Proposed Student Accommodation 90-102 Regent Street, Redfern

Framework Construction Traffic Management Plan

Prepared for:

The Trust Company (Australia) Limited ATF Wee Hur Regent Trust

13 October 2020

The Transport Planning Partnership



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Client: The Trust Company (Australia) Limited ATF Wee Hur Regent Trust

Version: V02

Date: 13 October 2020

TTPP Reference: 19139

Quality Record

Version	Date	Approved by	Signature
V01	8/10/20	Jason Rudd	Jam Russ
V02	13/10/20	Jason Rudd	Jam Russ



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1 Introduction

1.1 Background

This Framework Construction Pedestrian and Traffic Management Plan (CPTMP) has been prepared on behalf of The Trust Company (Australia) Limited ATF Wee Hur Regent Trust is associated with the State Significant Development Application (SSDA) for a proposed mixed use development at 90-102 Regent Street Redfern. The development will include a ground floor retail premises and student accommodation.

This CPTMP is intended to provide a framework for the future preparation of a detailed CPTMP following SSDA approval and development of a detailed construction methodology.

Moreover, this Framework CPTMP establishes the principles and objectives for construction traffic management, evaluates the potential traffic-related impacts arising from the proposed construction activities of the subject development and sets out appropriate mitigation measures and management arrangements to address these implications.

This report provides an outline of an indicative construction methodology and details management measures to ensure the safety of the public and workers.

It is envisaged that if approved, the consent will include a condition requiring a detailed CPTMP to be prepared in consultation with the Sydney Coordination Office (SCO) within TfNSW prior to construction activities commencing on site.

This Framework CPTMP sets out the principles for construction traffic management and identifies measures to be considered as part of the detailed CPTMP.

The overall principles of traffic management during construction include:

- manage vehicle and pedestrian access to / from adjacent properties;
- manage construction traffic activity during each stage of the development
- restrict construction vehicle movements to designated routes to / from the site;
- estimate indicative traffic generation associated with construction works;
- minimise the impact on traffic flows, emergency vehicles and pedestrian movements;
- maintain appropriate public transport access; and
- carry out construction activity in accordance with the approved work hours.



1.2 Site Description

The subject site is located at 90-102 Regent Street, Redfern, and falls within the local government area of City of Sydney Council.

The site is bounded by Regent Street, Marian Street and William Lane on the east, north and west boundary respectively.

The location of the site and its surrounds is presented in Figure 1.1.

Redfern Railway Station is located approximately 200m (walking distance) north-west of the site and provides various rail service connections to numerous destinations across Sydney.



Figure 1.1: Site Location



2 Indicative Construction Methodology

2.1 Construction Staging and Activities Program

Demolition, excavation and construction works associated with the proposed student accommodation are expected to have a total duration of 18 - 24 months.

Construction activities for this project will generally involve:

- Preliminary works/ site establishment / demolition
- Excavation/ earthworks for basement
- Building Works (ie. structure works, façade and internal fit out)

2.2 Construction Site Access and Work Zones

2.2.1 Consideration of Surrounding Developments

The site has three road frontages, namely Regent Street, Marian Street and William Lane.

It is noted that construction works on surrounding sites is currently being undertaken. The site at 80-88 Regent Street is currently utilising a 'work zone' within the kerb side lane along the site's frontage to Regent Street and also Marian Street (see Figure 2.1).

Similarly, the site at 11 Gibbons Street Redfern is utilising a 'work zone' in Gibbons Street and has utilised a vehicle access (driveway) at Gibbons Street accessing an on site loading facility.

Both these sites are planned to be completed prior to or during construction works on the proposed development site (90-102 Regent Street).

As such the construction methodology and the associated detailed CPTMP for the site will need to consider operational vehicle access to adjacent site which is to be via Marian Street and William Lane.

Notwithstanding the above, the site has 3 road frontages and thus has several options to provide construction vehicle access to and from the site to respond to the changing and cumulative conditions on the surrounding road network.



Figure 2.1: Construction Vehicle Site Access





2.2.2 Principles for Construction Vehicle Access

The following principles for construction vehicle access shall be considered during the preparation of the detailed CPTMP.

- Whenever practicable, vehicle unloading / loading of construction vehicles shall be undertaken via on site loading zone.
- Access to and from on site loading areas shall be undertaken via the lowest order road frontage that is practical for the size of vehicle to be used and road constraints. That is where practical, vehicle access should be provided via William Lane. If this is not practical then Marian Street and as a last option via Regent Street.
- The use of on street loading areas (ie. Work Zones) shall be limited and only be considered to accommodate large construction vehicles unable to access the site and / or when the building phase prohibits on site access.
- The length (metres) and duration of occupation of any work zone shall be minimised such as to minimise the loss of on street parking.
- To the greatest extent possible, vehicle movements to and from the site or work zones shall be in a forward direction. Any reversing movements shall be undertaken under the supervision and direction of traffic controllers.
- Notwithstanding the above, reversing movements of construction vehicles via Regent Street shall be avoided in order to maintain efficient and safe traffic flows along the major road.
- Pedestrian access along the Regent Street frontage shall be maintained during construction. Pedestrian movements along the footpath shall be protected with appropriate hoarding and / or site fencing.
- Pedestrian access along Marian Street and potentially William Lane shall be maintained during construction or via appropriate alternative routes.
- Co-ordination with adjacent construction sites to be undertaken to avoid simultaneous periods of peak construction vehicle generation, ie. simultaneous concrete pours.
- Vehicle access to and from the site will be via prescribed and approved construction vehicle routes.
- All traffic and pedestrian control associated with the construction works to be undertaken by accredited traffic controllers.



2.2.3 Construction Vehicle Access to On Site Loading Areas

The road alignment and configuration of the surrounding streets will determine the size of vehicle able to access site access driveways and / or work zones.

As shown in Figure 2.2, a vehicle swept path analysis demonstrates that a Small Rigid Vehicle (SRV) can access the site via Marian Street and William Lane. Vehicles larger than a SRV will require the temporary removal of parking and traffic controllers to enable reversing movements within the public road space to access William Lane.

Figure 2.3 indicates the potential construction vehicle access options for on site loading / unloading during construction.

The location of driveways in each option are variable and can be adjusted to suit access to on site loading areas and on site vehicle circulation pathways. The width of driveways could also be varied to accommodate different sized vehicles, namely wider driveways for larger sized vehicles.

It is anticipated that traffic controllers would be used to assist with traffic flows for each option.

Notwithstanding the above it is recognised that at certain stages of the build, there will not be an opportunity to provide on site loading and / or large vehicles will be required to deliver large materials to the site. Thus it is envisaged that on street work zones would be required at certain stages of the build.

The potential options for on street work zones are shown in Figure 2.4.

The use of a Marian Street Work Zone is only possible if the existing Work Zone on the northern side of Marian Street is not in use for the construction site at 80-88 Regent Street.

The use of Work Zones on both Regent Street and Marian Street will require the temporary removal of on street parking.



Figure 2.2: SRV Access to Site Via Marian Street & William Lane





Figure 2.3: Construction Vehicle Access to On Site Loading Areas





Figure 2.4: Construction Vehicle Access to On Street Work Zones





2.3 Work Hours

Construction works shall be carried out in accordance with the approved work hours specified in the conditions of consent for the development.

It is envisaged that the typical construction work hours will be as follows:

- Monday to Friday
 7.00am 5.00pm
- Saturday 8.00am 3.00pm
- Sunday and public holiday
 No work.

2.4 Construction Vehicle Type and Volumes

Given the limited site constraints and available vehicle access routes, it is proposed that the size of vehicles accessing the site would include the following:

- Articulated semi trailers (19m long) for delivery of large structural elements
- Truck and Dog used removal of bulk excavated material
- Heavy Rigid Vehicles (12.5m long) delivery of building materials
- Concrete Agitators for delivery of concrete for concrete pours
- Medium and Small Rigid Vehicles Delivery of building materials, removal of waste etc.

Peak construction traffic generation during construction will occur during concrete pouring activities. During concrete pours, potentially 6 concrete agitator trucks per hour will be required across a 10-hour working day.

2.5 Construction Workers

It is envisaged that there will be an average of 100 construction staff on site, and up to 150 construction staff during peak activities. No on site car parking would be provided for construction workers.

Construction workers would be encouraged to utilise the site's good access to public transport. It is recommended that the site provide a 'tool drop' and on site tool storage facility such that trades people are not required to transport tools to and from the site each day.



2.6 Construction Vehicle Routes

Construction vehicles shall be restricted to designated and approved construction vehicle routes for access to and from the site.

Construction vehicle routes shall seek to minimise the use of local roads and direct construction vehicles along the most direct route to and from the arterial road network.

It is envisaged that the construction traffic routes to be utilised for the construction of the proposed student accommodation will utilise the routes shown in Figure 2.5.

The routes to be used may also need to vary during different construction stages to reflect the different vehicle site access arrangements.



Figure 2.5: Indicative Construction Vehicle Routes

All truck drivers will be advised of the designated truck routes to / from the site and be required to adhere to the nominated routes.



3 Construction Traffic Assessment and Implications

3.1 Construction Traffic Generation

The proposed peak construction activities are estimated to generate up to 6 concrete trucks per hour during the peak activities, equating to 120 two-way movements on a 10-hour working day. The low level of construction traffic volumes could not be expected to result in adverse impact on the operation of the surrounding road network and would be less than the volumes generated by the adjacent Stadium construction.

Notwithstanding the above, consideration shall be given in the detailed CPTMP to the cumulative traffic implications associated with other adjacent construction sites.

3.2 Pedestrian and Cycle Access

Traffic control measures will be implemented during the construction phases as developed through the detailed CPTMP and associated Traffic Control Plans (TCP).

Notwithstanding the above, all existing pedestrian and cycle access along the site's frontage to Regent Street shall be maintained during construction activities. Alternate pedestrian pathways shall be provided should construction vehicle access or a work zone be implemented in Marian Street. It is suggested that pedestrians would be diverted to the northern side of Marian Street.

Cycle access on public roads shall be maintained as would general traffic flows.

3.3 Public Transport Facilities

Access to the existing bus stops and existing bus routes would not be impacted by the proposed construction activities on the site.

Additionally, workers shall be encouraged to utilise public transport to access the site.



4 Indicative Construction Traffic Management Measures

4.1 Traffic Management Measures

Traffic Control Plans (TCPs) shall be prepared to depict the proposed traffic control measures including static signage to guide motorists past the subject site.

The TCPs shall be designed in accordance with Roads and Maritime Services' Traffic Control at Works Sites manual, with all relevant approvals and permits to be obtained prior to the commencement of any construction works.

The proposed construction truck movements to/from the site shall be accompanied by advisory traffic control signage to minimise the traffic impact on the surrounding road network.

All advisory road signage shall be installed in accordance with AS1742.3 Manual of uniform traffic control devices - Traffic control devices for works on roads and the Roads and Maritime Services Traffic Control at Worksites Manual. Signs shall be installed and maintained throughout the construction period.

4.2 Vehicle Access

Construction vehicles shall radio / call the site office on approach to the site to ensure that space is available within the site loading area or work zones.

Notwithstanding this, if there are any materials spilt onto the road, site personnel and equipment shall rectify the issue accordingly, subject to appropriate OH&S provision.

4.3 Truck Routes

Protocols must be in place to ensure:

- site induction shall include procedures for accessing the site during demolition, excavation and construction stages;
- drivers shall adhere to the nominated truck routes as shown in Figure 2.5;
- drivers shall be aware of pedestrians and cyclists in the vicinity of the site; and
- drivers shall be aware of existing signposted speed limits.



4.4 Construction Worker Parking

It is envisaged that all workers at the site will utilise public transport to access the site.

A tool drop-off and storage facility shall be provided on-site. This will allow construction workers to drop off and store their tools, allowing them to use public transport to travel to and from the site. This will be incorporated in the workers induction program to ensure minimal parking impact on the surrounding streets.

It is proposed to implement the following measures to encourage workers to use public transport:

- provide an on-site tool drop-off and storage facility to allow trades people to drop off and store their specific machinery for the project
- inform staff during the induction and regular management meetings that limited onsite car parking will be available
- instruct staff to use public transport to access the site during the induction and regular management meetings
- display public transport timetable information at key locations within the work site and ensure that it is easily accessible by staff.

4.5 Site Inspections and Record Keeping

The demolition, excavation and construction stages shall be monitored to ensure that it proceeds as set out in the Contractor's Construction Management Plan provided by the Principal Contractor.

A daily inspection before the start of construction activity shall take place to ensure that conditions accord with those stipulated in the plan and that there are no potential hazards. Any possible adverse impacts shall be recorded and dealt with as they arise.

4.6 Site Induction

All staff employed on the site by the Principal Contractor shall be required to undergo a site induction.

The induction shall include permitted access routes to and from the works site for site staff and delivery vehicles as well as standard environmental, OH&S, driver protocols and emergency procedures.

The workers are to be informed to use public transport to access the site during the induction.

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