eukai
Transport Advisory

23 July 2024

Iglu Pty Ltd
Level 4, 69 York Street
SYDNEY NSW 2000

Attention: Tim Manning (Head of Development)

Dear Tim,

Proposed Student Accommodation Development
215B Anzac Parade, Kensington (UNSW Car Park site)
Review of NIDA Building Vehicle Access Arrangements

1 INTRODUCTION

1.1 Background

It is understood that planning approval is currently being sought for a proposed student accommodation development located at 215B Anzac Parade, Kensington, NSW.

The development site (the site) is located to the immediate south of the existing National Institute of Dramatic Art (NIDA) building and is currently operated as a car park for The University of NSW (UNSW). The site includes a carriageway easement of 6.875m width along its northern boundary in favour of NIDA which connects to Anzac Parade in the northeast corner of the site. The connection to Anzac Parade is positioned directly opposite a tram stop constructed as part of the Sydney Light Rail project.

Advice provided to Eukai indicates that the proposed development will entail:

- The construction of a building containing 881 student accommodation units, plus 1,197sqm GFA retail and 2,144sqm of other UNSW area.
- The provision of 250 basement car parking spaces to be allocated for UNSW (220 car spaces), retail staff (5 car spaces), and IGLU student accommodation staff (5 car spaces). Vehicle access to this basement car parking is to be provided via Day Avenue to the south of the site.
- The widening of the access road at the northern end of the site to 10.0m (including the retention of the 6.875m carriageway easement) to continue to facilitate vehicle access to NIDA. To enable trucks accessing NIDA to enter and exit in a forward direction, I also understand that the ground level of the proposed development will provide a turnaround area for vehicles of a length up to an including 12.5m long Heavy Rigid Vehicles (HRV)[1].
- The provision of other transport infrastructure including bicycle parking spaces for residents and staff, end-of-trip lockers, and unisex showers / change rooms

[1] I understand that the carriageway easement currently does not provide this turnaround area and that trucks accessing NIDA have simply relied upon use of the existing car park to either turnaround on that part of the site or traverse through it to access Day Avenue to the south.

I understand that Ken Hollyoak from The Transport Planning Partnership (TTPP) has been providing traffic engineering and transport planning advice on the project for several years and has prepared various reports and letters assessing the transport impacts of the proposed development.

1.2 Council Proposed Conditions

Advice provided to Eukai indicates that Council has proposed the following conditions in relation to the design of the crossover to Anzac Parade that serves the access road to the north of the site:

1. *"The owner/developer must meet the full cost for a Council approved contractor to:*
    a) *Widen the existing concrete vehicular crossing and layback at kerb serving the subject site in Anzac Parade. The extent of the widened crossing shall be based on turning manoeuvres submitted with the Development Application and the reconstructed crossing shall be to the satisfaction of Council and Transport for New South Wales (TFNSW) to Council's specifications and requirements.*
    b) *Reconstruct a full width footpath along the Anzac Parade site frontage, in accordance with Council's Urban Design Guidelines for Kensington Commercial Centre.*
2. *..."*

1.3 Purpose of this Review

In July 2024, I was requested by Iglu Pty Ltd to undertake an independent peer review of the above condition, as well as related documentation provided by TTPP, to:

1. Form my own opinions on whether the conditions are reasonable, and
2. Provide guidance on whether I expect the proposed design will be approved post issue of the DA.

Prior to being approached to undertake this peer review, I note that I had no prior involvement with the proposed development and nor had I had any past engagement with Iglu Pty Ltd on this or any other of its projects. Notwithstanding this, I note that I previously worked with Ken Hollyoak when we were both employed at GTA Consultants (now Stantec) in 2015 and 2016. During this period, I was employed as the NSW Regional Head at GTA and worked on and managed teams providing transport advice on a range of Sydney land use and transport infrastructure projects. Of particular relevance to this peer review, I note that these projects included the Sydney Light Rail project.

For reference, I attach a copy of my CV to this letter at Appendix A. This CV confirms that I have provided advice on a range of significant development projects over the past 10 years in Sydney and Melbourne, and have regularly presented associated transport evidence at tribunal, panel and court hearings.

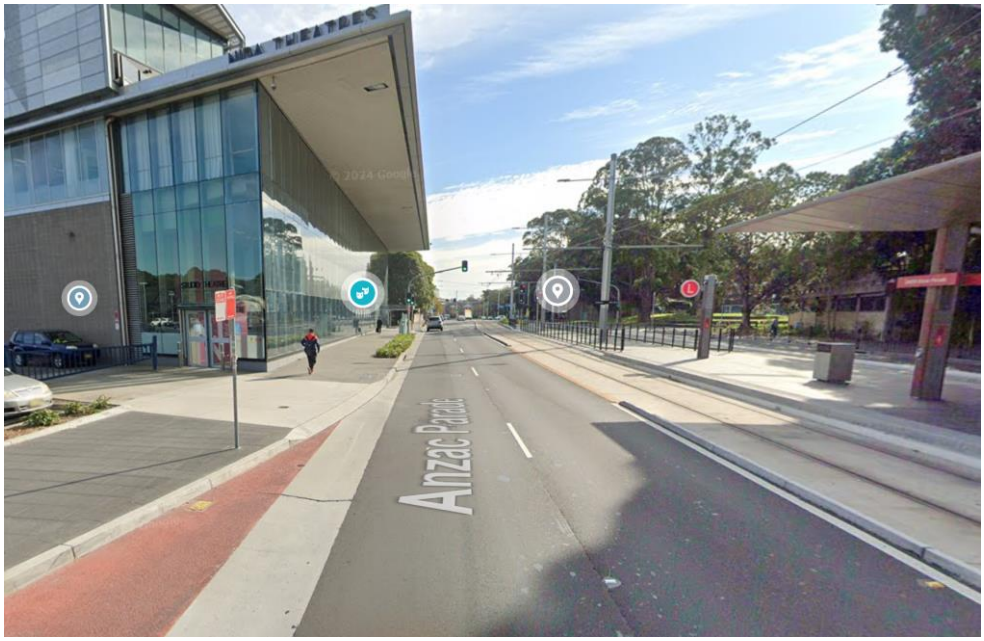
1.4 References

In undertaking this review, I have undertaken a virtual inspection of the site and its surrounds, reviewed relevant background TTPP reports including the TTPP letter dated 23 July 2024 as referenced below, and consulted with a former colleague who previously led GTA's work on the Sydney Light Rail project. (I note that I personally did not work on the Sydney Light Rail project).

2 EXISTING CONDITIONS

In the immediate vicinity of the site, Anzac Parade is configured as a divided carriageway with two traffic lanes in either direction which are separated by the tram lanes and the central tram stop. The existing cross-section of this road is shown in Figure 2.1.

Figure 2.1: Existing Anzac Parade Cross-section (Google Street View image, 2020)



I note that the existing cross-section of this road was very different prior to the construction of the Sydney Light Rail project. As shown in Figure 2.2, Anzac Parade was previously configured with three lanes (including a bus and car parking lane, coloured in the figure below) in each direction.

Figure 2.2: Previous Anzac Parade Cross-section (Google Street View image, 2015)

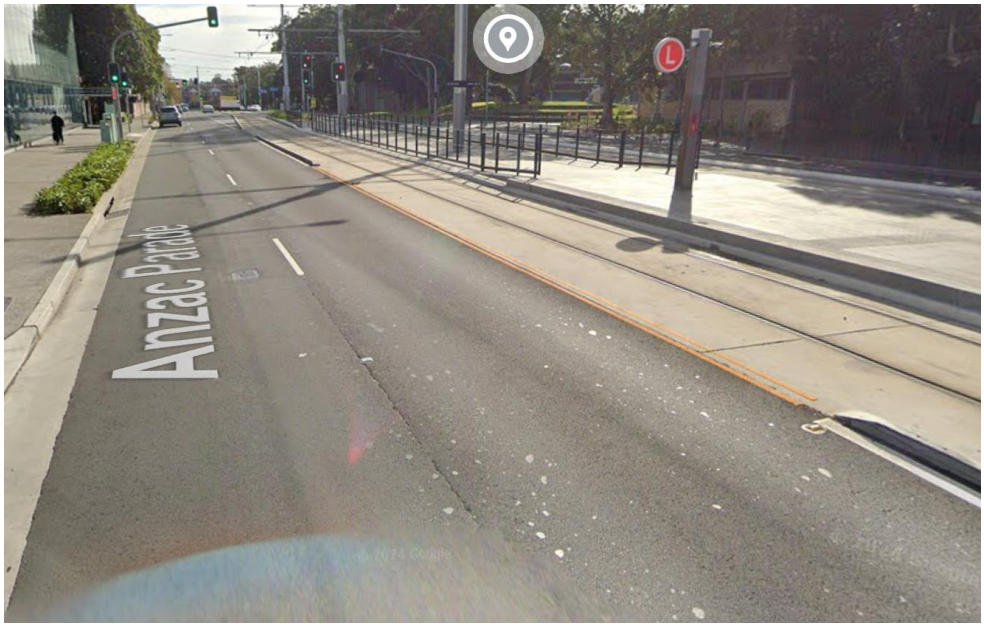
From a site accessibility perspective, the narrowing of Anzac Parade from three to two northbound lanes results in the left turn out of the site being relatively more difficult than it would have been under the previous three northbound lane configuration. Based on my discussions with former colleagues, I expect this impact would have been assessed at the time of the planning for the Sydney Light Rail project and the following options to mitigate it would have likely been considered:

- Alter the design of the light rail project,
- Widen the crossover to Anzac Parade to better facilitate the restricted swept paths, and/or
- Limit the size of vehicles accessing the NIDA site.

Following a review of the design that has been constructed (as shown in Figure 2.1), I consider that it is evident that the preferred solution was to alter the design of the light rail project by removing a short section of kerbing that separates the northbound traffic and tram lanes to allow the swept path for trucks exiting the site to cross onto the tram lanes before straightening into the normal traffic lane. The section of 'missing' kerbing is shown clearly in Figure 2.3.

I note that this type of treatment is common on the light rail route, particularly at intersections, where vehicle swept paths are more likely to cross over the tram tracks for a short distance. I also cannot see any other reason that would have resulted in the removal of this kerbing at this particular location other than to better accommodate truck swept paths from the site.

Figure 2.3: Existing Missing Section of Kerbing Separator on Anzac Parade



3 PEER REVIEW COMMENTARY

I have been provided a copy of the TTPP letter dated 23 July 2024 which was prepared to examine the implications of the Council condition outlined above. The TTPP letter contains three swept path plans, which are discussed below and also reproduced in Appendix B.

FIGURE 1 – 12.5M HEAVY RIGID VEHICLE - EXISTING ACCESS ARRANGEMENT

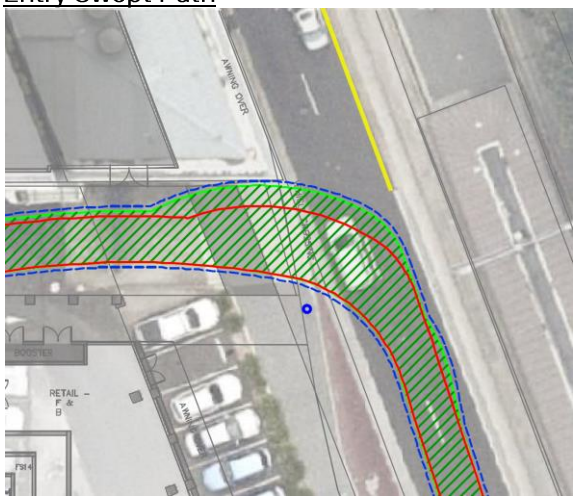
The swept paths for this plan at the crossover to Anzac Parade are reproduced in Figure 3.1.

The swept paths show that the 12.5m long HRV is able to adequately enter and exit the crossover, without any modifications to the crossover width, noting that the exit swept path relies on the use of the northbound tram lane. (In my view, the exit swept path also confirms the discussion above that the break in the kerbing section between the traffic and tram lanes has been created to facilitate this swept path).

The key advantage of this option is that it requires no modification to the crossover width and therefore maximises the area allocated as footpath for pedestrians. One consideration for this option though is that it requires large trucks to exit over the northbound tram lane and therefore increases the potential for a truck – tram collision. I expect this potential to be low, however, given sight lines between the two vehicles will be excellent and the frequency of simultaneous truck and tram movements will be very low.

Figure 3.1: Swept Paths for TTPP "Existing Access Arrangement" Plan

Entry Swept Path



Exit Swept Path

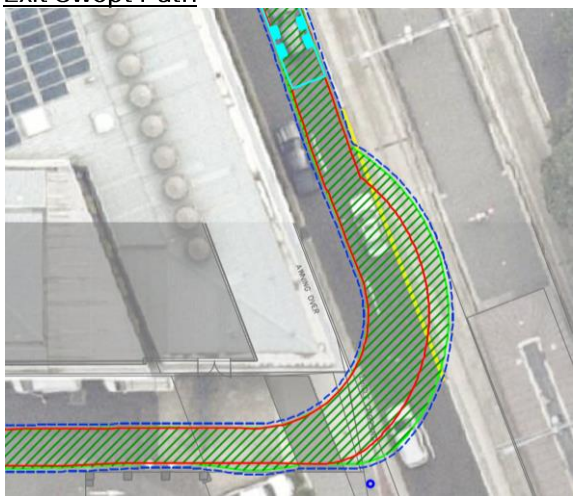


FIGURE 2 – 12.5M HEAVY RIGID VEHICLE - ALTERNATIVE ACCESS OPTION 1

The swept paths for this plan at the crossover to Anzac Parade are reproduced in Figure 3.2.

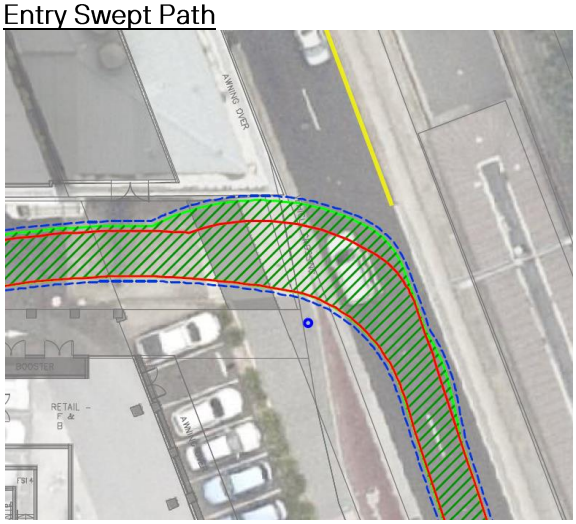
The swept paths show that the 12.5m long HRV would be able to adequately enter and exit the crossover without crossing over the northbound tram lane (should this swept path no longer be considered to be acceptable) if the existing crossover was widened to the north.

For reference, I have included an indicative design for this crossover widening in Figure 3.3, which shows my expectation that it would likely be modest in size and not materially impact the area of footpath and certainly not extend as far north as the existing planting area or side-entry drainage pit.

The key advantage of this option is that it avoids potential truck – tram collisions given the swept path does not extend onto the northbound tram lanes. However, it also results in a reduction in the area of footpath (although this impact is expected to be minor). I do not expect that this design would otherwise impact pedestrians, including their safety, given the glass façade of the corner of NIDA provides good sight lines between exiting vehicles / trucks and pedestrians.

Figure 3.2: Swept Paths for TTPP "Alternative Access Option 1" Plan

Entry Swept Path



Exit Swept Path

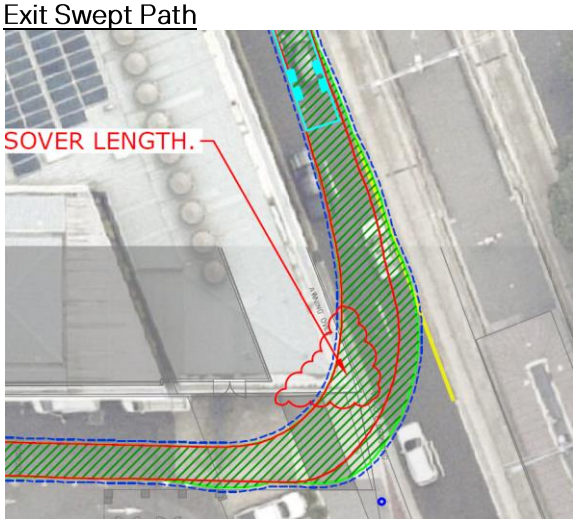


Figure 3.3: Indicative Design for Widening of Crossover to North ("Alternative Access Option 1")

FIGURE 3 – 12.5M HEAVY RIGID VEHICLE - ALTERNATIVE ACCESS OPTION 2

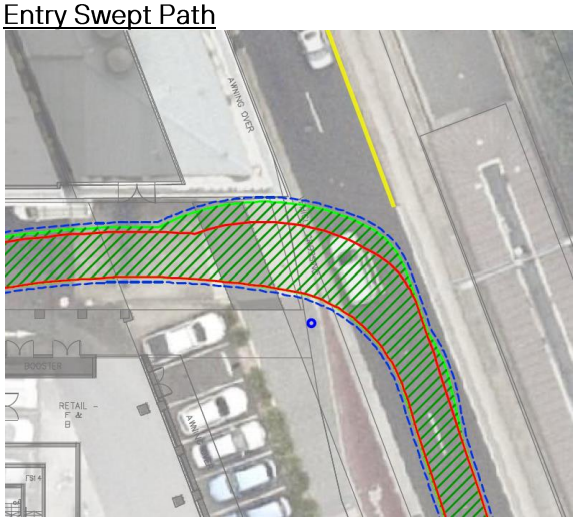
The swept paths for this plan at the crossover to Anzac Parade are reproduced in Figure 3.4.

The swept paths show an alternative option to enable the 12.5m long HRV to be able to adequately enter and exit the crossover without crossing over the northbound tram lane (should this swept path no longer be considered to be acceptable) if the existing crossover was widened to both the north and south.

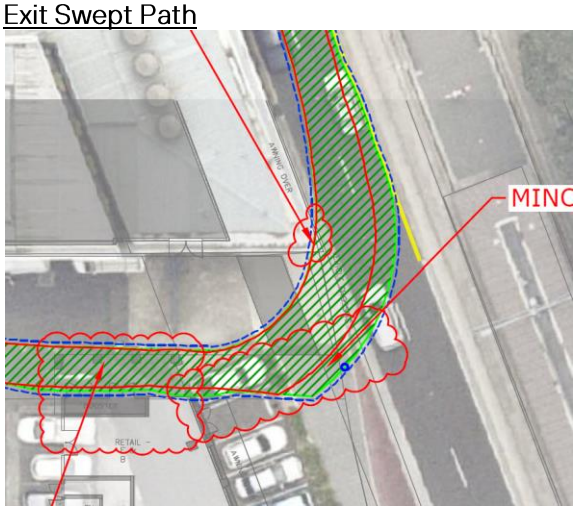
I consider this option to be the least preferred given it results in a crossover width that is wider than other options discussed above and thus increases the distance that pedestrians have to cross. I consider this to be undesirable in a high pedestrian volume area. I also note that it likely results in a minor reduction in the length of the bus bays which is again undesirable.

Figure 3.4: Swept Paths for TTPP "Alternative Access Option 2" Plan

Entry Swept Path



Exit Swept Path



4 SUMMARY OF OPINION

Based on the views presented above, I consider that the existing arrangements, as outlined in the TTPP Figure 1 design, are acceptable and the most logical design outcome for the following reasons:

- The crossover has been designed to operate in this manner for the last four years since the completion of the Sydney Light Rail project.
- The need for large trucks exiting the site to cross onto the northbound tram lane was likely previously considered as part of the planning of the Sydney Light Rail and been deemed to be acceptable.
- The arrangement whereby vehicles need to cross onto tram lanes to turn at intersections is common along the tram route.

I also expect that Council's position as outlined in its draft conditions was not based on a perceived truck – tram safety concern, but rather to simply accommodate the truck swept path that were submitted with the DA package. I understand that these swept paths assumed no reliance on the tram lane using the existing break in the kerbing separator. I consider it possible that Council will support the existing access arrangements with the benefit of this new swept path and background information.

Notwithstanding this, if the use of the northbound tram lane to accommodate this swept path is no longer considered to be acceptable, I am of the view that the TTPP "Alternaitve Arrangement – Option 1" is the next most preferred option given that it results in only a minor reduction in the area for pedestrians.

If this alternative option was to be preferred, I consider it highly likely that it would be approved by the relevant authorities given the design represents a typical arrangement that is common adopted where swept paths dictate that slightly wider crossovers are required. In my view, the changes in this design option are minor and effectively seek to improve an existing arrangement (rather than resolve an issue caused by the proposed development).

I trust the above advice is clear is consistent with expectations. Naturally, should you have any questions regarding this proposal, please do not hesitate to contact me via email at tim.deyoung@eukai.com.au or on 0411 863 774.

Kind regards,
Eukai Pty Ltd

Tim De Young
Director

BEng (Civil), BCom, MBA, CPEng, FIEAust

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Attachment A – Tim De Young CV

Tim De Young

Tim is a transport planner and chartered professional civil engineer with over 22 years of experience in Australia. He is one of the leading transport advisors to the private and public sector for major urban renewal / development precincts and other complex land use projects. He also regularly presents expert evidence at tribunals and panel hearings. Prior to establishing Eukai in 2024, Tim led the national transport planning and advisory business centre at one of Australia's largest engineering firms.

CONTACT DETAILS

Tim De Young
Director, Eukai Pty Ltd
tim.deyoung@eukai.com.au
0411 863 774

EDUCATION

Bachelor Of Engineering (Civil),
The University of Melbourne

Bachelor of Commerce,
The University of Melbourne

Master of Business Administration,
Monash University

AFFILIATIONS

Fellow of Engineers Australia

Fellow of Roads Australia

Member of Victorian Planning & Environmental Law Association

RECENT PROJECT EXPERIENCE

In his current and former employment, Tim has led teams on the following projects:

- **New Footscray Hospital** (Plenary Health & Multiplex)
- **Chadstone – transport advisory services, master planning, panel hearings & multiple developments** (Vicinity Centres)
- **Suburban Rail Loop East Precinct Structure Planning Transport Peer Review** (SRLA via Stantec)
- **La Trobe University 'City of the Future' – master plan input & developments** (La Trobe University & Plenary)
- **Box Hill Central – master planning, panel hearing & developments** (Vicinity Centres)
- **Victoria Gardens – transport strategy, master planning, panel hearing & developments** (Salta Properties & Vicinity Centres)
- **Preston Market – master planning & panel hearing** (Salta Properties)
- **Castle Towers, NSW – transport strategy, master planning, planning proposals & multiple developments** (QIC)
- **Bankstown Central, NSW – master planning, planning proposals & multiple developments** (Vicinity Centres)
- **UTAS Sandy Bay, TAS – master planning & planning scheme amendment** (University of Tasmania via Clarke Hopkins Clarke)

FURTHER INFORMATION ON RECENT PROJECT EXPERIENCE

New Footscray Hospital (VIC)

Client: Plenary Heath & Multiplex

From 2019 to 2024 (including through the bid phase led by Plenary), Tim led a team providing transport engineering and design advice for the new Footscray Hospital currently being constructed on the Ballarat Road / Geelong Road intersection in Footscray.

The new Hospital has a construction value of $1.5b and will provide over 500 inpatient beds and acute facilities including an emergency department and mental health and alcohol & other drugs hub. It will provide a 1,200-car space car park and three drop-off parking areas, together with over 500 bicycle parking spaces and associated end-of-trip facilities. Vehicle access to the one-site car parking will be provided via two new signalized intersections to Geelong Road and Ballarat Road. The project will also include ambulance parking and a basement loading dock accessed from Geelong Road.

Tim was extensively involved in the authority engagement process associated with this project and regularly attended meetings with the State Government (VHBA), transport authorities and Council.

Chadstone Shopping Centre (VIC)

Client: Vicinity Centres

Chadstone is the largest shopping centre in the southern hemisphere with a floor area of over 220,000 sqm.

Since 2011, Tim has led a variety of teams providing transport planning, engineering, traffic modelling, and design advice on a range of significant development and infrastructure projects at the Centre, including:

- **2016:** Chadstone's $660m Stage 40 redevelopment added a state-of-the-art light-filled four-storey northern retail precinct, a premium dining terrace, revitalized West Mall luxury offering, and 15,000 sqm Tower One commercial office. The project also entailed the provision of a new on-site bus interchange, new signalized intersection to Princes Highway as well as other road upgrades, increased car parking and improved active travel connections.
- **2019:** The $130m 250-room Hotel Chadstone "M Gallery by Sofitel". This project was constructed in 2019 and involved revisions to the transport infrastructure constructed in 2016.
- **2021**: The expansion of Car Park C which added over 800 car spaces in a new upper deck car park. The project entailed provision of a new signalized intersection internal to the Centre as well as revisions to external intersections.
- **2023**: The Social Quarter project added a new entertainment and leisure precinct on the top of Car Park C at the northern end of the Centre. It also included modifications to the car parks beneath, as well as the creation of a new drop-off car parking rank.

Tim has also led the following projects which are currently under construction at Chadstone:

- **Upgraded Fresh Food Precinct**: This project will involve the refurbishment and expansion of the existing retail core near the new Office Tower. It will include modifications to the internal road network as well as the creation of a new basement logistics hub.
- **One Middle Road Office Tower:** This 20,000sqm office (plus childcare) development will be constructed on the eastern side of the Centre. The project will also provide 200 bicycle spaces and create a new porte cochere arrival on the adjacent internal road network.
- **Car Park C Expansion Project**: This project will entail the construction of a new level on the car park to add 432 car spaces. It will also include the provision of a new signalized intersection onto the internal road network.

In addition to these development projects, Tim continues to lead a team providing strategic transport advice to Vicinity Centres on a range of long-term transport initiatives at Chadstone including the provision of a Trackless Rapid Transit service along Princes Highway, major road infrastructure works, bus network planning and bus infrastructure changes, and active travel improvements.

<u>La Trobe University City of the Future (VIC)</u>

Client: La Trobe University (in partnership with Plenary)

From 2022 to 2024, Tim led a team providing transport planning and engineering input, in collaboration with Arup, for the "City of the Future" masterplan for La Trobe University's Bundoora Campus.

The masterplan envisages very significant land use diversification and intensification at the Campus over the coming decades in a series of "local villages" located around the core university buildings. In addition, the master plan proposes changes to the internal transport network, including additional active travel and public transport infrastructure.

The masterplan is currently being prepared in advance of a planning scheme amendment that is expected to occur in late-2024 or early-2025 at which Tim is proposed to present associated expect evidence in relation to the transport implications of the masterplan.

<u>Box Hill Central (VIC)</u>

Client: Vicinity Centres

From 2018 to 2023, Tim led a team providing transport planning and engineering advice on the long-term masterplan opportunities at Box Hill Central.

This advice has considered a range of options to improve transport and land use integration at the Centre, and reduce car reliance, including (but not limited to) tram service realignments, bus network and interchange replanning, and car parking and vehicle access modifications

The advice assisted Vicinity Centres to understand the development options for the Centre and ultimately guided the recently approved office and residential development at Box Hill Central North. Tim was intimately involved in the design and approval process for this development, including presentations to the department of planning, transport authorities and Council.

In 2023, Tim also prepared and presented expert evidence for the Box Hill Central North Planning Scheme Amendment at Planning Panels Victoria.

<u>Victoria Gardens (VIC)</u>

Client: Salta Properties & Vicinity Centres

From 2016 to 2023, Tim led a team providing strategic transport planning and transport engineering advice, which was supplemented by detailed traffic modelling, for the Victoria Gardens precinct in Richmond.

As part of this engagement, a holistic transport strategy was prepared for the precinct to guide how the precinct could best be developed over coming decades to encourage travel by sustainable transport modes. The strategy recommended a range of measures including, but not limited to, the adoption of maximum car parking rates which were atypical outside of the inner Melbourne area at that time. In preparing this strategy, Tim engaged extensively with transport authorities and Council.

From 2021 to 2023, Tim led a team providing transport engineering and design advice for the proposed Doonside Expansion containing 800 apartments, 3000sqm office, and 8000sqm retail. This entailed the preparation and presentation of expert evidence for the associated Planning Scheme Amendment at Planning Panels Victoria in 2023.

Preston Market (VIC)

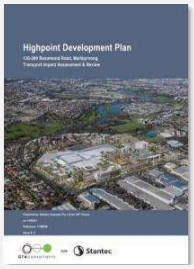
Client: Salta Properties

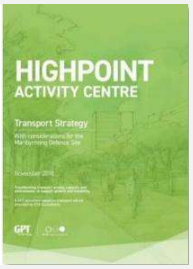
From 2013 to 2022, Tim led teams providing transport planning, traffic engineering, traffic modelling and transport design advice for a variety of developments and masterplan options for the Preston Market site.

The site is located immediately adjacent Preston Railway Station (which was recently reconstructed by the State Government as part of the level crossing removal project) and is proposed to accommodate approximately 2,000 apartments, 30,000sqm retail, 7,500sqm office and the existing Market.

In 2022, Tim also prepared and presented expert evidence for the Present Market Planning Scheme Amendment at Planning Panels Victoria.

Highpoint Shopping Centre (VIC)





Client: GPT Group

From 2008 to 2009 and 2018-2022, Tim has led teams providing transport planning and engineering advice on numerous projects at Highpoint Shopping Centre, including:

- 2008: Northeast Retail Expansion
- 2018: Highpoint Best in Class Car Parking Study
- 2019: Highpoint Activity Centre Transport Strategy & Access Corridor Strategy
- 2022: Highpoint Development Plan

The Highpoint Activity Transport Strategy continues to be relied upon to support land use development in the precinct as it presents an alternative view to how congestion can be tackled in the precinct by focusing on sustainable transport upgrades along key corridors (rather than local road works which provide limited benefit in mitigating network constraints).

As part of Tim's involvement in this precinct over the many years, he has regularly met with planning departments, transport authorities, Council and local members of parliament.

Castle Towers Shopping Centre (NSW)

Client: QIC

From 2016 to 2024, Tim has led a variety of teams providing transport planning, traffic engineering, traffic modelling and transport design advice on master plan, planning proposals and developments at Castle Towers Shopping Centre in Castle Hill NSW.

The most significant approval was the retail expansion approved by The Hills Shire Council in 2016 which permitted: an increase to the Centre's retail floor area from 133,000 to 258,000 sqm GFA, an increase in the parking provision from 5,639 car spaces to 7,996 car spaces, and other changes to the adjacent road network and vehicle access arrangements.

More recently, Tim has led team which are working on planning proposals and developments at Castle Towers that seek approvals for a diverse range of land uses, including:

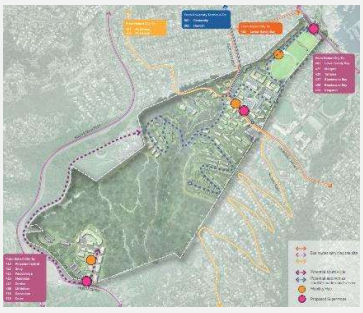
- **Site A Planning Proposal:** This planning proposal seeks approval for predominantly residential and some commercial and retail land uses on Site A at Castle Towers. The development yields are not yet confirmed but are expected to include well over 1000 residential apartments within numerous towers.
- **Site B Planning Proposal:** This planning proposal seeks approval for predominately residential land uses on Site B at Castle Towers. The master plan for the site envisages numerous towers on the site located around a central park. The anticipated development yield is approximately 1,500 apartments plus 10,000sqm of retail and commercial floor area.
- **Site A Zone 3 Development Application:** This development proposes a new office tower with a floor area of 16,000sqm and a new 220-room hotel on Site A. The development will include modifications to existing car parking and loading arrangements, together with the addition of new cycling and pedestrian infrastructure.
- **Woodward Development Application:** This development proposes a new indoor sports facility on Site B. The development will include modifications to vehicle access arrangements and the creation of a new internal roadway through the site that will ultimately be vested back to Council.

Bankstown Central Shopping Centre (NSW)

Client: Vicinity Centres

From 2020 to 2023, Tim led teams providing transport advice on multiple projects at Bankstown Central including:

- **Bankstown Bus Relation Project** : This project entails the relocation of the bus interchange that formerly sat on the Bankstown Central site to a mixture of on-street and off-street locations. The project was completed in May 2022.
- **Bankstown Exchange Office Development** : This project was approved in 2021 and proposes the construction of 30,000sqm of office floor area in addition to ground level retail floor area. The development will be constructed on the site of the former bus interchange and will sit above two new basement car parking levels.
- **Bankstown Central Planning Proposal** : This engagement entails the provision of transport advice for the long-term development of the site. The development envisages an ultimate yield of approximately 120,000sqm office, 1000 residential apartments, 650 hotel rooms and 1600 student accommodation units. It also proposes construction of a new bus interchange and provision of improved active travel connections. As part of this engagement, Tim has participated in extensive consultation with transport authorities and Council.



UTAS Sandy Bay (TAS)

Client: UTAS Properties via Clarke Hopkins Clarke

From 2021 to 2022, Tim led a team providing transport planning and engineering advice for a significant urban renewal project at the University of Tasmania's Sandy Bay Campus.

This project entailed the completion of strategic modelling, concept design work for recommended road upgrade works, and extensive engagement with Hobart City Council.

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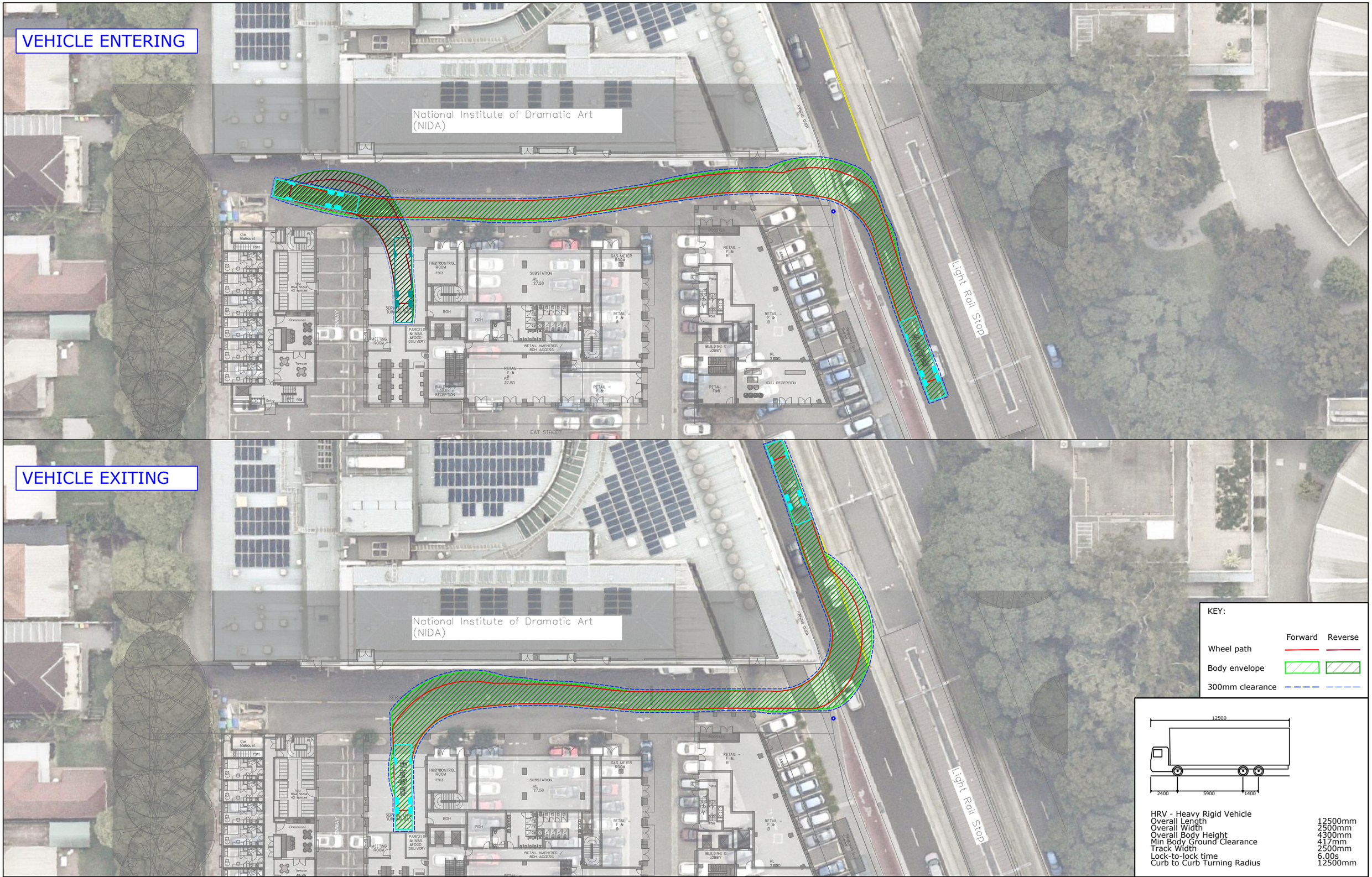
Attachment B – TTPP Swept Path Plans

VEHICLE ENTERING

VEHICLE EXITING



KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

HRV - Heavy Rigid Vehicle

Overall Length	12500mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	23/07/24

ttpp transport planning

PROJECT

IGLU KENSINGTON

TITLE

SWEPT PATH ANALYSIS - GROUND LEVEL
12.5M HEAVY RIGID VEHICLE - EXISTING ACCESS ARRANGEMENT

DWG No. 21435CAD019 FIGURE 1

DATE STAMP 23 JULY 2024

PROJECT No.	SCALE	REV.
21435	1:500 @A3	B

VEHICLE ENTERING

VEHICLE EXITING

National Institute of Dramatic Art (NIDA)

MINOR EXTENSION OF CROSSOVER LENGTH.

SERVICE LANE

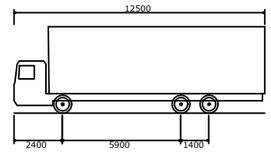
EAT STREET

ANNIE OVER

Light Rail Stop

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



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Min Body Ground Clearance	417mm
Track Width	2500mm
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REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
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ttpp transport planning

PROJECT

IGLU KENSINGTON

TITLE

SWEPT PATH ANALYSIS - GROUND LEVEL
12.5M HEAVY RIGID VEHICLE - ALTERNATIVE ACCESS OPTION 1

DWG No. 21435CAD019 FIGURE 2

DATE STAMP 23 JULY 2024

PROJECT No.	SCALE	REV.
21435	1:500 @A3	B

VEHICLE ENTERING

VEHICLE EXITING

National Institute of Dramatic Art (NIDA)

SERVICE LANE

EAT STREET

ANNIE OVER

Light Rail Stop

VERY MINOR EXTENSION OF CROSSOVER LENGTH.

MINOR EXTENSION OF CROSSOVER LENGTH.

COLUMNS TO BE REMOVED, BUILDING CANTILEVERED OVER.

KEY:

	Forward	Reverse
Wheel path		
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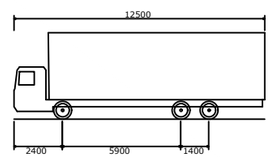

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PROJECT

IGLU KENSINGTON

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SWEPT PATH ANALYSIS - GROUND LEVEL
12.5M HEAVY RIGID VEHICLE - ALTERNATIVE ACCESS OPTION 2

DWG No. 21435CAD019 FIGURE 3

DATE STAMP 23 JULY 2024

PROJECT No.	SCALE	REV.
21435	1:500 @A3	B

Our Ref: 23384

23 July 2024

IGLU Pty Ltd
Level 4, 69 York Street
SYDNEY NSW 2000

Attention: Mark Pellen

Dear Mark,

RE: IGLU KENSINGTON AT UNSW - ACCESS TO NIDA

Background

TTPP has been asked to demonstrate that the existing 12.5m long Heavy Rigid Vehicle (HRV) access to/from Anzac Parade into NIDA's access easement will remain in place during and following completion of the proposed development.

This paper confirms that the existing arrangement for HRV Access to Anzac Parade is proposed to continue, unchanged.

It also sets out below two alternative arrangements, should access to the light rail line be unavailable for some reason in the future. Whilst this is considered highly unlikely, these options are provided to demonstrate the robustness of the proposed building design. These alternative arrangements are:

- a widening of the Anzac Parade crossover to the North; and
- removal of building columns inside the project boundary to the south of the existing driveway, to allow for an alternative swept path.

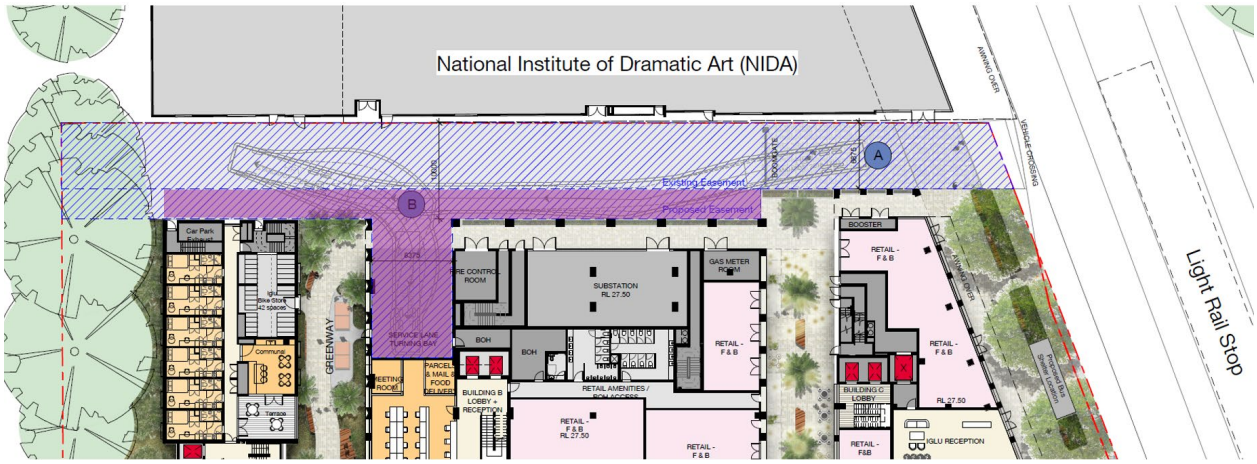
The Transport Planning Partnership
Suite 402, 22 Atchison Street
ST LEONARDS NSW 2065

Existing Access to NIDA

Vehicles access the NIDA access easement on the subject site via Anzac Parade, via a 'left in, left out' arrangement.

The service access to NIDA will be maintained along the existing, 6.875m wide right of way (ROW) to Anzac Parade. Although NIDA is not part of the proposed development, the existing service lane has been widened into the site, to give it a total width of 10m (compared to the existing 6.875m). Figure 1 shows the existing easement for access in blue and the additional access easement to be provided in purple.

Figure 1: NIDA ROW Access



The proposed development incorporates a turning bay within the building to facilitate a safe turnaround manoeuvre of NIDA's HRV service vehicles. This allows for a 'forward in, forward out' arrangement. The swept path for this HRV manoeuvre is shown in **Attachment 1**.

Proposed Development: Maintain Existing Crossover to Anzac Parade

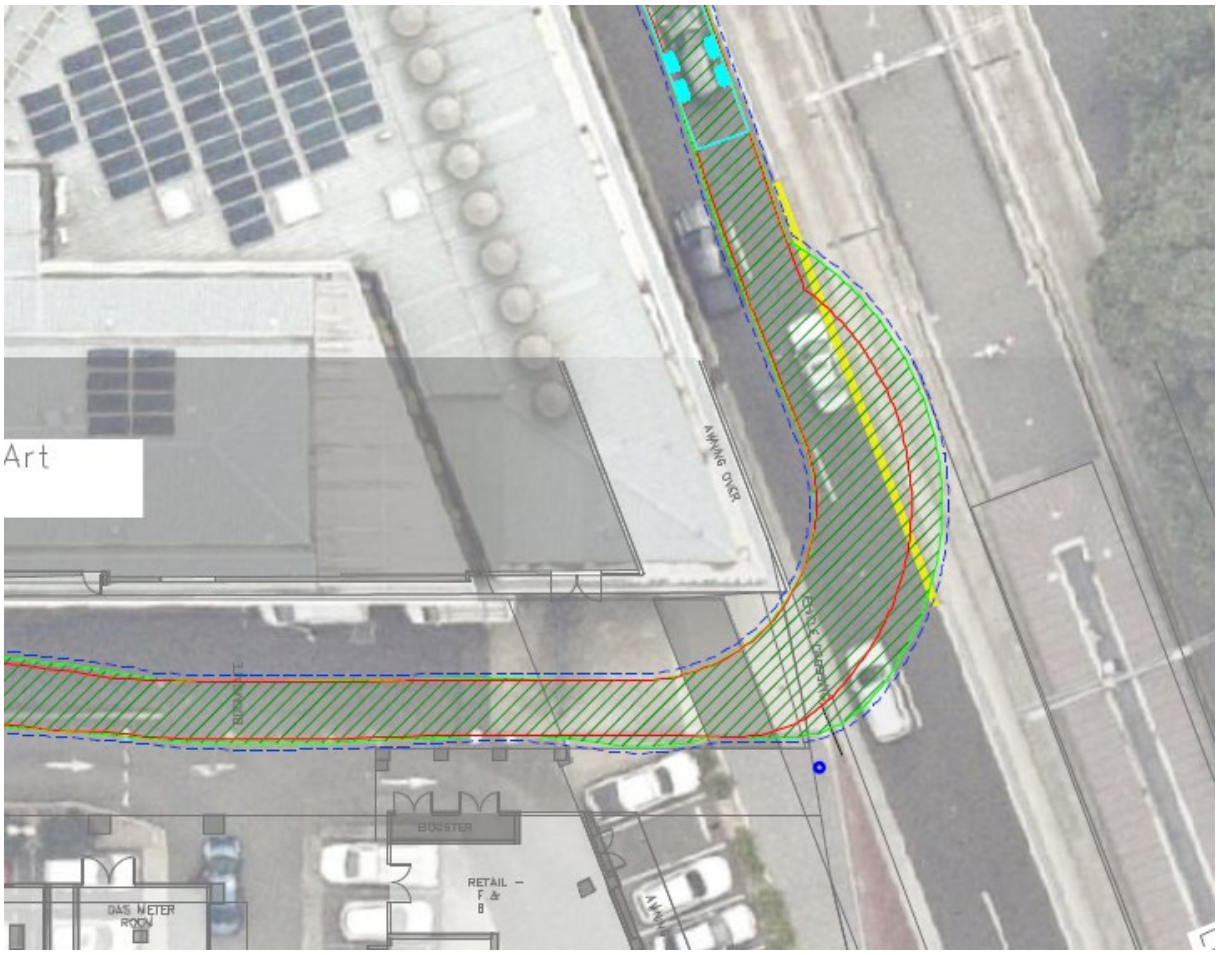
At Anzac Parade, the existing 6.875m vehicular crossover off Anzac Parade, as shown in Figure 2, will be retained.

Figure 2: NIDA Vehicular Crossover

As can be seen Figure 2, opposite the NIDA access, the low kerb alongside the light rail track, has been removed and replaced with yellow line marking to allow large vehicles from the NIDA service lane to exit the site.

It is my understanding that the light rail was specifically designed as such to accommodate the HRV turn out of the site which was an existing movement and which would need to have been maintained as an objective of the project. Our swept path, as shown in Figure 3, confirms that the left tun out of the site by an HRV is possible by traversing the track, as planned as part of the design of the light rail line.

Figure 3: HRV Swept Path at NIDA Access



It is noted that elsewhere on Anzac Pde, for example, at Abbotsford Road, the low kerb along the light rail track on Anzac Parade (as marked in red in Figure 4), has been removed for a short distance (with an associated yellow marking), to accommodate the wide sweep of large vehicles and buses to allow them to enter the light rail corridor for a short distance to facilitate their manoeuvre from the minor road.

Figure 4: Abbotsford Rd – Anzac Pde Intersection

This typical condition is proposed to continue, unchanged, during construction and following completion of the development.

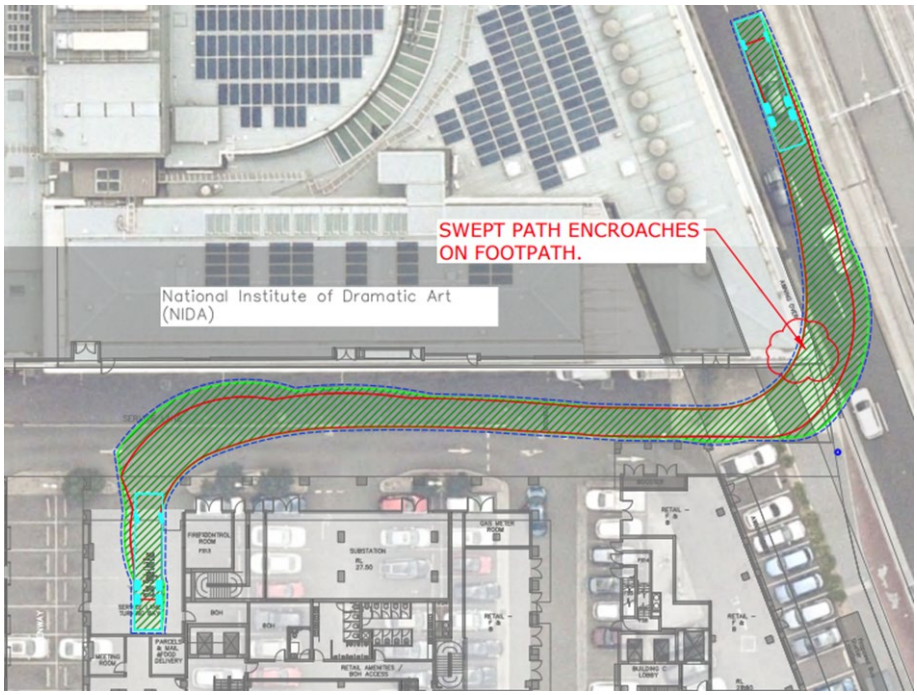
Alternative HRV Access Options

We have been asked to assess an alternative access option, in the scenario that this existing access arrangement is discontinued, with the Light Rail kerb reinstated. Whilst we do not see this as likely, the following two options would resolve NIDA's HRV Access within the existing building locations.

Alternative Option 1 – Splay Crossover to the North

Option 1 entails retaining the driveway/crossover in its existing position however, giving the driveway crossover a wide splay to the north to allow the HRV wheels to exit the service lane without encroaching on the light rail lines. This swept path is shown in Figure 5 and provided in Attachment One.

Figure 5: Splay Crossover to the North

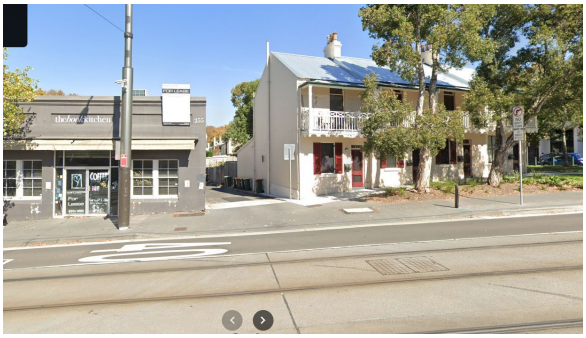


There are several existing examples of widened vehicular crossovers to enable swept paths along the light rail corridor as shown in Figure 7.

Figure 6: Existing Widened Vehicular Crossovers

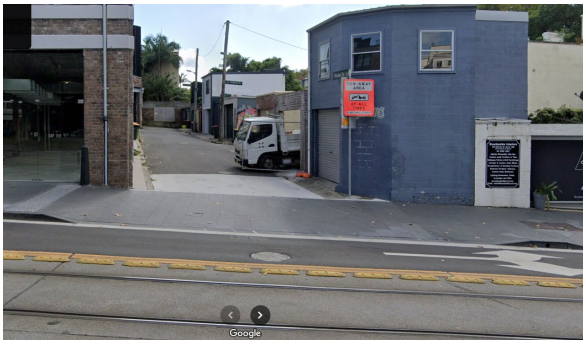
Esther Lane - Devonshire Street

Nickson Lane – Devonshire Street



Adelaide Place - Devonshire Street

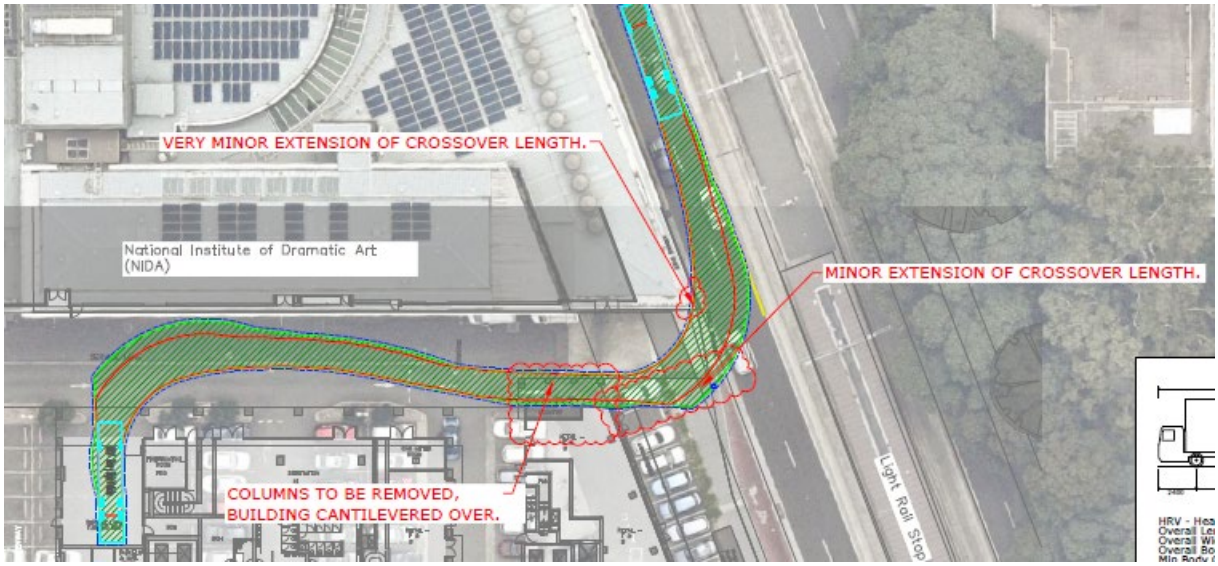
Violet Street – Devonshire Street



Alternative Option 2 – Splayed crossover to the South

Option 2 entails extending the driveway kerb/crossover to the south, to prevent the HRV wheels from encroaching upon the light rail lines. This will have a detrimental effect on the indented bus stop located to the south, as shown in the swept path in Figure 7 and provided in Attachment One. This option would require some minor extension of the driveway to the north as well and would require further investigation and consultation with TfNSW/ Sydney Buses.

Figure 7: Splay Crossover to the South



Informal Access via Day Avenue

NIDA vehicles have, in recent years, informally taken advantage of the space available in the Western Carpark Site from time to time, outside of the area allocated for vehicular access to the NIDA Building within the access easement. They also traversed the car park to enter and leave the site from Day Avenue.

The proposed development will discontinue this informal behavior, requiring all service vehicles to either use the existing Anzac Parade crossover and easement for service vehicle access, or to use the new underground carpark within the site for personnel access.

Conclusion

The existing access arrangements for the NIDA service lane from Anzac Parade are proposed to be retained, unchanged, noting that the layout already supports access for vehicles up to a 12.5m long Heavy Rigid Vehicle. This has been accommodated as part of the design of the light rail corridor.

Whilst unlikely to be required, two alternative arrangements are also available, should access to the light rail line be unavailable for some reason in the future.

We trust the above is to your satisfaction. Should you have any queries regarding the above or require further information, please do not hesitate to contact the undersigned on 8437 7800.

Yours sincerely,

Ken Hollyoak
Director

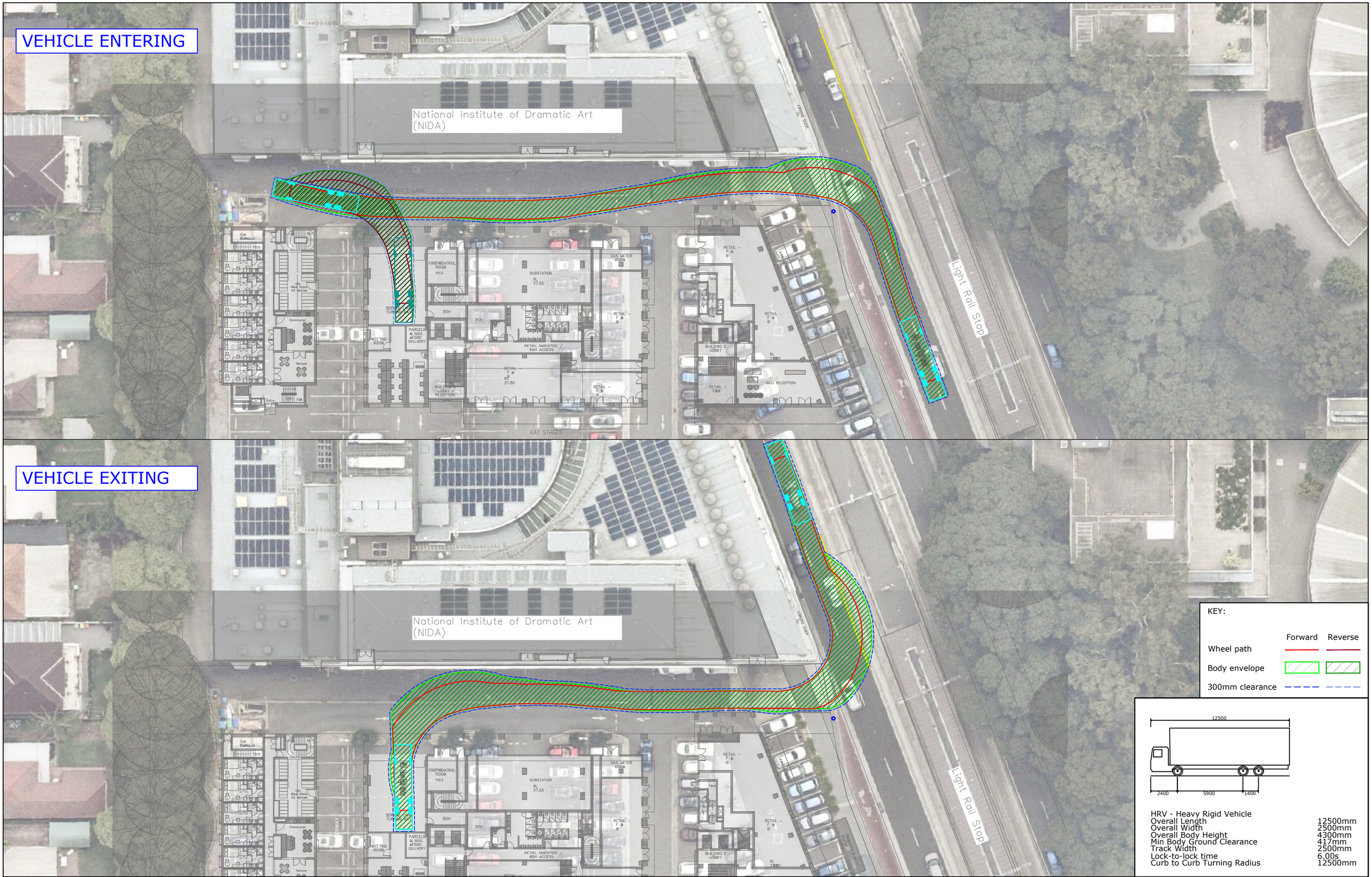
Encl. Attachment One – Swept Path Drawings

Attachment One

Swept Path Drawings

VEHICLE ENTERING

VEHICLE EXITING



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SWEPT PATH ANALYSIS - GROUND LEVEL
12.5M HEAVY RIGID VEHICLE - EXISTING ACCESS ARRANGEMENT

DWG No. 21435CAD019 FIGURE 1

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21435	1:500 @A3	B

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National Institute of Dramatic Art (NIDA)

MINOR EXTENSION OF CROSSOVER LENGTH.

SERVICE LANE

EAT STREET

ANNIE OVER

Light Rail Stop

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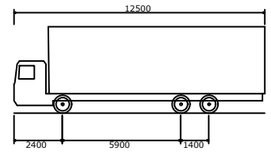

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SWEPT PATH ANALYSIS - GROUND LEVEL
12.5M HEAVY RIGID VEHICLE - ALTERNATIVE ACCESS OPTION 1

DWG No. 21435CAD019 FIGURE 2

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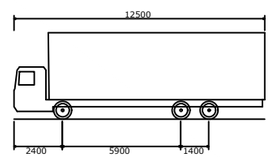

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DWG No. 21435CAD019 FIGURE 3

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