirement for a traffic controller to assist with emergency access from the street. All truck movements to the site work zone and/or incident point would be suspended and cleared. Consequently, any potential impacts on emergency access would be effectively managed throughout the works.

Liaison would be maintained with the police and emergency services agencies throughout the construction period and a 24-hour contact would be made available for 'out-of-hours' emergencies and access.

There would therefore be no adverse impacts on the provision of existing emergency vehicle access to the existing ATP buildings or to other neighbouring properties as a result of the proposed construction activities.

4.10 Existing and Future Developments

It is understood that there are currently no proposed developments within the local area that would be adversely impacted by the construction works.

4.11 Traffic Movements in Adjoining Council Areas

No adverse effects are expected from the movement of heavy vehicles through adjacent council areas.

4.12 Consultation Process

Consultation will be carried out with RMS, Transport for NSW and Council as part of the development application process.

5. Construction Traffic Management Mitigation Measures

5.1 Traffic Management Measures

The following construction traffic management mitigation measures will be applied during the construction period at ATP.

5.1.1 Traffic Signs and Devices

- Advisory road signage would be installed on approach to the work zone in accordance with the RMS 'Traffic control at Work Sites' guidelines.

5.1.2 Hours of Operation

- Work is to be undertaken only during the approved construction hours as conditioned in the development approval which are expected to be between 7:30am and 5:30pm weekdays and between 7:30am and 3:30pm Saturdays.
- Any work outside of the approved hours shall only be undertaken if work cannot be achieved during approved hours and will require a separate approval.

5.1.3 Vehicle Access

- All construction vehicles including all trucks must enter and exit the site in a forward direction.
- Construction vehicles are to make radio contact with the site on approach to ensure access to the work site is available.
- Access along all public roads will be maintained at all times.
- Construction vehicles must not block accesses along all public roads.
- Any materials or spoil spilled onto the road must be rectified with appropriate equipment and qualified personnel, subject to appropriate WHS provisions.
- Constructions vehicles will not queue on any public roads on approach to the construction works site.

5.1.4 Truck Routes

- The site induction must include procedures for heavy vehicles accessing the site.
- Drivers must adhere to nominated truck routes illustrated in Figure 4.2.
- Drivers must be aware of the local area's traffic, pedestrian and cyclist activity.
- All construction vehicles will adhere to the sign posted speed limits at all times.

5.1.5 Site Inspections and Record Keeping

The construction operation would be monitored to ensure that it proceeds as set out in the Contractor's Construction Management Plan provided by the Head Contractor. A daily inspection before the start of the construction activity should take place to ensure that conditions accord with those stipulated in the plan and there are no potential hazards. Any possible adverse impacts would be recorded and dealt with if they arise.

6. Conclusion

This CPTMP has been prepared to document the associated construction traffic management measures necessary to facilitate the proposed construction works at the Locomotive Workshop building.

Based on the findings of the report, it is concluded that:

i Construction of the Locomotive Workshop would commence in late 2018/early 2019 and will take approximately 18 months to complete.
ii The works associated with the Locomotive Workshop are proposed to align with the approved B1, B2, B3 and public domain construction programme and conclude at the same time.
iii All vehicles accessing the site will do so via Locomotive Street.
iv Traffic controllers will be in place at the location of the existing boom gates for the duration of the construction.
v Traffic controllers will be present at each site access and loading zone during truck movements.
vi Average construction vehicle movements to and from the site can be satisfactorily accommodated by the surrounding road network. Peak construction vehicle movements are to occur during the first stage for the Locomotive Workshop site. This is to occur outside the road network peak periods to prevent impacting general traffic movements.
vii Construction routes would not adversely affect the safety of motorists, pedestrians, cyclists and the amenity of local residents.
viii Construction activities are to be undertaken during approved working hours.
ix Large and medium rigid trucks will be required to access the site.
x Emergency vehicles will have access to the site via all existing accesses and internal roads.

Overall, the construction traffic arrangements are considered to be acceptable for this project.

Appendix A

CoS Standard Requirements

The City of Sydney Standard Requirements for Construction Traffic Management Plan

This report has been prepared taking into consideration the CoS' requirements for a CTMP. The table below provides a checklist and summary of this CTMPs compliance with Council requirements.

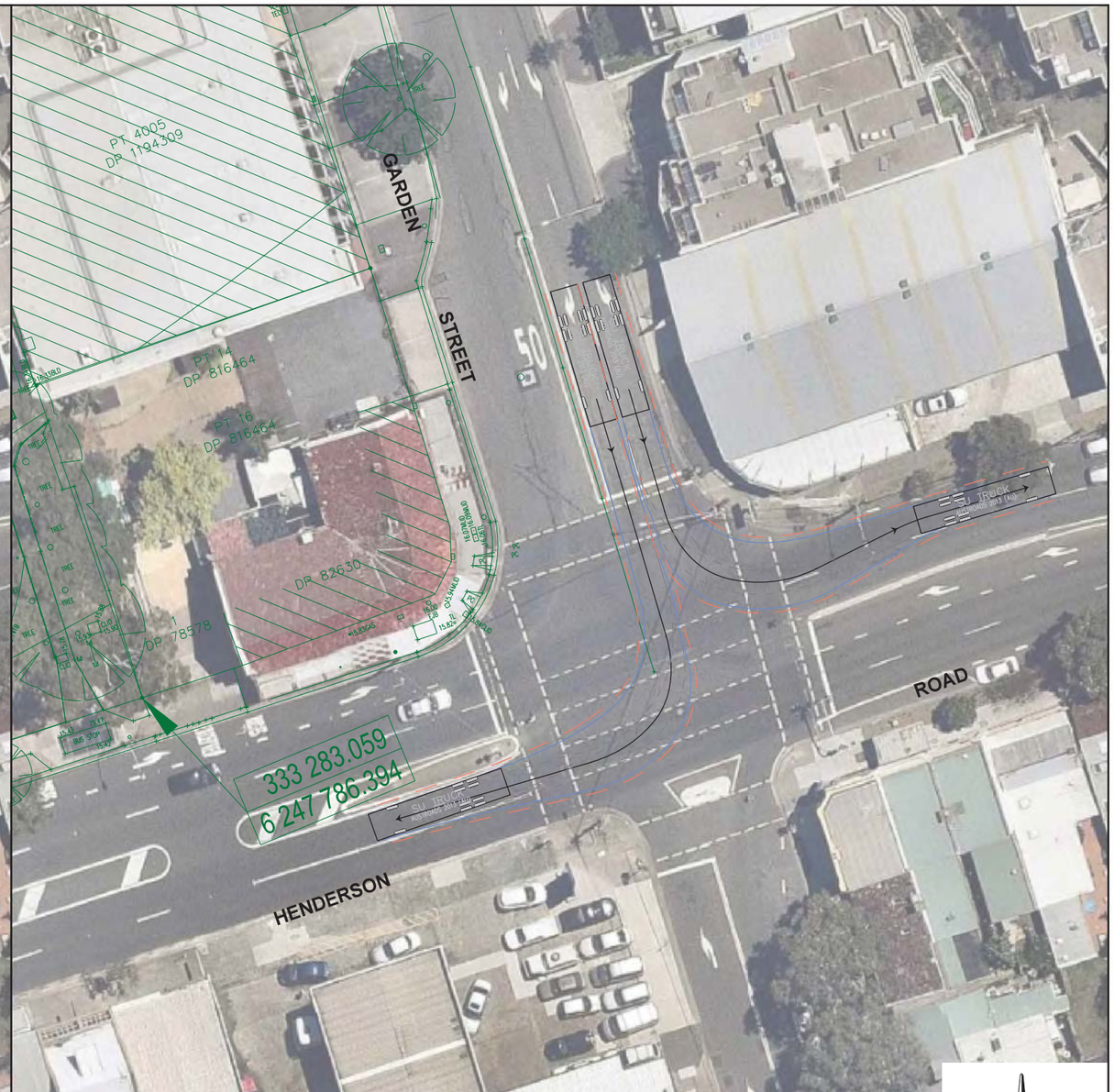
The Applicant or contractor undertakes to follow and abide by the following requirements at all times during the demolition, excavation and construction works at Australian Technology Park, Eveleigh.

	Requirement	Compliant	Comment/ Reference
i	Details of routes to and from site and entry and exit points from site – site specific	Yes	Section 4.3
ii	Details of roads that may be excluded from use by construction traffic i.e. roads with load limits, quiet residential streets or access/turn restricted streets – site specific	Yes	Section 4.3
iii	The approved truck route plan shall form part of the contract and must be distributed to all truck drivers.	Yes	Section 4.5
iv	All vehicles must enter and exit the site in a forward direction (unless specific approval for **a one-off occasion** is obtained from the City's Construction Regulation Unit).	Yes	Section 5.1.3 Appendix C - TCP
v	Trucks are not allowed to reverse into the site from the road (unless specific approval for a **one-off occasion** is obtained from the City's Construction Regulation Unit).	Yes	Section 5.1.3
vi	The Applicant must provide the City with details of the largest truck that will be used during the demolition, excavation and construction. **NOTE**: No dog trailers or articulated vehicles (AV) to be used on local roads (unless specific approval for a **one-off occasion** is obtained from the City's Construction Regulation Unit).	Yes	Section 3.6
vii	Oversize and over-mass vehicles are not allowed to travel on Local Roads (unless approval for a **one-off occasion** is obtained from the City's Traffic Operations Unit). Requests to use these vehicles must be submitted to the City 28 days prior to the vehicle's scheduled travel date. For more information please contact the National Heavy Vehicle Regulator (NHVR) on 1300 696 487 or www.nhvr.gov.au.	Yes	Section 3.6
viii	No queuing or marshalling of trucks is permitted on any public road.	Yes	Section 4.3 Section 5.1.3
ix	Any temporary adjustment to Bus Stops or Traffic Signals will require the Applicant to obtain approval from the STA and RMS respectively prior to commencement of works.	NA	Adjustments to Bus Stops or Traffic Signals are not anticipated at this stage, however, if required a separate application will be submitted
x	All vehicles associated with the development shall be parked wholly within the site. All site staff related with the works are to park in a designated off-street area or be encouraged to use public transport and not park on the public road.	Yes	Section 4.4
xi	All loading and unloading must be within the development site or at an approved "Works Zone".	Yes	Section 3.5
xii	The Applicant must apply to the City's Traffic Works Co-ordinator to organise appropriate approvals for Work Zones and road closures.	NA	No Works Zones are proposed on public ways, however if required, a separate application will be submitted.

Requirement	Compliant	Comment/ Reference
xiii The Applicant must apply to the City's Construction Regulations Unit to organise appropriate approvals for partial road closures.	NA	No road closures are anticipated, however if required, a separate application will be submitted.
xiv The Applicant must apply to the Transport for NSW's Transport Management Centre for approval of any road works on State Roads or within 100m of Traffic Signals and receive an approved Road Occupancy Licence (ROL). A copy of the ROL must be provided to the City.	NA	Road works to any public road is not anticipated however, if required, a separate application will be submitted
xv The Applicant must apply to the City's Construction Regulations Unit to organise appropriate approvals for temporary driveways, cranes and barricades etc.	Yes	A separate application will be submitted. Section 3.4
xvi The Applicant must comply with development consent for hours of construction.	Yes	Section 3.2
xvii All Traffic Control Plans associated with the CTMP must comply with the Australian Standards and Roads and Maritime Services (RMS) Traffic Control At Work Sites Guidelines.	Yes	Appendix C - TGS
xviii Traffic Controllers are NOT to stop traffic on the public street(s) to allow trucks to enter or leave the site. They MUST wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site - **the vehicles already on the road have right-of-way.**	Yes	Section 4.6
xix Pedestrians may be held only for very short periods to ensure safety when trucks are leaving or entering BUT you must NOT stop pedestrians in anticipation i.e. at **all times the pedestrians have right-of-way on the footpath not the trucks.**	Yes	Section 4.8
xx Physical barriers to control pedestrian or traffic movements need to be determined by the City's Construction Regulations Unit prior to commencement of work.	NA	No physical barriers are proposed however, if required, a separate application will be submitted
xxi The Applicant must obtain a permit from the City's Construction Regulation Unit regarding the placing of any plant/equipment on public ways.	NA	No equipment will be placed on public ways, however if required, a separate application will be submitted.
xxii The Applicant must apply to the City's Building Approvals Unit to organise appropriate approvals for hoarding prior to commencement of works.	Yes	A separate application will be submitted
xxiii The CTMP is for the excavation, demolition and construction of building works, not for road works (if required) associated with the development. Any road works will require the Applicant or the contractor to separately seek approval from the City and/or RMS for consideration. Also, WorkCover requires that Traffic Control Plans must comply with Australian Standards 1742.3 and must be prepared by a Certified Traffic Controller (under RMS regulations).	NA	Road works to any public road is not anticipated however, if required, a separate application will be submitted
xxiv Please note that the provision of any information in this CTMP will not exempt the Applicant from correctly fulfilling all other conditions relevant to the development consent for the above site.	-	Noted

Appendix B

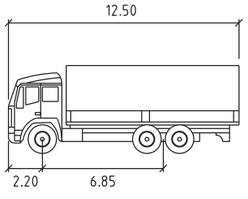
Swept Path Diagrams



SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 600mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h



SU TRUCK — metres

Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.6

N

WARNING
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THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

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GENERAL NOTES
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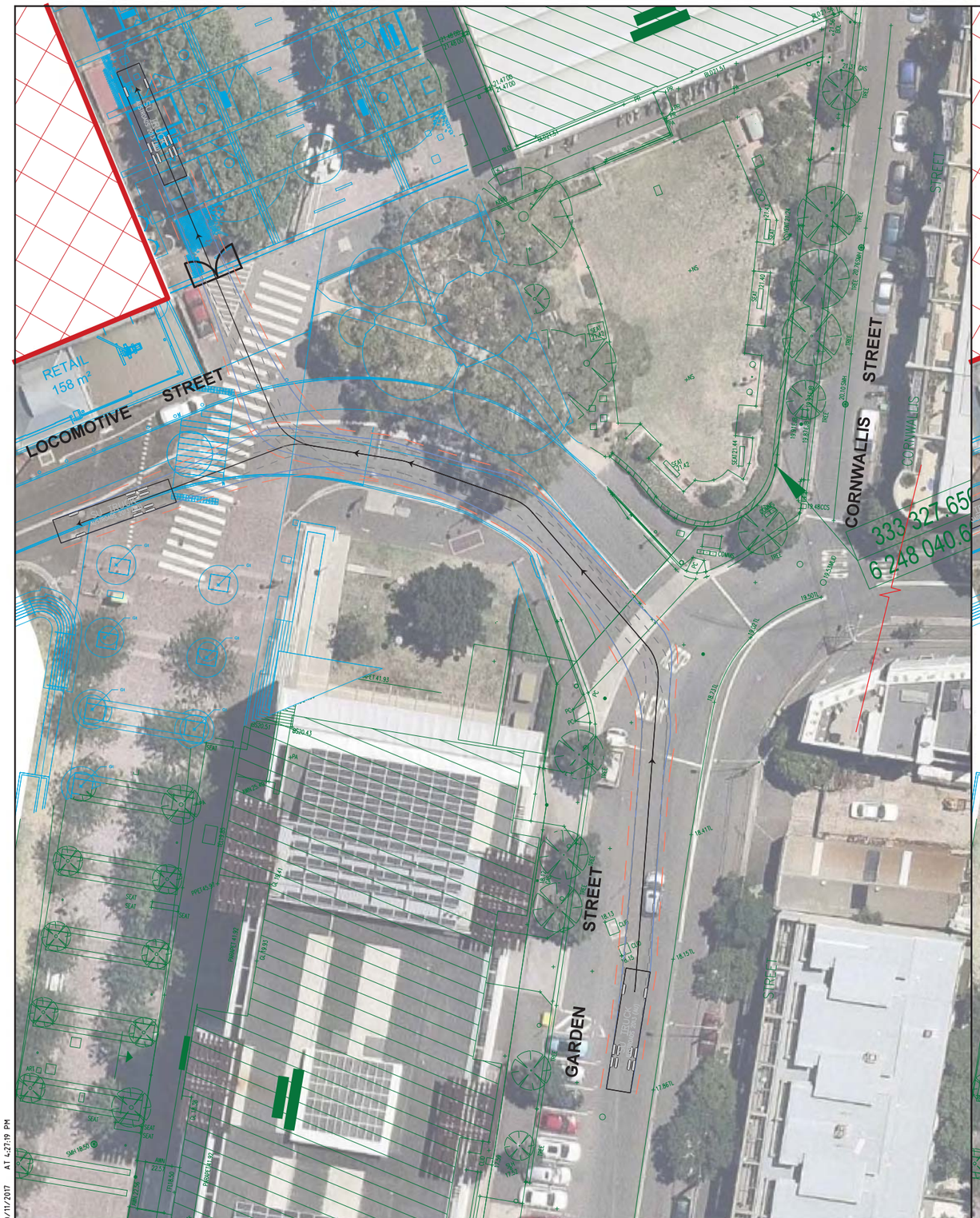

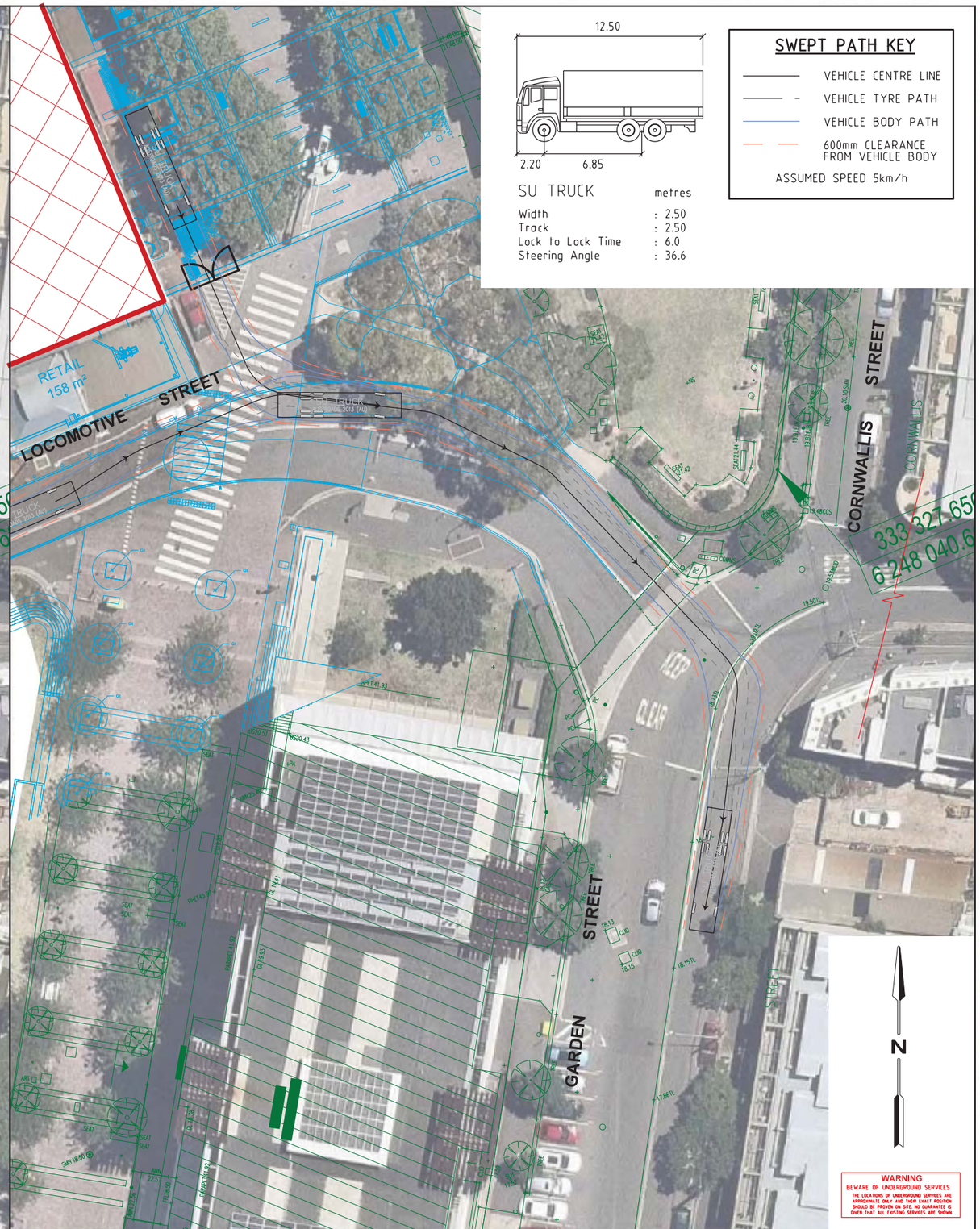

SU TRUCK

	metres
Width	: 2.50
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Lock to Lock Time	: 6.0
Steering Angle	: 36.6

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 600mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

N

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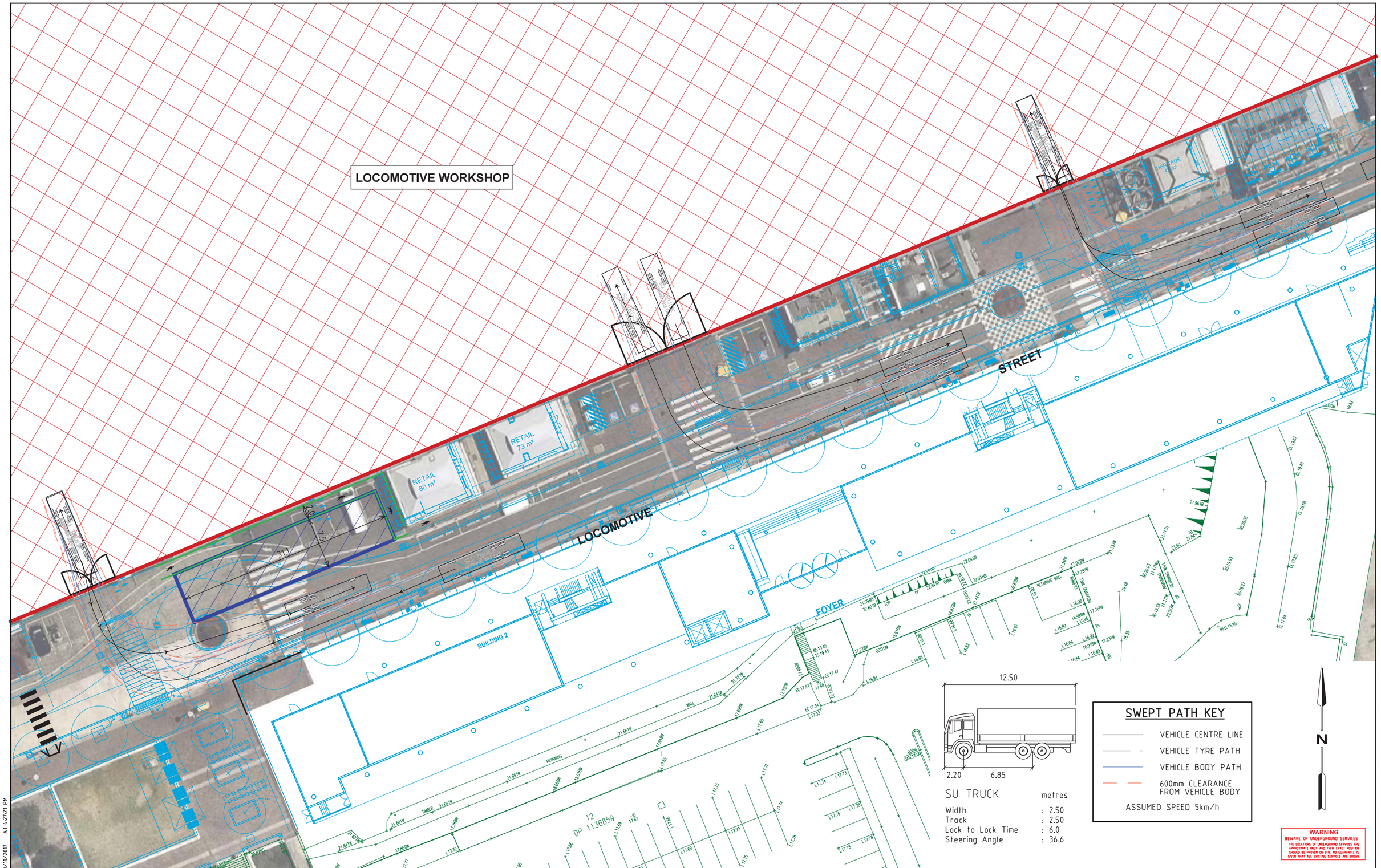

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3. DECLARED MAIN ROAD - LOCOMOTIVE STREET - SPEED ZONE 10 KM/H

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SWEPT PATH ASSESSMENT

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N117430-04-02-04	04 OF 07	P2

LOCOMOTIVE WORKSHOP

STREET

LOCOMOTIVE

BUILDING 2

FOYER

RETAIL 73 m²

RETAIL 80 m²

SUBSTATION 2

RETAIL SEATING

HERITAGE 14 m²

RETAINING WALL

TIMBER RETAINING WALL

RETAINING WALL

WALL

DP 1136859

12.50

2.20 6.85

SU TRUCK

	metres
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.6

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 600mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

N

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3. DECLARED MAIN ROAD - LOCOMOTIVE STREET - SPEED ZONE 10 KM/H

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APPROVED BY: -	DATE APPROVED FOR INITIAL ISSUE: 25 JULY 2017
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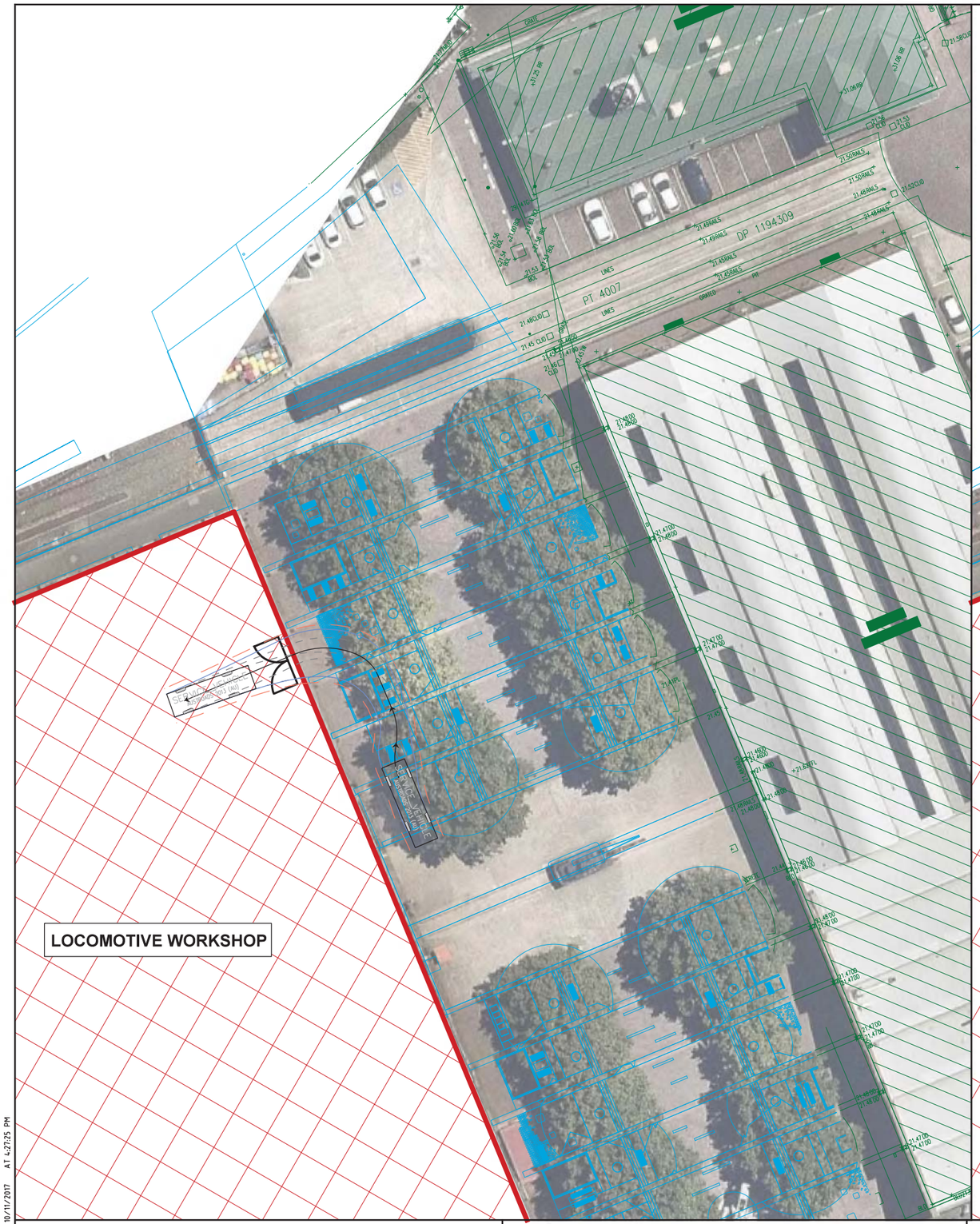
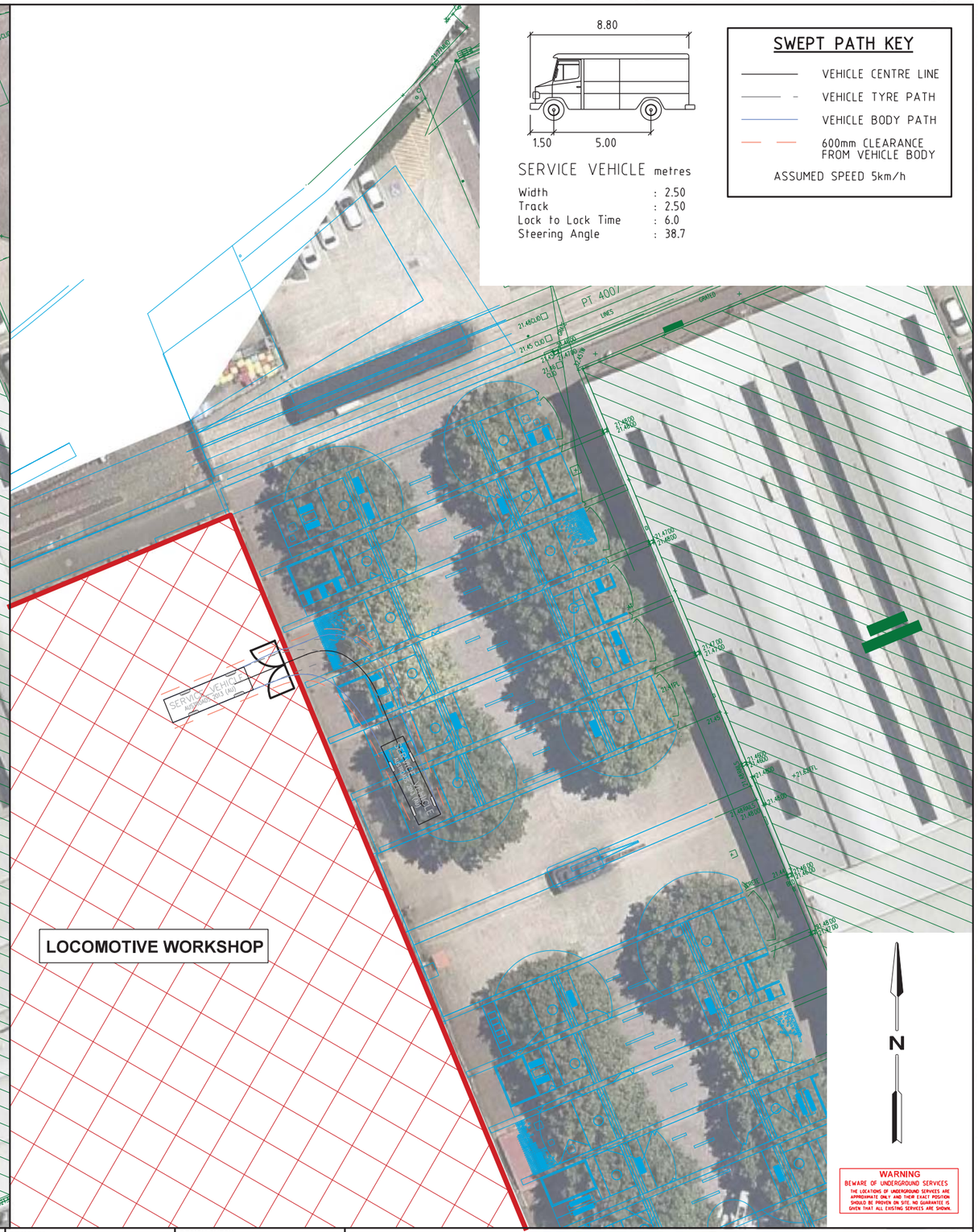
AUSTRALIAN TECHNOLOGY PARK
LOCOMOTIVE STREET

SWEPT PATH ASSESSMENT

DRAWING NO.	SHEET	ISSUE
N117430-04-02-05	05 OF 07	P2





SERVICE VEHICLE metres

Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 38.7

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 600mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

N

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

PLOTTED BY : chenlong.You ON 10/11/2017 AT 4:27:25 PM

AMENDMENTS

ISSUE	DATE	DESCRIPTION	BY	CHK.	APP.
P2	10.11.17	BASE PLAN UPDATE	CY	KW	KW
P1	25.07.17	INITIAL ISSUE	CY	KW	KW

GENERAL NOTES
1. ALL DIMENSIONS AND RADII ARE IN METRES AND ARE TO THE FACE OF KERB AND CHANNEL.

2. BASE INFORMATION OBTAINED FROM NEARMAP AERIAL PHOTOGRAPHY DATABASE DATED 11 JANUARY 2017; FEATURE AND LEVEL
SURVEY FROM LINKER SURVEYING DATED 23 JANUARY 2017
GTA CONSULTANTS DOES NOT TAKE ANY RESPONSIBILITY FOR THE ACCURACY OF THE EXISTING CONDITIONS BASE (AERIAL PHOTOGRAPHY) ON WHICH THE SETOUT DETAIL IS BASED.
PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE EXISTING CONDITIONS INCLUDING UNDERGROUND SERVICES SHOULD BE VERIFIED ON SITE.

DESIGNED C.YOU	DESIGN CHECK -
DRAWN C.YOU	DRAFTING CHECK -
APPROVED BY -	DATE APPROVED FOR INITIAL ISSUE 25 JULY 2017
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AUSTRALIAN TECHNOLOGY PARK
LOCOMOTIVE STREET

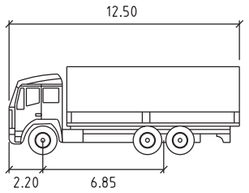
SWEPT PATH ASSESSMENT

DRAWING NO.	SHEET	ISSUE
N117430-04-02-06	06 OF 07	P2

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 600mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h



SU TRUCK metres

Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.6

PLOTTED BY : Chenlong.You ON 10/11/2017 AT 4:27:26 PM

AMENDMENTS

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3. DECLARED MAIN ROAD - LOCOMOTIVE STREET - SPEED ZONE 10 KM/H

DESIGNED: C.YOU	DESIGN CHECK: -
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LOCOMOTIVE STREET

SWEPT PATH ASSESSMENT

DRAWING NO.	SHEET	ISSUE
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Appendix C

Traffic Control Plans

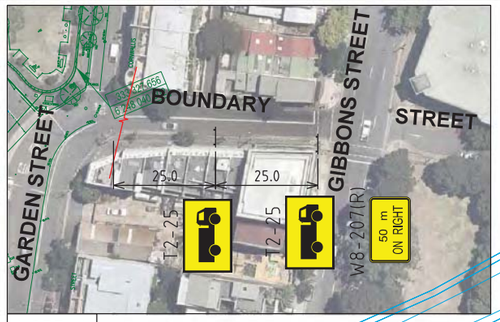
NOTES

1. NOT ALL DIMENSIONS SHOWN ARE TO SCALE.
2. LOCATION OF SIGNS ARE TO BE CONFIRMED ON-SITE TO ENSURE APPROPRIATE VISIBILITY.
3. ALL SIGNS TO BE MINIMUM SIZE A.
4. ALL SIGNS TO BE CLASS 1 REFLECTIVE OR DIAMOND GRADE.
5. ALL TRAFFIC CONTROL PLANS ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE RMS "TRAFFIC CONTROL AT WORK SITES" MANUAL, VER 4 (RMS 2010) AND AUSTRALIAN STANDARDS AS1742.3:2009 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PART 3: TRAFFIC CONTROL DEVICES FOR WORKS ON ROADS.
6. THIS TRAFFIC CONTROL PLAN MUST BE SETUP BY A PERSON HOLDING AN "IMPLEMENT TRAFFIC CONTROL PLANS" (YELLOW) TICKET AND THE RMS TRAFFIC CONTROL AT WORK SITES CHECKLIST SHALL BE COMPLETED PRIOR TO IMPLEMENTATION.
7. THE ACCREDITTED PERSONNEL SHALL IMPLEMENT THE APPROVED TCP BEFORE ANY PHYSICAL WORK COMMENCES AND ENSURE A COPY OF THE TCP IS KEPT ON-SITE. THE ACCREDITTED PERSONNEL SHALL ALSO DRIVE THROUGH THE SITE BEFORE WORKS BEGIN TO ENSURE THAT THE TCP HAS BEEN IMPLEMENTED CORRECTLY AND THAT IT WILL WARN, INSTRUCT AND GUIDE ROAD USERS AS DESIGNED. ANY VARIATIONS MADE TO THE PLAN MUST BE MARKED ON THE PLAN AND INITIALLED BY THE ACCREDITTED PERSONNEL.
8. IT IS THE RESPONSIBILITY OF AN ACCREDITTED PERSONNEL WITH A 'PREPARE TRAFFIC MANAGEMENT PLAN' TICKET TO ENSURE THE FOLLOWING:
   - THE INTEGRITY OF ALL TRAFFIC CONTROL MEASURES THROUGH TO THE FINAL REMOVAL. THIS INCLUDES DAILY CHECKS OF ALL SIGNS AND DEVICES. THE CORRESPONDING RECORDS OF CHECKS SHALL BE KEPT ON FILE FOR AUDITING PURPOSES.
   - VEHICULAR ACCESS AND SERVICING REQUIREMENTS ARE TO BE MAINTAINED AT ALL TIMES TO ADJACENT PROPERTIES AFFECTED BY TRAFFIC CONTROL MEASURES.
   - AT ALL TIMES AN UP-TO-DATE COPY OF "TRAFFIC CONTROL AT WORK SITES" SHOULD BE AVAILABLE FOR REFERENCE AND IMPLEMENTATION AS REQUIRED ON-SITE.
9. ALL WORKERS WILL BE CONFINED TO THE DEDICATED WORKS AREA SHOWN ON THE PLAN.
10. IF THE WORKSITE IS LEFT UNATTENDED IT IS THE CONTRACTOR'S DUTY TO ENSURE THAT THE APPROPRIATE MEASURES ARE TAKEN TO PROVIDE A SAFE ENVIRONMENT FOR VEHICLES AND PEDESTRIANS TO RELEVANT AUSTRALIAN STANDARDS.
11. TRAFFIC CONTROLLERS ARE NOT REQUIRED AT THE ACCESS FULL TIME, SHOULD CONDITIONS BE MODIFIED AND TRAFFIC CONTROLLERS REQUIRED, THEY ARE TO BE SUITABLY ACCREDITED TO AUSTRALIAN STANDARDS AND RMS ACCREDITATION AS REQUIRED. WHEN REQUIRED T1-34 AND T1-10 SIGNS ARE TO BE SET UP IN ACCORDANCE TO AUSTRALIAN STANDARDS AND RMS REQUIREMENTS.
12. ALL SIGNAGE IS TO BE CLEAN, CLEARLY VISIBLE AND NOT OBSCURED.
13. ALL SIGNS TO BE COVERED OR REMOVED WHEN WORKERS ARE NOT ON SITE.
14. ALL NIGHT WORK OR DAY/NIGHT MUST USE RMS STANDARD NIGHT SIGNS AND DEVICES UNLESS OTHERWISE STATED.
15. ALL WORKERS MUST ADHERE TO THE APPLICABLE SAFE WORK DISTANCE AS DESCRIBED IN AS1742.3:2009.
16. ALL DISTANCES BETWEEN SIGNS ARE TO BE IN ACCORDANCE WITH SECTION 2.5.2 OF AS1742.3:2009. HOWEVER, MODIFICATIONS CAN BE MADE TO SUIT SITE CONDITIONS.

CERTIFICATION

THE UNDERSIGNED HAS COMPLETED AND OBTAINED THE RMS 'PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN' ACCREDITATION.

CERTIFICATE NO: 0039450274
ASHISH MODESSA



INSET A

LEGEND

	WORK SITE		TRAFFIC CONTROLLER
	WORK ZONE		SITE ACCESS
	CLASS A HOARDING		DESIRED PEDESTRIAN PATH
	CLASS B HOARDING	CONSTRUCTION ACCESS ONLY	S1 SIGNS
	SIGN POST	CAUTION VEHICLES CROSSING	S2 SIGNS

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PLOTTED BY : Chentang.You ON 10/11/2017 AT 4:27:16 PM

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TRAFFIC GUIDANCE SCHEME

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