

Honeysuckle City Campus Development

University of Newcastle

Construction Traffic Management Plan

Stage 1A

May 2019



Honeysuckle Drive/Worth Place Construction Traffic Management Plan

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Introduction

The University of Newcastle has a development application for the first stage of a new city campus (Honeysuckle City Campus Development) comprising a masterplan site for future faculties and student services including accommodation. The complete site sits between Honeysuckle Drive, Worth Place and Civic Lane including land previously forming part of the heavy rail corridor.

Stage 1A to accommodate the School of Creative Industries and Innovation Hub shall be located on the corner of Worth Place and Honeysuckle Drive with Wright Lane forming a pedestrian and cycling boulevard with intermittent access to service vehicles, operating as a shared zone.

Pedestrian access will be provided off both Honeysuckle Drive and Worth Place with service vehicle access off Wright Lane. There is no parking provided on site and so no permanent vehicle access will be required. There may be the need for occasional larger vehicles to access the foyer in conjunction with building activities.

As a condition of the SEARs for the development consent there is a requirement for the submission of a Construction Pedestrian and Traffic Management Plan (CPTMP) to ensure traffic and pedestrian issues can be safely and efficiently managed during the construction activities on site.

The proposed work is in a single stage.

The site is located within the Honeysuckle Precinct on the corner of Honeysuckle Drive and Worth Place, with frontage to both of these roads (Figure 1-1). The construction site includes the subject site and adjacent land which fronts Settlement Lane with Wright Place forming the southern frontage. Access for vehicles will be provided off Wright Lane with egress via Settlement Lane and directly to Honeysuckle Drive for larger vehicles due to the load limit on Settlement Lane and one way direction of travel on Wright Lane (east).

The location of the site is shown below in Figure 1-1.

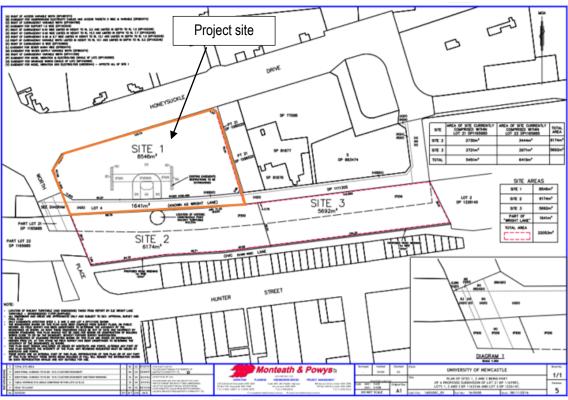


Figure 1-1 - Site Location







1.1 Existing Road Network and Local Characteristics

Honeysuckle Drive

The major road through the locality is Honeysuckle Drive which provides an important road link through the Honeysuckle Precinct linking with Hannell Street to the west and through to Merewether Street to the east. It provides a single lane of travel in both directions, with kerb side parking permitted along both sides of the road for the majority of its length. It connects with Hannell Street via a 3-way signal controlled intersection and with Merewether Street via a 3-way roundabout.

It provides a footpath along both sides of the road and operates under the posted speed limit of 50 km/h. There are street lights along the length of the road and the kerb side parking is provided with a marked parking / cycle lane.

A roundabout is provided at the Honeysuckle Drive / Worth Place intersection with pedestrian refuges installed within the splitter islands. The refuge on the Worth Place southern approach has a narrow cut-through 1.5 metres wide which has been proposed to be widened to 2.5 metres. The 4th leg provides access to a residential apartment driveway and access into a construction site associated with the development of 21 Honeysuckle Drive.

There are several Traffic Control Plans in place along Honeysuckle Drive west of Worth Place associated with mixed use developments along the northern side (21 and 35 Honeysuckle Drive) and a hotel development on the southern side (42 Honeysuckle Drive) near Cottage Creek. These TCPs have been reviewed and taken into consideration in the development of this plan

Worth Place

Worth Place has recently been upgraded in conjunction with the light rail development and provides a two way road connecting Honeysuckle Drive with Hunter Street. It has a central median restricting any access to left in left out only and connects with Hunter Street as T-intersection with slip lanes providing left in left out movements only. As shown in Figure 1-2 the light rail crosses onto Hunter Street to the immediate west of Worth Place.

It provides a single lane of travel in each direction with no parking permitted along its length and operates under the posted speed limit of 40 km/h. Civic Lane connects with Worth Place to the south with a left out only permitted as Civic Lane operates as a one way road with an east west flow.

Pedestrian facilities are well developed in the Honeysuckle Precinct with footpaths along both sides of Honeysuckle Drive as well as along Worth Place and Wright Lane. Pedestrian facilities also connect along the foreshore with plazas and pathways connecting the subject site with the various commercial, retail and tourist destination associated with Honeysuckle and the harbour through to the east end beaches. Pedestrian crossings have been installed on Worth Place to provide for pedestrian traffic along Hunter Street which has an east west orientation similar to Honeysuckle Drive. This connects the Honeysuckle precinct with the Newcastle CBD.

Cycling facilities are also well development in the precinct. Honeysuckle Drive has a marked on road cycling lane although this is between the parking lane and the vehicle lane. It forms part of Regional Route 6 which connects the City Centre with the shared pathway at Throsby Creek off road through to Maitland Road and then to the University Campus at Callaghan and on to Birmingham Gardens.





Figure 1-2 Aerial image of Worth Place and Honeysuckle Drive showing the interaction between the local roads and the light rails.

Traffic Volumes and Road Operation

Seca Solution completed traffic surveys at the 4-way roundabout controlled intersection of Honeysuckle Drive and Worth Place. These surveys were completed during both the morning and afternoon peak periods on Thursday 16th February 2017 prior to the majority of roadwork interruption occurring in the CBD. The two-way flows on Honeysuckle Drive (east of Worth Place) were:

- 1,082 split 671 eastbound (62%) in the morning peak between 7:45am and 8:45am; and
- 1,118 split 761 eastbound (68%) in the afternoon peak between 4:45pm and 5:45pm.

The two-way flows on Worth Place (south of Honeysuckle Drive) are significantly lower with:

- 195 vehicles during the morning peak, 84% southbound; and
- 215 vehicles during the evening peak, 72% northbound

Observations on site during the peak periods show that the traffic movements along Honeysuckle Drive experience minor delays, with the roundabout at the intersection of Honeysuckle Drive and Worth Place operating well.

To the west of the site, the traffic signal controlled intersection of Honeysuckle Drive and Hannell Street suffers from delays and congestion, which sees queues in the PM peak impacting on the Worth Place roundabout. It is noted that the major delays in the afternoon period on Honeysuckle Drive occur due to the high demand for traffic turning right out of Honevsuckle Drive onto Hannell Street. This right turn is opposed by the heavy two-way traffic movements along Hannell Street. In the morning period, this movement is a right turn from Hannell Street into Honeysuckle Drive and this suffers from minimal delays and congestion due to the traffic signals favouring the dominant traffic movement along Hannell Street.

Recent upgrades to the Hannell Street intersection and a new north/south link at Steel Street are expected to see improvements to traffic distribution and delays. Outside of the peak hours the traffic flows along Honeysuckle Drive are much lower and the delays and congestion are minimal.







2 Construction Activities

2.1 Methodology

The development requires the construction of the new building (Stage 1A) on the site which is currently vacant. The site was developed as part of the Honeysuckle Precinct redevelopment and in recent years has been the works site for Downer in association with the light rail project.

As the site includes both the subject site and the future stages for the Honeysuckle Campus, all construction vehicles (including any cranes) will be able to be located within the site and no vehicles will be parked on the footpath adjacent to the site. A site office shall also be incorporated into the site.

As part of the construction works, a temporary egress driveway onto Honeysuckle Drive is required along the site frontage which may require a temporary removal of on-street parking or adjustments to the bus stop in this location. This is consistent with changes that have occurred along this length of road during the construction of the light rail due to changes to bus routes. This driveway is necessary to provide for large vehicles exiting the site due to the load limit on Settlement Lane and the one way access along Wright Lane east of Settlement Lane. This driveway shall be restricted to left out only due to the central median. This driveway shall not require traffic control and drivers exiting shall observe NSW Road Rules giving way to pedestrians as well as traffic approaching from the East.

Access to the site shall be provided along Wright Lane with all heavy vehicles (23t) to exit via the temporary driveway onto Honeysuckle Drive. Light vehicles and other vehicles under 23t can also exit back onto Wright Lane toward Settlement Lane.

The construction works will have minimal impacts to the adjacent footpaths with no diversions anticipated along Honeysuckle Drive nor Worth Place. Once Wright Lane is closed, pedestrian detour signs shall be appropriate to direct eastbound pedestrians along Worth Place to Hunter Street or along Settlement Lane and westbound pedestrians along Settlement Lane.

The following vehicle movement plan has been developed on the basis that Wright Lane is closed to public traffic west of Settlement Lane and construction traffic only is permitted, however it is noted that further developments in the area may continue to use this section of road for access. This will not impact upon the construction access off Wright Lane identified for the site. If required, changes to the vehicle movement plan can be undertaken during the CC stage of the development.

2.2 Timing

The construction work is expected to take 12-18 months to complete and is expected to commence in the middle of July 2019 (subject to DA consent). This timetable shall be confirmed once a contractor is appointed.

2.3 Working Hours

Construction hours would be between 7:00am and 5:00pm Monday to Friday and 8.00 AM to 1.00 PM on a Saturday. No construction work is to be carried out on a Sunday or public holiday. No construction work contributing to unacceptable noise levels or major deliveries are scheduled outside of the weekdays in line with EPA Guidelines.

Work may be undertaken outside these hours where the following occurs:

- The delivery of fill or material may occur outside these hours if required by the Police or other authorities.
- Council providing permission for working out of hours;
- It is required in an emergency to avoid loss of life, damage to property and / or to prevent environmental harm.
- The work is approved from the Construction Noise and Vibration Management Plan;





Residents likely to be affected by the works are notified of the timing and duration of these works at least 48 hours prior to the commencement of the works.

2.4 Construction staff numbers

Peak demand levels will be circa 70 construction workers based on site during the construction stage. Construction staff shall be encouraged to park their vehicles off site to allow for construction vehicles and activities to occur within the site. The old rail corridor of Site 2 is expected to be used for Construction parking. This will not impact the public car parking space whilst Wright Lane (west) remains open. During the earlier stages of the construction work the staff levels will be lower and they will gradually ramp up over the project timeframe to the peak of 100 staff.





3 Traffic Management Assessment

The proposal traffic management measures allow for access direct off Wright Lane west. All access shall be along Wright Lane (east) with Settlement Lane one way northbound for the duration of the works. Truck movements to and from the site are as shown in Figure 3-1.

During the 12-18 months of work on site there will be a maximum of 70 people working on site. The site is located close to the Newcastle CBD and allows for good connection to the public transport routes in the locality which will offer the opportunity for construction staff to travel by public transport rather than drive. The light rail is now operational and can provide good connectivity to the site.

Due to the nature of the work the maximum number of trucks through the day could be 5 vehicles per hour associated with concrete pours and delivery of material to the site. These trucks will typically be a heavy rigid vehicle, with a length of 12.5 metres with larger deliveries via semi-trailers. These vehicles be able to manoeuvre within the site to enter and exit in a forward direction.

There will be no general public vehicles within the site during the construction works.

Pedestrian movements are reasonably high and currently occur on the footpath adjacent to the subject site on both sides of Honeysuckle Drive. The proposed works are all contained within the site with no impact on these pedestrian pathways. Wright Lane shall be closed; pedestrian detour signs shall be appropriate to direct eastbound pedestrians along Worth Place to Hunter Street or along Settlement Lane and westbound pedestrians along Settlement Lane.

The truck numbers associated with the construction work would be comparable to the traffic associated with the carparks currently off Wright Lane that shall form part of the future site and it is considered that the movement of vehicles in and out of the site for construction works can safely occur with minimal delays to pedestrians and in a safe manner. No limitation on truck access times is considered appropriate for the project.

At the point at which Wright Lane, west of Settlement Lane is closed to public traffic, consideration shall need to be given for Settlement Lane to become one way northbound with southbound traffic to be detoured via Wright Lane (east).

There will be minimal impact upon public transport services with no diversions required. The location of the bus stop on Honeysuckle Drive shall be reviewed as part of the final CTMP.

There will be minimal impact for emergency vehicles, heavy vehicles, cyclists with no diversions required. Pedestrians with an origin/destination via Wright Lane (west) shall be redirected along existing footpaths.

Due to the timeframe of the works and the location of the works zones within the site there will be minimal impact upon development within the locality of the site.

There will be minimal impact upon adjoining Council areas. Traffic routes in and out of the locality will be along the arterial road network which will experience minimal impacts due to the works.

Due to the nature of the works and the minimal impact upon the external road network no public consultation is required for this project.

SECA solution

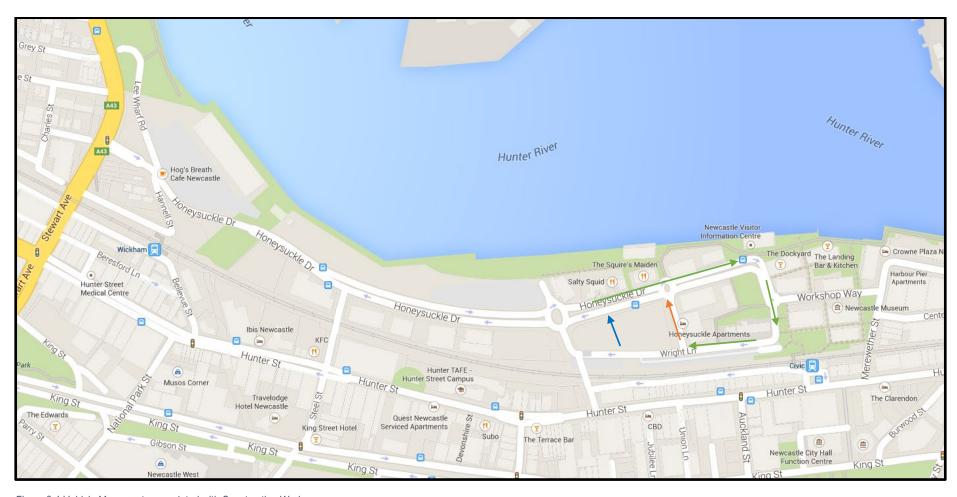


Figure 3-1 Vehicle Movements associated with Construction Works

Outbound light vehicles

Outbound light vehicles

SECA solution

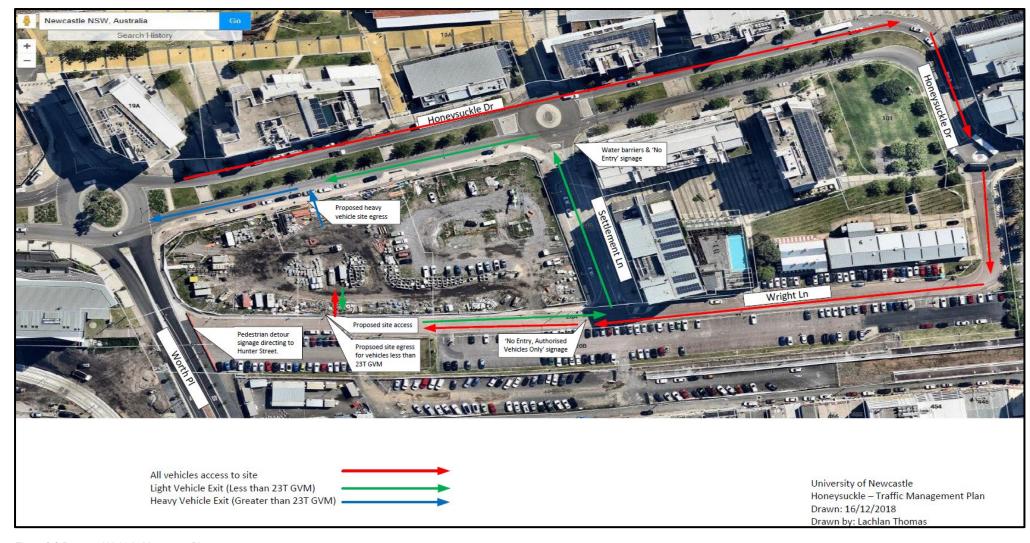


Figure 3-2 Proposed Vehicle Movement Plan



4 Traffic Control Plan

4.1 General

A TCP shall be prepared to meet the requirements of the RMS Traffic Control at Work Sites Manual 2018. The plan shall cover the access and egress requirements to and from the site and the safe passage of vehicles in and out of the subject site via Wright Lane and Honeysuckle Drive during the construction works.

At all times the Roads and Maritime Services Traffic Control at Work Sites guidelines must be adhered to. Please refer to the RMS guidelines for traffic control matters not listed in this report.

4.2 Existing traffic conditions on Honeysuckle Drive

- 50km/hr speed limit;
- Peak AM period traffic in the order of 500 vehicles per hour one-way adjacent to site and 680 vehicles per hour one-way PM (noting opposing vehicle movements separated by raised central median). This indicates approximately 5,900 vehicles per day
- Work site located off Wright Lane
- Temporary driveway crossing to be constructed on Honeysuckle Drive for egress only (left out)
- No restrictions to access to adjacent properties are to be created by the works.
- Settlement Lane shall be one way northbound only with southbound traffic diverted to Wright Lane

4.3 Cyclists and Pedestrians

There are footpaths for pedestrians along the Project Site boundary on both sides of Honeysuckle Drive and Worth Place. No diversions are required for these movements.

Pedestrian detour signs shall be appropriate to direct pedestrians wishing to use Wright Lane eastbound along Worth Place to Hunter Street or along Settlement Lane and westbound pedestrians along Settlement Lane.

Cyclist movements along Honeysuckle Drive are catered for within the road carriageway and the proposed works will not impact upon these movements. It is noted that there is an off road footway / cycleway provided along the foreshore of Honeysuckle which offers an alternative route for cyclists.

4.4 General Traffic Control Considerations

The factors to be considered in preparing this TCP are:

- During the construction, all vehicle movements will access the site off Wright Lane, west of Settlement
- Parking available on site for some construction staff whilst parking is generally available for staff within the general locality of the subject site in parking stations if required. Site is well located for access via public transport for staff.
- Loading/delivery will be completed within the subject site.
- There will be no change to the speed zone along Honeysuckle Drive during the duration of the construction works
- Pedestrian and cyclist considerations there is no change to the existing situation for cyclists. Diversion for pedestrians to be provided to avoid Wright Lane (west).
- Location of machines/personnel on-site relative to roadway;
- Access to/from Work Site:





- Timing of works, and
- Safety of road users and site personnel.

The RMS Traffic Control at Worksites 2018 manual recommends safety barriers are considered if:

• The location will continue to be a work area for longer than two weeks. (Applicable)

• Traffic speeds are likely to be greater than 80 km/hr. (Not applicable)

AADT exceeds 5000 vehicles for traffic lane nearest the works. (Applicable)

• The work area is less than 3 metres clear of traffic on straights (less on tight curves)

(Not Applicable)

Personnel do not have other protection, such as operating plant. (Not Applicable)

Construction Works are expected to take around 12-18 months to complete

The location and nature of the work will not require safety barrier to be installed.

The local speed zone limits of 50 km/hr is considered acceptable as the construction works are all contained within the site and the site personnel will be protected by construction fencing.

4.5 Traffic Control – Signage and Line Marking

The TCP shall provide Work Site definition. General signage and line marking are included due to the nature of the passing traffic and the location and nature of the works.

All signs shall be permanently mounted and shall be operational at all times.

A copy of the TCP must be on site at all times during the demolition and construction stages.

4.6 Daily Checklist

In accordance with the Roads and Traffic Authority of New South Wales 'Traffic Control at Worksites' guidelines, the site foreman / manager should complete a daily traffic control checklist and this checklist should be filed for future reference.





4.7 Contractors Contact Details

Project Manager:

Mobile:

E-mail

4.8 TCP Approval

This TCP will be submitted to the road authority for review and approval.

Details for lodging this TCP and the Construction Traffic Management Plan are:

City of Newcastle Council:

Council Administration 282 King Street Newcastle NSW 2300

Roads and Maritime Services:

Road Occupancy Unit (ROU) Newcastle

Phone: 131 782 Fax: 02 4924 0344

This Traffic Control Plan is to be prepared and reviewed by suitable qualified professionals in accordance with the RMS Traffic Control at Work Sites Manual 2018 edition.

Sean Morgan (3372046343)

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Director





Appendix A. Site Plan

