



Construction Traffic & Pedestrian Management Sub-Plan  
Newcastle High School Redevelopment  
for  
Hansen Yuncken

## Document Control

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# 1 Introduction

## 1.1 Overview

arc traffic + transport has been engaged by Hansen Yuncken to prepare a Construction Traffic & Pedestrian Management Sub-Plan (**CTPMSP**) to provide for the safe and efficient construction of the Newcastle High School (the **School**) Redevelopment (the **Project**) at 160/200 Parkway Ave, Hamilton South (the **Site**).

Full details of the Project are provided in State Significant Development 41814831 (the **SSD**) and subsequent **SSD Consent** prepared by the Department of Planning, Housing & Infrastructure (**DPHI**).

This CTPMSP (v7) replaces CTPMSP (v6), which was submitted to **DPHI** as part of the broader submission for construction approval. Further to their review of CTPMSP (v6), **DPHI** requested that CTPMSP (v6) was also provided to City of Newcastle Council (**Council**) and Transport for NSW (**TfNSW**) for any additional comment. We note that a response was subsequently provided by Council, but no response was received from TfNSW (see [Section 1.5](#)).

CTPMSP (v7) includes revisions to the *Vehicle Travel Plan* for construction trucks which specifically respond to Council's response to CTPMSP (v6); otherwise, there have been no significant changes to the CTPMSP.

## 1.2 CTPMSP Author

The CTPMSP has been prepared by Anton Reisch, Director of arc traffic + transport, with additional input provided by Julius Boncato, Traffic Engineer at PDC Consultants. Curriculum Vitae's for each author are provided in [Appendix A](#).

## 1.3 CTPMSP Tasks

In order to appropriately respond to the **Conditions** of Consent detailed in the SSD Consent (see also [Section 1.6](#) below) the CTPMSP includes specific consideration of the following:

- The scope of work to be assessed as part of the CTPMSP in accordance with the SSD Consent, TfNSW and Austroads and Australian Standards guidelines;
- The proposed construction schedule, including a breakdown of key stages of the construction period and the associated transport demands of each of those stages;
- General construction characteristics, including staff and truck numbers and construction hours;
- Access to and from the Site through all stages of construction, including the use of designated truck routes to minimise impacts on the local road network;
- Public and active transport opportunities for construction staff to minimise to as great an extent possible the use of private vehicle travel to/from the Site;

- Traffic generation and distribution through all stages of construction, and an assessment of the potential impact of construction traffic on the operation of the local road network;
- Staff and truck parking requirements and provisions;
- Mitigation measures by which to minimise to as great an extent as possible any potential impacts that the construction will have on existing road users, including motorists, pedestrians and cyclists; and
- Key strategies and protocols by which to maximise the safety and efficiency of construction operations across all stages of construction, focusing on the retention of safe and efficient vehicle, pedestrian and cyclist movements adjacent to the Site, and the ongoing monitoring of and – where required – revisions to the CTPMSP to respond to issues should they arise.

## 1.4 Reference Documents

### 1.4.1 Planning Documents

Key planning documents referenced in the preparation of the CTPMSP include:

- The SSD Consent;
- Newcastle Education Campus Traffic Impact Assessment 2023, Stantec (**SSD TIA**); and
- Newcastle Education Campus Environmental Impact Statement 2023, Gyde (**SSD EIS**).

### 1.4.2 Traffic and Transport Guidelines

The CTPMSP also references general traffic and transport guidelines, including:

- Australian Standard 1742 Manual of Uniform Traffic Control Devices Part 3: Traffic Control for Works on Roads (**AS 1742.3**);
- TfNSW Traffic Control at Work Sites Manual 2022 (**TCW Manual**); and
- Austroads Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments.

## 1.5 Consultation

Representatives of Council, TfNSW and School Infrastructure NSW (**SI NSW**) were involved in the preparation of the SSD TIA, forming (together with Stantec) a Project Working Group (**PWG**) that oversaw the preparation of the SSD TIA.

As discussed, a response was received from Council in regard to both Draft CTPMSP (v1) and DTPMSP (v6), but no response was received from TfNSW.

All correspondence with Council and TfNSW is provided in [Appendix B](#).

## 1.6 Summary Response to Assessment Requirements

In accordance with the SSD Consent, the CTPMSP is provided as a *Sub-Plan* to the broader Construction Environmental Management Plan (**CEMP**) being prepared by Hansen Yuncken, and provides an assessment of the relevant access, traffic and parking characteristics of the construction of the Project in accordance with the SSD Consent.

The CTPMSP specifically provides a response to Condition 15b of the SSD Consent, and then to other Conditions of relevance to the construction period; **Table 1** provides a summary response to each of these individual Conditions, and a reference to where each is addressed in more detail.

A summary response to each of the comments raised by Council during the consultation period, and a reference to where each is addressed in more detail, is provided in **Table 2**, and **Table 3** provides a response to the additional issues raised by Council further to their review of CTPMP (v6).

Table 1: Summary Response to SSD Consent Conditions

SSD Condition B15	Summary Response	TA Reference
<p><i>The Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must be prepared to achieve the objective of ensuring safety and efficiency of the road network and address, but not be limited to, the following:</i></p>		
<p>(a) <i>be prepared by a suitably qualified and experienced person(s);</i></p> <p>(b) <i>be prepared in consultation with Council and TfNSW;</i></p> <p>(c) <i>include a Driver Code of Conduct which must be prepared and communicated by the Applicant to heavy vehicle drivers and aim to:</i></p> <p><i>i. minimise the impacts of earthworks and construction on the local and regional road network;</i></p> <p><i>ii. ensure truck drivers use specified routes;</i></p> <p><i>iii. minimise road traffic noise; and</i></p> <p><i>iv. ensure truck drivers use specified routes;</i></p>	<p>This CTPMSP has been prepared by Anton Reisch, Director of <a href="#">arc traffic + transport</a>; and Mr Ben Midgeley, Principal Traffic Engineer at PDC Consultants. Anton has worked as a traffic and transport consultant for more than 30 years and has significant experience in the preparation of CTPMSP, most recent for the Jindabyne Education Precinct. Julius has worked as a traffic engineer for more than 5 years, and is fully accredited to <i>Prepare a Work Zone Traffic Management Plan</i> in accordance with the TCW Manual and AS 1742.3.</p> <p>CVs for both Anton and Julius are provided in <a href="#">Appendix A</a>.</p> <p><a href="#">arc traffic + transport</a> has consulted with Council and TfNSW during the preparation of the CTPMSP, including providing both with a copy of a Draft CTPMSP (v1) for review prior to the finalisation of the CTPMSP, and a copy of the CTPMSP (v6) which was submitted to DPE.</p> <p>A detailed Driver Code of Conduct has been prepared, and will apply to truck drivers and all those using branded construction vehicles.</p> <p>The Driver Code of Conduct will require that all trucks use designated routes to ensure that they use higher order roads rather than local roads. Further to advice received from Council in response to CTPMSP v6, the travel routes for trucks was amended to allow only Articulated Vehicles (AVs) to use Smith Street and National Park Street north of the construction access points. Access to the sub-regional road network will then be provided via Stewart Street and King Street.</p> <p>All trucks will be required to properly maintained, operate only during approved construction hours, and limit noise to as great an extent possible (appropriate brakes etc).</p>	<p>Appendix A</p> <p>Section 1.5 Appendix B</p> <p>Section 4.4.6 Appendix D</p> <p>Section 4.4.6 Appendix D</p>

Table 1: Summary Response to SSD Consent Conditions (continued)

SSD Condition B15	Summary Response	TA Reference
<p><i>(d) detail:</i></p> <p><i>i. measures to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services;</i></p> <p><i>ii. measures to ensure the safety of vehicles and pedestrians accessing adjoining properties where shared vehicle and pedestrian access occurs;</i></p> <p><i>iii. heavy vehicle routes, access and parking arrangements;</i></p> <p><i>iv. the swept path of the longest construction vehicle entering and exiting the site in association with the new work, as well as manoeuvrability through the site, in accordance with the latest version of AS 2890.2; and</i></p> <p><i>v. arrangements to ensure that construction vehicles enter and leave the site in a forward direction unless in specific exceptional circumstances under the supervision of accredited traffic controller(s)</i></p>	<p>Along with the obligations on all drivers detailed in the Driver Code of Conduct, trip generation will be minimised further to the use of public transport by staff, and minimising truck trips during school (and commuter peak periods) to the extent practicable. Scheduling of truck trips can be specific achieved during most construction periods given the set delivery of pre-fabricated modules/buildings off-site.</p> <p>Appropriate signage and additional traffic control measures will be in place at both construction driveways, the objective of which is to minimise the potential for vehicle/pedestrian conflicts in Smith Street and National Park Street.</p> <p>The use of dedicated truck routes will be strictly enforced, and all truck loading and unloading will take place exclusively within the Site. All access to the Site will be via the designated construction driveways only, and no trucks will be permitted to park or wait in local roads.</p> <p>Swept paths of a 12.5m Heavy Rigid Vehicle (<b>HRV</b>) accessing and turning within the Site are provided in TIA 2023 and reproduced in <a href="#">Appendix F</a>. Additional swept paths have been prepared for an Articulated Vehicle (<b>AV</b>) accessing and turning within the Site, as well as manoeuvring through key local intersections; these swept paths are also provided in <a href="#">Appendix F</a>.</p> <p>It is intended that all trucks enter and depart the Site in a forward direction; however, should any trucks be required to enter or depart the Site in reverse, appropriate traffic control measures will be in place to maximise the safety and efficiency of any such movements.</p>	<p>Section 4.2</p> <p>Section 4.2 Section 4.3</p> <p>Section 3.4.3</p> <p>Appendix F</p> <p>Section 3.2</p>



Table 1: Summary Response to SSD Consent Conditions (continued)

SSD Condition Additional Conditions	Summary Response	TA Reference
<p><b>Condition B24: Construction Parking</b></p> <p><i>Prior to the commencement of any construction, the Applicant must submit a Construction Worker Transportation Strategy to the Certifier. The Strategy must detail the parking facilities to be used by construction workers as identified within the Traffic Impact Assessment prepared by Stantec dated 5 December 2023, or other travel arrangements for construction that would minimise demand for parking in nearby public and residential streets or public parking facilities. A copy of the strategy must be published on the Applicant's website in accordance with condition A23. This condition cannot be staged.</i></p> <p><b>B29: Operational Access, Car Parking and Service Vehicle Arrangements</b></p> <p><i>Prior to the commencement of construction of access facilities, evidence of compliance of the design of access arrangements with the following requirements must be submitted to the Certifier:</i></p> <p>a) <i>the existing 40 on-site car parking spaces being available for use during operation of the development; and</i></p> <p>b) <i>the swept path of the largest service vehicle entering and exiting the site in association with the new work, as well as manoeuvrability through the site, must be in accordance with the latest version of AS 2890.2.</i></p>	<p>A Construction Worker Transportation Strategy (<b>CWTS</b>) has been prepared and provided as Appendix E of the CTPMSP. The CWTS outlines the strategies by which the use of public transport by construction workers will be highly prioritised so as to minimise the use of on-street parking in the vicinity of the Site.</p> <p>A minimum of 40 on-site parking spaces will be retained throughout the construction period to provide on-site parking capacity for School staff.</p> <p>Swept paths of a 12.5m Heavy Rigid Vehicle (<b>HRV</b>) accessing and turning within the Site are provided in TIA 2023 and reproduced in Appendix F. Additional swept paths have been prepared for an Articulated Vehicle (<b>AV</b>) accessing and turning within the Site, as well as manoeuvring through key local intersections; these swept paths are also provided in Appendix F.</p>	<p>Appendix E</p> <p>Section 2.5.1</p> <p>Appendix F</p>

Table 1: Summary Response to SSD Consent Conditions (continued)

SSD Condition Additional Conditions	Summary Response	TA Reference
<p><b>C10: Construction Traffic</b></p> <p><i>All construction vehicles (excluding site personnel vehicles) are to be contained wholly within the site, except if located in an approved on-street work zone, and vehicles must enter the site or an approved on-street work zone before stopping.</i></p> <p><b>C14: Construction Noise Limits</b></p> <p><i>The Applicant must ensure construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under condition C4.</i></p> <p><b>D13: Road Damage</b></p> <p><i>Prior to the commencement of operation of the final stage as identified within the Preliminary Staging Plan prepared by Gyde, dated 25 October 2023, the cost of repairing any damage caused to Council or other Public Authority's assets in the vicinity of the Subject Site as a result of construction works associated with the approved development must be met in full by the Applicant.</i></p>	<p>The majority of loading and handling will be undertaken on-site, as will the turning movements of trucks. Notwithstanding, a Work Zone in National Park Street adjacent to the primary (internal) works area has been recently approved by Council, and all activities within the Work Zone and across the adjacent footpath will be appropriately monitored to maintain maximum safety for pedestrians.</p> <p>Should any additional Work Zones be required, an application for such would be prepared and submitted to Council for approval prior to any use of that Work Zone. .</p> <p>All trucks will only be permitted to access the Site during the designated construction hours as detailed in Condition C4 – C8 inclusive of the SSD Consent. Additionally, truck will not be permitted to enter or depart the Site during standard School Zone periods, being 8:00am – 9:30am and 2:30pm – 4:00pm on school days to further enhance safety.</p> <p>Road dilapidation surveys will be undertaken prior to the commencement of construction in the key sections of Parkway Avenue, Smith Street and National Park Street providing trucks access to/from the Site.</p> <p>Road dilapidation surveys would then be undertaken during the construction period to ensure that any damage to the road is rectified as soon as possible further to consultation with Council.</p> <p>Ultimately, the objective of the road dilapidation protocols will be to ensure that all key sections of road are in the same or better condition than they were prior to construction activities commencing.</p>	<p>Section 4.1.2</p> <p>Section 4.2.1</p> <p>Section 3.1.3</p> <p>Section 3.4.1</p> <p>Section 4.5</p>

Table 2: Summary Response to Comments Raised during Consultation

City of Newcastle Council Comments	Summary Response	TA Reference
<p>1. Driveway 2 is not existing. It is only a personnel gate connecting to footpath. Additional consideration must be given to the necessary applications/permits needed to facilitate this crossover - however temporary/permanent it will be:</p> <p>a. A Work Zone permit can be used to clear parking from the vicinity of any temporary layback.</p> <p>b. Unless covered by a separate approval, a Type 1 S138 application needs to be approved by CN to add a driveway or augment a driveway in the road reserve for this project (it may not be necessary for the driveway works you intend, but this cannot be determined without you first seeking an application of this nature and providing plans to be considered).</p>	<p>Hansen Yuncken recently submitted a Section 138 application to Council for the provision of the new access driveway (<b>Driveway 2</b>) in National Park Street, and it is anticipated that an approval of the application will be provided in the short term, and moreover will be required prior to the Driveway 2 construction commencing.</p> <p>As discussed, a Work Zone permit has been approved by Council for a kerbside section of National Park Street adjacent to Driveway 2.</p>	<p>Section 3.2</p>

Table 2: Summary Response to Comments Raised during Consultation (continued)

City of Newcastle Council Comments	Summary Response	TA Reference
<p>2. <i>The claim that HRV swept-paths succeed in accounting for AV swept-paths is noted. However, swept-path assessments only show HRV/MRV turnaround manoeuvres, not AV turnaround manoeuvres. Please either:</i></p> <p>a. <i>Confirm internal roads exist which link, or will link, driveway 1 with driveway 2 that removes the need for an AV to turnaround in the off-street area; or</i></p> <p>b. <i>Provide swept-path analyses showing an AV can turnaround off-street, or an explanation of the methodology to be used to get them safely back onto the road.</i></p>	<p>Additional swept paths showing the movements of AVs to both Driveway 1 and Driveway 2, and within the Site, have been prepared as requested by Council.</p> <p>An internal link between the driveways is not proposed, and as such the swept path analysis shows AVs entering from both driveways, turning within the Site, and then departing each driveway in a forward direction.</p> <p>Importantly, this swept path analysis identified constraints for AVS travelling to/from both driveways, and specifically their inability to negotiate turning movements at the intersections of Parkway Avenue &amp; Smith Street and Parkway Avenue &amp; National Park Street without crossing the centre line in each road.</p> <p>Further to the response from Council in regard to CTPMSP v6, AV access to/from Driveway 2 will still be available via National Park Street and its intersection with King Street, but all other truck access will be south to/from Parkway Parade.</p> <p>While it is anticipated that the majority of vehicles using Driveway 1 would be no larger than a HRV, should there be any requirement for a larger vehicle to access Driveway 1, a Traffic Guidance Scheme (TGS) will need to be prepared so that the movements of such a vehicle can be undertaken in the safest and most efficient manner practicable, most likely under the supervision of authorised traffic controllers.</p>	<p>Section 3.4</p> <p>Appendix F</p>
<p>3. <i>Noting that discussions elsewhere have likely occurred on this topic and may speak to the following, I would suggest extending the dilapidation survey to include all of Parkway Avenue between Smith Street and Stewart Avenue if at all possible.</i></p>	<p>The road dilapidation survey protocols have been extended to include:</p> <ul style="list-style-type: none"> <li>• Parkway Avenue between Smith Street and Stewart Street;</li> <li>• Smith Street between Driveway 1 and Parkway Avenue; and</li> <li>• National Park Street between King Street and Parkway Avenue.</li> </ul>	<p>Section 4.5</p>

Table 3: Summary Response to Comments by Council regarding CTMPSP Version 6

City of Newcastle Council Comments	Summary Response	TA Reference
<p><i>The CTMP is approved/accepted subject to the following advice and conditions:</i></p>		
<p>1. TCP/TGSs provided in the CTMP are noted to not change the function of the road reserve in any part, but only warn road users of changes to activity around the driveways noted.</p> <p>a) If additional traffic management is required on City of Newcastle (CN) managed roads, submit road occupancy permit applications to CN as per the process detailed here <a href="https://www.newcastle.nsw.gov.au/Council/Forms-Publications/Forms/Roads-Road-Occupancy-Application-Form">https://www.newcastle.nsw.gov.au/Council/Forms-Publications/Forms/Roads-Road-Occupancy-Application-Form</a>.</p> <p>b) This email does not constitute the approval of any TCP/TGS or action contained in the CTMP, only the overall support for the work proposed by the CTMP. You must apply for a CN Road Occupancy License (ROL) as needed, determined by advice contained here or delivered elsewhere.</p>	<p>Noted in regard to TCP/TGSs; the current TGS provide only for additional warning signage for road users in the vicinity to the construction driveways.</p> <p>Noted in regard to Road Occupancy Licences (ROLs); no additional road occupancy is proposed, but should such occur all appropriate permits would be obtained prior.</p>	<p>Section 4.3</p> <p>Section 4.2</p>
<p>2. All parts of all traffic lanes, road shoulders, and footpath areas within the road reserve must remain fully open and unaffected by construction activities unless permitted as part of a ROL or Work Zone.</p>	<p>Noted and agreed.</p>	<p>Section 4.2</p>
<p>3. Access by heavy vehicles is to be gained by the shortest route connecting the site to Stewart Avenue via Parkway Avenue (the southern route), utilising suitable NHVR permits as necessary.</p> <p>a) It is CNs preference that all heavy vehicle traffic does not traverse north of either driveway using National Park Street or Smith Street, to access King Street (the northern route). CN acknowledges that to require articulated vehicles to abide by this would imply a potentially unfeasible traffic management burden on the applicant or induce an unacceptable safety risk at the intersections of Parkway Avenue with National Park Street and Smith Street.</p> <p>b) CN accepts the compromise that only articulated vehicles will travel along the northern route.</p> <p>i. If such activity gives rise to complaint from any community stakeholder, CN reserves the right to withdraw its support of this compromise and demand the applicant to enact traffic management measures to allow articulated vehicles to safely use the southern route or undertake actions that reduce articulated vehicle traffic generated by the development, to zero.</p> <p>c) CN requests all articulated heavy vehicle traffic be 'converted' to heavy rigid vehicle traffic where possible, to minimise as much as practicable all heavy vehicle traffic travelling the northern route.</p>	<p>The designated truck routes previously identified have been modified to reflect Council's preferred routes, with AVs only to be provided with access in Smith Street and National Park Street north of the Driveway 1 and Driveway 2 respectively, with all other trucks required to use Parkway Parade to Stewart Street.</p> <p>Heavy Rigid Vehicles (HRVs) will be used instead of AVs wherever practicable.</p>	<p>Section 3.4</p>

Table 3: Summary Response to Comments by Council regarding CTMPSP Version 6 (continued)

City of Newcastle Council Comments	Summary Response	TA Reference
<p>4. <i>General vehicle/worker movement notes for actions in the road reserve:</i></p> <p>a) <i>Delivery and construction vehicles must give way to pedestrians, cyclists and public vehicles when entering or leaving nominated loading zones unless under the control of traffic controllers.</i></p> <p>b) <i>Workmen to wear high visibility vests when walking around delivery vehicles and the site.</i></p> <p>c) <i>Construction workers are prohibited from parking on surrounding, adjacent and opposite road shoulders including median strip (where present) near the construction site during construction.</i></p> <p>d) <i>All construction employee vehicles to use existing established parking facilities as otherwise directed in relevant CWTS.</i></p> <p>e) <i>Construction vehicles (forklifts, scissor lifts, etc.) are to be always parked on site away from pedestrian traffic flow.</i></p> <p>f) <i>Minimise construction vehicles and delivery activity between 0800-0930 and 1600-1730 Monday to Friday to avoid conflict with peak hour traffic volumes; during school times, the afternoon peak should be understood to extend 1430-1730 Monday to Friday.</i></p> <p>g) <i>Where TCP/TGS prevent access along a road, notification must be given to residents and businesses which require access, which informs them of working times and activities at least 5 business days prior to commencement.</i></p>	<p>Noted and agreed:</p> <p>Pedestrians, cyclists and public vehicles will have right of way at the construction driveways;</p> <p>All construction staff will be appropriately attired at all times;</p> <p>Construction staff parking areas will be strictly monitored to ensure parking only occurs in the designated parking locations;</p> <p>All construction vehicles will be parking on-site at all times;</p> <p>Construction vehicle movements will be specifically restricted from occurring during school peak periods.</p> <p>Notification to any affected residents of a TGS would necessarily be undertaken as part of the approval process.</p>	<p>Section 4.2</p> <p>Section 3.6.1</p> <p>Section 3.6.2</p> <p>Section 3.4</p> <p>Section 4.3</p>

## 2 The SSD Approval

### 2.1 Site Location

The Site is located at 160/200 Parkway Ave, Hamilton South, and is bordered by Parkway Avenue, National Park Street and Smith Street. The Site is shown in its local context and broader context within Newcastle City in Appendix A and Figure 9 of SSD TIA respectively, which are reproduced below.

Figure 1: Site Location



Source: SSD TIA

Figure 2: Site Location within Newcastle



Source: SSD TIA

## 2.2 The SSD Consent

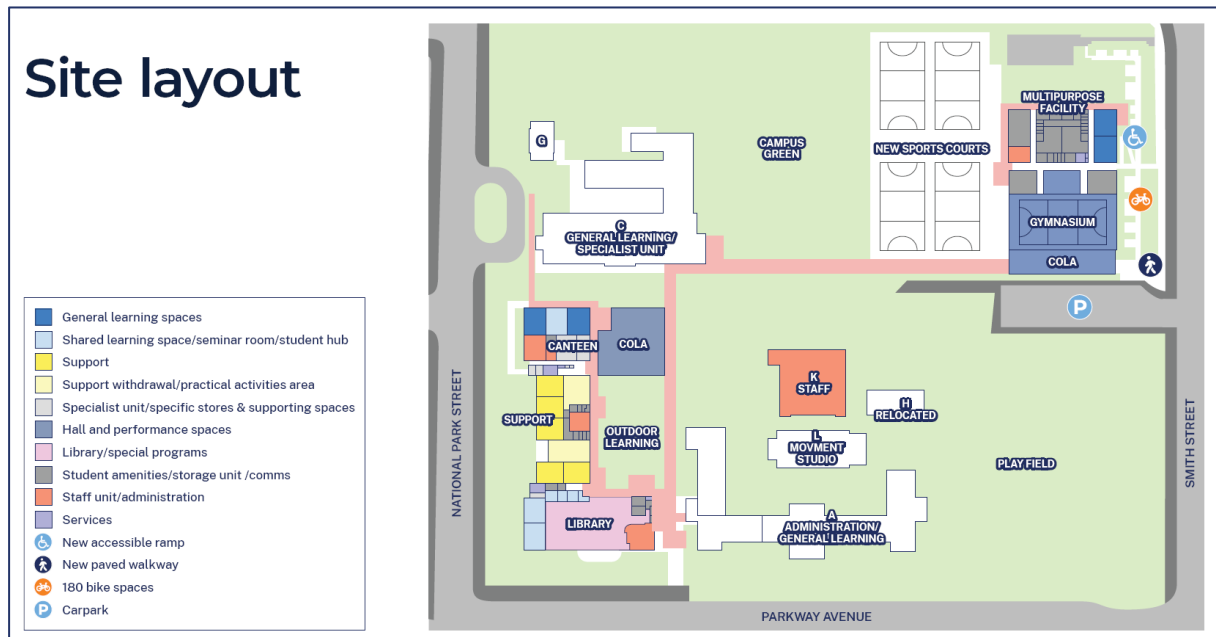
The SSD Consent provides for the redevelopment of the Site to include:

- Demolition of eight (8) existing buildings;
- Construction of a new three (3) storey learning hub located on the southwestern corner of the campus;
- Construction of a new multi-purpose facility located in the north-eastern corner of the campus;
- Internal refurbishment works within the existing administration building on Parkway Avenue to form a new student;
- A new student entry from Parkway Avenue; and
- Relocation of Block H approximately 50m South.

The Newcastle High School Redevelopment Master Plan is shown in Figure 3.



Figure 3: Newcastle High School Redevelopment Master Plan



Source: EJE Architecture

## 2.3 Access

### 2.3.1 Vehicle Access

With reference to Figure 3, access to a new drop-off/pick-up (**DOPU**) facility for support students will be provided from National Park Street, while access to the staff car park will continue to be provided from Smith Street.

### 2.3.2 Active Transport Access

The Site is provided with excellent active transport connectivity, including numerous gates to all frontage roads. These roads in turn all provide appropriate footpath infrastructure (generally on both sides of the road), and while there are no dedicated cycleways (off-road) in the immediate vicinity of the Site, on-road cycling conditions are relatively safe.

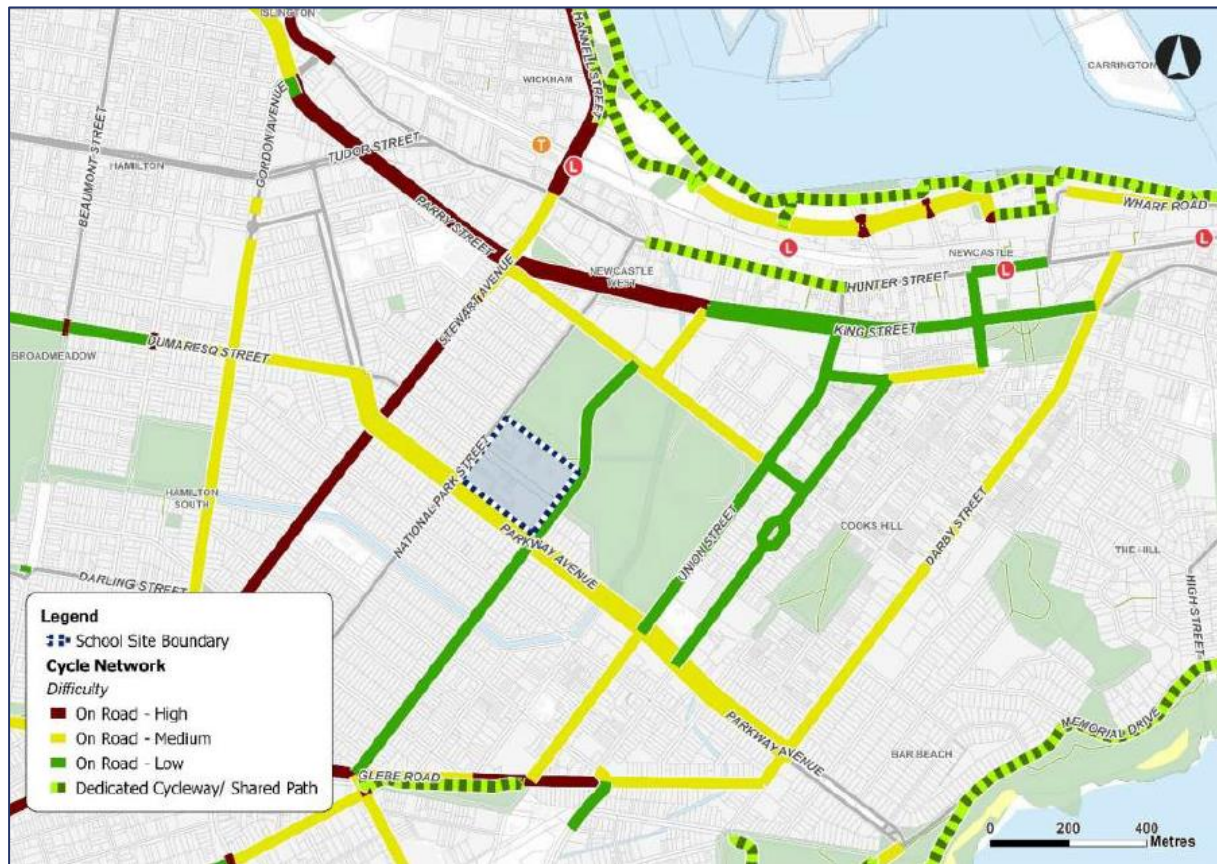
An overview of the active transport infrastructure at and in the vicinity of the Site is provided in Figure 4 (footpaths) and Figure 5 (cycling) of the SSD TIA, which are reproduced below.

Figure 4: Campus and Local Pedestrian Infrastructure



Source: SSD TIA

Figure 5: Cycle Routes



Source: SSD TIA

## 2.4 Traffic

In consultation with the PWG, the anticipated trip generation (all modes) of existing School students and staff were determined in the SSD TIA, and then the future trip generation (all modes) determined further to the establishment of travel mode targets for the redeveloped School (identified in Section 5 of the SSD TIA), including strategies detailed in the Draft Green Travel Plan (**Draft GTP** - Section 9 of the SSD TIA).

Further to the implementation of these strategies – and as agreed with the PWG – the private vehicle trip generation of the School is not anticipated to increase (further to the SSD Consent), even though there is an increase in student (and staff) numbers, as a result of more students (and staff) moving to sustainable travel modes rather than using private vehicles to travel to/from the Site.

## 2.5 Parking

### 2.5.1 School Staff Parking

40 school staff parking spaces are provided in the on-site car park accessed via Smith Street; these 40 parking spaces will be retained further to the Project, and importantly will be available to school staff through the duration of the construction works.

No on-site parking is provided for students, and the use of on-street parking by students is discouraged, noting that demand for private vehicle travel will be minimised further to the implementation of the [Final] GTP.

### 2.5.2 Visitor Parking

Time limited and unrestricted parking is provided in all frontage roads for use by visitors.

## 2.6 Drop-Off & Pick-Up Facilities

On-street DOPU facilities are provided in Parkway Avenue, and will be retained further to the proposed works; importantly, this DOPU facility would not be impacted through the construction period.

As noted, a new internal DOPU facility for support students will be provided on-site via separate entry and departure driveways in National Park Street.

## 2.7 Bus Bays

Bus operations in Parkway Avenue will be largely unchanged, but further to the identification of some capacity issues with the existing bus bays in Parkway Avenue, the SSD TIA recommended further consideration of the following:

- An extension of the Parkway Avenue bus zone to provide for 1 additional bus set down bay; and
- The installation of No Stopping signage between the bus zone and DOPU facility to discourage illegal stopping.

While the SSD TIA considered that the measures above would have no impact on existing bus or DOPU operations, it is acknowledged that the implementation of such changes will be the responsibility of Council, who we understand have committed to a review of these issues.

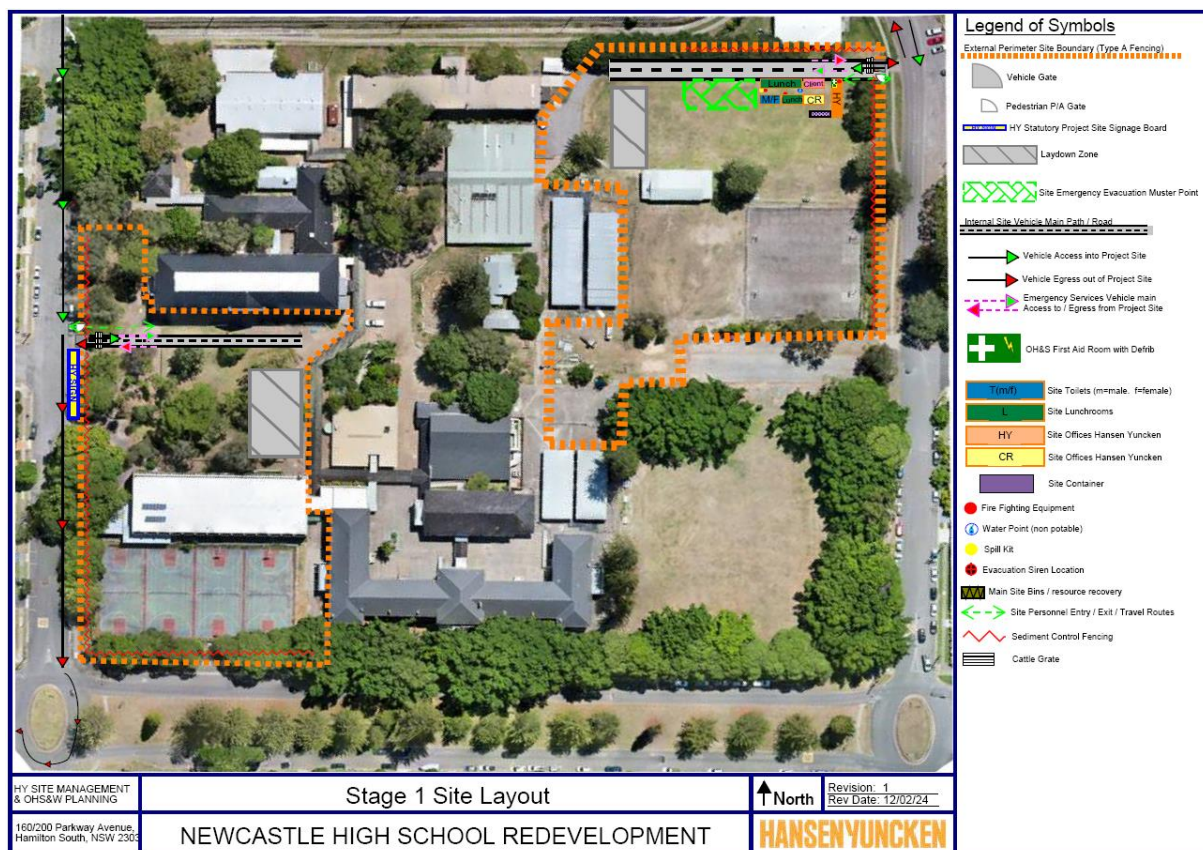
### 3 Construction Characteristics

#### 3.1 General Construction Characteristics

##### 3.1.1 General Works Plan

A plan of the general work areas across the Site, as well as access locations and on-site construction staff facilities has been prepared by Hansen Yuncken, and is reproduced below.

Figure 6: Newcastle High School Redevelopment General Works Plan



Source: Hansen Yuncken

##### 3.1.2 Construction Schedule and Staff

Hansen Yuncken has provided a summary of the general characteristics of the construction schedule, which is provided below in Table 4, noting that construction is anticipated to commence in mid-late March 2024 and be completed by December 2025.

Table 4: Construction Schedule Characteristics

Construction Stage	Construction Tasks	Scheduled Timing	Average Staff/day	Maximum Staff/day	Average Trucks/Day	Maximum Trucks/Day
1	Building H relocation Service upgrades Demolition	13 weeks	50	70	5	10
2 & 3 (concurrent)	Learning Hub Support student DOPU Multi-Purpose facility Landscaping and ancillary works	47 weeks	80	140	10	20
4	Demolition Building A and K refurbishment Landscaping and ancillary works	14 weeks	5	10	5	10
5	Demolition Sports Courts Campus Green Landscaping and ancillary works	16 weeks	5	10	1	2

### 3.1.3 Construction Hours

In accordance with Condition C4 of the SSD Consent, construction hours will be as follows:

- 7:00am to 6:00pm Monday to Friday;
- 8:00am to 1:00pm on Saturdays; and
- No construction works permitted on Sundays or public holidays.

It is noted that while the start and finish times are provided for construction in general, additional restrictions will be in place for truck movements during school arrival and departure peaks. In this regard, and as stipulated by SI NSW, truck movements to/from the Site will not be permitted during standard School Zone periods between 8:00 - 9:30am and 2.30 - 4:00pm on school days unless agreed with the School Principal (see also Section 3.4.1).

Notwithstanding Condition C4, Condition C5 of the SSD Consent states the following:

*provided noise levels do not exceed the existing background noise level plus 5dB, works may also be undertaken during the following hours:*

- (a) between 6pm and 7pm, Mondays to Fridays inclusive; and*
- (b) between 1pm and 4pm, Saturdays.*

As is also relatively standard for major construction projects, Condition C6 and Condition C7 of the SSD Consent also provide for construction activities outside of the hours detailed in Conditions C4 and C5 of the SSD Consent under some circumstances, stating:

*C6. Construction activities may be undertaken outside of the hours in condition C4 (and C5) if required:*

- (a) by the Police or a public authority for the delivery of vehicles, plant or materials; or*
- (b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm;*
- or*
- (c) where the works are inaudible at the nearest sensitive receivers; or*
- (d) for the delivery, set-up and removal of construction cranes, where notice of the crane-related works is provided to the Planning Secretary and affected residents at least seven days prior to the works; or*
- (e) where a variation is approved in advance in writing by the Planning Secretary or her nominee if appropriate justification is provided for the works.*

*C7. Notification of such construction activities as referenced in condition C6 must be given to affected residents before undertaking the activities or as soon as is practical afterwards.*

Finally, Condition C8 of the SSD Consent restricted hours for construction activities that would generally result in more significant noise impacts, such as rock breaking, rock hammering, sheet piling, pile driving and other similar activities. These works can only be undertaken during the following periods:

- 9:00am to 12:00pm Monday to Friday;
- 2:00pm to 5:00pm Monday to Friday; and
- 9:00am to 12:00pm on Saturdays.

#### 3.1.4 Out of Hours Work Permits

While not anticipated at this time, where it is necessary for any significant construction works to occur outside of the conditioned work hours, an application for an Outside of Hours Work Permit (**OHW Permit**) will be submitted to Council, and adjacent residents will also be notified of the proposed works. Approval from the School Principal will also be required for any such works.

Any out of hours works would only commence further to an approval of the OHW Permit.

### 3.2 Site Access

For the duration of the construction period, access to the Site for construction vehicles will be provided via the existing driveway in Smith Street (**Driveway 1**) and a new driveway in National Park Street (**Driveway 2**).

With regard to Driveway 2, Hansen Yuncken has submitted a Section 138 application to Council for the construction and operation of Driveway 2; we understand that Council is currently considering this application but that there is general agreement between the parties that this is an acceptable driveway location. As discussed, a **Work Zone** application for kerbside space in National Park Street at Driveway 2 has already been approved by Council.

These construction driveways and the approved Work Zone are shown in [Figure 7](#), noting that no general School (staff or student) access would be available via these construction driveways for the duration of the construction period.



Figure 7: Construction Vehicle Access



Source: Nearmap

### 3.3 Public & Active Transport Access

#### 3.3.1 Overview

Further to a determination that parking for construction staff cannot be provided on-site, and then consideration of the need to reduce staff parking in local streets (given the residential and existing School parking demand) it is proposed that the majority of construction staff be directed to use alternative travel modes to travel to/from the Site.

The means by which this can be achieved are detailed further in the Construction Worker Transportation Strategy (**CWTS**) provided in Appendix A, but rely heavily on the use of public and active transport, as discussed further in sections below.

### 3.3.2 Newcastle Interchange

Newcastle Interchange (**NI**) is located approximately 1.0km north of the Site, or a 10 – 15 minute walk depending on the route taken. NI provides an interchange of rail, light rail and bus services, which are discussed further below.

### 3.3.3 Rail

NI is serviced by Central Coast & Newcastle Line and Hunter Line trains, with up to 2 services per hour and 4 services per hour on each line respectively, including services during the construction arrival and departure peaks.

### 3.3.4 Light Rail Services

The Newcastle light rail services runs between NI and Newcastle Beach, with services every 15 minutes in the AM construction arrival peak, and every 7.5 minutes in the PM construction departure peak.

### 3.3.5 Ferry Services

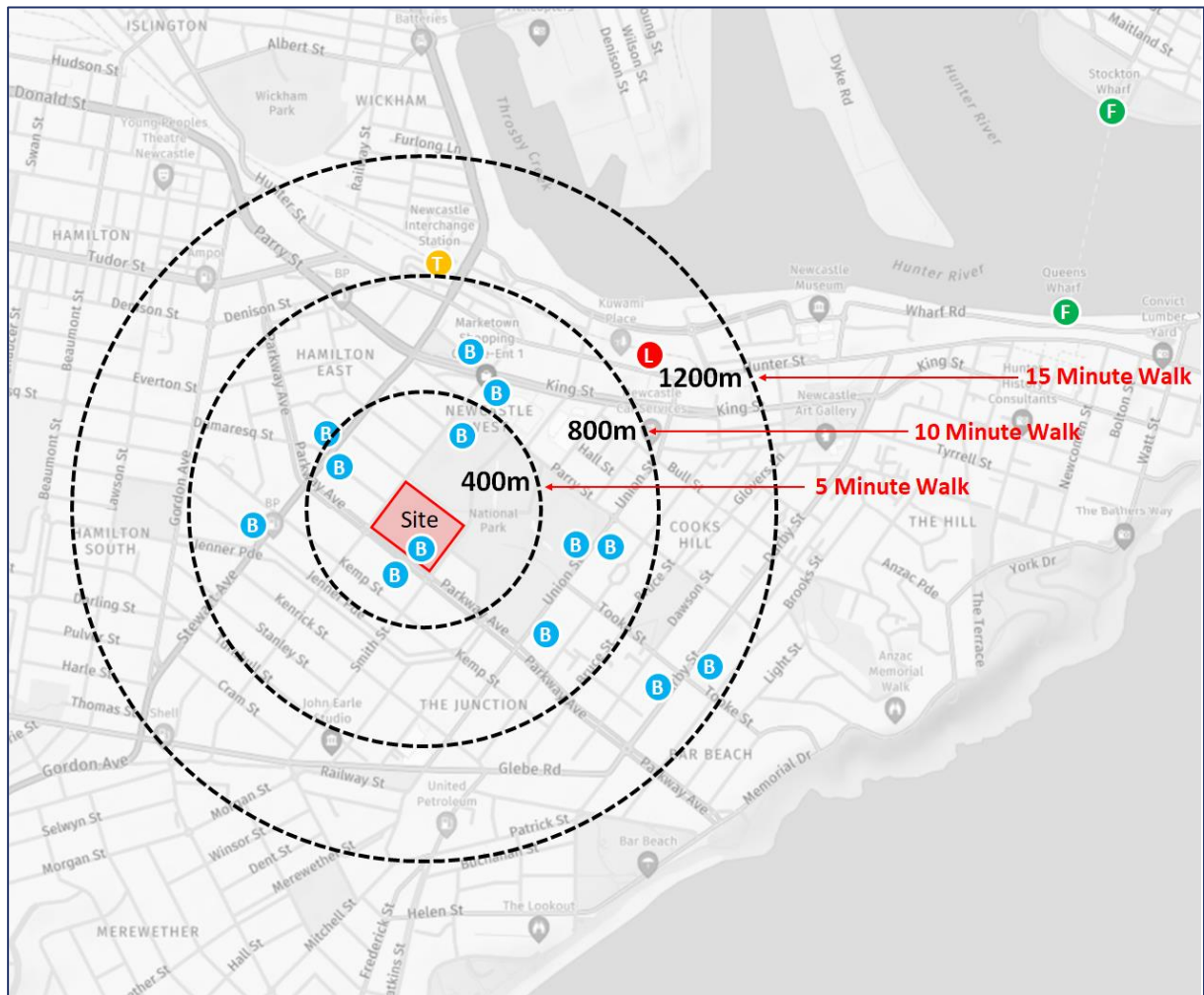
Ferry services operate between Stockton Wharf and Newcastle Wharf every 20 – 30 minutes during the construction arrival and departure peaks; a large commuter car park is provided adjacent to Stockton Wharf.

### 3.3.6 Bus Services

The Site is very well serviced by public buses, with bus stops within appropriate walking distance in Parkway Avenue and National Park Street, as well as King Street to the north, Union Street and Darby Street to the east, and Stewart Street to the west.

The location of these bus stops (and other transport hubs) and their proximity to the Site is shown in [Figure 8](#), while individual bus routes and service frequencies (during the construction arrival and departure peaks, i.e. prior to and following standard commuter peaks) are shown in [Table 5](#).

Figure 8: Bus Stop Locations



Source: Nearmap

Table 5: Bus Services

Route	Origin-Destination	Bus Stop Location	Construction Peak Frequency
10X	NI to Charlestown	King St	20 - 30 min
12	Maryland - Merewether via NI	Union Street	15 - 20 min
14	Swansea Heads - Newcastle	Darby Street	30 min
21	Broadmeadow - Newcastle	Parkway Ave	40 - 50 min
22	Charlestown - Newcastle	King Street/Stewart St	30 min
23	Wallsend - Newcastle vi NI	King Street	30 min
26	Newcastle West to Wallsend via NI	King Street	30 - 40 min
28	Mount Hutton to Newcastle West vi NI	King Street	30 - 60 min
47	Jesmond to Market Town via NI	National Park St	60 min
138	NI - Lemon Tree Passage	Parkway Ave	1 service in each peak

Source: TfNSW

### 3.3.7 Active Transport

While it is unlikely that many construction staff will reside in the immediate vicinity of the Site, as discussed in Section 2.3.2 the local active transport environmental provides pedestrians paths in all key roads providing access between the Site and NI, light rail and bus stops.

### 3.3.8 Public & Active Transport Summary

Having made a determination that there will be no construction staff parking provided on-site, and moreover a determination that the use of private vehicles by construction staff will be specifically discouraged, it is important to recognise the breadth of public transport services available for travel to/from the Site, including viable services from across the LGA and adjacent LGAs. Paired with an excellent active transport network, it is as such anticipated that private vehicle trips by construction staff can be significantly reduced (see also Section 3.6).

## 3.4 Construction Trucks

### 3.4.1 Truck Movement Hours

As discussed in Section 3.1.3, truck movements will be restricted to the same start and finish times as general construction works. However, in accordance with the request of SI NSW, and so as to maximise the safety of students and staff throughout the construction period, no truck access will be permitted to the Site (either construction driveway) during the following periods on school days:

- 8:00am – 9:30am; and
- 2:30pm – 4:00pm.

If truck access to the Site is required at any time during these School Zone periods, the Principal Contractor will provide as much notice as possible to the School Principal, and all truck movements to/from the construction driveways would occur under the direction of properly accredited persons to be engaged by the Principal Contractor.

Any more general out of hours truck movements (i.e. before 7:00am or after 6:00pm) would be subject to the same OHW Permit application and notification process as described in Section 3.1.4.

### 3.4.2 Truck Types

The type of trucks required during the construction period will include Medium Rigid Vehicles (**MRVs**) and Heavy Rigid Vehicles (**HRVs**); a small number of Articulated Vehicles (**AVs**) may also be required on occasion. Importantly, all of these vehicles would be classified as General Access Vehicles (**GAVs**) in accordance with TfNSW guidelines, which are able to use the entire public road network.

Notwithstanding, there is the potential to generate a small number of Restricted Access Vehicles (**RAVs**) and/or Oversize Overmass vehicle (**OSOM vehicles**), which may include floats for plant, large pieces of equipment or mobile cranes. Prior to any of these vehicle types travelling to from the Site, specific permission will be required, including:

- Depending on their dimensions, RAVs that exceed the dimensions for GAVs may be eligible to operate under a **RAV Notice**; RAV Notices allow for greater dimension/mass limits than GAVs further to compliance with additional conditions (such as route restrictions).
- For the use of any OSOM vehicles, an Oversize Overmass Permit (**OSOM Permit**) will be required. OSOM Permits are generally issued with conditional restrictions that limit the time and days that these vehicles are allowed to access the Site, and the route they are allowed to take.

Again, no RAV or OSOM vehicles would be permitted to travel to/from the Site prior to the appropriate approval of either a RAV Notice or OSOM Permit.

### 3.4.3 Designated Truck Routes

A Vehicle Movement Plan (**VMP**) has been prepared in accordance with Section 5.2.2 of the TCW Manual. The VMP identifies the designated truck routes to be used for travel to/from the Site; to the extent possible, these routes use higher order roads rather than local residential streets.

Importantly, while a number of routes are available for vehicles up to and including a HRV, the assessment of swept paths for trucks travelling to and from the Site (Section 3.4.4 below) indicated that AVs were unable to appropriately navigate the roundabout intersections of Parkway Avenue & Smith Street, and Parkway Avenue & National Park Street, primarily due to the elliptical shape of the roundabouts.

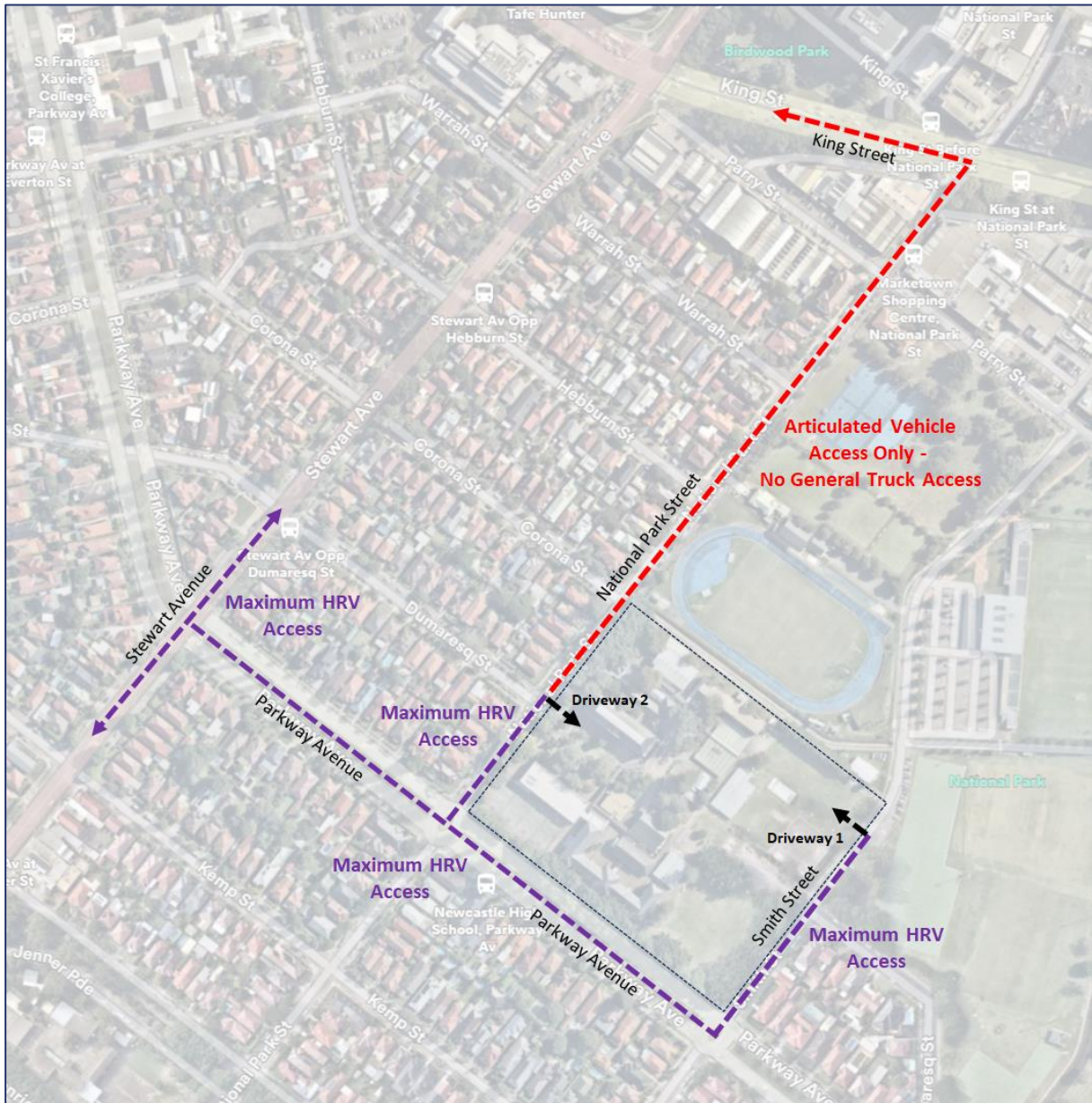
As such, and further to the Council response in regard to CTPMSP v6, AV access to the Site will be restricted to National Park Street between King Street and Driveway 2. This would have essentially no impact on the movement of AVs to/from Driveway 2, as the King Street route – like Stewart Street – is a higher order sub-regional road as well as being approved for RAVs. However, this does impact the movement of AVs to/from Driveway 1, as the alternative route north to the intersection of Smith Street & Parry Street is similarly unsuitable for AV movements.

As such, any AV (or larger vehicle) would only be able to access Driveway 1 further to the preparation of a TGS detailing how these movements could be undertaken safely and efficiently. With reference to the swept path figures in [Section 3.4.4](#), it is anticipated that this could occur and the supervision of traffic controllers (temporarily blocking vehicles travelling in the opposing direction in Smith Street) but again any such movements would occur only further to the approval of a TGS.

Finally, all other trucks, up to and including a HRV, will be required to use Smith Street and National Park Street south from Driveway 1 and Driveway 2 respectively and Parkway Parade to Stewart Street; no truck other than AVs will be permitted to use National Park Street north of Driveway 2.

Further to the above, the designated travel routes for all trucks are shown in [Figure 9](#).

Figure 9: Vehicle Movement Plan - Designated Truck Routes



Source: Nearmap

### 3.4.4 Swept Paths

As discussed above, swept path figures are provided in the SSD TIA which show the movement of HRVs through local intersections and to/from Driveway 1 and Driveway 2; they also show the movement of HRVs within the Site, i.e. being able to turn so as to enter and depart the Site in a forward direction.

Conversely, further to a request from Council for swept paths showing an AV entering, turning within and then departing the Site, our analysis determined that there were constraints for AV movements at the intersections of Parkway Avenue & National Park Street and Parkway Avenue & Smith Street, which is why the designated routes shown in [Figure 9](#) differentiate routes for truck up to and including a HRV, and then for AVs.

Importantly though, all HRVs and AVs are then able to enter, turn within and depart both Driveway 1 and Driveway 2 in an appropriate manner. These swept path figures are provided in [Appendix F](#).

### 3.5 Construction Traffic

#### 3.5.1 Staff Trip Generation

With reference to [Table 4](#), it is estimated that a maximum of up to 140 staff would be on-site at any one time (during the peak Stage 2/3 construction period); this would include general construction staff, Project Managers and tradespeople. It is acknowledged that this is higher number of construction staff than indicated in the SSD TIA.

With reference to [Section 3.3](#) above, and the CWTS provided in [Appendix E](#), construction staff will be instructed to use public or active transport to travel to/from the Site, not private vehicles. Given the Site's proximity to the excellent rail, light rail and bus services within walking distance of the Site, these services will provide a more than viable travel option for construction staff throughout the construction period.

Notwithstanding, and with reference to [Section 3.6](#) below, it is reasonable to conclude that there will be some parking demand generated by construction staff, most likely in the No. 2 Oval car park in Smith Street, and on-street parking along Smith Street north of the Site. The majority of these spaces are paid spaces with an 8 hour parking limit (again something that would discourage most construction staff for a work day longer than 8 hours) but would generally be available during the day given that primary demand for this parking would be on weekends when local recreational facilities were being used.

It is noted that construction staff numbers on Saturdays are anticipated to be significantly lower than on weekdays (throughout the construction period).

Based on the construction hours (i.e. with peaks prior to and after commuter peak periods); the minimisation of construction staff using private vehicles; and what are almost always high vehicle occupancies for construction vehicles, it is estimated that construction staff would generate no more than 20 vehicle trips per hour (**vph**) during the commuter peak periods.

#### 3.5.2 Truck Trip Generation

With reference to [Table 4](#), an average of 10 trucks per day (20 truck trips per day) would be required during the majority of construction stages, then peaking at up to 20 trucks per day (40 truck trips per day) for a short period for the delivery of modular buildings to the Site (estimated to be only 2 – 3 weeks during Stage 3).



Based on a spread of these movements over the day, it is estimated that no more than 6 truck trips could be generated in a single hour even during the peak modular delivery period. Importantly, it is again unlikely that this peak number of hourly truck movements would occur during the commuter peak periods as a factor of cost efficiency (i.e. faster trips outside the commuter peak periods) and the general start-up/shut-down periods at the start and end of the workday where trucks are unlikely to be utilised.

### 3.5.3 Trip Distribution

As discussed in Section 3.4.3, all truck movements will be limited to the routes shown in the VMP, while staff vehicle trips would generally have a similar distribution, but also generating some trips to the east and south-east for construction staff living in Newcastle.

### 3.5.4 Construction Traffic Impacts

With reference to sections above, there is little if any potential for the additional trips generated during the construction period to have any significant impact on the road network further to consideration of:

- The low percentage of construction staff using private vehicles, and even then, the high vehicle occupancies of such trips;
- The generation of most construction trips outside of commuter peak periods;
- The distribution of trips to a number of different routes; and
- The relatively short-term nature of the construction period.

## 3.6 Parking

### 3.6.1 Staff Parking Provision

As discussed in Section 2.5.1, no parking will be provided on-site for construction staff, though measures will be in place to allow staff to drop-off/pick-up tools and equipment; this would occur within the Site.

Given this limitation on the provision of internal parking, and as discussed in Section 3.5.1, it is the intention of the CWTS that the use of private vehicles by construction staff be limited to as great an extent as possible, and in turn that parking demand (for what would be off-site parking spaces) would similarly be minimised.

While it is acknowledged that that some construction staff parking will exist, this will strictly be in non-residential roads and off-street car parks, including the No. 2 Oval car park and on-street parking in Smith Street north of the Site. These restrictions will be specifically enforced by the Principal Contractor throughout the construction period, as detailed further in Section 4.1.1.

### 3.6.2 Truck Parking

No truck parking or standing will be permitted in local roads, but rather all trucks travelling to the Site will be required to directly enter the Site or the Work Zone and load/unload fully within the Site or Work Zone.

## 4 Construction Management

### 4.1 On-Site Management

#### 4.1.1 Staff Parking

As discussed in Section 3.6, no construction staff parking will be provided on-site, and the use of private vehicles by construction staff will be minimised further to the implementation of the CWTS.

#### 4.1.2 Deliveries & Materials Handling

All deliveries and materials handling will occur on-site or within the approved Work Zone at all times, and as discussed in Section 3.6.2, all truck parking demand will be contained on-site.

#### 4.1.3 Washdown Facilities

Washdown facilities will be provided on-site to ensure trucks are clean (and where necessary, appropriately covered) so as to minimise the potential for trucks to track dirt or debris onto the adjacent local roads.

#### 4.1.4 Emergency Vehicle Access

Emergency vehicle access to and from the Site will be available at all times while the Site is occupied by construction staff; emergency protocols during the works will be developed by the Principal Contractor for inclusion in the CTPMSP.

### 4.2 Traffic and Pedestrian Management

#### 4.2.1 Work Zones

As discussed, a Work Zone has been approved in Council utilising a 40m section of kerbside lane adjacent to Driveway 1.

At this time, it is not anticipated that other Work Zones (within the road reserve, i.e. off-site) will be required, i.e. that all other construction works and associated vehicle movements can be accommodated within the Site (notwithstanding the need for appropriate control at construction driveways – see also Section 4.2.2). If any other Work Zone is required, an approval for such would need to be obtained from Council following the same application process as required for the approved National Park Street Work Zone.

#### 4.2.2 Pedestrian and Cyclist Management

Appropriate fencing will be provided along all Site frontages and internal boundaries (between the works areas and retained School areas); it is noted these boundaries may change a number of times during the construction period.

It is anticipated that the fencing will either be fencing panels (ATF) or 2.4m chain wire.

Secure gates will also be provided across Driveway 1 and Driveway 2, and remain closed at all times outside of the permitted construction hours.

The management of pedestrian and cyclist movements in the immediate vicinity of the Site – and specifically movements along the Smith Street and National Park Street footpaths across the construction driveways – will be carefully managed. As discussed in Section 3.4.1, trucks will not be permitted to enter or depart the Site during standard School Zone periods, which means that the potential for there to be pedestrians walking along the footpaths adjacent to Driveway 1 and Driveway 2 is minimal.

Notwithstanding, all truck movements to/from the construction driveways would occur under the direction of properly accredited persons to be engaged by the Principal Contractor.

When the construction driveways are not in use (during the workday) a separate barrier/gate would be placed across the construction driveway at the property line to prevent any unauthorised access.

## 4.3 Traffic Guidance Scheme

### 4.3.1 General Traffic Guidance Scheme Requirements

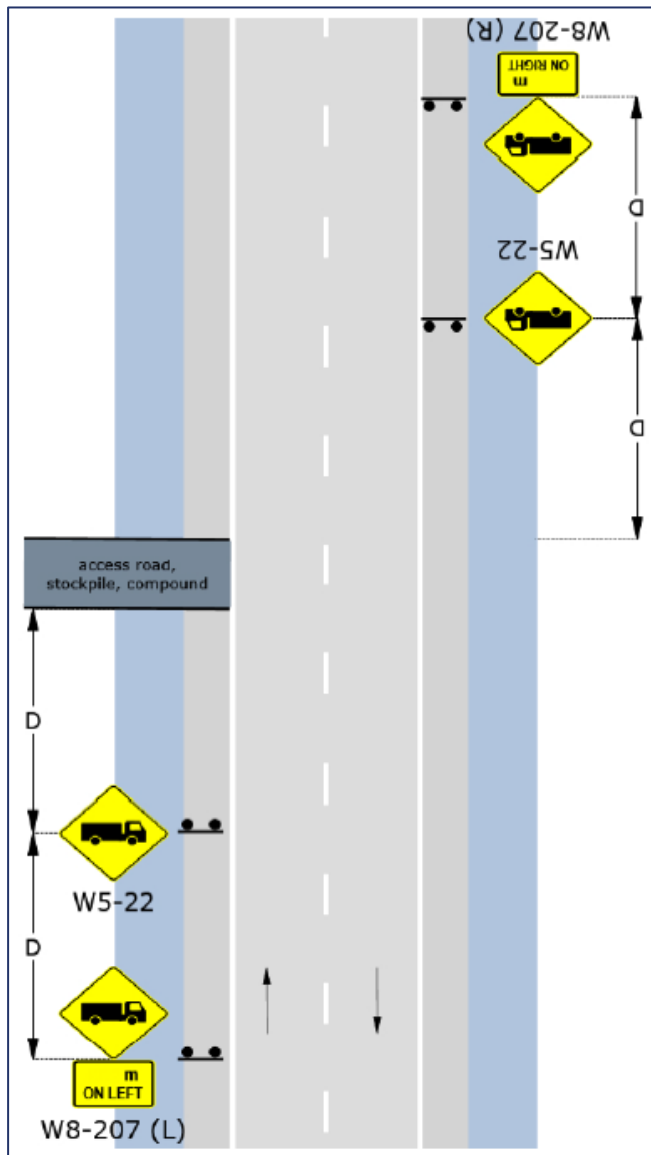
Further to Section 4.2.1, any submission for a Road Occupancy Licence (**ROL**) for additional Works Zones or other off-site works with the potential to impact local transport conditions will need to be accompanied by a detailed TGS (previously referred to as a Traffic Control Plan). The TGS will be prepared by persons accredited to *Prepare a Work Zone Traffic Management Plan* in accordance with the TCW Manual and AS1742.3.

Any TGS involving signage, traffic control or other potential changes to the operation of any roads providing access to/from the construction driveways will require consultation with and approval from Council prior to the construction works to which they relate.

With specific reference to the construction driveways in Smith Street and National Park Street, a TGS has been prepared referencing Section D.4.7 of the TCW Manual relating to *Static Work: Access to depot, stockpile, quarry, gravel pit etc. all roads*, formerly referenced as Traffic Control Plan 195. This will provide for the installation of signage on both approaches to the construction driveways in both Smith Street and National Park Street to heighten the awareness of drivers that trucks may be turning to and from the construction driveways.

The basic components of this TGS are in accordance with Figure 10 below, and the detailed TGS' for the construction driveways are provided as Appendix D.

Figure 10: Traffic Guidance Scheme: Static Work



Source: TCW Manual

#### 4.3.2 Works Specific TGS

As discussed, a TGS is anticipated to be required for the following works:

- The construction of Driveway 2; and
- Any AV movements to/from Driveway 1.

An additional TGS may be required to control pedestrian/cyclist movements along the public path that runs along the northern boundary of the Site between Smith Street and National Park Street. Works within the Site along the northern boundary include the demolition of 2 buildings, and are anticipated to require the path to be closed for 2 – 3 days, as indicated in Figure 11.

Figure 11: Northern Path Temporary Closure



Source: Hansen Yuncken

A TGS supporting these temporary works would include consideration of the appropriate means of blocking access to the path at both Smith Street and National Park Street, as well as providing signage indicating an alternative pedestrian route, likely including public paths connecting Smith Street and National Park Street across the southern part of National Park to the north of the Site, or via Parkway Avenue.

Again, all TGS' will be prepared by accredited persons in accordance with the TCW Manual and AS1742.3, and require approval prior to any of the works they support commencing.

#### 4.3.3 Authorised Traffic Controllers

At this time, it is anticipated that traffic control will be required to monitor truck movements to/from movements at the construction driveways; as discussed in Section 4.2, these movements would be supervised by properly accredited persons to be engaged by the Principal Contractor.

The other potential requirement for a TGS would be to provide for AV movements to/from Driveway 1.

Should additional traffic control be required external to the Site – most likely as a component of a TGS – traffic controllers may be required. Any such traffic control would be undertaken in accordance with the *Traffic Controller Accreditation Scheme*, and moreover by persons qualified by an Authorized Training Providers.

Each traffic controller would be required to have a copy of their qualification certificate available at all times during their supervision of construction works.

## 4.4 Principal Contractor Responsibilities

### 4.4.1 Site Induction

All construction staff (including truck drivers) will be properly inducted prior to commencing work on-site. The induction will detail the Site's construction safety protocols, including:

- General Site safety;
- Site access, amenities and general procedures;
- Truck movements and on-site parking;
- Neighbour consultation and notification requirements; and
- Project Management's policies and procedures.

### 4.4.2 Truck Movements

The Principal Contractor is required to take all steps necessary to ensure all truck movements are as safe as possible, and will not result in truck drivers operating under conditions that are unsafe. This will be achieved by undertaking the following:

- Ensuring all trucks are well maintained and that the equipment enhances driver, operator and passenger safety to as great an extent as practicable;
- Ensuring there are regular checks to ensure all trucks are leaving the Site appropriately covered and are not tracking dirt or debris off-site;
- Ensuring all truck drivers have a valid Verification of Competency for the class of vehicle they are driving;
- Identifying truck driver training needs and arranging appropriate training or re-training. This is anticipated to include truck driver competency assessments as part of all inductions, and regular Toolbox Talks on safety conditions, managing fatigue, approved truck routes and truck driver responsibilities; and
- Encouraging safe driving behaviour by not covering or re-imbursing staff for speeding or other infringement notices; ensuring the legal use of mobile phones only while driving; and providing training on, and circulating information about, travel planning and efficient truck driving habits.

### 4.4.3 Construction Staff Parking

As discussed, no construction staff parking will be provided on-site, nor permitted to occur in local residential streets in the vicinity of the Site.

Available off-site parking has been identified in both the No.2 Sportsground Car Park and in Smith Street north of the Site, which provide primarily paid parking. Site observations and a review of historical Nearmap images indicate that there is significant spare capacity during weekdays in these parking areas, which only reach capacity outside of the approved construction hours.

A summary of where construction staff parking would and would not be permitted is provided in Figure 12.

Figure 12: Restricted and Permitted Off-Site Parking Locations



Source: Nearmap

It will be the responsibility of the Principal Contractor to ensure that construction staff vehicles are not parking in local residential roads in the immediate vicinity of the Site; this will be achieved by:

- Undertaking regular observations in local roads in the vicinity of the Site immediately prior to and following the work day to ensure that construction staff are not parking in local roads;
- Consultation with sub-contractors via Site inductions, pre-start meetings and tool box talks;
- Formal warning for those found to be continually parking in local roads;
- Re-induction of those that continue to parking in local roads; and

- A final warning if the parking practices persist, before ultimately being removed for work at the Site.

#### 4.4.4 Communications Strategy

A Communications Strategy will be established and included in the CTPMSP. The Communications Strategy will outline the most effective communication methods to ensure adequate information is provided to relevant authorities and the local community, and will assist the Project Team to deliver any construction traffic changes with minimal disruption to the on and off-site vehicle, pedestrian and cyclist environment.

The Communications Strategy will include (as a minimum):

- The erection of signs providing advanced notice of works and/or any traffic control measures to be implemented (on or off-site);
- Written notices to surrounding residents who would potentially be impacted by the construction works (prior to commencement of those works); and
- A contact person from the Principal Contractor to answer construction related enquiries from stakeholders and local residents.
- A contact person from the School/SI NSW to answer general enquiries from stakeholders and residents.

Relevant contact details will also be affixed to the fencing around the Site.

#### 4.4.5 CTPMSP Monitoring and Review

The development of a program to monitor the effectiveness of the CTPMSP will be established by the Principal Contractor.

The CTPMSP will be subject to ongoing review to further enhance the safety and efficiency of the construction works; any and all reviews will be documented by the Principal Contractor, with considerations for review potentially including the following:

- Tracking deliveries and general construction vehicle movements against estimated volumes;
- Identifying any shortfalls in the existing CTPMSP, and developing an updated action plan to address issues that may arise during construction (for example, parking or access issues);
- Ensuring that any TGS (where required) is updated by accredited persons to ensure they remain consistent with construction requirements and the intent of the CTPMSP; and/or
- Undertaking regular checks to ensure all loads are leaving the Site appropriately covered and without tracking materials onto adjacent roads.



#### 4.4.6 Driver Code of Conduct

A Driver Code of Conduct (**Driver COC**) will be strictly enforced by the Principal Contractor throughout the construction period. The objectives of the Driver COC include:

- Minimising the impact of truck and company vehicle movements on the on-site work environment and local road network;
- Minimising conflict with other on and off-site road users;
- Minimising truck traffic noise by ensuring that vehicles have correctly been fitted with mufflers to minimise noise disturbance, and use only the approved construction vehicle routes during approved construction hours so as to minimise noise impacts in residential and urban areas; and
- Ensuring truck drivers use the designated truck routes.

The Driver COC will also require that, while driving any truck or company vehicle for construction related purposes, drivers must:

- Demonstrate safe driving and road safety activities;
- Abide by traffic and road legislation;
- Abide by on and off-site speed limits at all times; and
- Follow Site signage and instructions at all times.

The detailed Driver COC is provided in Appendix D.

### 4.5 Road Dilapidation Protocols

#### 4.5.1 Road Dilapidation Surveys

Road dilapidation surveys involve a careful inspection of existing road conditions prior to the commencement of any project that might lead to an increase in the volume of traffic the road is expected to handle.

A suitably qualified and independent inspector would conduct an inspection that encompasses various factors, including drainage, potholes and road surface cracks and formation. Further to the initial inspection, they will compile a comprehensive report that includes detailed descriptions and accompanying photographs of the existing conditions.

Additional surveys would then be undertaken towards to end of the construction period to ensure that any impacts arising from the increased traffic due resulting from the construction are appropriately addressed. The ultimate objective is to ensure that all key roads are returned to a condition equal to or better than their state prior to the commencement of the construction period.

Importantly, the condition of the public footpath, access lane to the Scout Hall and the culvert all along the northern border of the Site will also be included in the dilapidation protocols/surveys.

### 4.5.2 Survey Locations

Based on the potential for construction related vehicles to impact the condition of local roads, as well as the public infrastructure along the northern boundary of the Site, the dilapidation protocols/surveys will apply to the locations shown in Figure 13 below, noting the inclusion of Parkway Avenue between National Park Street and Stewart Street as specifically requested by Council.

Figure 13: Road Dilapidation Protocol Locations



Source: Nearmap

### 4.5.3 Survey Schedule

At a minimum, it is anticipated that the surveys will be undertaken prior to construction commencing, and then within 1 month prior to the completion of construction.

#### 4.5.4 Periodic Inspections

In addition to the formal dilapidation surveys, the Principal Contractor will be responsible for overseeing periodic visual inspections of the abovementioned roads and public lands so as to address in a timely manner any road defect issues. It will also be part of the Driver Code of Conduct for all drivers to immediately inform the Principal Contractor of any road defects that pose a safety or other risks.

#### 4.5.5 Road Repairs

If the need for repairs to the access roads arise, the Principal Contractor will consult with Council to define the extent of the necessary actions and identify the most efficient and sustainable methods for restoring these road sections. In cases of urgent repairs, it may be necessary to suspend construction vehicle operations until the remedial measures are executed.

## 5 Conclusions

Further to an assessment of the access, traffic and parking characteristics of the proposed construction of the Campus and associated infrastructure, arc traffic + transport has concluded that the construction works can be undertaken in a safe and efficient manner without impacting the local road environment.

In summary:

- Access to the Site for construction vehicles will be limited to a single construction driveway in both Smith Street and National Park Street.
- Construction trucks will be restricted to designated routes based on their size so as minimise impacts on lower order roads;
- The trip generation of the Site during all stages of construction is very moderate, would have no significant impact on the operation of local roads and intersections during what will be a relatively short construction period;
- Construction staff parking demands will be limited further to the use of public and active transport services which provide a more than viable alternative to private vehicle trips.
- While some construction staff may use private vehicles, they are anticipated to use the No. 2 car park and on-street parking in Smith Street north of the Site; a policy of no construction staff parking in local residential roads in the vicinity of the Site will be strictly enforced by the Principal Contractor.
- OHW Permits, OSOM Permits and TGS will be prepared as required through the construction period by qualified personnel; approval for each by TfNSW and/or Council would be required prior to any works associated with these permits/schemes commencing;
- Traffic controllers will be engaged to maximise the safety of pedestrian movements along the footpaths adjacent to the construction driveways;
- Hansen Yuncken and other contractors will implement comprehensive construction management strategies and protocols through the construction period to maximise the on and off-site safety of construction staff and the general public;
- The CTPMSP will be reviewed throughout the construction period, and appropriately updated as required.

In summary, arc traffic + transport has determined that the construction of the Campus in line with this CTPMSP can be undertaken without any significant road network or safety impacts.

## Appendix A: Anton Reisch and Julius Boncato Curriculum Vitae

## ANTON REISCH CURRICULUM VITAE

Anton excels in the detailed assessment of traffic and parking generating developments, and urban and strategic planning projects. His range of work has extended from small dwelling renovations through to residential subdivisions, shopping centres, schools, churches, commercial, industrial, mining and major infrastructure projects. Anton's reports provide the clear and precise detail required to meet and exceed the expectations of clients, while his communication with local and State government authorities and key stakeholders is second to none; a collaborative approach will always provide the best results.

Anton retains a fierce independence in his approach to any assessment task. This has been instrumental in the establishment of a large and loyal client base, from small architectural firms through to national and multi-national corporations and local and State government agencies.

### Personal

Date of Birth: 31<sup>st</sup> December 1970  
 Nationality: Australian  
 Address: 19 Canoon Road, Turramurra NSW 2074 Australia  
 Mobile: +61 2 427 995 160  
 Email: [antonreisch@optusnet.com.au](mailto:antonreisch@optusnet.com.au)



### Education

BA (USyd): 1990 - 1992  
 Master Urban & Regional Planning (USyd): 1993 - 1995

### Employment

Stapleton & Hallam	1993 - 1994
Christopher Stapleton Consulting	1994 - 2004
Stapleton Transportation & Planning	2004 - 2011
arc traffic + transport	2011 - 2018
Ason Group	2018 - 2020
arc traffic & transport	2020 - Present

### Referees |

#### Local Government Projects

Mr Tim Ruge  
 Urban Engineer, Coffs Harbour City Council  
 P: +61 2 6648 4650

#### Residential and Commercial Projects

Mr Peter Lawrence  
 Director, GLN Planning  
 Phone: +61 402 181 571

#### Regional Projects

Mr Stephen Richardson  
 Director, Cowman Stoddart  
 Phone: +61 2 4423 6198

#### Precinct Planning

Mr Murray Donaldson  
 Director, Urbis  
 Phone: +61 2 8233 9900

## CURRICULUM VITAE



### YEARS OF EXPERIENCE

7 years

### QUALIFICATIONS & AFFILIATIONS

BE (Civil)

MIEAust

Member AITPM

Member IPWEA

SafeWork NSW – Work Health & Safety Traffic Control Work (PWZ)

Level 2 Road Safety Auditor

### KEY SKILLS & COMPETENCIES

Traffic & Parking Impact Assessments

SIDRA Traffic Modelling

Road Safety Audits

Car Park Design

Car Park & Loading Dock Audits

Traffic Management Plans

Loading Dock Management Plans

Design Development & Compliance Statements for Construction & Occupation Certificates

Peer Review

Data Analysis

### PROFESSIONAL BACKGROUND

2017-Present - PDC Consultants

## JULIUS BONCATO

SENIOR TRAFFIC ENGINEER



### PROFESSIONAL OVERVIEW

Julius is a competent traffic engineer with expertise in the areas of traffic engineering and transport planning. Julius has been involved in several development and infrastructure projects, varying in land-use and scale, and has been involved in all project aspects from design and development, through to construction. This experience allows Julius to provide strategic and specialist advice on transport planning issues that ensure the best possible outcome on all projects he is involved in.

Julius is a very effective communicator and a skilled user of many transport related software packages, including, SIDRA Intersection, AutoCAD, Vehicle Tracking and RapidPlan.

### RELEVANT PROJECT EXPERIENCE

#### TRAFFIC & PARKING IMPACT ASSESSMENTS

Winter Sports World  
Jamison Rd, Penrith

Cabramatta East Precinct  
Cabramatta Rd E, Broomfield St and Fisher St,  
Cabramatta

Big Bear Shopping Centre  
Military Rd, Neutral Bay

Liverpool West Public School  
Hoxton Park Rd, Liverpool

Bexley Bowling Club  
Laycock St, Bexley North

Mixed-Use Development  
Segers Ave, Padstow

Canada Bay Club  
William St, Five Dock

Uniting Residential Aged Care & Independent Living Units  
Freeburn St & Yamba Rd, Yamba

Roly-Poly Early Learning Centre  
Clovelly Rd, Clovelly

Warehouse Development  
Interchange Park, Eastern Creek

New High School in Bungendore  
Majara Street, Bungendore

Mixed-Use Development  
Castlereagh St, Haymarket

#### TRAFFIC MANAGEMENT PLANS

Yennora Distribution Centre  
Loftus Rd, Yennora

Showground Business Park  
Anella Ave, Castle Hill

Hendra Industrial Estate  
Nudgee Rd, Nudgee

Great West Distribution Centre  
Great Western Hwy, Arndell Park

Big Bear Shopping Centre  
Military Rd, Neutral Bay

Ingleburn Logistic Park  
Stennett Rd, Ingleburn

Moorebank Distribution Centre  
Helles Ave, Moorebank

Chullora Business Park  
Hume Hwy, Chullora

PolAir Facility  
Bankstown Airport, Bankstown

Parramatta West Public School  
Young St, Parramatta

Domremy College  
First Ave, Five Dock

Forrester Distribution Centre  
Forrester Rd, St Marys

#### DESIGN DEVELOPMENT & COMPLIANCE STATEMENTS FOR CONSTRUCTION CERTIFICATE

PolAir Facility  
Bankstown Airport, Bankstown

Park One  
Waterloo Rd, Macquarie Park

Domremy College  
First Ave, Five Dock

Boomerang Tower  
Olympic Blvd, Sydney Olympic Park

Uniting Mayflower Westmead  
Caroline St, Westmead

Mixed-Use Development  
Old Princes Hwy, Sutherland

## Appendix B: Correspondence



arc traffic + transport to Transport for NSW


## Newcastle Education Campus Construction Traffic & Pedestrian Management Sub-Plan



Anton Reisch <[antonreisch@optusnet.com.au](mailto:antonreisch@optusnet.com.au)>  
To: 'liz.smith@transport.nsw.gov.au'  
Cc: 'Jordan Watters'

[Reply](#) [Reply All](#) [Forward](#) [...](#)

Fri 16/02/2024 12:08 PM

 P0406r2v2 Newcastle Education Campus Construction Worker Transportation Strategy.pdf  
2 MB

 P0406r1v2 Newcastle Education Campus CTPMSP.pdf  
3 MB

Good afternoon Liz,

Corrine was good enough to pass on your details...we are current preparing the CTPMSP for the Newcastle Education Campus on behalf of Hansen Yuncken. In accordance with the SSD Consent, we are seeking any feedback that TfNSW may have in regard to the CTPMSP, and as such I have attached our draft CTPMSP which I am hoping you can review and provide any comments so that we can revise if necessary and then provide to the Department for approval to get construction going.

I have also attached a Construction Worker Transportation Strategy which will be included as an appendix to the CTPMSP.

If you require any further information or wish to discuss anything further, please don't hesitate to get in touch with me at your convenience.

Many thanks in advance Liz, and kind regards,

anton



**anton reisch.** director

**m.** +61 427 995 160

**a.** 19 canoon road, south turramurra, NSW 2074

**e.** [antonreisch@optusnet.com.au](mailto:antonreisch@optusnet.com.au)

**w.** [www.arctt.com.au](http://www.arctt.com.au)

Confidentiality Note: The information contained in this email (including attachments) is strictly confidential and for the use of the intended recipients only. If you have received this email in error, please notify arc traffic + transport immediately and delete all copies of this email and attachments. Thank you.

## Newcastle High School Redevelopment Construction Traffic Management Plan



Anton Reisch <antonreisch@optusnet.com.au>

To 'nicholas.trajcevski@transport.nsw.gov.au'; 'avisser@ncc.nsw.gov.au'; 'traffic@ncc.nsw.gov.au'; 'Liz Smith'

Cc 'Jordan Watters'

Reply

Reply All

Forward



Wed 10/04/2024 1:37 PM



Afternoon all,

As discussed, we have prepared a CTMP for the Newcastle High School Redevelopment Project, a Draft of which I sent in mid-February 2024.

Please see attached the most recent version of the CTMP (V6) as well as the most recent Construction Worker Transportation Strategy (V4), both of which are with DPE. Aaron, I incorporated a response to all of your comments received 23/2/2024, Nicholas I didn't here back from you or TfNSW, but any comments still appreciated.

As always, please get in touch if you would like to discuss anything further.

Kind regards,

anton



**anton reisch.** director

**m.** +61 427 995 160

**a.** 19 canoon road, south turramurra, NSW 2074

**e.** [antonreisch@optusnet.com.au](mailto:antonreisch@optusnet.com.au)

**w.** [www.arctt.com.au](http://www.arctt.com.au)

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## arc traffic + transport to City of Newcastle Council

FW: Newcastle Education Campus Construction Traffic & Pedestrian Management Sub-Plan



Anton Reisch <antonreisch@optusnet.com.au>  
To: 'traffic@ncc.nsw.gov.au'

Reply Reply All Forward  
Mon 19/02/2024 2:20 PM

P04062v2 Newcastle Education Campus Construction Worker Transportation Strategy.pdf 2 MB  
P04061v2 Newcastle Education Campus CTPMSP.pdf 3 MB

Good afternoon Newcastle Traffic People!

arc traffic + transport is currently preparing the CTPMSP for the Newcastle Education Campus on behalf of Hansen Yuncken and School Infrastructure. In accordance with the SSD Consent, we are seeking any feedback that Council may have in regard to the CTPMSP, and as such I have attached our draft CTPMSP which I am hoping you can review and provide any comments so that we can revise if necessary and then provide to the Department of Planning for approval to get construction going.

I have also attached a Construction Worker Transportation Strategy which will be included as an appendix to the CTPMSP.

If you require any further information or wish to discuss anything further, please don't hesitate to get in touch with me at your convenience.

Many thanks in advance, and kind regards,

Kind regards,

anton



anton reisch. director  
m. +61 427 995 160  
a. 19 canoon road, south turramurra, NSW 2074  
e. antonreisch@optusnet.com.au  
w. www.arcct.com.au

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## Newcastle High School Redevelopment Construction Traffic Management Plan



Anton Reisch <antonreisch@optusnet.com.au>

To: 'nicholas.trajcevski@transport.nsw.gov.au'; 'avisser@ncc.nsw.gov.au'; 'traffic@ncc.nsw.gov.au';

'Liz Smith'

Cc: 'Jordan Watters'

Reply Reply All Forward

Wed 10/04/2024 1:37 PM

P0406r1v6 Newcastle High School Redevelopment CTPMSP.pdf 5 MB  
P0406r2v4 Newcastle High School Redevelopment Construction Worker Transportation Strategy.pdf 2 MB

Afternoon all,

As discussed, we have prepared a CTMP for the Newcastle High School Redevelopment Project, a Draft of which I sent in mid-February 2024.

Please see attached the most recent version of the CTMP (V6) as well as the most recent Construction Worker Transportation Strategy (V4), both of which are with DPE. Aaron, I incorporated a response to all of your comments received 23/2/2024, Nicholas I didn't here back from you or TfNSW, but any comments still appreciated.

As always, please get in touch if you would like to discuss anything further.

Kind regards,

anton



anton reisch. director  
m. +61 427 995 160  
a. 19 canoon road, south turramurra, NSW 2074  
e. antonreisch@optusnet.com.au  
w. www.arcct.com.au


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## City of Newcastle Council to arc traffic + transport

RE: Newcastle Education Campus CTMP



Traffic <traffic@ncc.nsw.gov.au>  
To: Anton Reisch; Traffic

 You replied to this message on 21/02/2024 2:54 PM.  
Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

 Reply  Reply All  Forward 

Wed 21/02/2024 2:31 PM

Good afternoon Anton,

I can confirm your email and associated CTMP was received and is with the traffic engineer for review.

If there is anything we can assist with in the meantime, please do not hesitate to contact us.


Kind regards,

**Rebecca | Business Support Officer**

City of Newcastle | Planning & Environment

Planning, Transport & Regulation | Business & Customer Improvement

T: +61249742000

 The linked image cannot be displayed. Your computer may not have enough memory to open the image, or the image may have been moved. Restart your computer, and then open this message. If the red x still appears, you may have to delete the image and then insert it again. Newcastle is a liveable, sustainable, inclusive global city. Cooperation | Respect | Excellence | Wellbeing

Newcastle Education Campus Construction Traffic & Pedestrian Management Sub-Plan



Aaron Visser <avisser@ncc.nsw.gov.au>  
To: antonreisch@optusnet.com.au  
Cc: Traffic

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Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

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Fri 23/02/2024 11:35 AM

Hi Anton,

Thanks for passing this through.

Regarding the draft *Construction Traffic & Pedestrian Management Sub-Plan Newcastle Education Campus*, see my comments below:

1. Driveway 2 is not existing. It is only a personnel gate connecting to footpath. Additional consideration must be given to the necessary applications/permits needed to facilitate this crossover - however temporary/permanent it will be:
  - a. A [Work Zone permit](#) can be used to clear parking from the vicinity of any temporary layback.
  - b. Unless covered by a separate approval, a [Type 1 S138 application](#) needs to be approved by CN to add a driveway or augment a driveway in the road reserve for this project (it may not be necessary for the driveway works you intend, but this cannot be determined without you first seeking an application of this nature and providing plans to be considered).
2. The claim that HRV swept-paths succeed in accounting for AV swept-paths is noted. However, swept-path assessments only show HRV/MRV turnaround manoeuvres, not AV turnaround manoeuvres. Please either:
  - a. Confirm internal roads exist which link, or will link, driveway 1 with driveway 2 that removes the need for an AV to turnaround in the off-street area; or
  - b. Provide swept-path analyses showing an AV can turnaround off-street, or an explanation of the methodology to be used to get them safely back onto the road.
3. Noting that discussions elsewhere have likely occurred on this topic and may speak to the following, I would suggest extending the dilapidation survey to include all of Parkway Avenue between Smith Street and Stewart Avenue if at all possible.

Further comments can be provided as needed on yet to be completed components of this plan if a 'completed' draft is provided to us.

I have no comments regarding the draft *Construction Worker Transportation Strategy Newcastle Education Campus* document.

Please reach out for discussion as needed.


Kind regards,

**Aaron Visser | Senior Traffic Engineer**

City of Newcastle | Planning & Environment

Planning, Transport & Regulation | Traffic

E: [avisser@ncc.nsw.gov.au](mailto:avisser@ncc.nsw.gov.au) | T: +61249741412

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## Newcastle High School Redevelopment Construction Traffic Management Plan - CN Traffic Response




Aaron Visser <avisser@ncc.nsw.gov.au>

To: Anton Reisch; Jordan Watters

Cc: Traffic

 Reply  Reply All  Forward 

Tue 16/04/2024 10:08 AM

 You replied to this message on 16/04/2024 2:54 PM.

Hi Anton, Jordan,

Thanks for passing the revision through and taking my comments on.

The CTMP is approved/accepted subject to the following advice and conditions:

1. TCP/TGSs provided in the CTMP are noted to not change the function of the road reserve in any part, but only warn road users of changes to activity around the driveways noted.
  - a) If additional traffic management is required on City of Newcastle (CN) managed roads, submit road occupancy permit applications to CN as per the process detailed here: <https://www.newcastle.nsw.gov.au/Council/Forms-Publications/Forms/Roads-Road-Occupancy-Application-Form>.
  - b) **This email does not constitute the approval of any TCP/TGS or action contained in the CTMP**, only the overall support for the work proposed by the CTMP. You must apply for a CN Road Occupancy License (ROL) as needed, determined by advice contained here or delivered elsewhere.
2. All parts of all traffic lanes, road shoulders, and footpath areas within the road reserve must remain fully open and unaffected by construction activities unless permitted as part of a ROL or Work Zone.
3. Access by heavy vehicles is to be gained by the shortest route connecting the site to Stewart Avenue via Parkway Avenue (the southern route), utilising suitable NHVR permits as necessary.
  - a) It is CNs preference that all heavy vehicle traffic does not traverse north of either driveway using National Park Street or Smith Street, to access King Street (the northern route). CN acknowledges that to require articulated vehicles to abide by this would imply a potentially unfeasible traffic management burden on the applicant or induce an unacceptable safety risk at the intersections of Parkway Avenue with National Park Street and Smith Street.
  - b) CN accepts the compromise that **only** articulated vehicles will travel along the northern route.
    - i. If such activity gives rise to complaint from any community stakeholder, CN reserves the right to withdraw its support of this compromise and demand the applicant to enact traffic management measures to allow articulated vehicles to safely use the southern route or undertake actions that reduce articulated vehicle traffic generated by the development, to zero.
  - c) CN requests all articulated heavy vehicle traffic be 'converted' to heavy rigid vehicle traffic where possible, to minimise as much as practicable all heavy vehicle traffic travelling the northern route.
4. General vehicle/worker movement notes for actions in the road reserve:
  - a) Delivery and construction vehicles must give way to pedestrians, cyclists and public vehicles when entering or leaving nominated loading zones unless under the control of traffic controllers.
  - b) Workmen to wear high visibility vests when walking around delivery vehicles and the site.
  - c) Construction workers are prohibited from parking on surrounding, adjacent and opposite road shoulders including median strip (where present) near the construction site during construction.
  - d) All construction employee vehicles to use existing established parking facilities as otherwise directed in relevant CWTS.
  - e) Construction vehicles (forklifts, scissor lifts, etc.) are to be always parked on site away from pedestrian traffic flow.


- f) Minimise construction vehicles and delivery activity between 0800-0930 and 1600-1730 Monday to Friday to avoid conflict with peak hour traffic volumes.
  - i. During school times, the afternoon peak should be understood to extend 1430-1730 Monday to Friday.
- g) Where TCP/TGS prevent access along a road, notification must be given to residents and businesses which require access, which informs them of working times and activities at least 5 business days prior to commencement.

Please reach out for further discussion as needed.

Kind regards,

**Aaron Visser | Senior Traffic Engineer**  
City of Newcastle | Planning & Environment  
Planning, Transport & Regulation | Traffic  
E: [avisser@ncc.nsw.gov.au](mailto:avisser@ncc.nsw.gov.au) | T: +61249741412



 City of Newcastle acknowledges the Traditional Custodians of the land of the Newcastle LGA, the Awabakal and Worimi peoples.

## TfNSW to arc traffic + transport

RE: Newcastle Education Campus CTMP



Liz Smith <Liz.Smith@transport.nsw.gov.au>  
To: Anton Reisch

You replied to this message on 13/03/2024 11:31 AM.

Hi Anton, apologies yes I have received. Just looking internally for relevant parties to review. TfNSW will respond to you in due course. I note this one had a working group with TfNSW reps involved but the relevant docs are missing from the appendix. Can you please confirm who may have attended these working group meetings on behalf of TfNSW?  
Thanks Liz

Liz Smith  
Manager Development Services North  
M 0411149655

 Reply  Reply All  Forward 

Wed 21/02/2024 2:41 PM





FW: Newcastle Education Campus CTMP



Liz Smith <Liz.Smith@transport.nsw.gov.au>  
To: Anton Reisch  
Cc: Nicholas Trajceviski, Corinne Thompson

You replied to this message on 14/03/2024 10:01 AM.

Hi Anton, this has been handed over the Community Partnering team for review and response. The contact is Nicholas Trajceviski, cc'd into this email.  
Cheers Liz

 Reply  Reply All  Forward 

Thu 14/03/2024 6:25 AM

## Appendix C: Traffic Guidance Scheme - Construction Driveways

Prepared by Julius Boncato

Card No: TCT 0038351 - Prepare a Work Zone Traffic Management Plan



## GENERAL NOTES

1. This Traffic Guidance Scheme (TGS) has been designed in accordance with:
  - NSW Government Traffic Control at Work Sites (TCAWS) Version 6.1 dated February 2022.
  - AS 1742.3-2019: Manual of Uniform Traffic Control Devices - Part 3 Traffic Control for Works on Roads (AS 1742.3).
2. Implementation of this TGS is to be undertaken by a suitably qualified person holding the 'Implement Traffic Control Plans' (ITCP) qualification, managed by SafeWork NSW.
3. Traffic controllers that are required under this TGS are to hold the 'Traffic Control' (TC) qualification, managed by SafeWork NSW.
4. Workers performing the temporary traffic management (TTM) are to wear appropriate Personal Protective Equipment (PPE).
5. Workers performing the TTM are to adhere to site safety policies including Safe Work Method Statement (SWMS) issued by the principal contractor, builder or traffic control company that is implementing the TGS.
6. In accordance with Clause 4.3.4 of AS 1742.3, signs are to face towards approaching traffic approximately at right angles to the line of sight from the driver to the sign.

At curved alignments, the sign shall be placed approximately at right angles to the line of sight of a motorist 50 metres in advance of the sign as shown below.

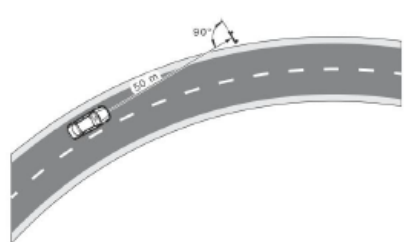


Figure 4.1 — Orientation of sign at curved alignments

Source: AS 1742.3

7. Positioning of signs and devices are to be in accordance with Clause 4.3.2 of AS 1742.3:
  - (a) Are properly displayed and securely mounted.
  - (b) Are within the line of sight of the intended road user.
  - (c) Are not and cannot be obscured from view (e.g. by vegetation or parked cars).
  - (d) Do not obscure other devices from the line of sight of the intended road user.
  - (e) Do not become a possible hazard to workers, pedestrians, people with disabilities (e.g. trip hazards for people with vision impairment), cyclists or vehicles.
  - (f) Do not direct pedestrians, cyclists or vehicles into an undesirable path.
  - (g) Do not restrict sight distance for drivers entering from side roads or streets, or private driveways.
  - (h) Are not installed using supports that could be a hazard if struck by a vehicle.

8. Temporary signs and devices under this TGS are to be removed or covered when not in use, during breaks (e.g. lunch) or at the end of a work shift.

9. Maintenance of temporary signs and devices are to be in accordance with Section 6.3 of TCAWS with particular attention to the following:


- Signs and devices displayed must remain appropriate for changing circumstances during the work.
- Signs which are not required between shifts must be covered.
- Sign placement, including covers must be checked after weather events.
- Signs and devices must be in good condition.
- Damaged or disfigured signs in the work environment must be replaced as soon as possible, especially if the warnings displayed are not clear.
- Signs and devices erected before they are required must be covered by a suitable, opaque material in accordance with AS 1742.3. The cover must be removed immediately prior to the commencement of work.

Note: Covering signs with hessian material does not sufficiently inhibit the sign's retroreflective performance and should not be used. Additionally, dark coloured and plastic materials may cause overheating or excessive moisture build-up and therefore damage to the sign.

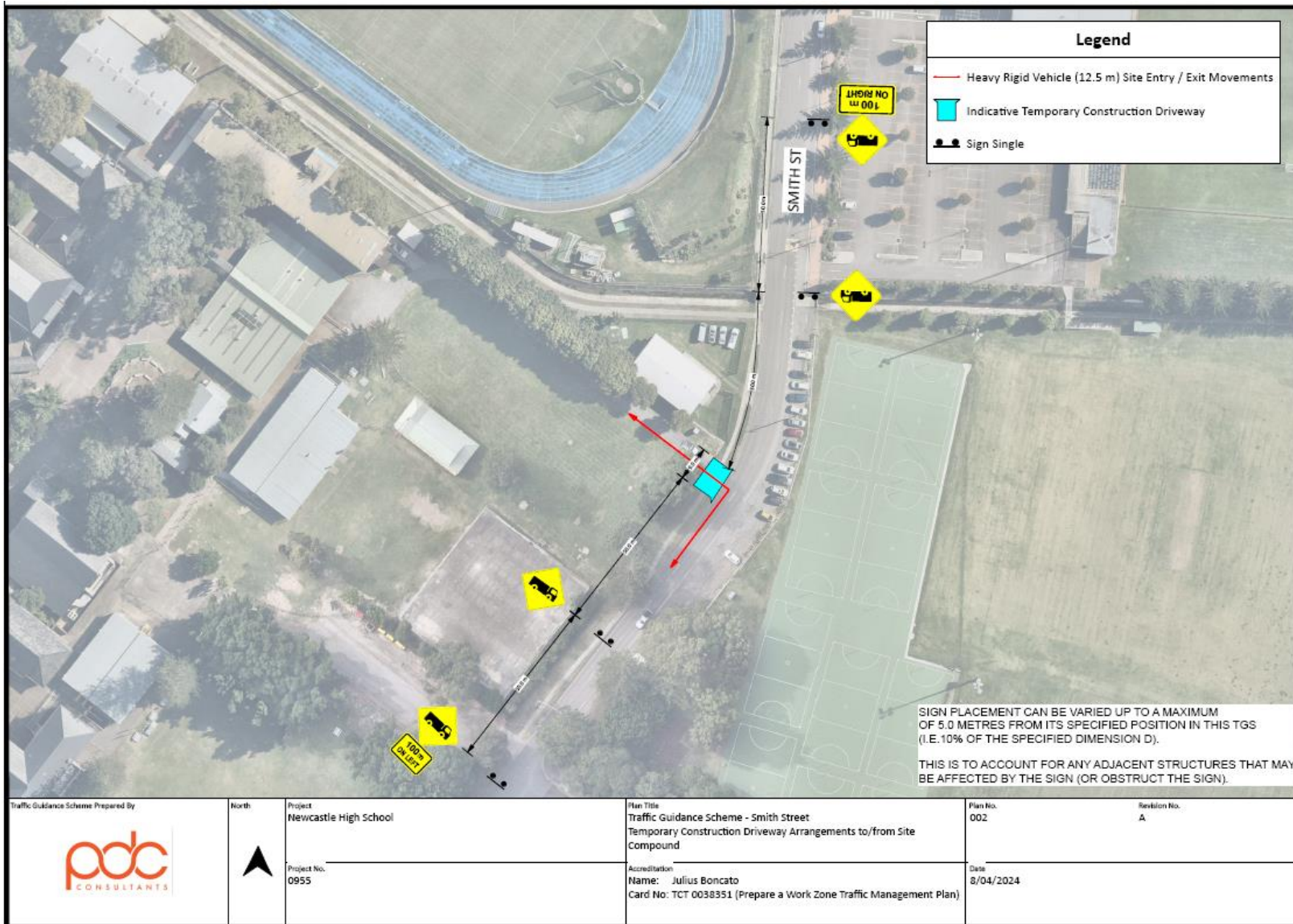
10. Dimension D values in accordance with Section 6.2.6 of TCAWS.

11. Traffic controllers are to manage pedestrians and cyclists only. Traffic controllers are to assist exiting drivers in identifying a safe gap in traffic before leaving the Works Zone / site.

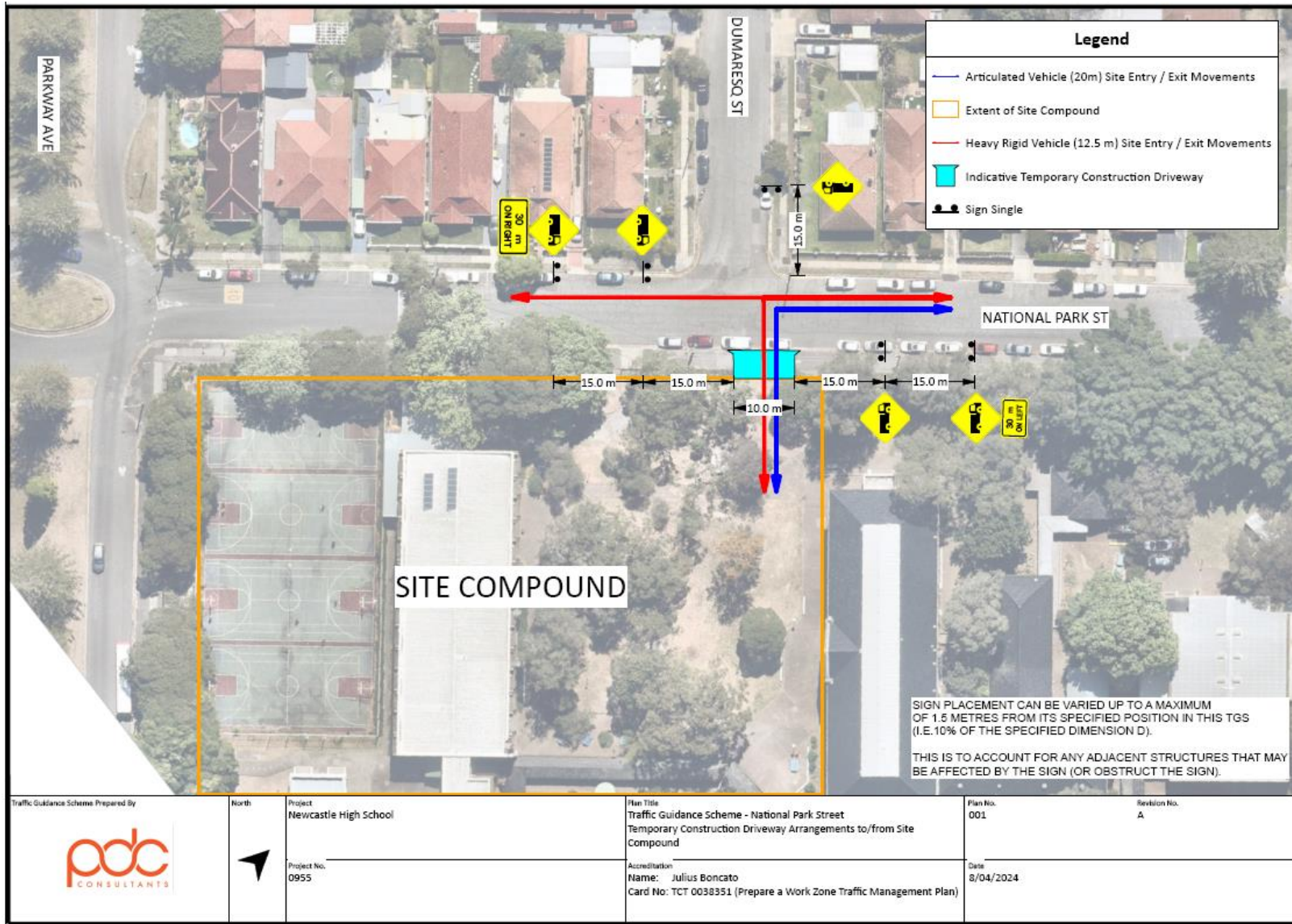
12. Traffic controllers are to communicate to each other via two-way radio.

Traffic Guidance Scheme Prepared By 	North 	Project <b>Newcastle High School</b>  Project No. <b>0955</b>	Plan Title <b>General Notes</b>  Accreditation <b>Name: Julius Boncato</b> <b>Card No: TCT 0038351 (Prepare a Work Zone Traffic Management Plan)</b>	Plan No. <b>000</b>  Revision No. -  Date <b>21/03/2024</b>
--	-----------	---	---	--

# Traffic Guidance Scheme Driveway 1



### Traffic Guidance Scheme Driveway 2



## Appendix D: Driver Code of Conduct

# Driver Code of Conduct

## 1 Driver Code of Conduct Objectives

This Driver Code of Conduct is to be provided to all truck and company vehicle drivers accessing the Site. The objectives of the Driver Code of Conduct include:

- Minimising the impact of truck and company vehicle movements on the on-site work environment and local road network;
- Minimising conflict with other on and off-site road users;
- Minimising truck traffic noise; and
- Ensuring truck drivers use the designated truck routes.

The Driver Code of Conduct also requires that, while driving any truck or company vehicle for construction related purposes, drivers must:

- Demonstrate safe driving and road safety activities;
- Abide by traffic and road legislation;
- Abide by on and off-site speed limits at all times; and
- Follow Site signage and instructions at all times.

## 2 Key Driver Controls

### Truck Operating Periods

The delivery of materials to/from the Site will be as follows:

- School days:
  - 7:00am – 8:00am;
  - 9:30am – 2:30pm; and
  - 4:00pm – 6:00pm.
- Weekdays (school holidays):
  - 7:00am – 6:00pm;
- Saturdays:
  - 8:00am to 1:00pm.

No construction or construction truck movements are permitted on Sundays or public holidays, and – with reference to the weekday work hours above, no truck movements will be permitted to/from the Site during standard School Zone periods.

Where it is necessary for a truck to enter/depart the Site during the periods 8:00am – 9:30am or 2:30pm – 4:00pm on a school days, these movements will only be permitted further to the express approval of the [School] Principal and the Principal Contractor.

Where it is necessary for any truck movements to occur outside of the conditioned truck movement hours before or after the standard workday (not including the School peak restrictions) an approved **OHW Permit** will be required prior to any such truck movements. The Principal Contractor must be notified of any intention for truck movements outside of the approved construction hours, and provide approval for the OHW Permit application prior to its submission to the relevant authorities.

### Speed Limits

All truck, company vehicle and general construction staff drivers are to travel within the posted speed limits in the public road network at all times.

All truck, company vehicle and general construction staff drivers are to travel at a speed of no greater than 15km/h within the Site at all times.

### Site Access

Site access will be provided via Smith Street (**Driveway 1**) and National Park Street (**Driveway 2**). These construction driveways are shown below, noting that all vehicles are strictly required to enter and depart the Site in a forward direction.

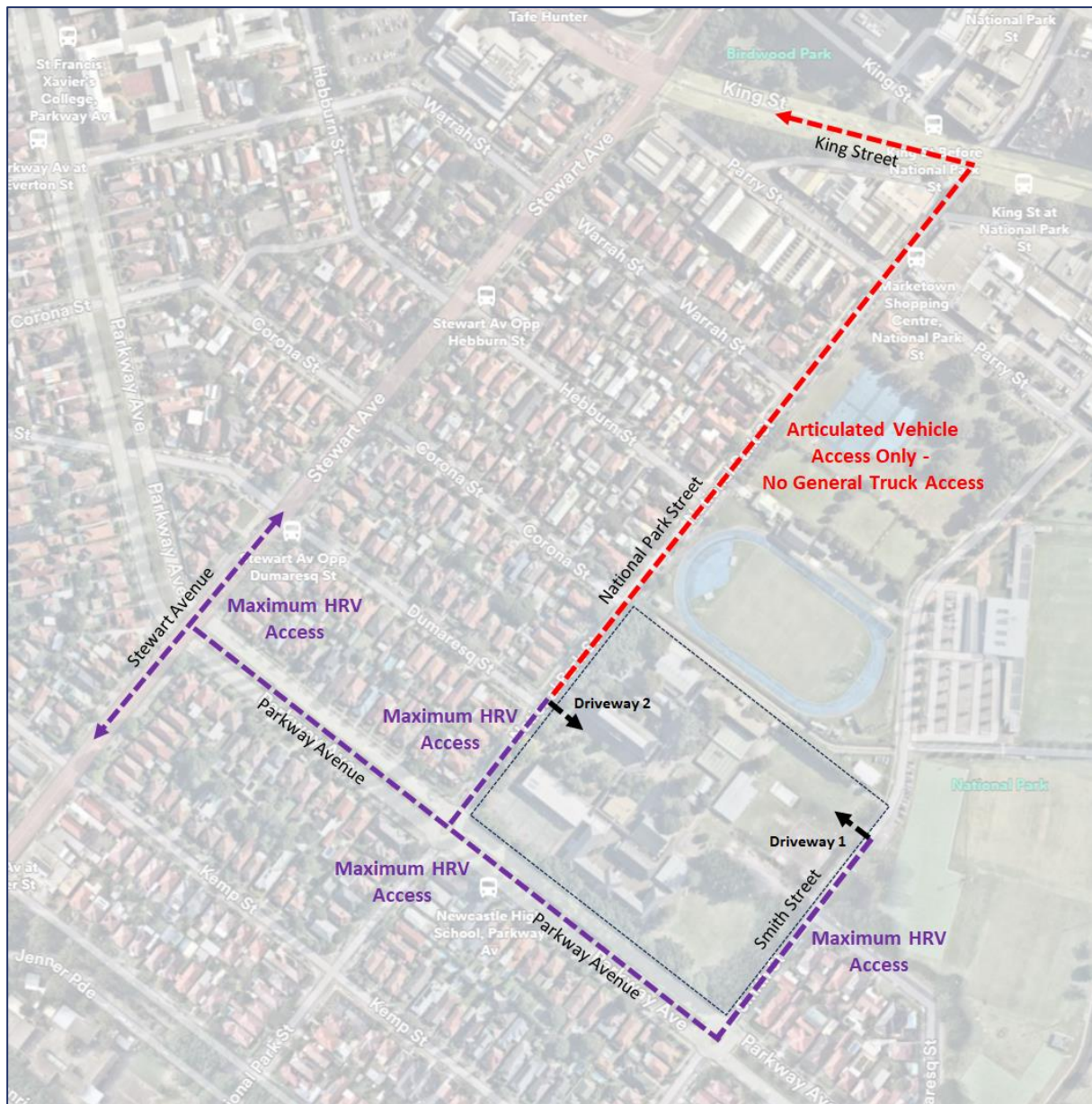
## Site Access Driveways



## Designated Truck Routes

Designated truck routes must be used by all truck drivers at all times for travel to/from the Site; these routes are shown below, noting that no Articulated Vehicle access will be permitted to Driveway 2 from Parkway Avenue; and that no Articulated Vehicle access will be permitted to Driveway 1 without prior approvals from Council.

## Designated Truck Routes



### 3 Breach of Driver Code of Conduct

The following activities by any truck or company vehicle driver would be considered as a breach of the Driver Code of Conduct:

- Reckless or dangerous driving causing injury or death;
- Driving whilst disqualified or not correctly licensed;
- Drinking or being under the influence of drugs while driving;
- Failing to stop after an incident;
- Loss of demerit points leading to suspension of licence;



- Any actions that warrant the suspension of a licence; and/or
- Exceeding the speed limits in place in public roads and on-site.

Any drivers found to be in breach of the Driver Code of Conduct will be notified of the breach, as would their immediate managers, who would in turn be required to provide additional training/guidance to the driver. **Any repeat offenders would be prevented from returning to Site.**

## 4 Driver Responsibilities

All truck and company vehicle drivers must:

- Be responsible and accountable for their actions when operating a truck or company vehicle;
- Ensure they have a current driver licence for the class of vehicle they are driving, and this licence is to be carried with them at all times;
- Immediately notify their manager if their drivers licence has been suspended, cancelled, or has had limitations applied;
- Comply with all traffic and road legislation when driving;
- Regularly check the operating condition of trucks or company vehicles;
- Ensure their vehicles have correctly been fitted with mufflers to minimise noise disturbance, and use only the approved construction vehicle routes during approved construction hours so as to minimise noise impacts in residential and urban areas;
- For truck drivers, not drive along routes other than the designated truck routes;
- Never drive under the influence of alcohol or drugs;
- Wear a safety seat belt at all times when in the vehicle;
- Report any near-misses, crashes or scrapes to their manager, including those that do not result in injury;
- Report infringements to a manager at the earliest opportunity;
- Report vehicle defects to a manager prior to the next use of the vehicle; and
- Keep loads covered at all times (where relevant).

## 5 Crash or Incident Procedure

In the event of a crash or other traffic incident, the truck or company vehicle driver is required to:

- Stop the vehicle as close to it as possible to the scene, making sure this not hindering traffic;
- Ensure one's own safety first, then help any injured people and seek assistance immediately if required;
- Ensure that key information is exchanged with the other driver, including the registration, names and insurance details of other vehicles/drivers;

- Ensure that the police are contacted should there be a disagreement over the cause of the crash, if there are injuries or if property is damaged; and
- As soon as reasonably practical, report all details gathered to the Principal Contractor.

## Appendix E: Construction Worker Transportation Strategy

Provided as a separate document.



Construction Worker Transportation Strategy  
Newcastle High School Redevelopment  
for  
Hansen Yuncken

# Document Control

**Project:** Newcastle High School Redevelopment  
**Client:** Hansen Yuncken  
**File Reference:** P0406r2v4 Newcastle High School Redevelopment Construction Worker Transportation Strategy

## Revision History

Revision	Date	Details	Approved by
v1	14/02/2024	Draft 1	A. Reisch
v2	16/02/2024	Draft 2	A. Reisch
v3	18/03/2024	Draft 3	A. Reisch
14	21/03/2024	Final 1	A. Reisch

This document has been prepared by arc traffic + traffic for the use of the stated Client only, and addresses the project specifically detailed in this document, and as such should not be considered in regard to any other project. This document has been prepared based on the Client's description of its requirements, information provided by the Client and other third parties. arc traffic + transport does not accept any responsibility for the use of or reference to this document other than intended by the stated Client.

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**Attachment A:** Rail Timetables

**Attachment B:** Bus Routes

**Attachment C:** Light Rail Route

# 1 Overview

arc traffic + transport has been engaged by Hansen Yuncken to prepare this Construction Worker Transportation Strategy (**CWTS**) to outline the proposed strategies to be adopted by the Principal Contractor to regulate the travel habits of construction staff during the construction of the Newcastle Education Campus (the **Campus**), Parkview Avenue, Hamilton South (the **Site**).

The CWTS is provided as an appendix to the primary Construction Traffic & Pedestrian Management Sub-Plan (**CTPMSP**), itself part of the broader Construction Environmental Management Plan (**CEMP**) prepared by Hansen Yuncken for submission to the Department of Planning & Environment.

The CWTS has been prepared in response to Condition B.24 of the recent SSD Consent for the Campus, but moreover in response to the acknowledgement by Hansen Yuncken that the Site is not large enough to accommodate parking generating by construction staff, and the resulting need to minimise to the extent possible the use of private vehicles by construction staff, and in turn a parking demand in local residential streets in the immediate vicinity of the Site.

Key strategies to be adopted throughout the construction period focus on the following:

- Encouraging construction staff to use public and active transport for travel to/from the Site;
- Encouraging group transport where the use of private vehicles is essential; and
- Strictly prohibiting parking in local residential street in the immediate vicinity of the Site.

These strategies are detailed further in sections below.

## 2 Public Transport

The Site is provided with excellent access to public and active transport services and infrastructure, including heavy rail, light rail, ferries and buses.

### 2.1 Newcastle Interchange

Newcastle Interchange (**NI**) is located approximately 1.0km north of the Site, or a 10 – 15 minute walk depending on the route taken. NI provides an interchange of rail, light rail and bus services, which are discussed further below.

### 2.2 Rail

NI is serviced by Central Coast & Newcastle Line and Hunter Line trains, with up to 2 services per hour and 4 services per hour on each line respectively, including services during the construction arrival and departure peaks.

Timetables for rail services on both lines are provided in *Attachment A*, and further information is available on the TfNSW Trip Planner website at <https://transportnsw.info/trip>.

### 2.3 Bus Services

The Site is very well serviced by public buses, with bus stops within appropriate walking distance in Parkway Avenue and National Park Street, as well as King Street to the north, Union Street and Darby Street to the east, and Stewart Street to the west.

The location of these bus stops (and other transport hubs) and their proximity to the Site is shown in the *Figure 1*, while individual bus routes and service frequencies (during the construction arrival and departure peaks, i.e. prior to and following standard commuter peaks) are shown in *Table 1*.



Figure 1: Public Bus Stops and Walk Times

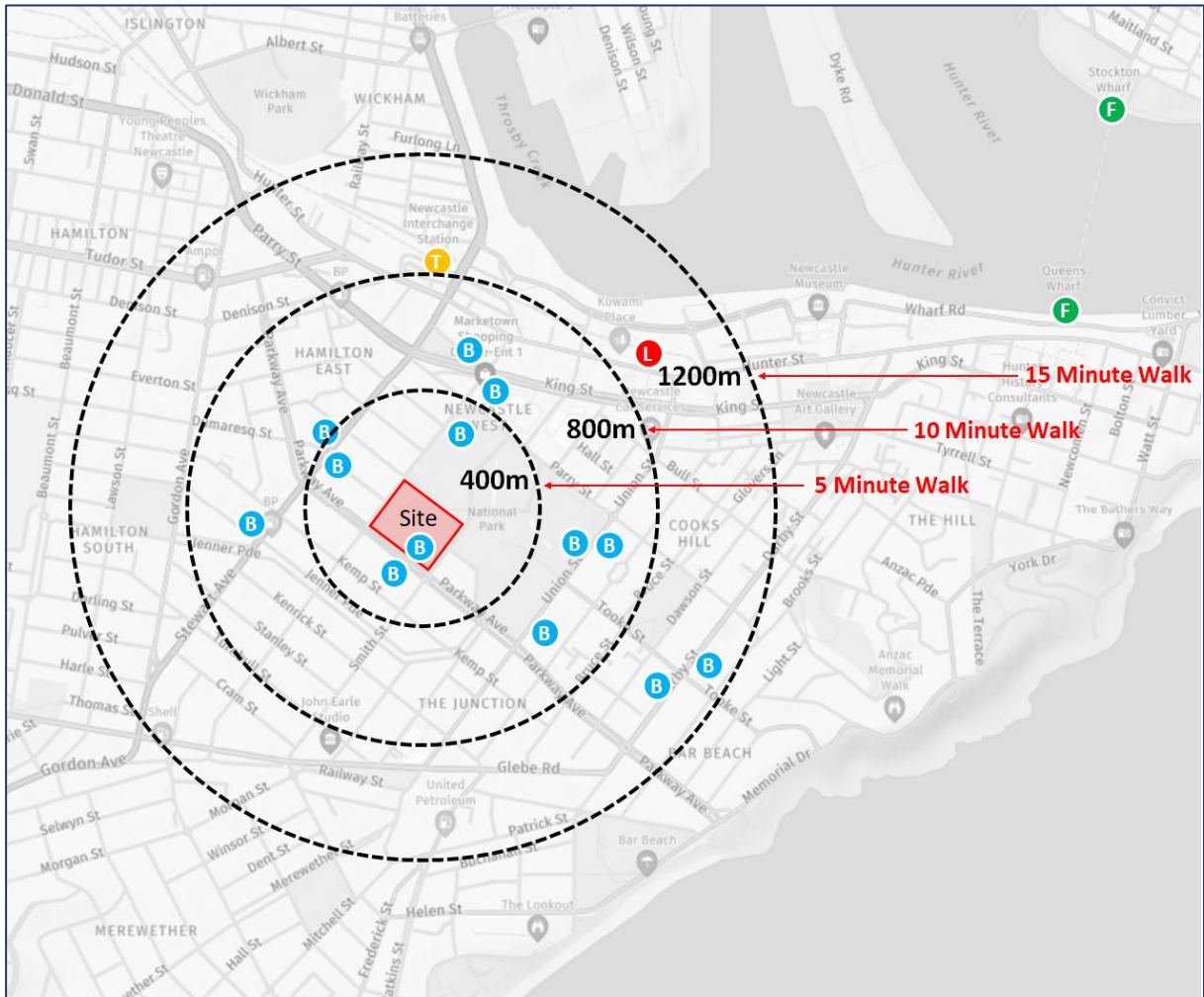


Table 1: Public Bus Routes, Stop Locations and Frequencies

Route	Origin-Destination	Bus Stop Location	Construction Peak Frequency
10X	NI to Charlestown	King St	20 - 30 min
12	Maryland - Merewether via NI	Union St	15 - 20 min
14	Swansea Heads - Newcastle	Darby St	30 min
21	Broadmeadow - Newcastle	Parkway Ave	40 - 50 min
22	Charlestown - Newcastle	King St/Stewart St	30 min
23	Wallsend - Newcastle vi NI	King St	30 min
26	Newcastle West to Wallsend via NI	King St	30 - 40 min
28	Mount Hutton to Newcastle West vi NI	King St	30 - 60 min
47	Jesmond to Market Town via NI	National Park St/King St	60 min
138	NI - Lemon Tree Passage	Parkway Ave	1 service in each peak

Detailed information in regard to available bus routes are provided in Attachment B, while timetable and other information is available on the TfNSW Trip Planner website at <https://transportnsw.info/trip>.

## 2.4 Light Rail Services

The Newcastle light rail runs between NI and Newcastle Beach, with services every 15 minutes in the AM construction arrival peak, and every 7.5 minutes in the PM construction departure peak.

The light rail route is provided in Attachment C, and further information is available on the TfNSW Trip Planner website at <https://transportnsw.info/trip>.

## 2.5 Ferry Services

Ferry services operate between Stockton Wharf and Newcastle Wharf every 20 – 30 minutes during the construction arrival and departure peaks; a large commuter car park is provided adjacent to Stockton Wharf.

Further information in regard to ferry services is available on the TfNSW Trip Planner website at <https://transportnsw.info/trip>.

### 3 Active Transport

#### 3.1 Pedestrian Paths

While there may not be many construction staff residing within walking or cycling distance of the Site, it is nonetheless essential to point out the quality of the active transport network, and particularly the provision of pedestrians paths in all key roads providing access between the Site and NI, light rail and bus stops.

Pedestrian paths and crossing are located at all intersections with the City Centre, while additional paths and crossing locations in the vicinity of the Site are shown in Figure 2.

Figure 2: Pedestrian Paths and Crossing Locations



#### 3.2 Cycling

While there are few dedicated cycleways (either on or off-road) in the immediate vicinity of the Site, on-road cycling conditions are still well suited to most cyclists. The relative difficulty of on-road cycle routes in the vicinity of the Site are shown in Figure 3.

Figure 3: Cycling Paths



### 3.3 End of Journey Facilities

Importantly, End of Journey facilities will be available to all construction staff, including cycle racks, lockers and showers.

## 4 Group Transport

Many sub-contractors on major construction projects provide group transport for construction staff, often in larger mini-vans and the like; this allows construction to meet (and, if travelling by private vehicle, park) at would be their normal workplace and then travel together to/from the Site. This practice will be encouraged where the use of public or active transport is not practical, noting though that any parking of such vehicles would not be permitted in local residential streets in the immediate vicinity of the Site.

It is also the case that construction staff travelling in private vehicles have high vehicle occupancies, again a function of construction staff travelling together from their normal workplace, or dropping off-pick-up along a predetermined route to/from the Site. This practice will be encouraged where the use of public or active transport is not practical, noting again though that any parking of such vehicles would not be permitted in local residential streets in the immediate vicinity of the Site.

## 5 Parking

### 5.1 Parking Demand

While the excellent public and active transport opportunities available to construction staff are anticipated to provide a significant reduction in private vehicle trips, it must be acknowledged that there will be some demand for private vehicle travel and in turn off-site parking demand given that no parking for construction staff will be provided on-site.

### 5.2 Off-Site

It will be the responsibility of the Principal Contractor to ensure that construction staff vehicles are not parking in local residential roads in the immediate vicinity of the Site. In this regard, these local roads already generate a residential parking demand, but also a historic parking demand generated by Newcastle HS; reducing parking capacity in local roads further is not an acceptable outcome during the construction period, even if short-term.

As such, the Principal Contractor will direct those that must use private vehicles to park in off-site locations where the impact of additional parking demand would be minimal. In this regard, the off-street (paid) car park at the No.2 Oval in Smith Street, and the on-street (paid and unpaid) parking in Smith Street north of the Site, have been identified as being appropriate to meet this (anticipated to be relatively minor) parking demand.

An overview of where staff parking will be restricted and where it will be permitted is provided in Figure 4.

Figure 4: Restricted and Permitted Staff Parking Locations



### 5.3 Managing Parking Demand

With reference to Section 4.4 of the CTPMSP which this CWTS accompanies, it will be the responsibility of the Principal Contractor to strictly enforce the parking restrictions identified in sections above, and moreover to continually monitor the demand for construction staff parking so as to develop additional strategies if that demand is higher than anticipated.

With regard to managing parking demand, the Principal Contractor will:

- Encourage the use of public and active transport for travel to and from the Site in all inductions and then regularly in tool box talks and the like;
- Provide details of on-site drop-off/pick-up provisions for construction staff for tools and equipment and the like;

- Undertake regular observations in local roads in the vicinity of the Site immediately prior to and following the work day to ensure that construction staff are not parking in local roads; and
- Consult with sub-contractors regularly in regard to the greater use of group transport to/from the Site.

Should the Principal Contractor become aware of consistent parking in local roads, or a parking demand in excess of that anticipated, they shall develop additional strategies (for inclusion in the CTPMSP and the CWTS) to reduce this demand. Such strategies are anticipated to include:

- Formal warnings for those found to be continually parking in local roads;
- Re-induction of those that continue to parking in local roads; and
- A final warning if the parking practices persist, before ultimately being removed for work at the Site.



Attachment A: Rail Timetables (all services via Newcastle Interchange)

## Central Coast & Newcastle Line Work Day Arrival Services

CCN

# Central to Newcastle Interchange via Strathfield or Gordon

T

Monday to Friday	⏰	⏰	⏰	⏰	⏰	⏰	⏰	⏰	⏰
Central	-	03:45	-	04:45	05:15	-	05:45	06:15	06:45
Strathfield	-	03:58	-	04:58	05:28	-	05:58	06:28	06:58
Epping	-	04:10	-	05:10	05:40	-	06:10	06:40	07:10
Hornsby	-	04:22	-	05:22	05:53	-	06:23	06:53	07:23
Berowra	-	04:31	-	05:31	-	-	06:33	-	07:33
Cowan	-	04:36	-	05:36	-	-	06:37	-	07:37
Hawkesbury River	-	04:46	-	05:46	-	-	06:47	-	07:47
Wondabyne	-	a04:53	-	a05:53	-	-	a06:54	-	a07:54
Woy Woy	-	05:00	-	06:00	06:27	-	07:01	07:28	08:01
Koolewong	-	05:02	-	06:02	-	-	07:03	-	08:03
Tascott	-	05:05	-	06:05	-	-	07:06	-	08:06
Point Clare	-	05:07	-	06:07	-	-	07:08	-	08:08
Gosford	04:12	05:12	05:39	06:12	06:35	06:43	07:13	07:36	08:13
Narara	04:18	05:17	05:45	06:17	-	06:48	07:18	-	08:18
Niagara Park	04:20	05:19	05:47	06:19	-	06:51	07:20	-	08:20
Lisarow	04:23	05:22	05:50	06:22	-	06:53	07:23	-	08:23
Ourimbah	04:26	05:24	05:53	06:24	-	06:56	07:25	-	08:25
Tuggerah	04:32	05:30	05:59	06:30	06:49	07:02	07:31	07:50	08:31
Wyong	04:35	05:33	06:02	06:33	06:52	07:06	07:34	07:54	08:34
Warnervale	04:40	05:37	06:06	06:37	-	07:10	07:38	07:58	08:38
Wyee	04:47	05:44	06:14	06:44	-	07:17	07:45	08:05	08:45
Morisset	04:54	05:50	06:20	06:50	07:07	07:24	07:51	08:12	08:51
Dora Creek	04:58	05:54	06:24	06:54	-	07:28	07:55	08:17	08:55
Awaba	05:07	06:03	06:34	07:03	-	07:38	08:04	08:26	09:04
Fassifern	05:12	06:08	06:38	07:08	07:23	07:42	08:09	08:31	09:09
Booragul	05:16	06:12	06:43	07:12	-	07:47	08:13	08:35	09:13
Teralba	05:18	06:14	06:45	07:14	-	07:49	08:15	08:37	09:15
Cockle Creek	05:21	06:17	06:48	07:17	-	07:52	08:18	08:40	09:18
Cardiff	05:26	06:22	06:53	07:22	07:34	07:57	08:23	08:45	09:23
Kotara	05:31	06:27	06:58	07:27	-	08:02	08:28	08:50	09:28
Adamstown	05:34	06:29	07:00	07:29	-	08:04	08:30	08:53	09:30
Broadmeadow	05:37	06:32	07:03	07:32	07:42	08:07	08:33	08:55	09:33
Hamilton	05:40	06:36	07:07	07:36	07:46	08:11	08:37	08:59	09:37
Newcastle Interchange	05:44	06:40	07:10	07:40	07:50	08:13	08:41	09:03	09:41

**CCN**

**Central to Newcastle Interchange  
via Strathfield or Gordon**



<b>Weekends &amp; Public Holidays</b>	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒
Central	-	-	04:48	05:48	-	06:48	07:15	07:48	08:18
Strathfield	-	-	05:01	06:01	-	07:01	07:31	08:01	08:31
Epping	-	-	05:13	06:13	-	07:13	07:43	08:13	08:43
Hornsby	-	-	05:26	06:26	-	07:26	07:56	08:26	08:56
Asquith	-	-	05:28	06:28	-	-	-	-	-
Mount Colah	-	-	05:31	-	-	-	-	-	-
Mount Kuring-gai	-	-	05:34	-	-	-	-	-	-
Berowra	-	-	05:38	06:36	-	07:35	-	08:35	-
Cowan	-	-	05:43	06:41	-	07:40	-	08:40	-
Hawkesbury River	-	-	05:53	06:50	-	07:49	-	08:49	-
Wondabyne	-	-	-	-	-	<b>a</b> 07:56	-	<b>a</b> 08:56	-
Woy Woy	-	-	06:05	07:02	-	08:02	08:30	09:02	09:30
Koolewong	-	-	06:08	07:05	-	08:05	-	09:05	-
Tascott	-	-	06:11	07:08	-	08:07	-	09:08	-
Point Clare	-	-	06:13	07:10	-	08:10	-	09:10	-
Gosford	04:21	05:26	06:18	07:13	07:21	08:14	08:39	09:14	09:39
Narara	04:26	05:31	06:23	-	07:26	08:19	-	09:19	-
Niagara Park	04:29	05:34	06:25	-	07:28	08:21	-	09:22	-
Lisarow	04:31	05:36	06:27	-	07:30	08:23	-	09:24	-
Ourimbah	04:34	05:39	06:30	-	07:33	08:26	-	09:27	-
Tuggerah	04:39	05:44	06:36	-	07:39	08:32	08:53	09:32	09:53
Wyong	04:43	05:47	06:39	-	07:42	08:35	08:56	09:36	09:56
Warnervale	04:47	05:51	06:43	-	07:46	-	-	-	10:00
Wyee	04:54	05:58	06:50	-	07:53	-	09:05	-	10:07
Morriset	05:01	06:05	06:57	-	07:59	-	09:12	-	10:14
Dora Creek	05:05	06:09	07:01	-	08:03	-	-	-	10:18
Awaba	05:14	06:18	07:10	-	08:11	-	-	-	10:27
Fassifern	05:19	06:23	07:15	-	08:16	-	09:27	-	10:31
Booragul	05:23	06:27	07:19	-	08:20	-	-	-	10:35
Teralba	05:25	06:29	07:21	-	08:22	-	-	-	10:37
Cockle Creek	05:29	06:33	07:25	-	08:26	-	-	-	10:40
Cardiff	05:33	06:37	07:29	-	08:30	-	09:38	-	10:44
Kotara	05:38	06:42	07:34	-	08:35	-	-	-	10:49
Adamstown	05:40	06:44	07:36	-	08:37	-	-	-	10:52
Broadmeadow	05:43	06:47	07:39	-	08:40	-	09:46	-	10:54
Hamilton	05:47	06:51	07:43	-	08:44	-	09:50	-	10:58
Newcastle Interchange	05:51	06:55	07:47	-	08:48	-	09:54	-	11:02

## Central Coast & Newcastle Line Work Day Departure Services

CCN

### Newcastle Interchange to Central via Strathfield or Gordon

T

Monday to Friday	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒
Newcastle Interchange	12:35	13:24	13:34	14:20	14:34	15:12	15:34	16:24	16:34
Hamilton	12:38	13:27	13:37	14:22	14:38	15:15	15:37	16:27	16:38
Broadmeadow	12:41	13:30	13:40	14:26	14:41	15:19	15:40	16:30	16:41
Adamstown	12:44	–	13:43	–	14:44	15:22	15:43	–	16:44
Kotara	12:47	–	13:46	–	14:47	15:25	15:46	–	16:47
Cardiff	12:51	13:38	13:50	14:33	14:51	15:29	15:50	16:38	16:51
Cockle Creek	12:55	–	13:54	–	14:55	15:34	15:54	–	16:55
Teralba	12:58	–	13:57	–	14:58	15:37	15:57	–	16:58
Booragul	13:00	–	13:59	–	15:00	15:39	15:59	–	17:00
Fassifern	13:05	13:49	14:04	14:43	15:05	15:44	16:04	16:49	17:05
Awaba	13:09	–	14:08	–	15:09	15:49	16:08	–	17:09
Dora Creek	13:18	–	14:17	–	15:18	15:58	16:17	–	17:18
Morrisset	13:23	14:05	14:22	14:59	15:23	16:02	16:22	17:05	17:23
Wyee	13:29	–	14:28	–	15:29	16:08	16:28	–	17:29
Warnervale	13:35	–	14:34	–	15:35	16:15	16:34	–	17:35
Wyang	13:41	14:20	14:40	15:15	15:41	16:20	16:40	17:20	17:41
Tuggerah	13:44	14:23	14:43	15:18	15:44	16:23	16:43	17:23	17:44
Ourimbah	13:49	–	14:48	–	15:49	–	16:48	–	17:49
Lisarow	13:52	–	14:51	–	15:52	–	16:51	–	17:52
Niagara Park	13:54	–	14:53	–	15:54	–	16:53	–	17:54
Narara	13:57	–	14:56	–	15:57	–	16:56	–	17:57
Gosford	14:02	14:37	15:01	15:33	16:02	16:38	17:01	17:38	18:02
Point Clare	14:05	–	15:04	15:36	16:05	–	17:04	–	18:05
Tascott	14:07	–	15:06	15:39	16:07	–	17:06	–	18:07
Koolewong	14:10	–	15:09	15:41	16:10	–	17:09	–	18:10
Woy Woy	14:13	14:45	15:12	15:45	16:13	16:46	17:12	17:46	18:13
Wondabyne	a14:20	–	a15:19	–	a16:20	–	a17:19	–	a18:20
Hawkesbury River	14:27	–	15:26	–	16:27	–	17:26	–	18:27
Cowan	14:36	–	15:35	–	16:36	–	17:35	–	18:36
Berowra	14:42	–	15:41	16:11	16:42	–	17:41	–	18:42
Asquith	–	15:18	–	–	–	–	–	–	–
Hornsby	14:52	15:21	15:51	16:21	16:52	17:21	17:52	18:23	18:52
Epping	15:05	15:33	16:03	16:33	17:03	17:33	18:03	18:35	19:05
Strathfield	e15:16	e15:44	e16:16	e16:46	e17:16	e17:46	e18:16	e18:46	e19:16
Central	i15:29	i15:58	i16:29	i16:59	i17:29	i17:59	i18:29	i18:59	i19:29

CCN

## Newcastle Interchange to Central via Strathfield or Gordon

T

Weekends & Public Holidays	⏰	⏰	⏰	⏰	⏰	⏰	⏰	⏰	⏰
Newcastle Interchange	11:43	-	12:53	-	13:43	-	14:53	-	15:43
Hamilton	11:45	-	12:55	-	13:45	-	14:55	-	15:45
Broadmeadow	11:49	-	12:59	-	13:49	-	14:59	-	15:49
Adamstown	11:52	-	-	-	13:52	-	-	-	15:52
Kotara	11:54	-	-	-	13:54	-	-	-	15:54
Cardiff	11:59	-	13:06	-	13:59	-	15:06	-	15:59
Cockle Creek	12:03	-	-	-	14:03	-	-	-	16:03
Teralba	12:06	-	-	-	14:06	-	-	-	16:06
Booragul	12:08	-	-	-	14:08	-	-	-	16:08
Fassifern	12:13	-	13:17	-	14:13	-	15:17	-	16:13
Awaba	12:17	-	-	-	14:17	-	-	-	16:17
Dora Creek	12:26	-	-	-	14:26	-	-	-	16:26
Morisset	12:31	-	13:32	-	14:31	-	15:32	-	16:31
Wye	12:37	-	13:39	-	14:37	-	15:39	-	16:37
Warnervale	12:44	-	-	-	14:44	-	-	-	16:44
Wyong	12:49	13:05	13:49	14:14	14:49	15:14	15:49	16:05	16:49
Tuggerah	12:52	13:08	13:52	14:17	14:52	15:17	15:52	16:08	16:52
Ourimbah	-	13:13	-	14:23	-	15:23	-	16:13	-
Lisarow	-	13:16	-	14:26	-	15:26	-	16:16	-
Niagara Park	-	13:19	-	14:28	-	15:28	-	16:19	-
Narara	-	13:21	-	14:30	-	15:30	-	16:21	-
Gosford	13:06	13:27	14:06	14:36	15:06	15:36	16:06	16:27	17:06
Point Clare	-	13:30	-	14:40	-	15:40	-	16:30	-
Tascott	-	13:32	-	14:42	-	15:42	-	16:32	-
Koolewong	-	13:35	-	14:45	-	15:45	-	16:35	-
Woy Woy	13:14	13:38	14:14	14:48	15:14	15:48	16:14	16:38	17:14
Wondabyne	-	a13:45	-	a14:54	-	a15:54	-	a16:45	-
Hawkesbury River	-	13:53	-	15:02	-	16:02	-	16:53	-
Cowan	-	14:02	-	15:12	-	16:12	-	17:02	-
Berowra	-	14:09	-	15:18	-	16:18	-	17:09	-
Hornsby	13:49	14:19	14:49	15:29	15:49	16:29	16:49	17:19	17:49
Epping	14:02	14:32	15:02	15:43	16:02	16:43	17:02	17:32	18:02
Strathfield	e14:16	e14:46	e15:16	e15:53	e16:16	e16:53	e17:16	e17:46	e18:16
Central	i14:29	i14:59	i15:29	i16:06	i16:29	i17:06	i17:29	i17:59	i18:29

## Hunter Line Work Day Arrival Services

HUN

# Scone or Dungog to Newcastle Interchange

T

Valid from: 01 Jan 2023	Creation date: 13 Feb 2024 NOTE: Information is correct on date of download.								
<b>Monday to Friday</b>	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒
Scone	-	-	-	-	-	-	-	06:07	-
Aberdeen	-	-	-	-	-	-	-	06:16	-
Muswellbrook	-	-	-	-	-	-	-	06:25	-
Singleton	-	-	-	-	-	-	-	06:56	-
Branxton	-	-	-	-	-	-	-	07:10	-
Greta	-	-	-	-	-	-	-	07:14	-
Lochinvar	-	-	-	-	-	-	-	07:20	-
<b>Dungog</b>	-	-	-	-	-	-	-	-	06:48
Wirragulla	-	-	-	-	-	-	-	-	a06:54
Wallerobba	-	-	-	-	-	-	-	-	a07:00
Hilldale	-	-	-	-	-	-	-	-	a07:05
Martins Creek	-	-	-	-	-	-	-	-	07:11
Paterson	-	-	-	-	-	-	-	-	07:16
Mindaribba	-	-	-	-	-	-	-	-	a07:24
Telarah	03:37	04:22	05:12	05:37	06:10	06:37	07:10	-	07:32
Maitland	03:40	04:25	05:15	05:40	06:13	06:40	07:13	07:29	07:35
High Street	03:42	04:27	-	05:42	-	06:42	-	-	-
East Maitland	03:45	04:30	-	05:45	-	06:45	-	-	-
Victoria Street	03:47	04:32	05:19	05:47	06:17	06:47	07:17	07:33	07:39
Metford	03:50	04:35	05:22	05:50	06:20	06:50	07:20	07:36	07:42
Thornton	03:53	04:38	05:25	05:53	06:23	06:53	07:23	07:39	07:45
Beresfield	03:56	04:41	05:28	05:56	06:26	06:56	07:26	07:42	07:48
Tarro	03:58	04:43	-	05:58	-	06:58	-	-	-
Hexham	04:01	04:46	-	06:01	-	07:01	-	-	-
Sandgate	04:05	04:50	-	06:05	-	07:05	-	-	-
Warabrook	04:07	04:52	05:36	06:07	06:34	07:07	07:34	07:50	07:56
Waratah	04:10	04:55	05:39	06:10	06:37	07:10	07:37	07:53	07:59
Hamilton	04:14	04:59	05:43	06:14	06:42	07:14	07:41	07:57	08:03
<b>Newcastle Interchange</b>	04:18	05:02	05:47	06:18	06:47	07:18	07:45	08:01	08:07



## Score or Dungog to Newcastle Interchange



Weekends & Public Holidays	△	△	△	△	△	△	△	△	△
Score	-	-	-	-	06:38	-	-	-	-
Aberdeen	-	-	-	-	06:47	-	-	-	-
Muswellbrook	-	-	-	-	06:56	-	-	-	-
Singleton	-	-	-	-	07:27	-	-	-	-
Branxton	-	-	-	-	07:41	-	-	-	-
Greta	-	-	-	-	07:45	-	-	-	-
Lochinvar	-	-	-	-	07:51	-	-	-	-
Dungog	-	-	-	-	-	-	07:49	-	-
Wirragulla	-	-	-	-	-	-	a07:55	-	-
Wallarobba	-	-	-	-	-	-	a08:00	-	-
Hilldale	-	-	-	-	-	-	a08:06	-	-
Martins Creek	-	-	-	-	-	-	08:12	-	-
Paterson	-	-	-	-	-	-	08:17	-	-
Mindaribba	-	-	-	-	-	-	a08:25	-	-
Telarah	02:31	03:31	06:01	06:59	-	08:01	08:33	09:01	10:01
Maitland	02:34	03:34	06:04	07:02	08:00	08:04	08:36	09:04	10:04
High Street	02:36	03:36	06:06	07:04	-	08:06	-	09:06	10:06
East Maitland	02:39	03:39	06:09	07:07	-	08:09	-	09:09	10:09
Victoria Street	02:41	03:41	06:11	07:09	08:04	08:11	08:40	09:11	10:11
Metford	02:44	03:44	06:14	07:12	08:07	08:14	08:43	09:14	10:14
Thornton	02:47	03:47	06:17	07:15	08:10	08:17	08:46	09:17	10:17
Beresfield	02:50	03:50	06:20	07:18	08:13	08:20	08:49	09:20	10:20
Tarro	02:52	03:52	06:22	07:20	-	08:22	-	09:22	10:22
Hexham	02:55	03:55	06:25	07:23	-	08:25	-	09:25	10:25
Sandgate	02:59	03:59	06:29	07:27	-	08:29	-	09:29	10:29
Warabrook	03:01	04:01	06:31	07:29	08:21	08:31	08:57	09:31	10:31
Waratah	03:04	04:04	06:34	07:32	08:24	08:34	09:00	09:34	10:34
Hamilton	03:08	04:08	06:38	07:36	08:28	08:38	09:04	09:38	10:38
Newcastle Interchange	03:12	04:12	06:42	07:40	08:32	08:42	09:08	09:42	10:42

## Hunter Line Work Day Departure Services

HUN

# Newcastle Interchange to Scone or Dungog

T

Monday to Friday	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒
Newcastle Interchange	15:25	15:48	16:14	16:29	16:44	17:12	17:29	17:49	17:59
Hamilton	15:27	15:50	16:16	16:31	16:48	17:14	17:31	17:51	18:02
Waratah	15:32	15:55	16:21	16:36	16:51	17:19	17:36	17:56	18:06
Warabrook	15:35	15:58	16:24	16:39	16:54	17:22	17:39	17:59	18:09
Sandgate	-	16:00	-	-	16:57	17:24	-	18:01	-
Hexham	-	16:04	-	-	17:01	17:28	-	18:05	-
Tarro	-	16:07	-	-	17:04	17:31	-	18:08	-
Beresfield	15:42	16:09	16:31	16:46	17:06	17:33	17:46	18:10	18:16
Thornton	15:45	16:12	16:34	16:49	17:09	17:36	17:49	18:13	18:19
Metford	15:48	16:15	16:37	16:52	17:11	17:39	17:52	18:16	18:22
Victoria Street	15:52	16:18	16:41	16:56	17:14	17:42	17:56	18:19	18:26
East Maitland	-	16:20	-	-	17:16	17:44	-	18:21	-
High Street	-	16:23	-	-	17:19	17:47	-	18:24	-
Maitland	15:57	16:26	16:46	17:02	17:22	17:50	18:01	18:27	18:32
Telarah	16:00	16:29	16:49	-	17:25	-	18:04	18:30	-
Mindaribba	a16:08	-	-	-	-	-	a18:12	-	-
Paterson	16:16	-	-	-	-	-	18:20	-	-
Martins Creek	a16:20	-	-	-	-	-	a18:24	-	-
Hilldale	a16:27	-	-	-	-	-	a18:31	-	-
Wallarobba	a16:32	-	-	-	-	-	a18:37	-	-
Wirragulla	a16:38	-	-	-	-	-	a18:43	-	-
Dungog	16:45	-	-	-	-	-	18:50	-	-
Lochinvar	-	-	-	17:10	-	-	-	-	18:40
Greta	-	-	-	17:15	-	-	-	-	18:45
Branxton	-	-	-	17:19	-	-	-	-	18:49
Singleton	-	-	-	17:34	-	-	-	-	19:04
Muswellbrook	-	-	-	18:05	-	-	-	-	19:35
Aberdeen	-	-	-	18:14	-	-	-	-	19:44
Scone	-	-	-	18:24	-	-	-	-	19:54

Monday to Friday	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒	🕒
Newcastle Interchange	18:20	18:48	19:27	19:48	20:24	20:29	20:48	21:18	22:18
Hamilton	18:22	18:54	19:31	19:50	20:26	20:31	20:50	21:20	22:20
Waratah	18:27	18:58	19:36	19:55	20:31	20:36	20:55	21:25	22:25
Warabrook	18:30	19:01	19:39	19:58	20:34	20:39	20:58	21:28	22:28
Sandgate	-	19:04	-	20:00	-	-	21:00	21:30	22:30
Hexham	-	19:08	-	20:04	-	-	21:04	21:35	22:34
Tarro	-	19:11	-	20:07	-	-	21:07	21:38	22:37
Beresfield	18:37	19:13	19:46	20:09	20:41	20:46	21:09	21:40	22:39
Thornton	18:40	19:15	19:49	20:12	20:44	20:49	21:12	21:43	22:42
Metford	18:43	19:18	19:52	20:15	20:47	20:52	21:15	21:46	22:45
Victoria Street	18:47	19:21	19:56	20:18	20:50	20:56	21:18	21:49	22:48
East Maitland	-	19:23	-	20:20	-	-	21:20	21:51	22:50
High Street	-	19:26	-	20:23	-	-	21:23	21:54	22:53
Maitland	18:52	19:29	20:01	20:26	20:56	21:01	21:26	21:57	22:56
Telarah	18:55	19:32	-	20:29	-	21:04	21:29	21:59	22:59
Lochinvar	-	-	-	-	21:05	-	-	-	-
Greta	-	-	-	-	21:10	-	-	-	-
Branxton	-	-	-	-	21:14	-	-	-	-
Singleton	-	-	-	-	21:28	-	-	-	-



HUN

## Newcastle Interchange to Scone or Dungog

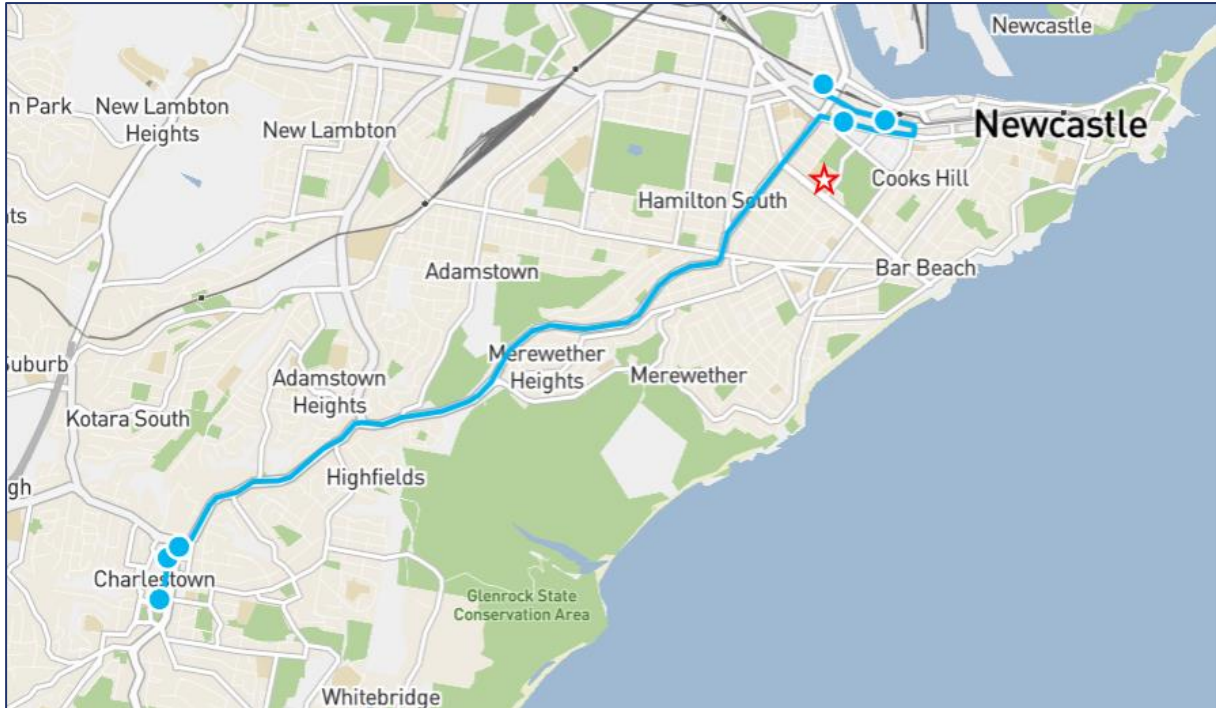
T

Weekends & Public Holidays	△	△	△	△	△	△	△	△	△
Newcastle Interchange	11:53	12:59	13:11	13:48	14:24	14:59	15:59	16:41	17:29
Hamilton	11:55	13:01	13:13	13:51	14:26	15:02	16:01	16:43	17:31
Waratah	12:00	13:06	13:18	13:55	14:30	15:06	16:06	16:48	17:36
Warabrook	12:03	13:09	13:21	13:58	14:33	15:09	16:09	16:51	17:39
Sandgate	12:05	13:11	-	14:00	-	15:11	16:11	16:53	-
Hexham	12:09	13:15	-	14:04	-	15:15	16:15	16:57	-
Tarro	12:12	13:18	-	14:07	-	15:18	16:18	17:00	-
Beresfield	12:14	13:20	13:28	14:09	14:41	15:20	16:20	17:02	17:46
Thornton	12:17	13:23	13:31	14:12	14:44	15:23	16:23	17:05	17:49
Metford	12:20	13:26	13:34	14:15	14:47	15:26	16:26	17:08	17:52
Victoria Street	12:23	13:29	13:38	14:18	14:50	15:29	16:29	17:11	17:56
East Maitland	12:25	13:31	-	14:20	-	15:31	16:31	17:13	-
High Street	12:28	13:34	-	14:23	-	15:34	16:34	17:16	-
Maitland	12:31	13:37	13:43	14:26	14:56	15:37	16:37	17:19	18:01
Telarah	12:34	-	13:46	14:29	-	15:40	16:40	17:22	18:04
Mindaribba	-	-	a13:54	-	-	-	-	-	a18:12
Paterson	-	-	14:02	-	-	-	-	-	18:20
Martins Creek	-	-	14:07	-	-	-	-	-	18:25
Hilldale	-	-	a14:13	-	-	-	-	-	a18:31
Wallarobba	-	-	a14:18	-	-	-	-	-	a18:36
Wirragulla	-	-	a14:24	-	-	-	-	-	a18:42
Dungog	-	-	14:31	-	-	-	-	-	18:49
Lochinvar	-	-	-	-	15:04	-	-	-	-
Greta	-	-	-	-	15:10	-	-	-	-
Branxton	-	-	-	-	15:14	-	-	-	-
Singleton	-	-	-	-	15:28	-	-	-	-

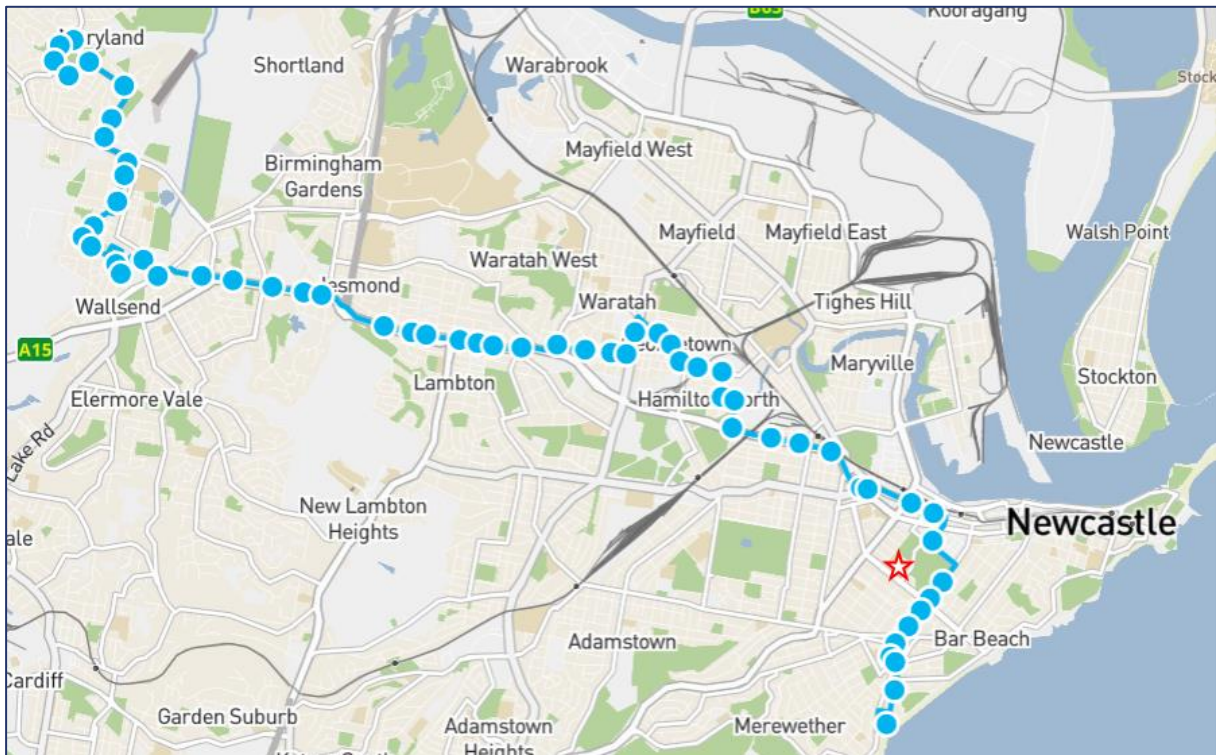
## Attachment B: Bus Routes

Source All: TfNSW

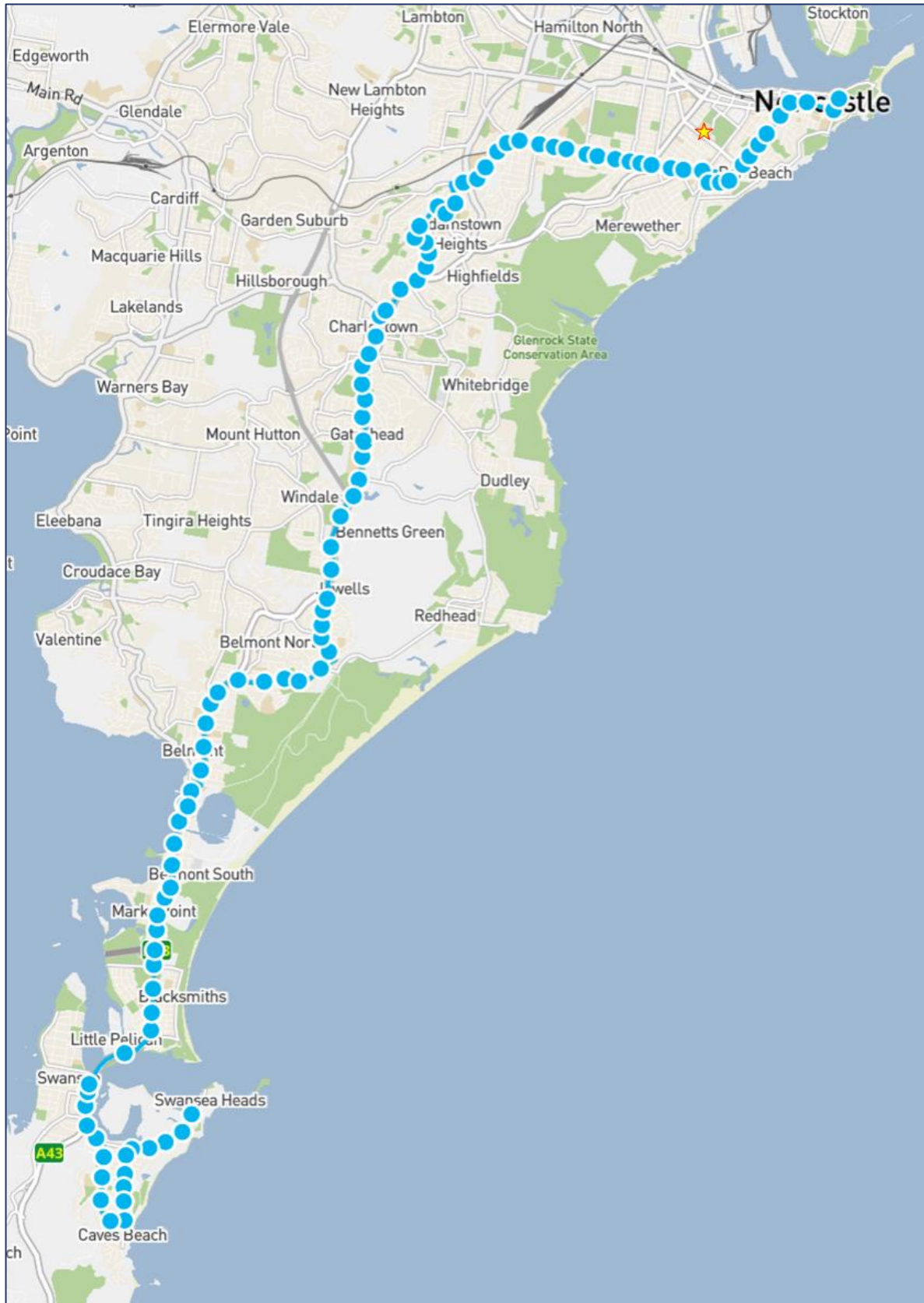
### Bus Route 10X: Newcastle - Charlestown



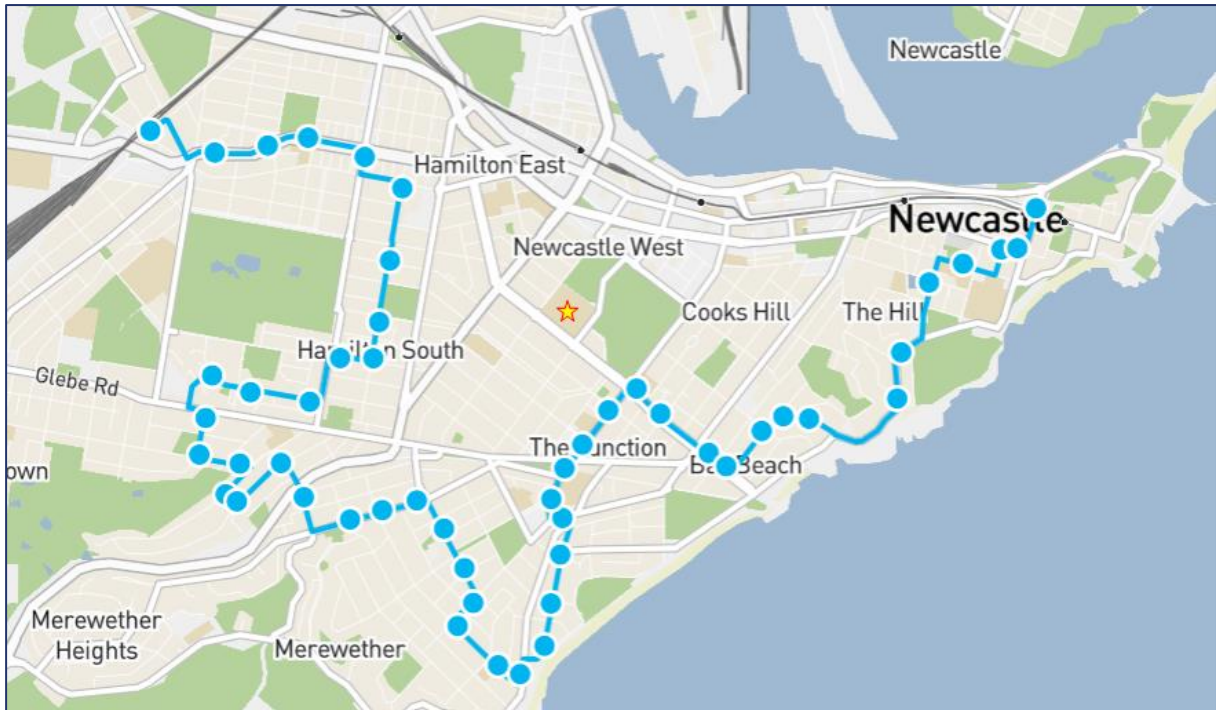
### Bus Route 12: Maryland – Merewether via Wallsend



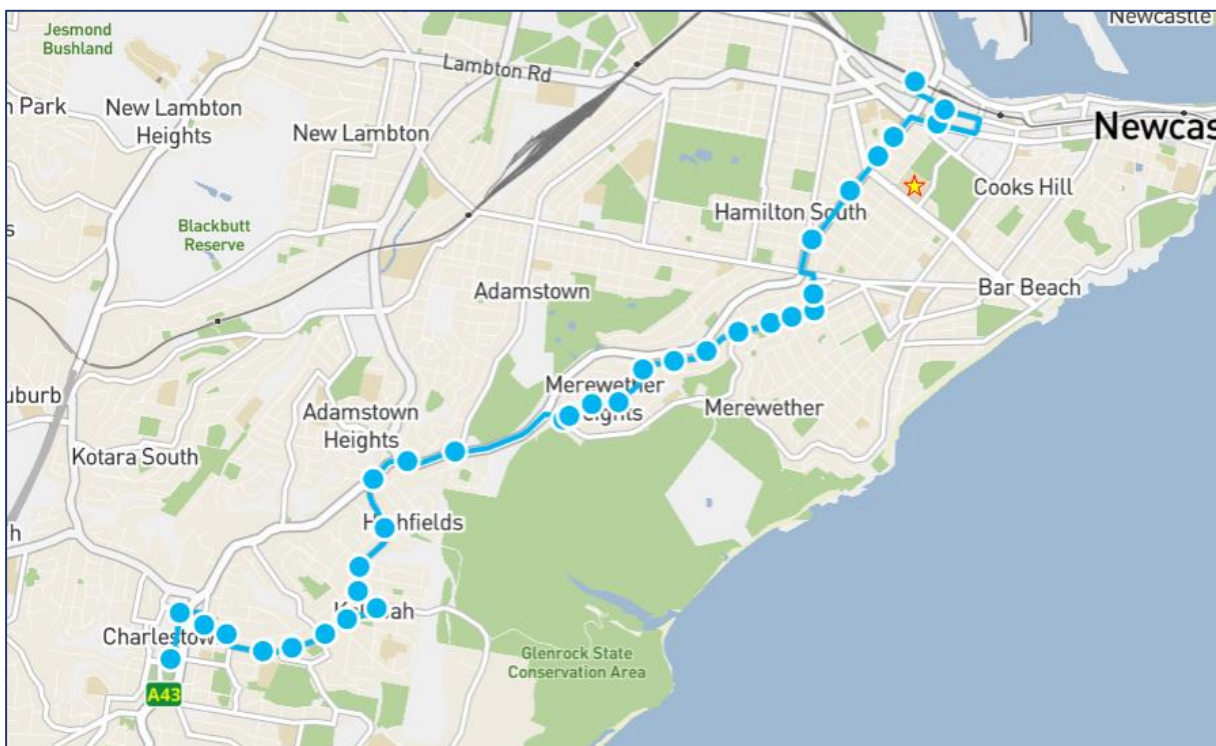
### Bus Route 14: Newcastle – Swansea Head



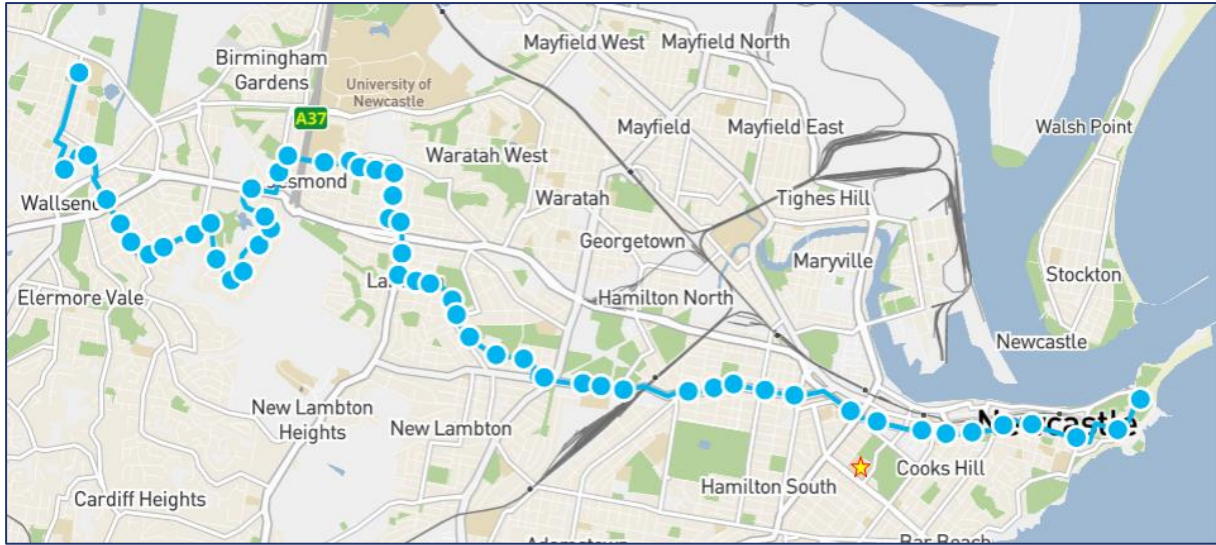
### Bus Routes 21: Newcastle – Broadmeadow via Merewether



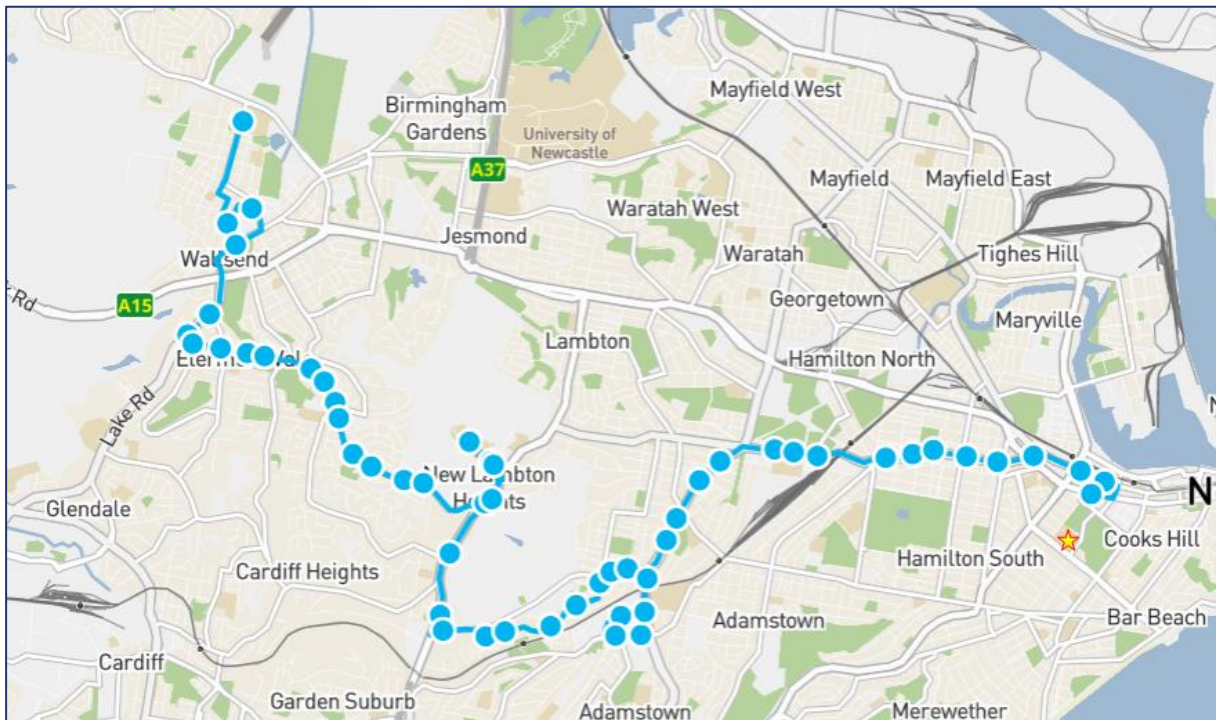
### Bus Route 22: Newcastle – Charlestown via Adamstown Heights



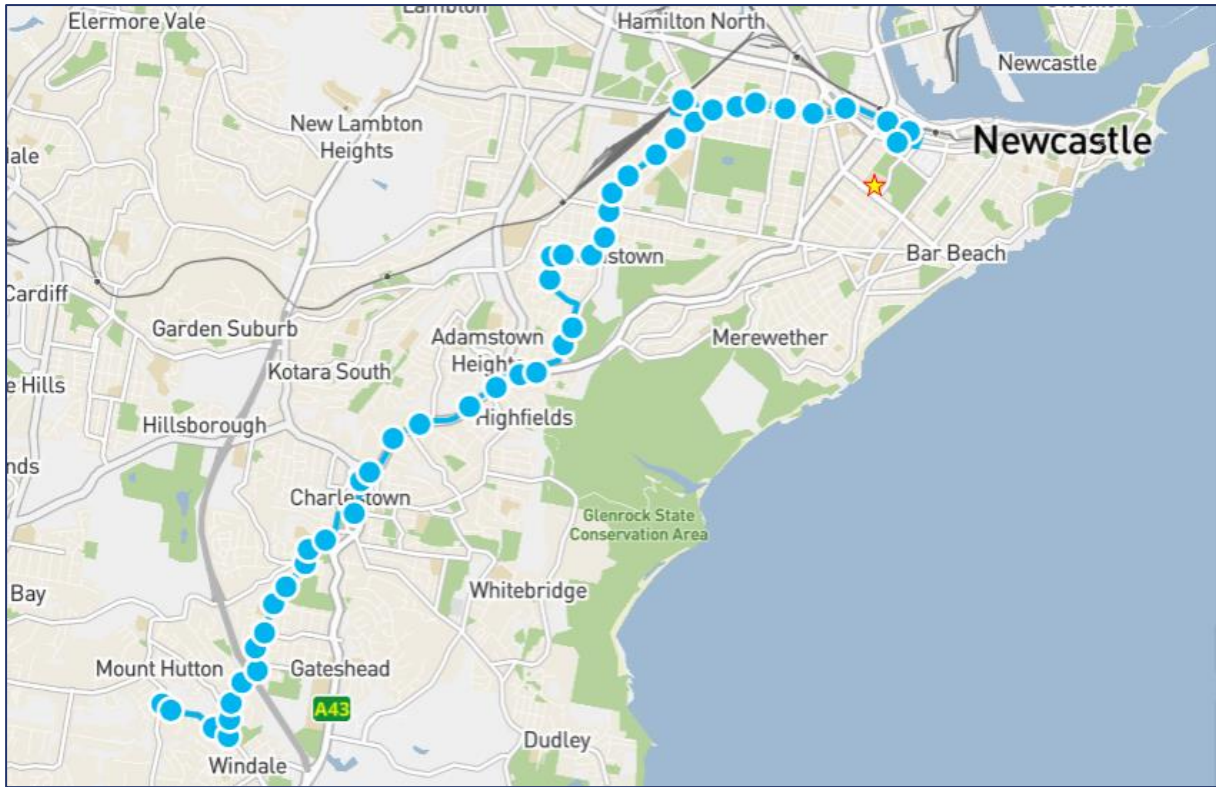
### Bus Route 23: Newcastle – Wallsend via Jesmond



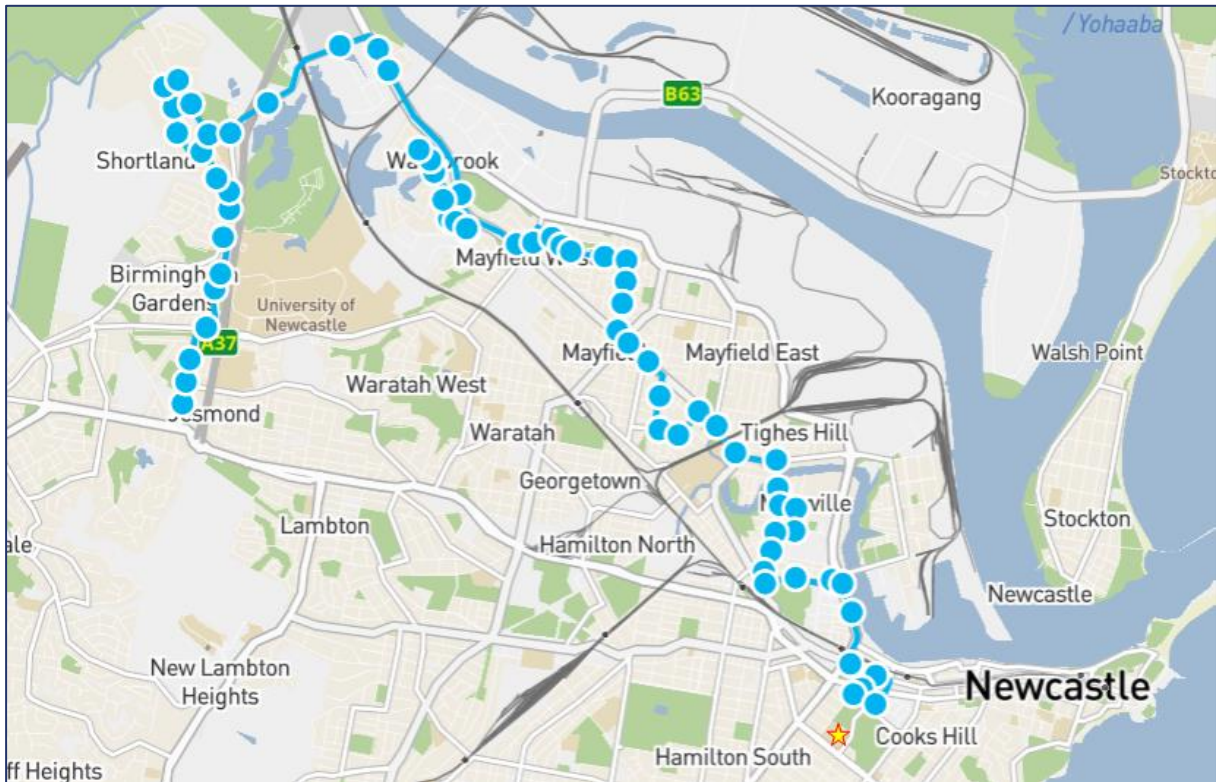
### Bus Route 26: Newcastle – Wallsend via Kotara



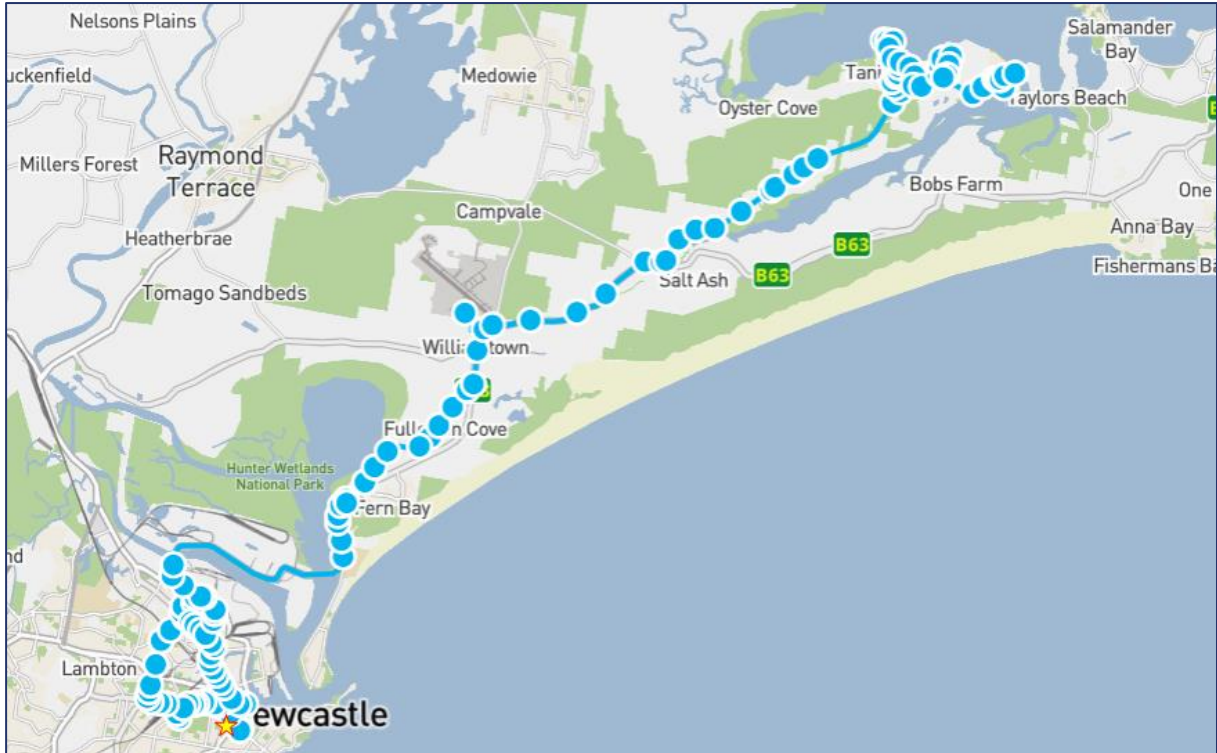
Bus Route 28: Newcastle – Mount Hutton via Broadmeadow



Bus Route 47: Jesmond to Marketown via Warabrook



### Bus Route 138: Newcastle to Lemon Tree Passage



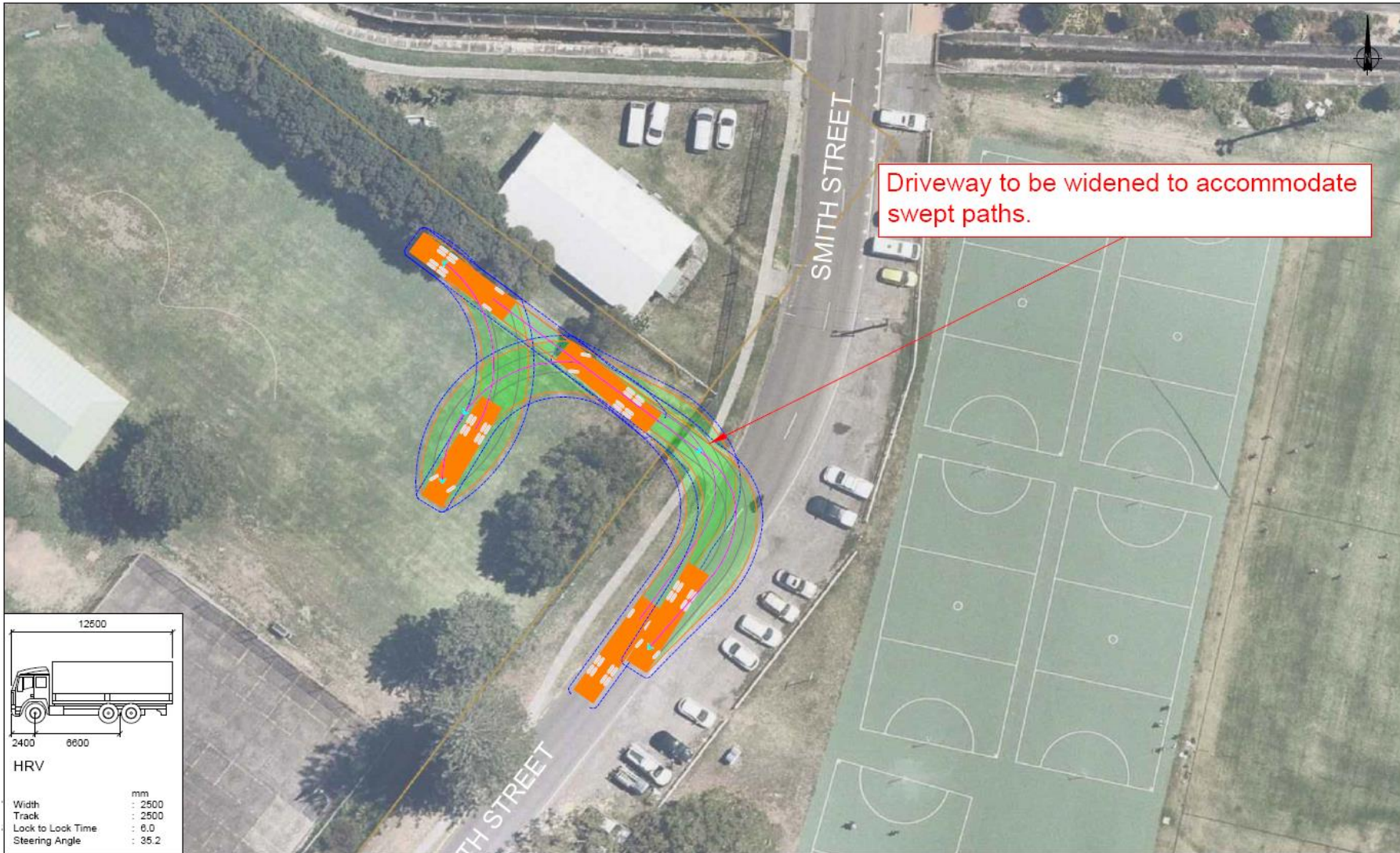


## Attachment C: Light Rail Route



## Appendix F: Swept Path Figures

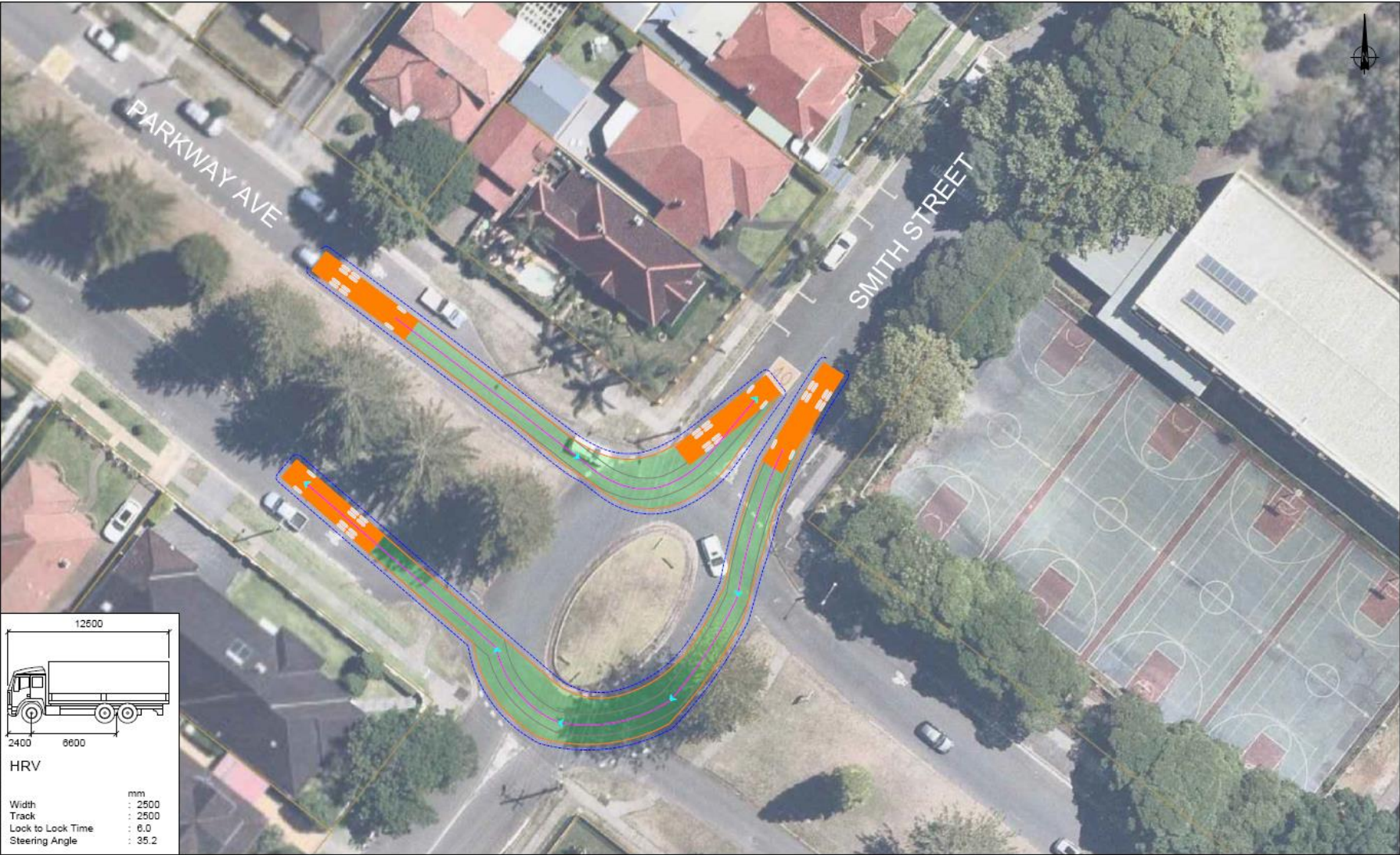
Heavy Rigid Vehicle Access Smith Street Construction Driveway 1 and Internal



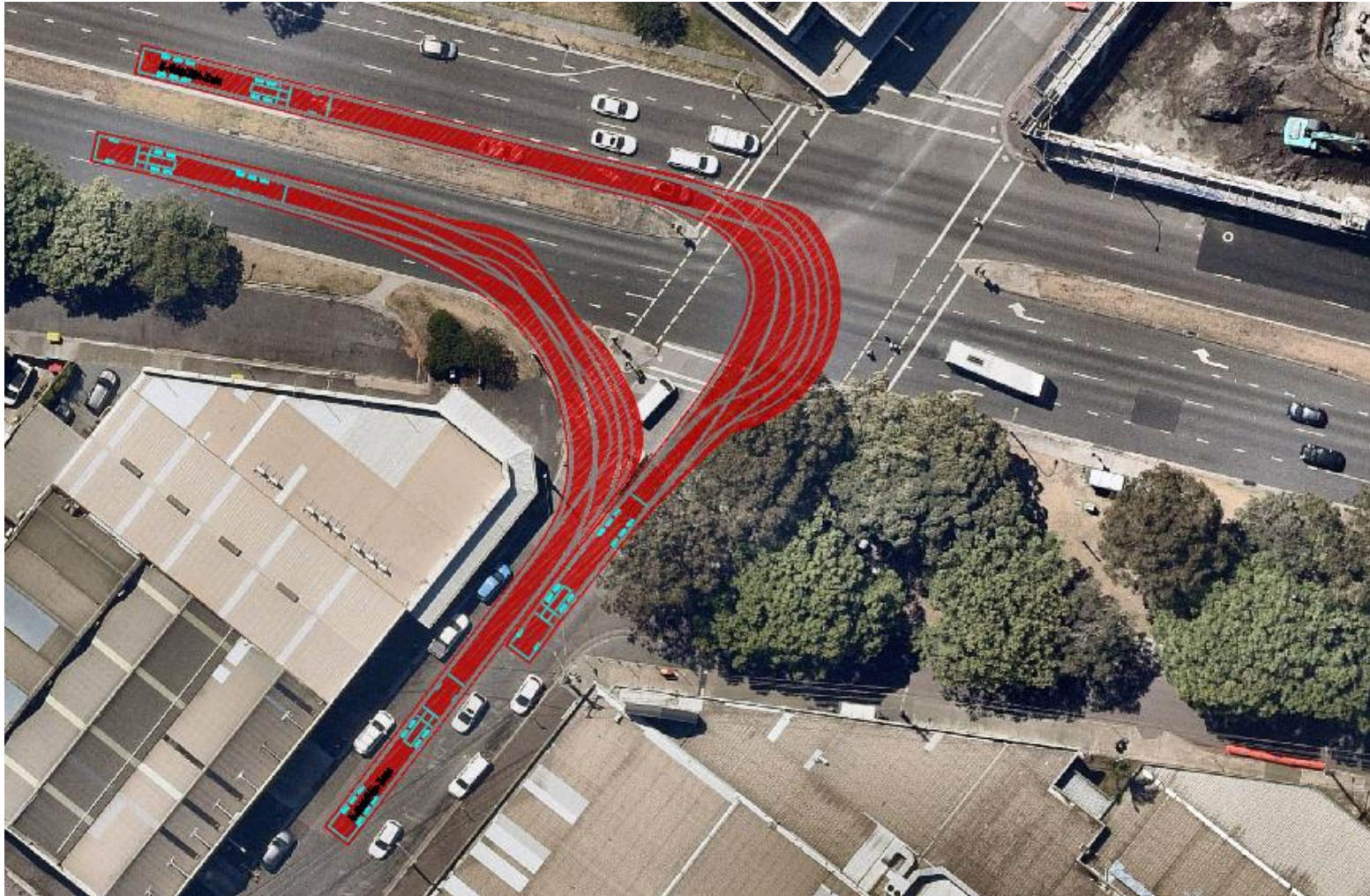
Heavy Rigid Vehicle Access National Park Street Construction Driveway 2 and Internal



Heavy Rigid Vehicle Access Intersection of Parkway Avenue & Smith Street

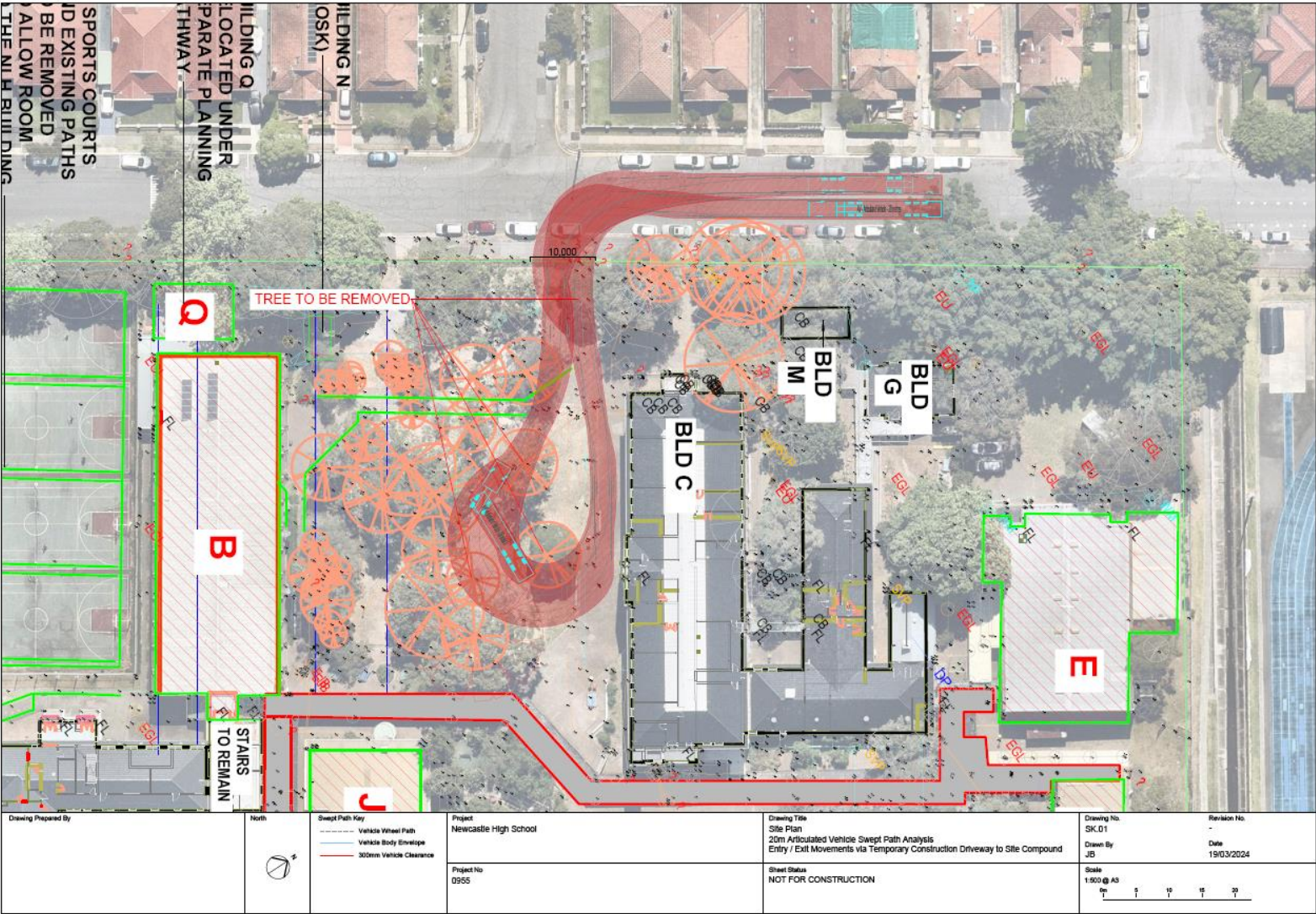


## Articulated Vehicle Access King Street & National Park Street



Source: PDC Consultants

# Articulated Vehicle Access National Park Street Construction Driveway 2 and Internal



Source: PDC Consultants



## Appendix G: Newcastle High School Redevelopment CTPMSP v1 and v6

As provided to Council and TfNSW for consultation, CTPMSP v1 is provided as a separate document.

As provided to DPE, Council and TfNSW for review, CTPMSP v6 is provided as a separate document.