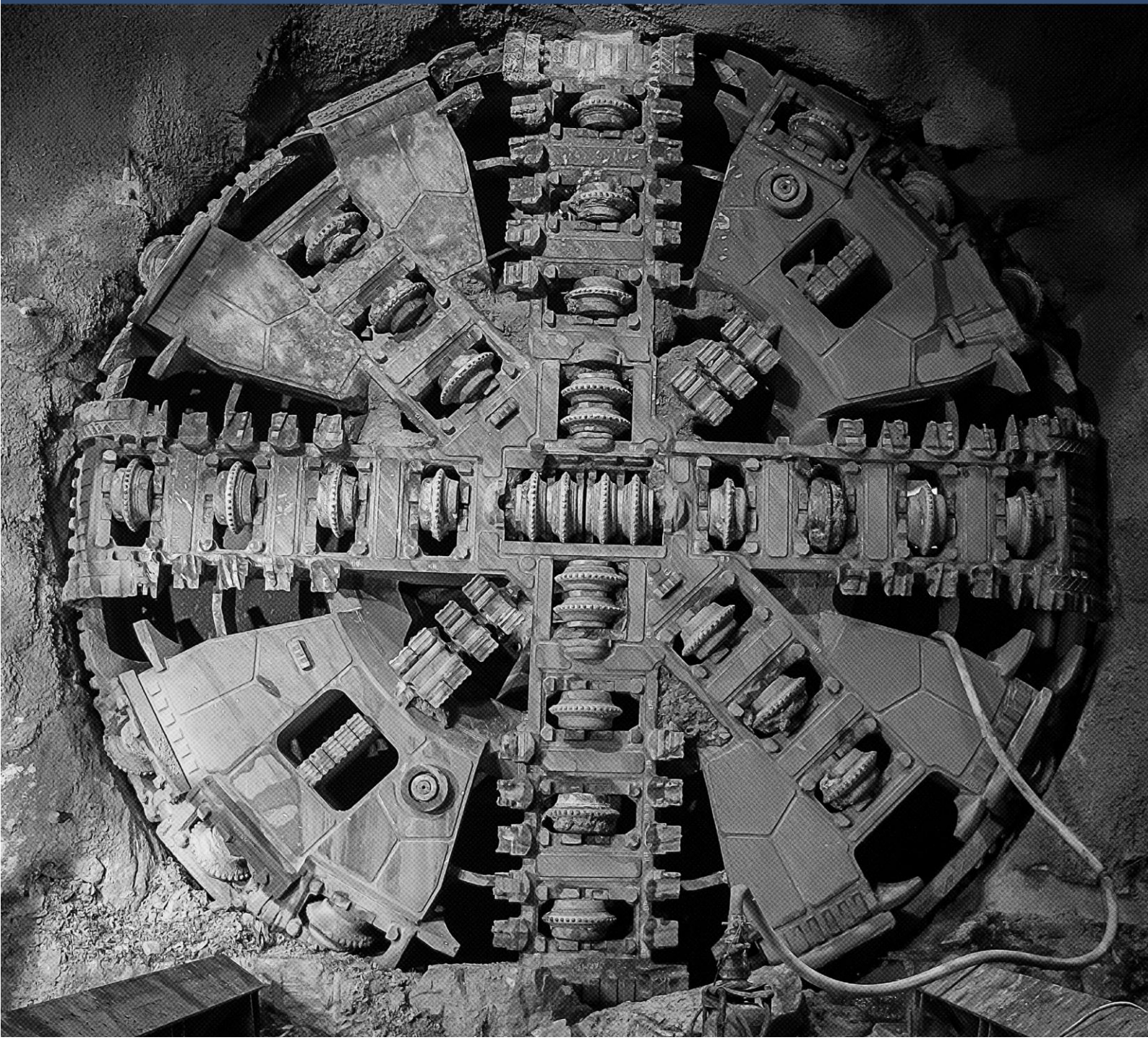


Heavy Vehicle Local Road Report for Use of Local Roads

Hunter Street East Construction Site - Rev B



Heavy Vehicle Local Road Report for Use of Local Roads

Hunter Street East Construction Site

Project number	7040
Document number	SMWSTETP-JCG-SCB-SN100-TF-RPT-093006

Document approval

Rev	Date	Prepared by	Reviewed by	Comments	Approved by
A	13/4/2023				
Signature:					
B	25/8/23				
Signature:				Addressing Review Comments	

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1. Introduction

1.1. Project Background

Sydney Metro West is a new 24-kilometre metro line that will connect Greater Parramatta with the Sydney CBD via stations at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and Hunter Street (Sydney CBD).

The planning process for Sydney Metro West was assessed as a staged infrastructure application under section 5.20 of the Environment Planning and Assessment Act 1979 (EP&A Act).

Stage 1 of the development, the Sydney Metro West Concept and major civil construction work for Sydney Metro West between Westmead and The Bays (SSI-10038 Schedule 2), was approved on 11 March 2021 and includes:

- Construction of a new passenger rail infrastructure between Westmead and the central business district of Sydney, including:
 - Tunnels, stations (including surrounding areas) and associated rail facilities
 - Stabling and maintenance facilities (including associated underground and overground connections to tunnels)
- Modification of existing rail infrastructure, including stations and surrounding areas
- Ancillary development.

Stage 2 of the planning approval process, the ETP Works, includes all major civil construction work including station excavation (Pyrmont Station and Hunter Street Station (Sydney CBD) and tunnelling between The Bays and Sydney CBD (Figure 1).

It is noted that the existing Sydney Metro West precast facility at Eastern Creek will be utilised in the delivery of concrete segments.

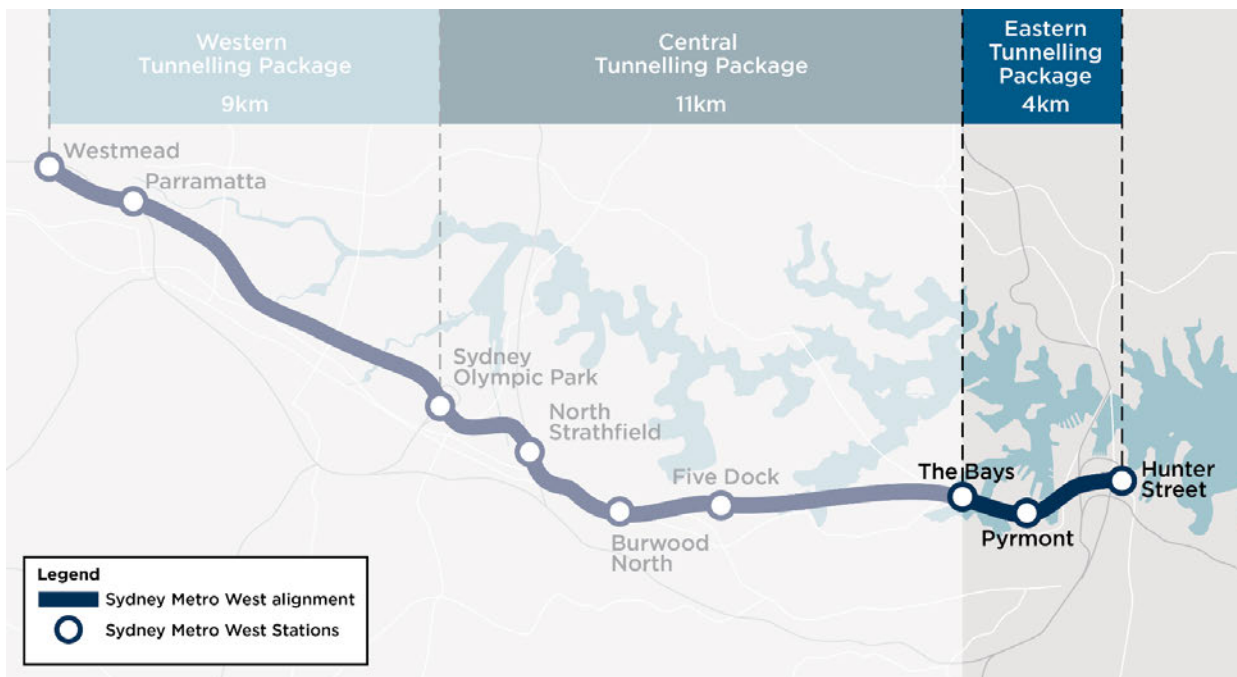


Figure 1: Sydney Metro West alignment

1.2. Hunter Street East Construction Site

As part of the Sydney Metro West Eastern Tunnelling Package, the Hunter Street East construction site is located in the Sydney CBD bounded by O'Connell Street, Bligh Street and Hunter Street.

As shown in Figure 2, the northern part of the site where the tunnelling operation will be undertaken, has an acoustic shed over the site and includes site access and egress driveways (EG1 & EG2) off O'Connell Street, pedestrian access off Bligh Street, secondary pedestrian access off O'Connell Street, and site office & amenities.

The southern part of the site where the demolition scope will be completed is accessed from O'Connell St (EG3) with an egress onto Hunter St (EG4).

Outside of OSOM deliveries, the maximum vehicle size that will be used to service both the northern and southern areas of the site, is a 12.5m HRV.

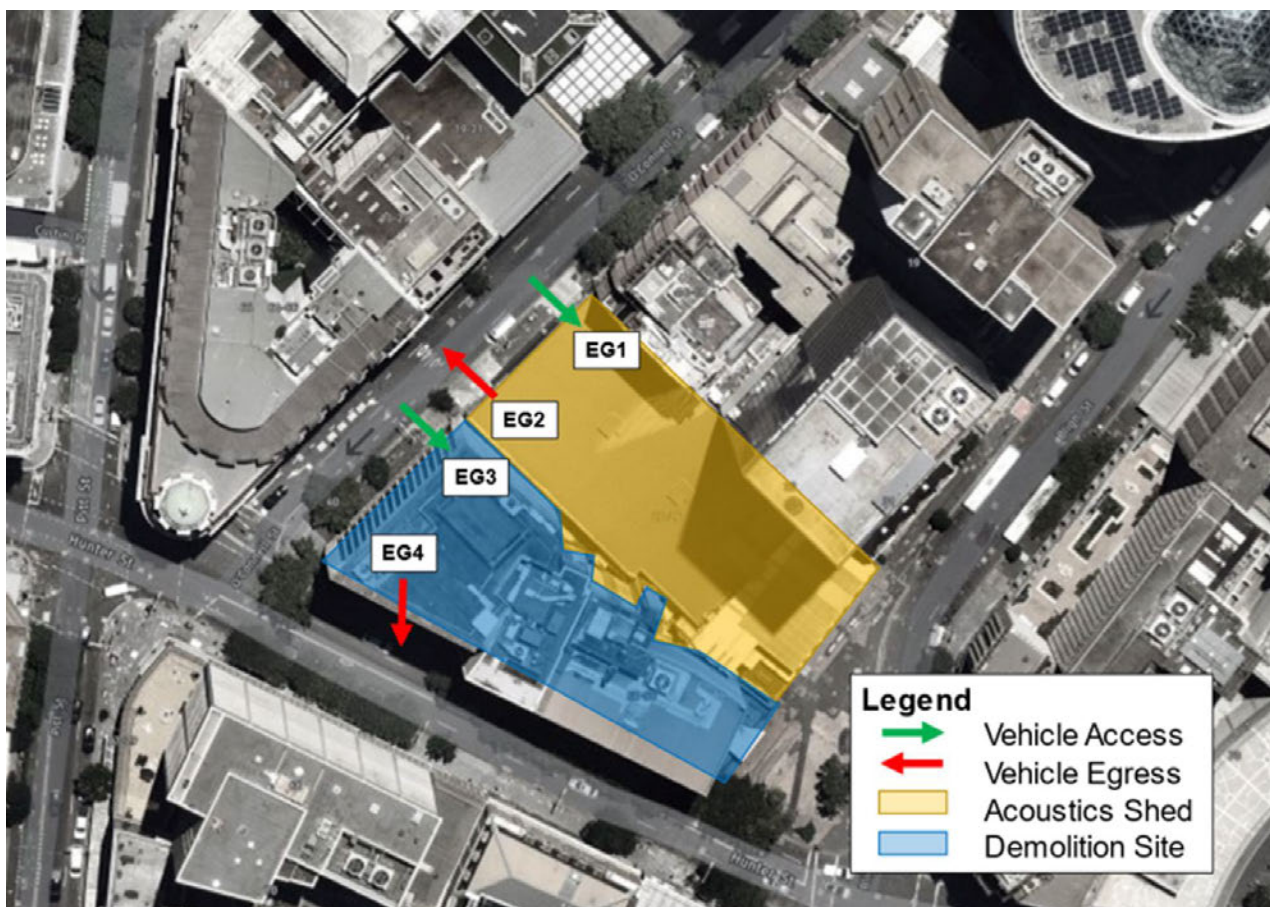


Figure 2: Proposed Hunter Street East Construction Site Access Locations During Demolition

1.3. Purpose and Scope of this HVLR

The scope of this Heavy Vehicle Local Road (HVLR) report is in relation to the additional heavy vehicle routes which are deviated from the approved haulage routes as shown in Figure 3. This is because City of Sydney (Council) is proposing to close Loftus Street to vehicular traffic which is as a part of the approved haulage route to the Hunter Street East site. Furthermore, there is an existing left restriction from Bridge St into Loftus St. Only vehicles 9m and under are permitted to turn left into Loftus St from Bridge St at all times. This restriction limits the HV movement into the Hunter St East construction site.

The following assessments have been undertaken in this HVLR to address the Ministerial Conditions of Approval:

- Swept path analysis assessment for the design vehicle (12.5m long HRV) along the proposed Inbound Route B as depicted by the dotted orange line in Figure 4. The swept path diagrams include all intersections where turning movements of the design vehicle will occur along these haulage routes.
- Road Safety Audit undertaken independently on the swept path assessment with a site inspection to identify safety issues associated with pedestrians, cyclists and two-way traffic flow.
- Details on the dates of the road dilapidation survey for the subject modified haulage routes.
- Measures to avoid schools, aged care facilities, and child care facilities during their peak operation times.
- Development of recommendations on the suitability of the proposed modified haulage routes taking into consideration the above assessment results.

1.4. Ministerial Conditions of Approval

This report complies with the following Condition of Approvals (CoA) and Revised Environmental Management Measures requirements.

Table 1: Compliance to CoA

ID	Conditions	Reference in this HVLR Report
D73	Local roads proposed to be used by heavy vehicles to directly access construction sites that are not identified in the documents listed in Condition A1 must be approved by the Planning Secretary and be included in the CTMPs.	This HVLR report
D74	All requests to the Planning Secretary under Condition D73 must include the following:	-
	(a) a swept path analysis;	Section 3 Appendix A, Appendix C
	(b) demonstration that the use of local roads by heavy vehicles for the CSSI will not compromise the safety of pedestrians and cyclists or the safety of two-way traffic flow on two-way roadways;	Section 4 Appendix B
	(c) details as to the date of completion of the road dilapidation surveys for the subject local roads;	Section 2.8
	(d) measures that will be implemented to avoid where practicable the use of roads past schools, aged care facilities and child care facilities during their peak operation times; and	N/A (Section 2.5 and Section 2.6) Refer to Section 2.7.2 for pedestrian and cyclist management
	(e) written advice from an appropriately qualified professional on the suitability of the proposed heavy vehicle route which takes into consideration items (a) to (d) of this condition.	Section 6

Table 2: Compliance to REMM

ID	Conditions	Reference in this HVLR Report
TT6	All trucks would enter and exit construction sites in a forward direction, where feasible and reasonable.	Appendix D
TT7	Construction site traffic would be managed to minimise movements during peak periods.	Section 2.7.3
TT8	Construction site traffic would be managed to minimise vehicle movements through school zones during pick up and drop off times.	N/A (Section 2.5 and Section 2.6)

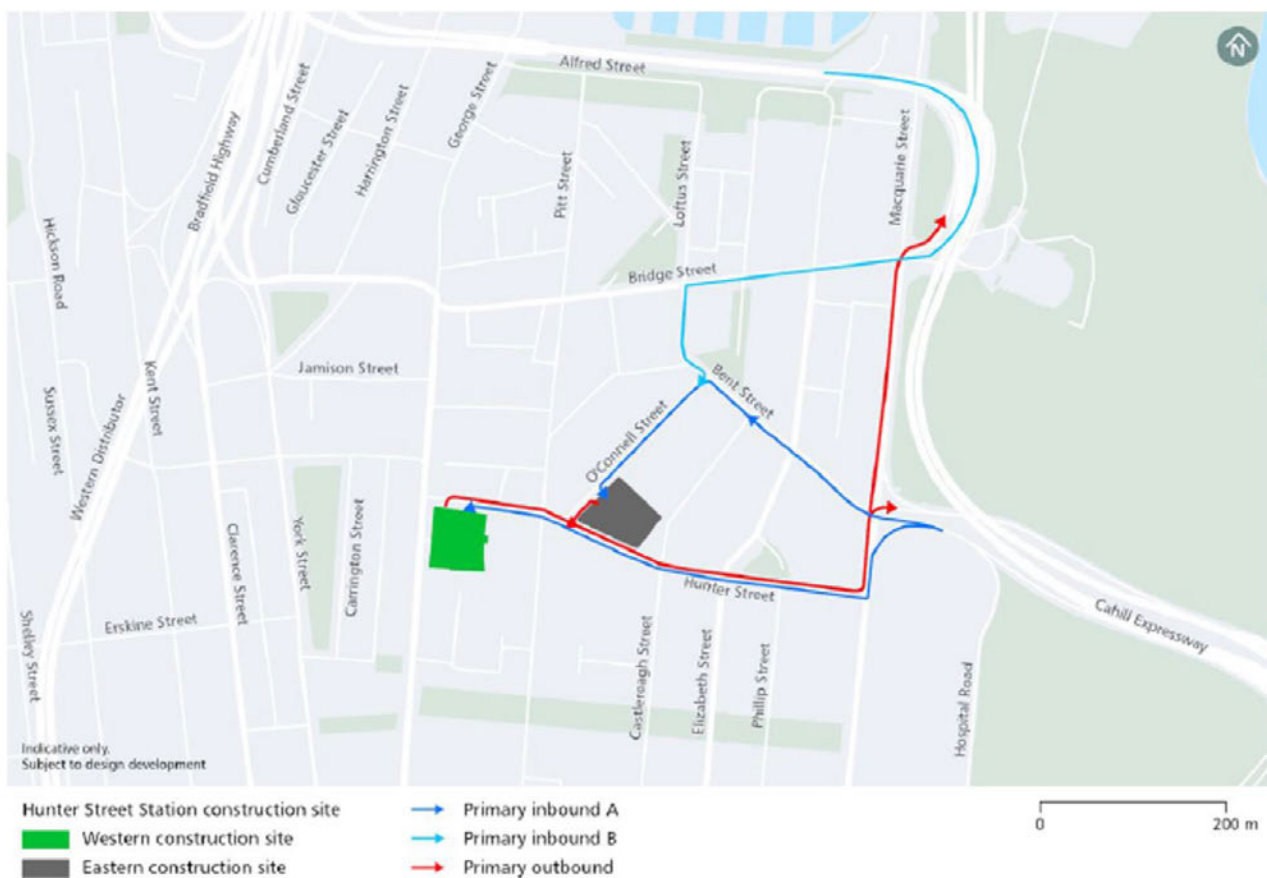
Refer to Section 2.7.2 for pedestrian and cyclist management

Refer to Construction Traffic Management Plan Hunter Street East – Stage 1 - Tunnel Excavation and Lining – Rev 2 (10 March 2023) for the compliance for other REMM requirements.

1.5. Existing Approved Routes

The existing approved EIS routes for the Hunter Street East construction site are shown in Figure 3, as identified in the Response to Submission (RTS).

There is an existing left restriction from Bridge St into Loftus St, Only vehicles 9m and under are permitted to turn left into Loftus St from Bridge St at all times.



Reference: Response to Submission

Figure 3: Existing Approved Haulage Routes

2. Proposed Route and Local Roads to be Used

2.1. Proposed Routes and Local Roads

The haulage routes to the Hunter Street East site are consistent with the modified EIS haulage routes, as illustrated by solid arrows in Figure 4.

The orange dotted line depicts the modified Inbound Route B to travel via Gresham Street due to the closure of Loftus Street to vehicular traffic that is going to be implemented by City of Sydney. The previously approved Inbound Route B is shown in pale blue in Figure 4, and the segment proposed along Gresham Street is illustrated by the orange line. The Gresham Street segment is not identified in Condition A1 of the Conditions of Approval (CoA) for this project.



Figure 4: Modified Haulage Routes

The full extent of the proposed Inbound Route B including the modified segment in Figure 4 are described as follows:

- Turn right from Cahill Expressway onto Bridge Street (as consistent with EIS)
- Turn left from Bridge Street onto Gresham Street (proposed)
- Turn left from Gresham Street onto Bent Street (proposed)
- Turn right from Bent Street onto O'Connell Street towards the Hunter Street East site (as consistent with EIS)

To increase pedestrian safety along the new proposed route, a Traffic Controller (TC) will be allocated at the intersections of Bridge St / Gresham St and Bent St / Gresham St during 7am to 6pm M – F for five days on the commencement of the HV movements along the new route. The TC will be directly communicating with the HV drivers as they are approaching the intersections and guide, assist pedestrians across the intersection safely.

The operation will be monitored and assessed during this time, and if necessary, appropriate action will be taken.

Furthermore, HV drivers are made aware of the high pedestrian activities along their route during the project's onboarding process and during the site's toolbox meetings.

As the modified segment of Inbound Route B was not captured as part of the modified EIS routes as shown in the Response to Submission (RTS), it triggers planning approval conditions D73 and D74 as shown in Table 1.

This report is in relation to an assessment of the haulage routes that JCG JV propose for a 12.5m long HRV to travel to Hunter East site via Gresham Street instead of Loftus Street.

2.2. Existing Road Environment

Existing road environment and the road network surrounding the subject site and the proposed haulage routes are described as follows:

Hunter Street is a four-lane, two-way road in the CBD road network, extending between George Street in the west to Macquarie Street in the east. The section of the road between Pitt Street and Macquarie Street offers restricted on-street parking within the kerbside lane. Hunter Street intersects with O'Connell Street and Bligh Street/ Castlereagh Street via signalised junctions with marked foot crossings on all approaches of the intersection, except for the eastern leg at the O'Connell Street intersection. Since January 2023, the intersection of George Street and Hunter has been closed albeit local traffic access is permitted for the left turn from Hunter Street to George Street.

O'Connell Street is a four-lane, one-way road in the southbound direction extending, between Bent Street and Hunter Street. Indented parking is provided on the eastern side of the road and a kerbside parking lane is available on the western side of the street. Bus layover zones are located on both sides of O'Connell Street along with loading zones, mail zone, pickup / drop-off area. Footpaths are located on both sides of the road which are approximately 3m in width. There is a Telstra phone booth kiosk situated along the western frontage of the site. Since Q3 2022, the right turn movement from O'Connell Street onto Hunter Street is banned as such traffic can only turn left out of O'Connell Street onto Hunter Street.

Bligh Street is a four-lane, one-way road in the southbound direction, extending between Bent Street to the north and Hunter Street to the south. Indented parking is provided along the kerbsides on both sides of the road. Bus zone layover facilities and loading zones are located on both sides of the road. Footpaths are available on both sides of Bligh Street which are approximately 4m in width and widens to approximately 15m from the end of the bus layover on the western side of Hunter Street.

Bridge Street is a four-lane, two-way road in the CBD road network, extending between George Street in the west to Macquarie Street in the east. Parking is generally not permitted on Bridge Street.

Gresham Street is a two-lane, two-way road with a north-south alignment with a bus zone located on both sides of the road between Bridge Street and Bent Street. Gresham Street forms a T-junction with Bent Street at its northern end and Bridge Street on its southern end. Pedestrian crossings are provided at both ends of Gresham Street.

Bent Street is a two-lane, two-way road with a south-west alignment with a taxi zone located on the north side of the road and a part time loading zone and parking lane on the south side of the road between Gresham Street.

2.3. Public Transport Network

The Hunter Street East construction site is surrounded by extensive public transport services due to the location with the Sydney CBD in close proximity to various commercial offices, retail and hospitality buildings, and shopping centres. Public transport services around the site vicinity include trains, buses, light rails and ferries.

Train stations in vicinity of the subject site include Wynyard, Circular Quay and Martin Place station. These train stations are serviced by multiple train lines, including T2 Inner West, T8 Airport and South, T1 North Shore and Western, T9 Northern Line and Central Coast & Newcastle, T4 Eastern Suburbs and Illawarra train lines. These train lines provide connections across the Sydney Greater Metropolitan Area through the Sydney CBD.

It is noted Sydney Metro City and Southwest (Chatswood to Sydenham) is currently underway, which is expected to be operational in 2024. This would open up three additional metro stations in the Sydney CBD, namely Barangaroo, Martin Place and Pitt Street. These stations are located within the proximity of the subject site. It is also noted that the proposed construction works would coincide with the Sydney Metro City and Southwest project.

Light rail services can be accessed at the nearby Bridge Street and Wynyard light rail stops. Both of these light rail stops are serviced by L2 Randwick Line and L3 Kingsford Line, which provide connection between the Sydney CBD, Surry Hills, Moore Park, Kingsford and Randwick. Bus stops are extensively available across the Sydney CBD, consolidating along York Street, Carrington Street, Clarence Street, Kent Street, Bridge Street, Phillip Street and Macquarie Street. The buses running through the Sydney CBD and servicing these bus stops provide connections to a number of suburbs and suburban hubs across the Greater Sydney Metropolitan Area. Night bus services are also available at some of these bus stops to accommodate the night travel demand induced by the surrounding licenced and entertainment venues within the Sydney CBD.

Ferry services can be accessed at Circular Quay, which is located at approximately 650m walking distance (8-minute walk) from the Hunter Street East construction site. The F1 Manly, F2 Taronga Zoo, F3 Parramatta River, F4 Pyrmont Bay, F5 Neutral Bay, F6 Mosman Bay, F7 Double Bay, F8 Cockatoo Island and F9 Watson Bay ferry lines service the Circular Quay wharfs, which provide connection between Circular Quay and multiple suburbs along the Sydney Harbour.

The public transport network facilities and services in the vicinity of the Hunter Street construction sites are shown in Figure 5.

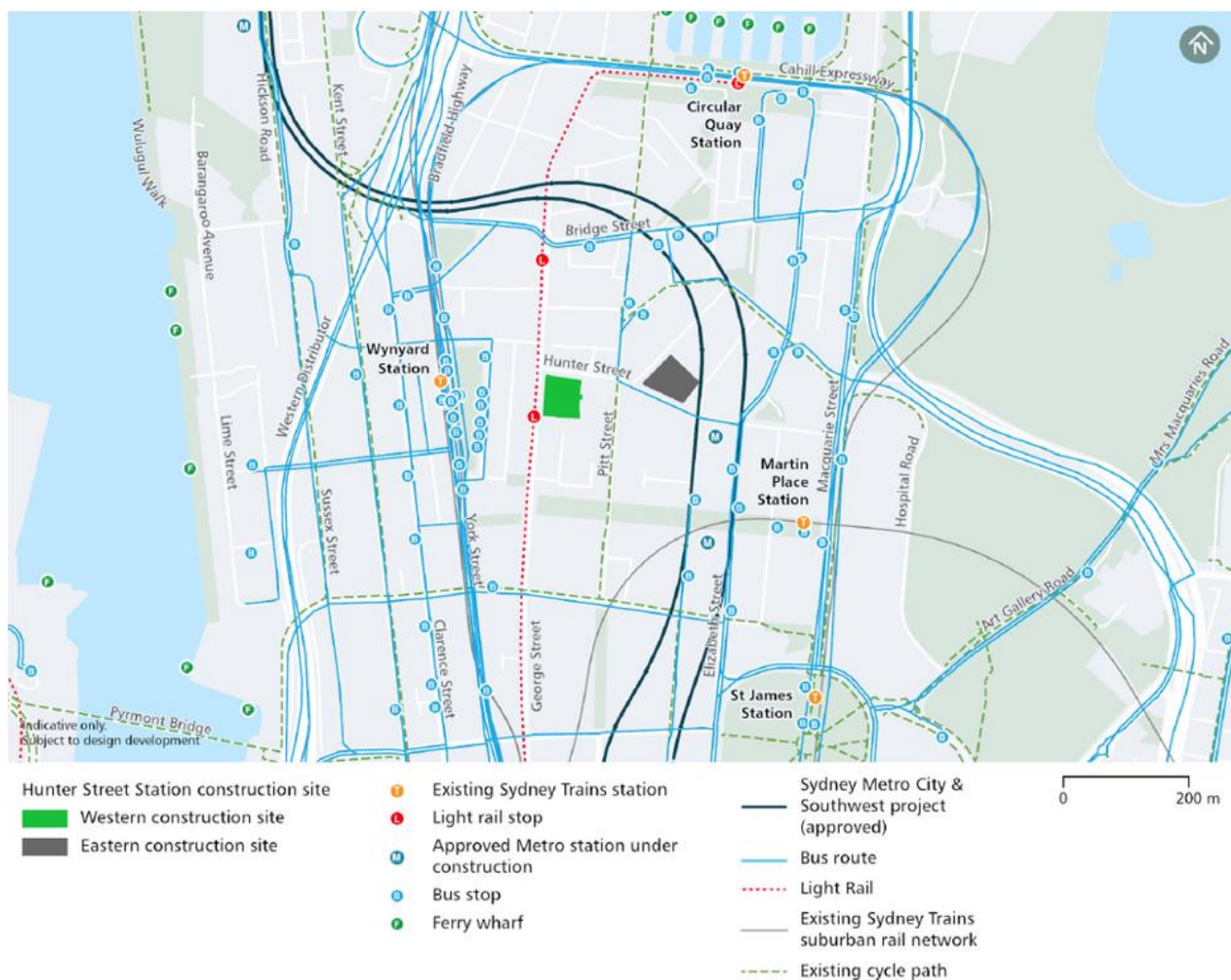


Figure 5: Public Transport Services Surrounding Hunter Street Construction Sites

2.4. Pedestrian and Cyclist Routes

Footpaths are designed with generous widths along both sides of most roads in the Sydney CBD to cater for the frequently high volumes of pedestrian movement. Signalised crossings are available at majority of intersections. Pedestrian activities are generally high during both day and night times, considering the proximity of the site to commercial, educational, entertainment and retail uses.

Cycling infrastructure around the construction site is well established, which consists of an off-road cycle route along Kent Street, shared user path on Macquarie Street and a dedicated cycleway along the western side of Pitt Street. Bicycle parking facilities are located through the Sydney CBD, including Hunter Street and Margaret Street.

The existing cycle infrastructure surrounding the Hunter Street East construction site is shown in Figure 6.

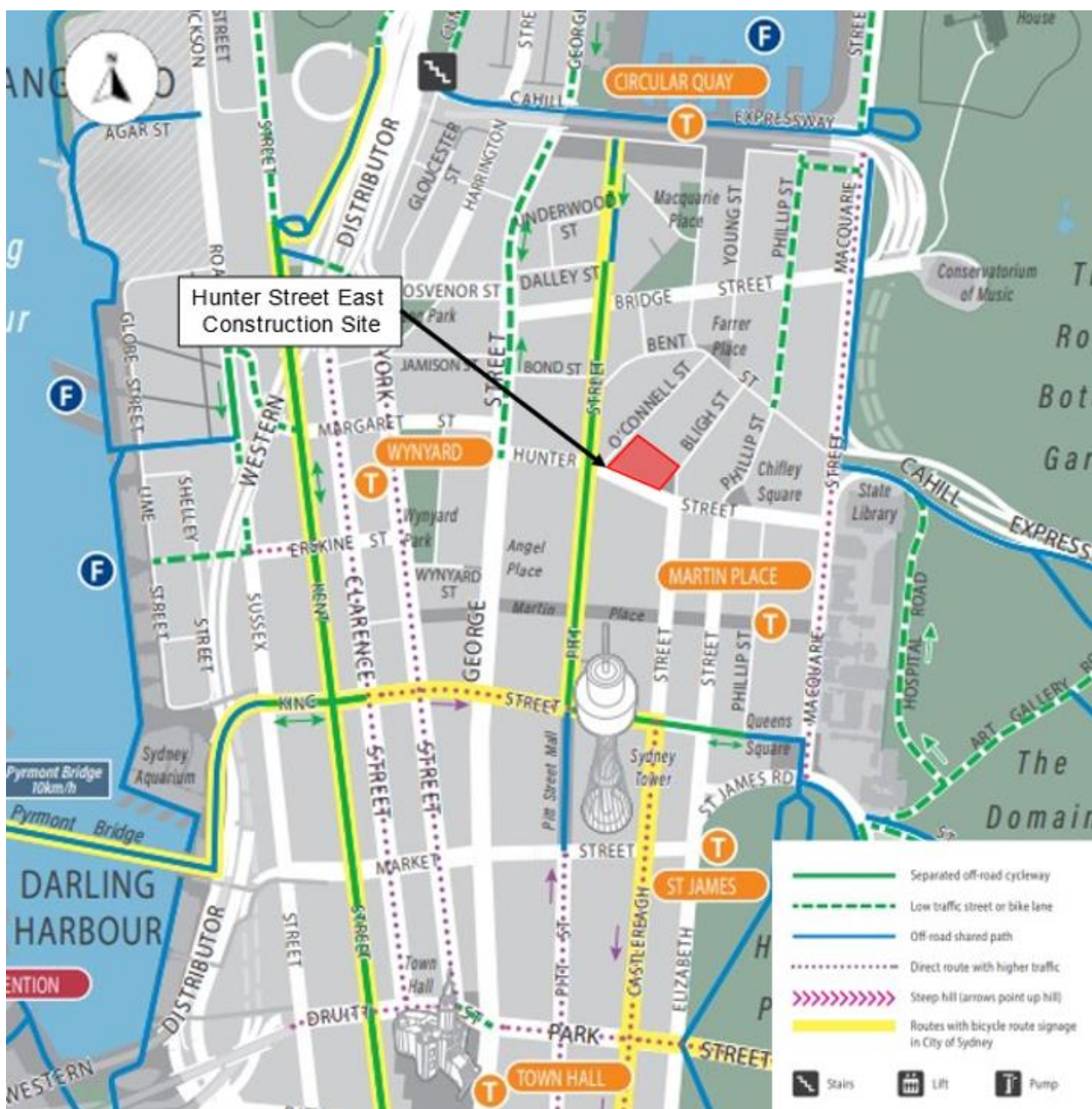


Figure 6: Cycle Infrastructure and Routes Surrounding Hunter Street East Construction Site

2.5. School Zones

There are no public schools or high schools within the vicinity of the nominated routes, other than Conservatorium High School located east of Macquarie Street which is on the approved haulage route.

2.6. Aged Care and Childcare Facilities

There are no known aged care and childcare centres located on the roads nominated for the modified haulage route.

2.7. Construction Traffic

2.7.1. Construction Traffic Management

Construction vehicles will be managed through monitoring, marshalling and communication between vehicles and the site.

2.7.1.1. Real Time Monitoring

The locations of all heavy vehicles used for spoil haulage will be monitored in real time and the records of monitoring will be made available electronically to the Planning Secretary and the Environmental Protection Authority (EPA) upon request for a period of no less than one year following the completion of the construction.

The real time monitoring will be undertaken using a Telematic system to track and analyse construction vehicle movements. Telematics are able to analyse real-time traffic data, allowing JCG JV to manage its spoil haulage vehicles fleet more efficiently by predicting arrival times and communicate directly with construction workers.

The GPS tracking feature allows JCG JV to determine the speed and location of the fleet to better manage the spoil haulage vehicle movements by determining pinch-points and adjust accordingly. If drivers are found to not comply with the posted speed limit, the traffic manager will receive notifications, enabling immediate action to mitigate the unsafe driver behaviour.

The spoil haulage vehicles will be restricted to use only the approved vehicle routes and avoid any unapproved local roads unless it is permitted for specific works by the authorities.

2.7.1.2. Inspection and Monitoring

Regular inspections will be conducted by the Foremen regarding compliance of the implementation of the relevant Hunter Street East CTMP in conformance with the Construction Traffic Management Framework and TCaWS manual. All critical safety defects will be rectified as soon as practicable.

Long-term traffic management setups will be inspected weekly with minor issues recorded and rectified within a reasonable timeframe. More significant issues will be recorded for rectification. The inspections will be documented.

Daily inspections will be undertaken to ensure all traffic management signs and devices are properly located, oriented and maintained in an effective condition.

All critical safety defects caused by the project activities, to any road, footpath, shared path or cycleway which is open to the public will be rectified as soon as practicable. Temporary rectification (e.g. cold mix, plating and etc.) might be used as an interim solution prior to permanent rectification works to the conditions it was in prior to the occurrence of the damage.

2.7.1.3. Marshalling

All truck marshalling is to be contained at The Bays site, with the site capable of holding eight trucks. Therefore, no on-street parking is required for truck marshalling in the vicinity of the site, and no layover would occur in any public roads nor the proposed haulage route.

2.7.1.4. Communication

The haulage route will be communicated and adhered to by drivers through the implementation of a Drivers Code of Conduct, which would be made available to the relevant personnel during the site induction training. All drivers will undergo the mandatory project-specific induction training provided by JCG JV.

As mentioned above, the Telematic system is able to provide details of the construction vehicle movements through real time monitoring. Telematics allow JCG JV to communicate directly with construction truck drivers.

2.7.2. Pedestrian and Cyclist Safety Management

The proposed works will not result in any major pedestrian impacts as pedestrian movements will be maintained on the existing footpath and crossing facilities.

Warning signage will be erected to warn and inform pedestrians of the changes in travel conditions and the traffic arrangement in place. TfNSW have implemented a 'Be Truck Aware' campaign which aims to show road users, the challenges that truck drivers face every day. Where the proposed haulage route crosses a pedestrian crossing facility along the proposed haulage route, truck awareness decals (Figure 7) will be placed on the footpath on either side of the pedestrian crossings on Gresham Street, as shown in Figure 8 subject to City of Sydney's approval. This will raise pedestrian awareness of the trucks on this local road.



Reference: <https://roadsafety.transport.nsw.gov.au/campaigns/be-truck-aware/index.html>

Figure 7: Truck Aware Decals



Figure 8: Proposed Location for Truck Aware Decals on Both Sides of Pedestrian Crossings on Gresham Street

The proposed haulage route will not result in any major impacts on cyclist activities in close proximity to the construction site. All cycle routes will be maintained for the duration of the proposed works. No cycle routes are along the proposed haulage route.

Toolbox talks will be held regularly during construction works and investigations. They will reinforce and reiterate information from inductions. Toolbox talks will advise drivers of any risk areas especially the proposed haulage route where two pedestrian crossings are located on Gresham Street.

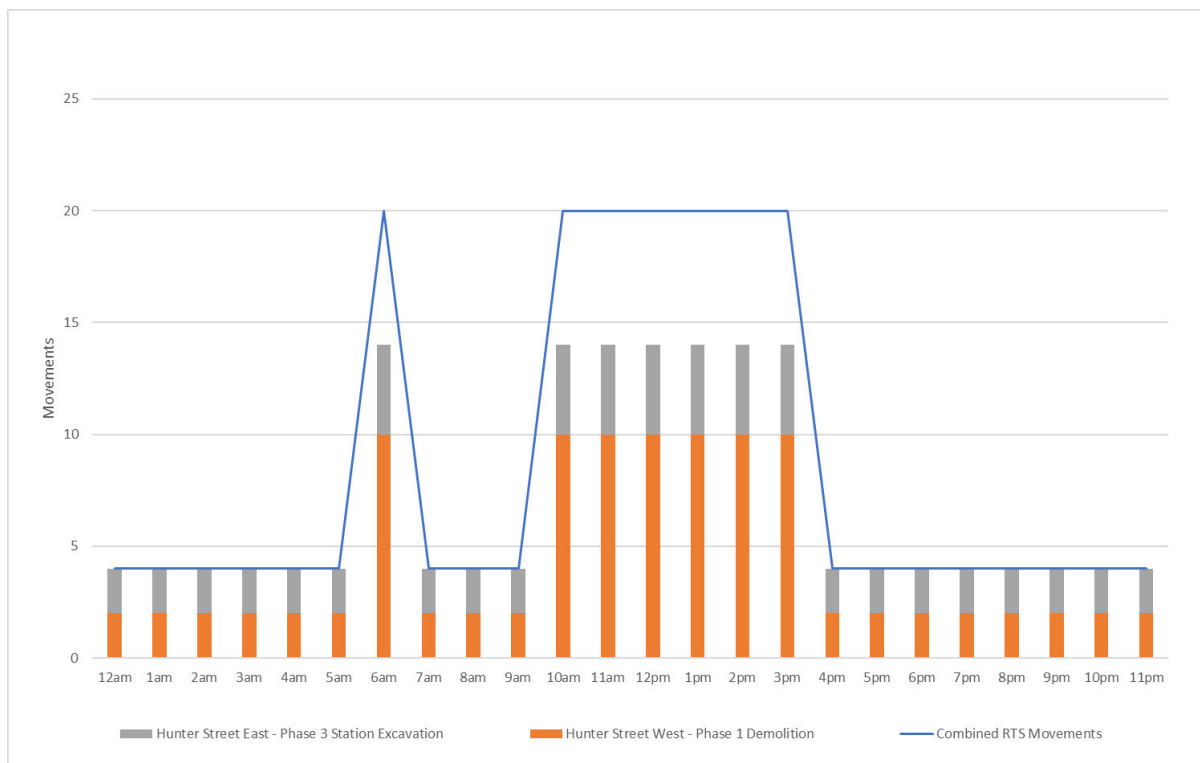
Driver training will consider current best practice and information, including cycle awareness training. The contractor must ensure that regular briefings are provided to drivers on routes, potential changes and impacts on the routes in the form of toolbox talks.

All heavy vehicles used for spoil haulage will be equipped with safety equipment as described in the Sydney Metro Principal Contractor Health and Safety Standard (SM-20-00100838). The corresponding list of safety equipment that will be installed on all heavy vehicles frequently entering the sites, is included in Appendix E

2.7.3. Construction Traffic Volumes

Construction traffic generated by the Hunter Street East construction site is expected to be consistent with the traffic generation identified in the Response to Submissions Report (RTS).

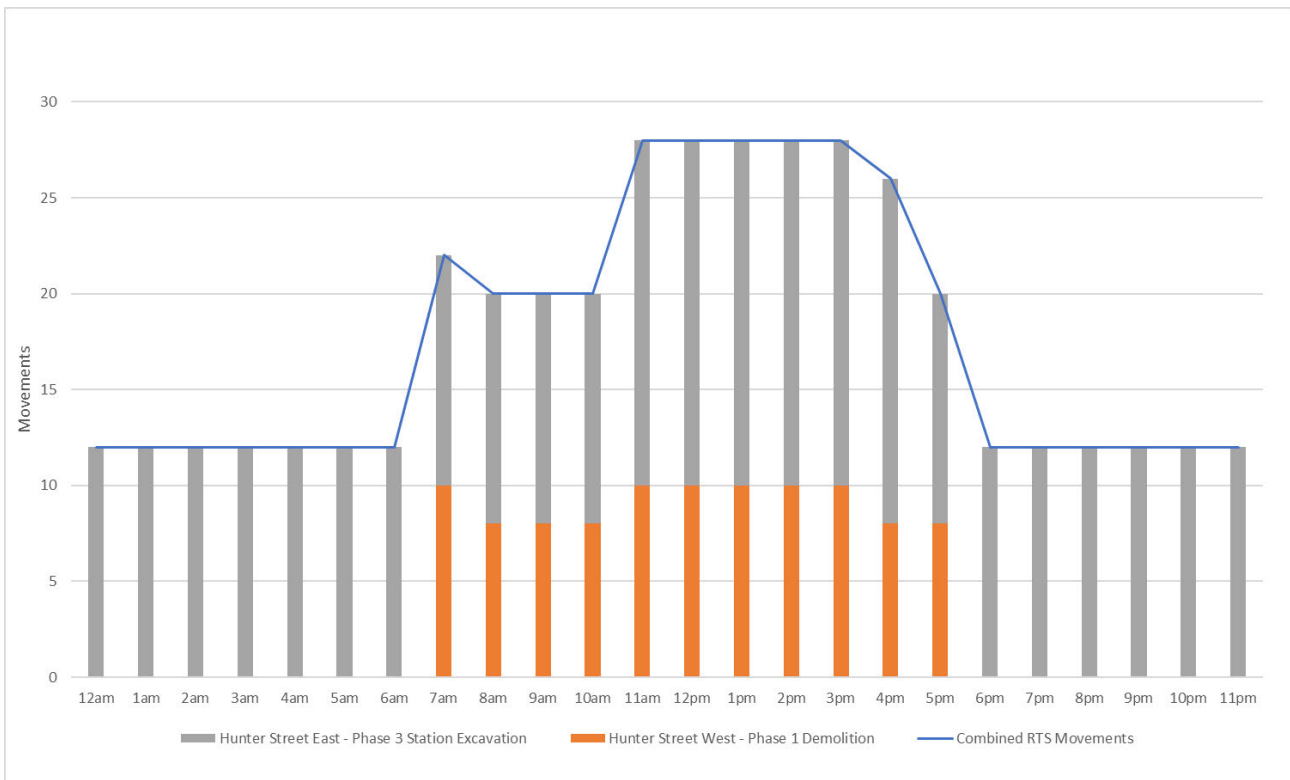
Figure 9 and Figure 10 detail the combined traffic generation of the Hunter Street East and West sites, noting construction traffic would be managed to minimise movements during AM and PM peak periods. Note: Movement means one way. A vehicle entering then leaving the site represents two movements.



Note: Movement means one way. A vehicle entering then leaving the site represents two movements.

Reference: Construction Traffic Management Plan Hunter Street East – Stage 1 - Tunnel Excavation and Lining – Rev 2 (10 March 2023)

Figure 9: Cumulative Hunter East & West Light Vehicle Movements



Note: Movement means one way. A vehicle entering then leaving the site represents two movements.

Reference: Construction Traffic Management Plan Hunter Street East – Stage 1 - Tunnel Excavation and Lining – Rev 2 (10 March 2023)

Figure 10: Cumulative Hunter East & West Heavy Vehicle Movements

2.8. Dilapidation

A road dilapidation survey will be completed by the end of August 2023. A copy of the dilapidation report will be provided to TfNSW and City of Sydney.

3. Swept Path Assessment

Swept path assessment is presented in Appendix A for all intersections as encircled in Figure 11 where turning movements of a 12.5m long HRV will occur along the proposed haulage routes.

One off and special oversize deliveries will be managed under a separate application.

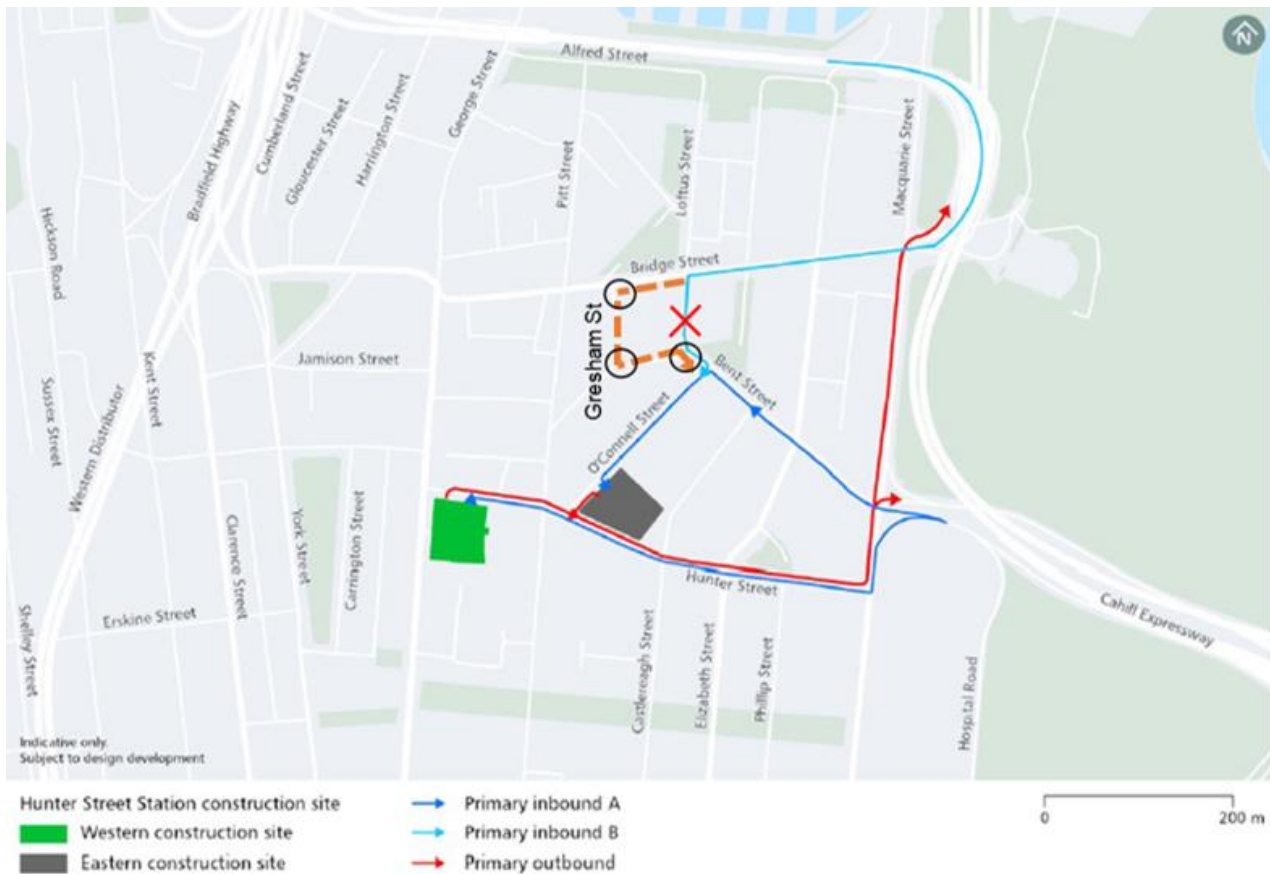


Figure 11: Intersections Included in Swept Path Assessment

The swept path assessment as shown in Appendix A demonstrates that the proposed additional haulage routes are suitable for 12.5m long HRVs.

4. Road Safety Audit

A road safety audit was conducted on the proposed modified Inbound Route B based on the swept path assessment in conjunction with a site inspection along the proposed haulage route via Bridge Street, Gresham Street and Bent Street which is deviated from the approved modified EIS route as shown in Figure 4. The road safety audit report is presented in Appendix B.

There were no high risk items identified, and two low risk items were categorised as “possible” in terms of likelihood and an “insignificant” severity level. Refer to the risk matrix in the road safety audit report.

Designer responses are shown in the last column in Table 4.2 in the road safety audit report in Appendix B. Swept path diagrams have been revised and are shown in Appendix C in response to the audit findings.

5. Consultation

Consultation of the Hunter Street East CTMP was undertaken in accordance with the requirements of the CTMF, including the TCG and the TTLG.

JCG JV has presented this HVLR proposed haulage route at the TCG meeting held on 3 August 2023. Minutes attached in Appendix F.

6. Qualification

This HVLR report in relation to the proposed haulage route has been prepared by Doris Lee, an Associate Traffic Engineer with a Bachelor of Civil Engineering. Doris has 20 years' experience in traffic engineering and transport planning and is an accredited Level 3 Road Safety Auditor and has certification to prepare work zone traffic management plans.

The road safety audit was carried out by the following team:

- Ashish Tamhane (RSA-02-1607) - level 3 road safety auditor (lead auditor)
- Adeline Sim (RSA-02-1527) - level 2 road safety auditor (team member)

Ashish and Adeline are registered road safety auditors with the TfNSW Register of Road Safety Auditors and are experienced in traffic engineering and design/ inspection of traffic management schemes. Both auditors are independent of the design process.

7. Conclusion

The swept path assessment demonstrates that the intersections along the modified Inbound Route B can provide sufficient clearance to accommodate the turning movements of a 12.5m HRV.

There were no high-risk items identified, and two low risk items were categorised as low in terms of likelihood.

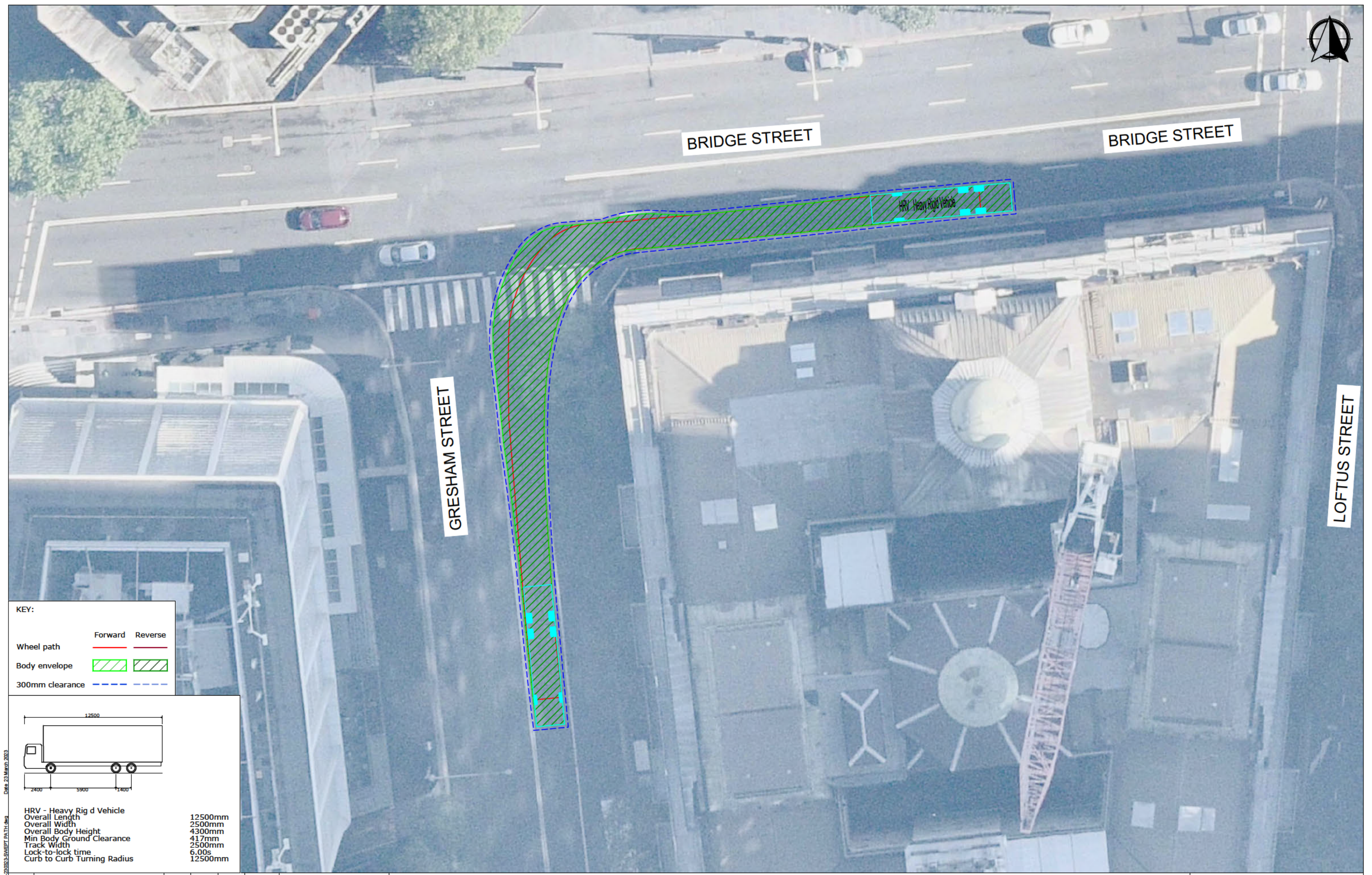
Truck awareness decals will be placed on the footpath on either side of the pedestrian crossing at the northern and southern ends of Gresham Street, subject to City of Sydney's approval. This will raise pedestrian awareness of the trucks on this local road.

A road dilapidation survey will be completed by the end of August 2023 prior to the use by heavy vehicles on the modified haulage route.

Finally, there are no known aged care facilities or childcare facilities along the proposed heavy vehicle route, and one high school is located adjacent to the approved EIS route. Therefore, the proposed additional haulage routes are suitable for use and are recommended for approval.

Appendix A

Swept Path Assessment (For Road Safety Audit)



File name: 21480CAD-HUNTER-005-230323-SWEPT PATH.dwg Date: 23 March 2023

KEY:

Wheel path	Forward	Reverse
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	SC	DL	DL	23/03/23



PROJECT	SYDNEY METRO WEST - EASTERN TUNNELING PACKAGE				
TITLE	SWEPT PATH ANALYSIS - BRIDGE STREET AND GRESHAM STREET AS2890.2 12.5m HEAVY RIGID VEHICLE				

DWG No.	21480CAD-HU FIGURE 11		
DATE STAMP	23 MARCH 2023		
PROJECT No.	SCALE	REV.	
21480	1:300 @A3	A	



GRESHAM STREET

BENT STREET



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

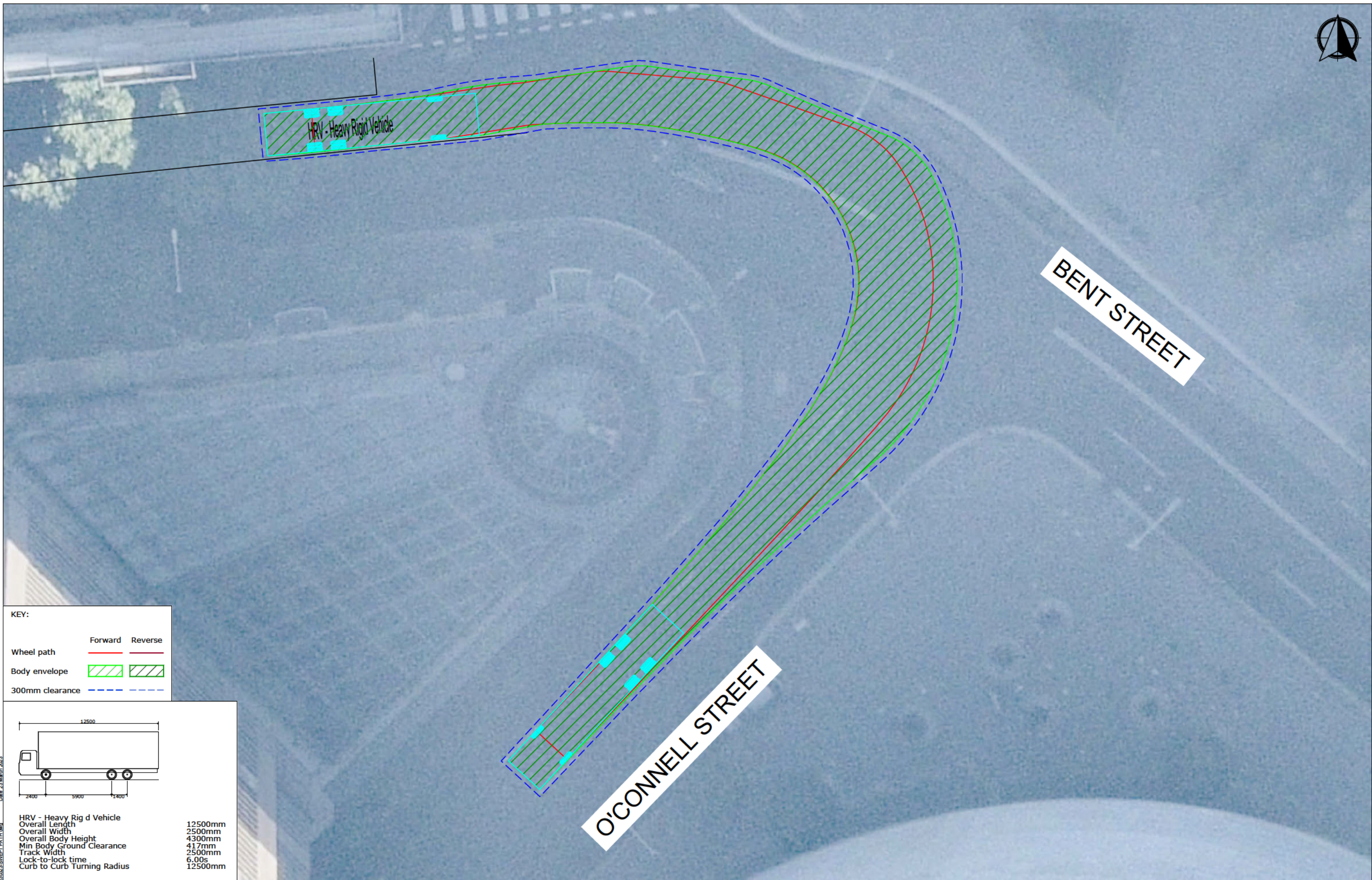
REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	SC	DL	DL	23/03/23



PROJECT	SYDNEY METRO WEST - EASTERN TUNNELING PACKAGE				
TITLE	SWEPT PATH ANALYSIS - GRESHAM STREET AND BENT STREET AS2890.2 12.5m HEAVY RIGID VEHICLE				

DWG No.	21480CAD-HU FIGURE 12		
DATE STAMP	23 MARCH 2023		
PROJECT No.	SCALE	REV.	
21480	1:200 @A3	A	

File name: 21480CAD-HUNTER-005-20230323-SWEPT PATH.dwg Date: 23 March 2023



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	SC	DL	DL	23/03/23



PROJECT	SYDNEY METRO WEST - EASTERN TUNNELING PACKAGE		
TITLE	SWEPT PATH ANALYSIS - BENT STREET AND O'CONNELL STREET AS2890.2 12.5m HEAVY RIGID VEHICLE		

DWG No.	21480CAD-HU FIGURE 13		
DATE STAMP	23 MARCH 2023		
PROJECT No.	SCALE	REV.	
21480	1:200 @A3	A	

File name: 21480CAD-HU-FIGURE 13-20230323-SWEPT PATH.dwg Date: 23 March 2023

Appendix B Road Safety Audit



Hunter Street East – Proposed Haulage Routes

Existing Conditions Road Safety Audit

Prepared for:

JCG JV

6 April 2023

The Transport Planning Partnership

Hunter Street East – Proposed Haulage Routes

Existing Conditions Road Safety Audit

Client: JCG JV

Version: V02

Date: 6 April 2023

TTPP Reference: 21480

Quality Record

Version	Date	Prepared by	Reviewed by	Approved by	Signature
V01	06/04/2023				
V02	6/04/2023				

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APPENDICES

A. SWEPT PATH ASSESSMENT

1 Road Safety Audit Summary

Audited project:	Hunter Street East – Proposed Haulage Routes	
Client:	JCG JV	
Project manager:	[REDACTED]	
Email address:	[REDACTED]	
Telephone:	[REDACTED]	
Audit Team:	[REDACTED]	(level 3 lead road safety auditor)
	[REDACTED]	(level 2 road safety auditor)
Audit type:	Existing Conditions	
Commencement meeting:	N/A	
Audit date:	04 April 2023	
Completion meeting:	Not required	

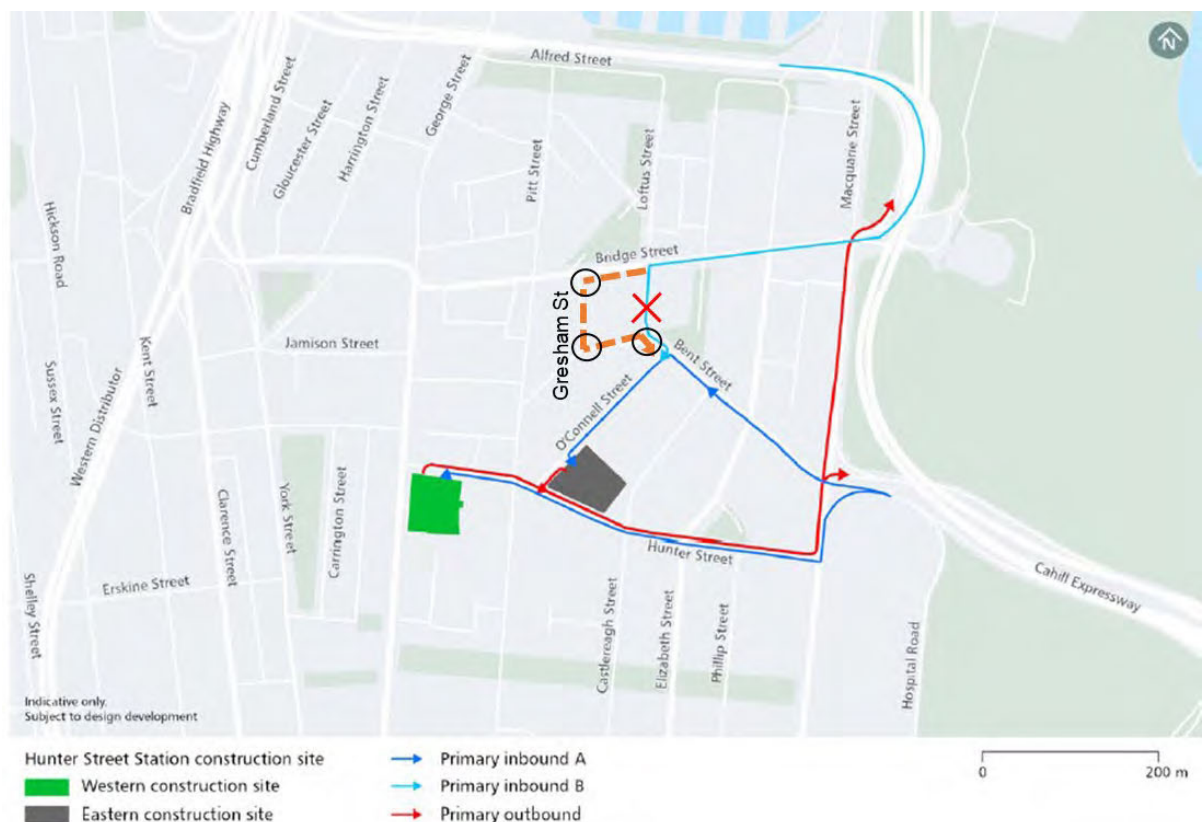
2 Introduction

2.1 Background

This report has been prepared on behalf of JCG JV to present road safety audit findings that have been identified from the proposed haulage routes associated with the construction of the Hunter Street East metro station as part of the Sydney Metro West Eastern Tunnelling Package.

City of Sydney (Council) is about to close Loftus Street to vehicular traffic. Subsequently, JCG JV have modified the Inbound Haulage Route B from Loftus Street to Gresham Street to access the Hunter Street East site. The previously approved Inbound Route B is shown by the pale blue line in Figure 2.1, and the proposed route is via Gresham Street as per the dotted orange line. The Gresham Street segment is not identified in Condition A1 of the Conditions of Approval for this project.

Figure 2.1: Modified Inbound Route B (Orange Dotted Line)



The swept path analysis movements of a 12.5m HRV at the intersections circled in Figure 2.1 were audited. A site inspection was carried out along the proposed haulage route to identify road safety issues associated with different road users.

2.2 Audit Objective

The objective of this Audit is to examine the road safety issues associated with the proposed Inbound Route via Gresham Street instead of Loftus Street.

2.3 Procedures and Reference Material

The procedures used are described in the following guidelines:

- Roads and Maritime Services' 2011 Guidelines for Road Safety Audit Practices
- Austroads Guide to Road Safety 2022: Part 6 Road Safety Audits

Following information was supplied and referenced prior to undertaking Road safety Audit:

Table 2.1: Information Supplied

Documentation	Date	Document Reference
Swept Path Analysis Plan – Bent Street and O'Connell Street	23 March 2023	21480CAD-HU Figure 13 (Three Sheets)

2.4 Audit Team

The RSA was carried out by the following team:

- Ashish Tamhane (RSA-02-1607) – level 3 road safety auditor (lead auditor)
- Adeline Sim (RSA-02-1527) – level 2 road safety auditor (team member)

Ashish and Adeline are registered road safety auditors with the TfNSW Register of Road Safety Auditors and are experienced in traffic engineering and design/ inspection of traffic management schemes. Both auditors are independent of the road design process.

3 Road Safety Audit Program

3.1 Commencement Meeting

A formal meeting was not held.

3.2 Site and Field Audit

A site inspection was carried out on Tuesday 4 April 2023 in fine weather conditions from 5:30pm – 6:30pm for day and night time inspections. The proposed modified haulage route along Gresham Street was walked over to identify possible road safety concerns. Several photographs and video footage were taken.

3.3 Completion Meeting

Not required.

4 Road Safety Audit Findings

4.1 Introduction

Table 4.1 provides specific details of the road safety deficiencies and a risk rating as extreme, high, medium, low, or negligible. The risk ratings have been based on the risk matrix presented in Table 4.1, which has been adopted from Figure 10.2 of Guide to Road Safety part 6 – Road Safety Audit.

Table 4.1: Risk Matrix

			Severity				
			Insignificant	Minor	Moderate	Serious	Fatal
			Property damage	Minor first aid	Major first aid and/or presents to hospital (not admitted)	Admitted to hospital	Death within 30 days of the crash
Likelihood (includes exposure)	Almost Certain	One per quarter	Medium	High	High	Extreme (FSI)	Extreme (FSI)
	Likely	Quarter to 1-year	Medium	Medium	High	Extreme (FSI)	Extreme (FSI)
	Possible	1 to 3 years	Low	Medium	High	High (FSI)	Extreme (FSI)
	Unlikely	3 to 7 years	Negligible	Low	Medium	High (FSI)	Extreme (FSI)
	Rare	7 years+	Negligible	Negligible	Low	Medium (FSI)	High (FSI)

↓

Safe System crash outcome threshold

The terms in Table 4.1 are described below.

Likelihood:

- Almost certain – occurrence once per quarter
- Likely – occurrence once per quarter to once per year
- Possible – occurrence once per year to once every three years
- Unlikely – occurrence once every three years to once every seven years
- Rare – occurrence less than once every seven years.

Severity:

- Insignificant – property damage
- Minor – minor first aid
- Moderate – major first aid and/or presents to hospital (not admitted)
- Serious – admitted to hospital
- Fatal – at scene or within 30 days of the crash.

Priority:

- Negligible – no action required
- Low – should be corrected or the risk reduced if the treatment cost is low
- Medium – should be corrected or the risk significantly reduced, if the treatment cost is moderate, but not high
- High – should be corrected or the risk significantly reduced, even if the treatment cost is high
- Extreme – must be corrected regardless of cost.

4.2 Responding to the Audit Report

As set out in the road safety audit guidelines, the responsibility for the road rests with the project manager, not with the auditor. The project manager is under no obligation to accept the audit findings. Neither is it the role of the auditor to agree to or approve the project manager's responses to the audit.

The audit provides the opportunity to highlight potential road safety problems and have them formally considered by the project manager in conjunction with all other project considerations.

4.3 Road Safety Audit Findings

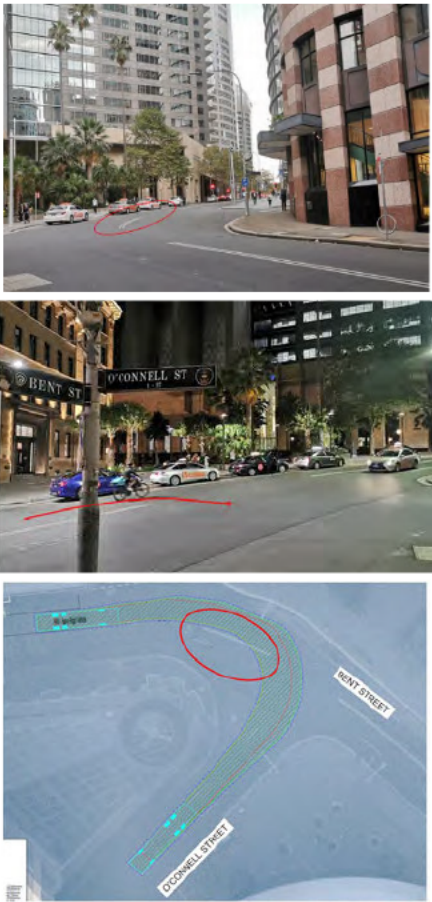
The audit findings are documented in Table 4.2 which provides:



- specific details of the road safety issues identified during the audit
- a risk level rating for each of the road safety audit findings.

It should be acknowledged that positive attributes of the audited road section have not been discussed. Deficiencies that do not cause a safety problem are also not listed.

In-line with TfNSW's best practice recommendations have not been included in the road safety audit findings.

Table 4.2: Road Safety Audit Findings

Item No.	Location	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating	Designer Response
1.	Bent Street – O'Connell Street	Bent Street has a designated taxi rank opposite the intersection with O'Connell Street and occasionally have taxis queuing out of the waiting zone. Taxi that spills out of the zone was observed to be parked at an angle, limiting the manoeuvring space for a HRV to turn right from Bent Street into O'Connell Street. This may lead to an HRV waiting to turn right crosses over the centre line while waiting to turn in the path of an oncoming vehicles, potentially resulting in head-on, side swipe crashes and minor injuries.		Possible	Insignificant	Low	<p>The part time taxi zone is approximately 19m long, which is sufficient to accommodate three taxis but another taxi may squeeze in with the rear of the taxi sticking out in the No Stopping zone, as shown in the photo.</p> <p>While this may occur at times, it is outside the control of JCG JV, however the swept path diagram for the Bent Street to O'Connell Street right turn movement has been refined to enable sufficient buffer in case a taxi spills out of the taxi zone.</p> <p>Refer to Attachment Three.</p>

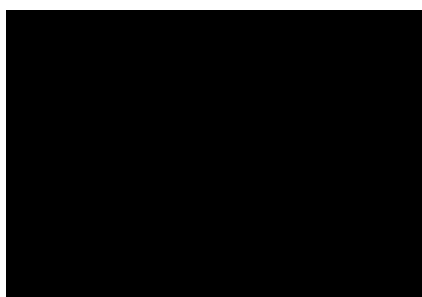
Item No.	Location	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating	Designer Response
2.	Gresham Street – Bent Street	The swept path appears to show HRVs turning left from Gresham Street into Bent Street would cross over the centre line and travel in the opposing lane to complete the turning manoeuvre. This could potentially result in head-on, side swipe crashes and minor injuries.	 	Possible	Insignificant	Low	The swept path diagram for the Gresham Street to Bent Street left turn movement has been refined for not encroaching the centreline and the kerbside lane. Refer to Attachment Three.

5 Concluding Statement

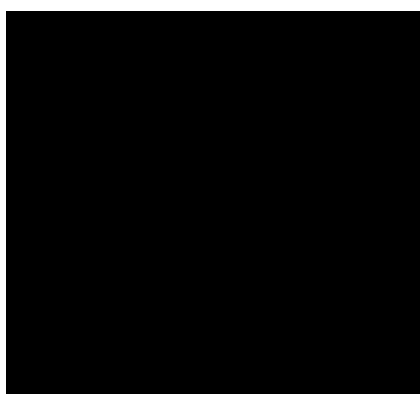
The findings and opinions in the report are based on the examination of the specific road and environments and might not address all concerns existing at the time of the audit.

The auditors have endeavoured to identify features of the road that could be modified in order to improve safety, although it must be recognised that safety cannot be guaranteed since no road can be regarded as absolutely safe.

While every effort has been made to ensure the accuracy of this report, it is made available strictly on the basis that anyone relying on it does so at their own risk without any liability to the Auditors.



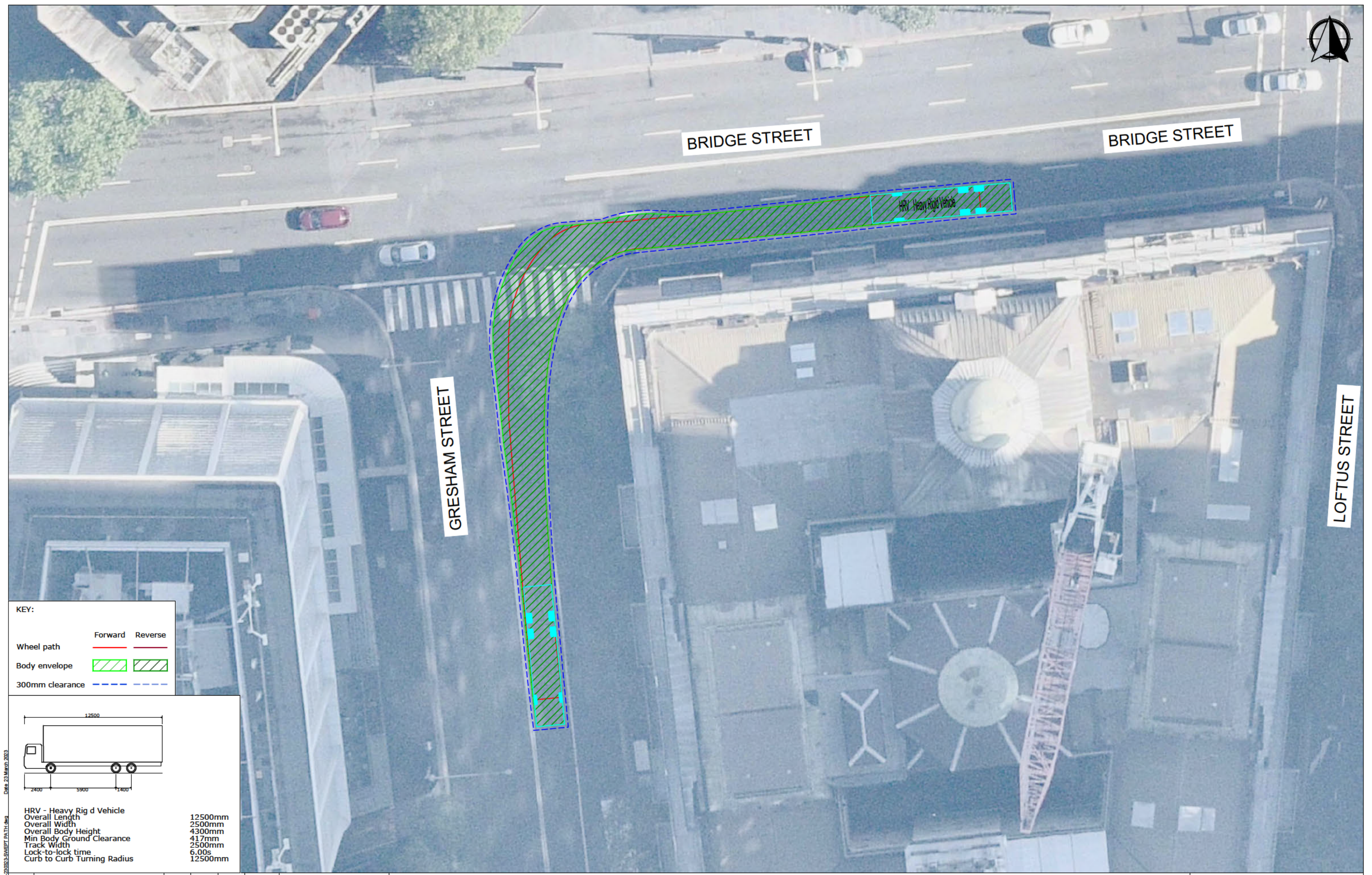
Level 3 Lead Road Safety Auditor
The Transport Planning Partnership



Level 2 Road Safety Auditor
The Transport Planning Partnership

Appendix A

Swept Path Assessment



KEY:

Wheel path	Forward	Reverse
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

File name: 21480CAD-HUNTER-005-230323-SWEPT PATH.dwg Date: 23 March 2023

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	SC	DL	DL	23/03/23



PROJECT	SYDNEY METRO WEST - EASTERN TUNNELING PACKAGE				
TITLE	SWEPT PATH ANALYSIS - BRIDGE STREET AND GRESHAM STREET AS2890.2 12.5m HEAVY RIGID VEHICLE				

DWG No.	21480CAD-HU FIGURE 11		
DATE STAMP	23 MARCH 2023		
PROJECT No.	SCALE	REV.	
21480	1:300 @A3	A	



GRESHAM STREET

BENT STREET



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

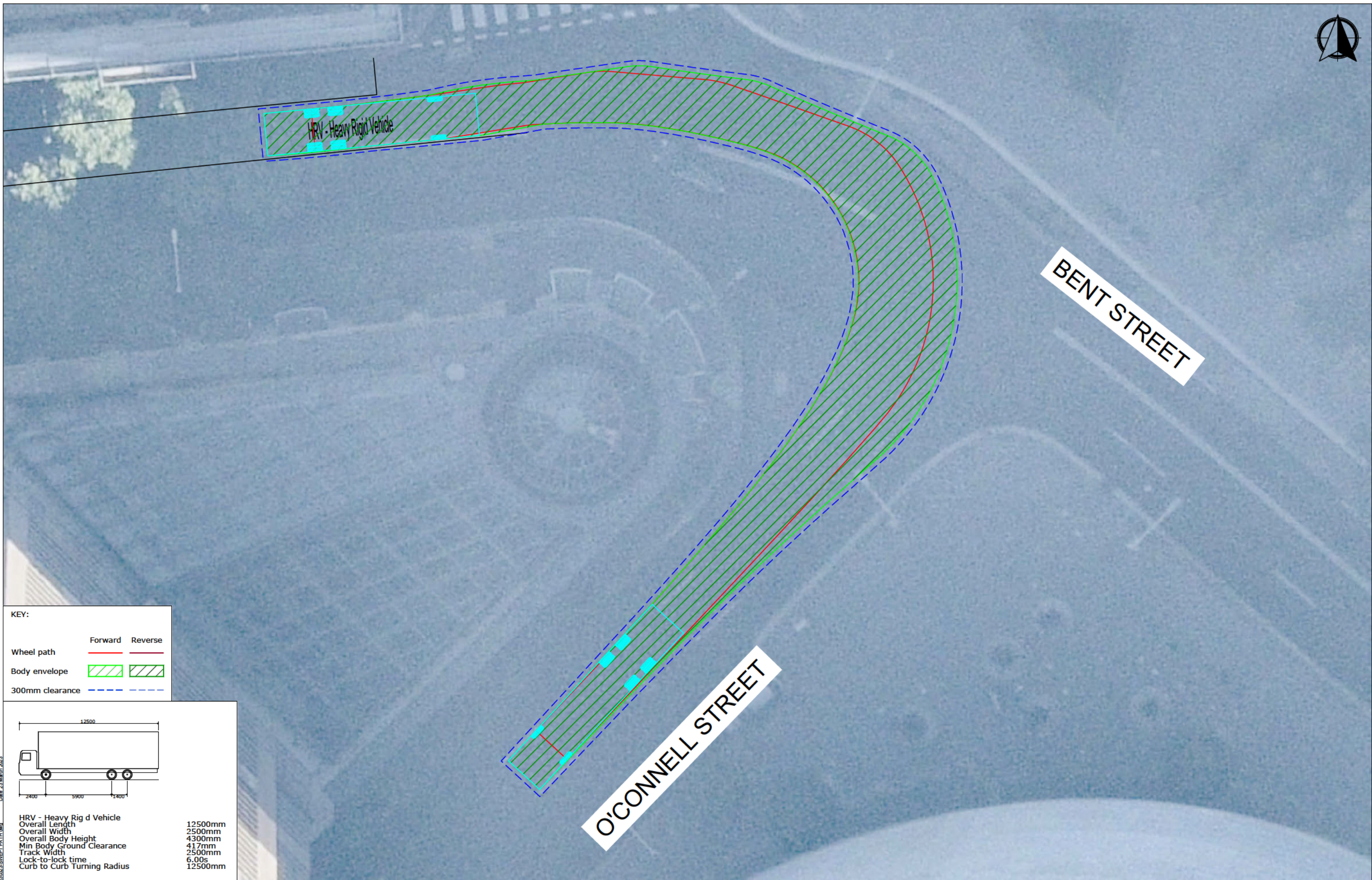
REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	SC	DL	DL	23/03/23



PROJECT	SYDNEY METRO WEST - EASTERN TUNNELING PACKAGE				
TITLE	SWEPT PATH ANALYSIS - GRESHAM STREET AND BENT STREET AS2890.2 12.5m HEAVY RIGID VEHICLE				

DWG No.	21480CAD-HU FIGURE 12		
DATE STAMP	23 MARCH 2023		
PROJECT No.	SCALE	REV.	
21480	1:200 @A3	A	

File name: 21480CAD-HUNTER-005-20230323-SWEPT PATH.dwg Date: 23 March 2023



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	SC	DL	DL	23/03/23



PROJECT	SYDNEY METRO WEST - EASTERN TUNNELING PACKAGE				
TITLE	SWEPT PATH ANALYSIS - BENT STREET AND O'CONNELL STREET AS2890.2 12.5m HEAVY RIGID VEHICLE				

DWG No.	21480CAD-HU FIGURE 13		
DATE STAMP	23 MARCH 2023		
PROJECT No.	SCALE	REV.	
21480	1:200 @A3	A	

File name: 21480CAD-HUNTER-005-20230323-SWEPT PATH.dwg Date: 23 March 2023

The Transport Planning Partnership
Suite 402 Level 4, 22 Atchison Street
St Leonards NSW 2065

P.O. Box 237
St Leonards NSW 1590

02 8437 7800

info@tpp.net.au

www.tpp.net.au

**Appendix C Revised Swept Path Assessment (in Response to
Road Safety Audit Findings)**



GRESHAM STREET

BENT STREET

KEY:

Wheel path	Forward	Reverse
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

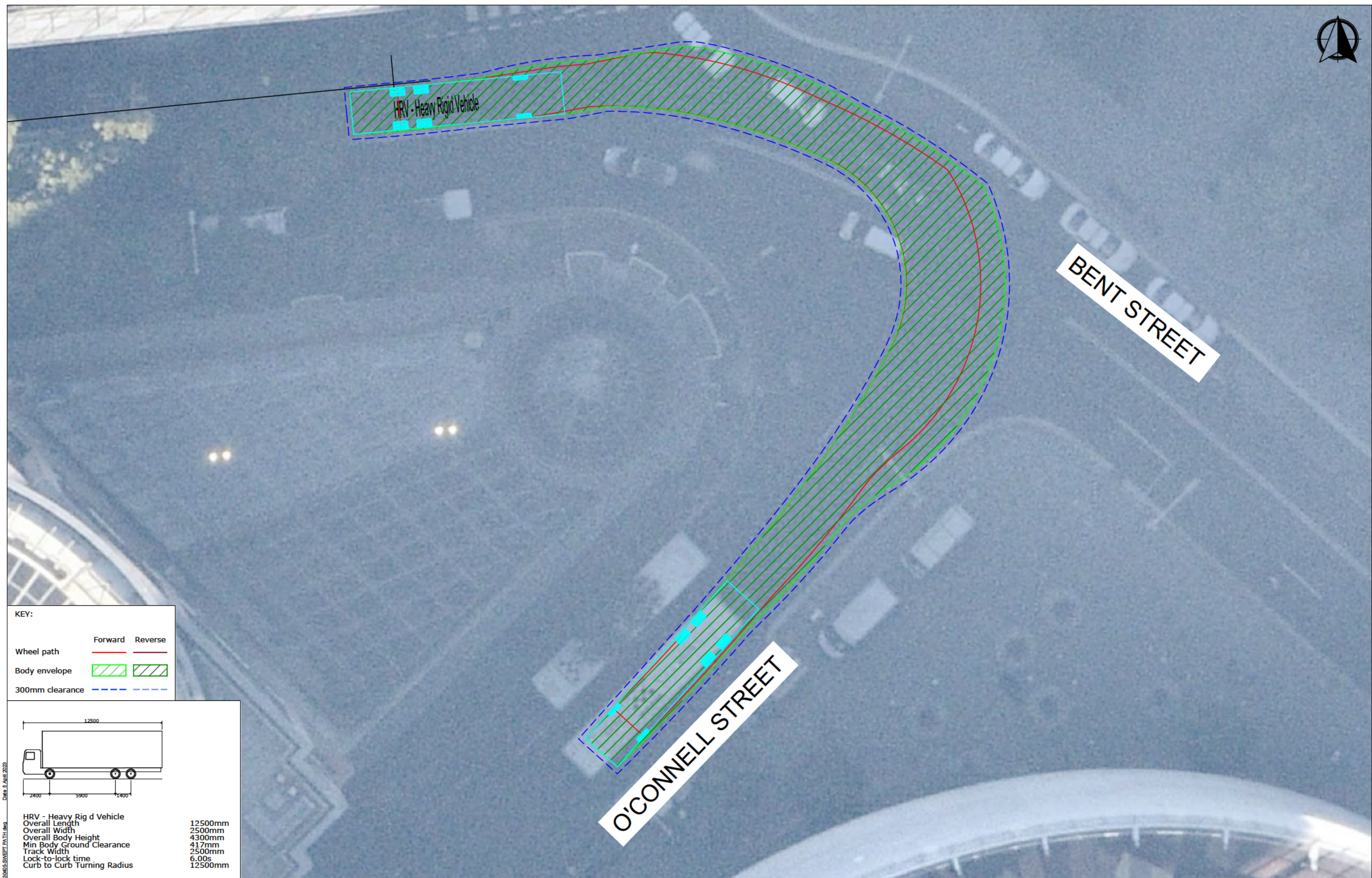
REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	SC	DL	DL	23/03/23
B	ISSUE FOR DISCUSSION	JG	DL	DL	05/04/23



PROJECT	SYDNEY METRO WEST - EASTERN TUNNELING PACKAGE		
TITLE	SWEPT PATH ANALYSIS - GRESHAM STREET AND BENT STREET AS2890.2 12.5m HEAVY RIGID VEHICLE		

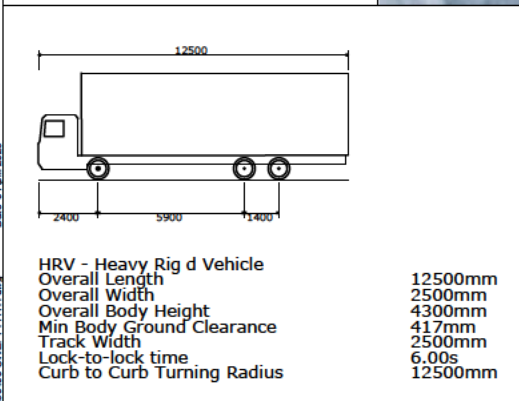
DWG No.	21480CAD-HU FIGURE 12		
DATE STAMP	05 APRIL 2023		
PROJECT No.	SCALE	REV.	
21480	1:200 @A3	A	

Filename: 21480CAD-HU-FIGURE 12-230405-SWEPT PATH.dwg Date: 5 April 2023



KEY:

Wheel path	Forward	Reverse
Body envelope		
300mm clearance		



File name: 21480CAD-HUNTER-005-230405-SWEPT PATH.dwg Date: 5 April 2023

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	SC	DL	DL	23/03/23
B	ISSUE FOR DISCUSSION	JG	DL	DL	05/04/23



PROJECT	SYDNEY METRO WEST - EASTERN TUNNELING PACKAGE		
TITLE	SWEPT PATH ANALYSIS - BENT STREET AND O'CONNELL STREET AS2890.2 12.5m HEAVY RIGID VEHICLE		

DWG No.	21480CAD-HU FIGURE 13		
DATE STAMP	05 APRIL 2023		
PROJECT No.	SCALE	REV.	
21480	1:200 @A3	A	

Appendix D Heavy Vehicle Safety Equipment

Heavy Vehicle Safety Equipment

Below are the specific safety equipment requirements, as described in the Sydney Metro Principal Contractor Health and Safety Standard (SM-20-00100838).

All heavy vehicles used to transport equipment, plant, materials and people to and from a project worksite or working area are to be fitted with the following mandatory safety equipment that complies with relevant Australian Design Rules (ADR) requirements:

- Horn
- UHF radio
- Positive identification signage
- Laminated glass fitted to all windows with unimpeded view
- Seat integrated three-point lap-sash seatbelts with emergency locking retractor (ELR) (for the driver and all passengers)
- Rear-view mirrors, refer below for further details for Heavy Vehicles
- Reversing cameras, sensors and alarm
- Reversing alarm that is automatically activated of the 'quacker-type'. Self-adjusting type alarms, 'Smart Alarms' are preferred
- Headlights, taillights, front and back direction indicators, hazard warning, reverse and brake lights, clearly visible day and night
- Light and high visibility colours for vehicles
- No additional window tinting
- Back-up alarms
- 360-degree visible roof-mounted flashing beacon or double pulse strobe lights visible up to 200 metres (unless determined otherwise by risk assessment)
- Fire safety equipment capable of suppressing or extinguishing potential vehicular fires.
- Suitable load restraint
- Positive identification signage.

All Heavy Vehicles over 4.5 tonnes gross vehicle mass (GVM), are to be fitted with the following additional safety equipment, as a minimum:

- Side-underrun guards, in accordance with the Australian Trucking Association's (ATA) Industry Technical Council Advisory Procedure for Side Under Run Protection, on both sides of the vehicle:
 - Between the front and rear axle of all rigid (single unit) trucks
 - Between the front axle/landing legs and rear axle of trailers forming part of a combination.
- Front Underrun Protection Systems (FUPS) (for all new heavy vehicles from January 2012) that comply with ADR 84—Front Underrun Impact Protection.
- A combination of direct and/or indirect devices to eliminate or minimise front, side and rear blind spots, including:
 - Class V and VI mirrors, or equivalent as defined under ADR 14/02 – Rear Vision Mirrors where blind spots cannot be permanently eliminated
 - The prohibition of accessories that restrict the forward field of view, including opaque or chrome bug deflectors.
- Blindspot elimination/detection systems as per the Truck Industry Council's Voluntary Code of Practice to Ensure an Adequate Field and Clarity of View are to be used if blind spots cannot be eliminated by measures above
- A Telematics Monitoring System which measures and reports on vehicle location, speed compliance, fatigue and other driver behaviour (such as harsh acceleration, braking)
- ABS Brakes, in accordance with ADR 35/04, are required to be fitted to all new heavy vehicles from January 2015)
- Rear warning signs alerting other road users to the dangers of overtaking the Heavy Vehicle and signs on the front nearside warning pedestrians about walking close to the front of a moving or stationary heavy vehicle.

- Front nearside signs warning pedestrians about walking close to the front of a moving or stationary Heavy Vehicle
- Conspicuity (full body line and contour) markings compliant with the requirements of UN/ECE 104 – Uniform Provisions Concerning the Retro-Reflective Markings for Heavy and Long Vehicles and their Trailers and ADR 13/00
- Reflective markings fitted to the drawbar of all trailers
- Heavy vehicles used for spoil haulage must be clearly marked on the sides and rear with the Project name and SSI No: 19238057 to enable immediate identification by a person viewing the heavy vehicle standing 20 metres away
- Automatic tailgate locks are fitted and operational on all heavy vehicles carting loose materials. Spoil trucks are also to be fitted with operating grain locks
- Subcontractors are encouraged to continue to adopt advanced vehicle safety features that are available such as:
 - Electronic stability control
 - Blind spot monitoring
 - Autonomous emergency braking systems
 - Any other vehicle safety technologies.

Note:

(1) These requirements apply to all heavy vehicles unless JCG can demonstrate, to the reasonable satisfaction of Sydney Metro, that the vehicle is unable to perform the function with the safety equipment fitted. In these circumstances JCG must apply for a variation in accordance with Clause 1.3.1 of the PC Standard.

(2) Regular inspections must be conducted by the PC to ensure all Frequent Heavy Vehicles entering site locations are compliant with the above requirements.

(3) If mechanical or compliance issues are detected during regular inspections of heavy vehicles and trailers on arrival at a project worksite, the relevant subcontractor or supplier will be notified, and the heavy vehicle or trailer will be sent from site to affect the repairs or other corrective actions.

(4) A reference to 5-Star ANCAP rating only applies only to new passenger vehicles, sports utility vehicles (SUV) and light commercial vehicles (LCV) light vehicles.

Appendix E Consultation

Minutes
Sydney Metro West – Traffic Control Group – Meeting 55

Date	Thursday 3 August 2023		Time	3:30pm – 3:45pm
Venue	Microsoft Teams meeting			
	Name	Initials	Organisation	Role
Chair		JA	SM	Transport planning
Attendees		RB	TfNSW (CJP)	Short term bus changes
		TB	City of Sydney Cl.	City Access
		LC	Quickway	Westmead Utilities Relocation
		SC	SM	Traffic & transport
		DCr	TfNSW (CJP)	Traffic & transport
		SD	SM	Project Engineer – The Bays
		BG	SM	Traffic & transport
		MHu	Inner West Cl.	Traffic & transport
		DH	SM	ETP Project Engineer
		GJ	Port Authority	Project manager
		PKe	TfNSW (CJP)	Traffic & transport
		BM	SM	Interface Mgt
		BMc	GLC	WTP contractor
		FP	TfNSW (CJP)	Short term bus changes
		ER	SM	CTP contract mgt
		MT	SM	ETP Engagement
		FV	SM	ETP Interface Mgt
		KV	JCGJV	ETP Contractor – Traffic Manager
		LW	SM	Road safety
		MY	TfNSW	Operational Improvement Planning

Item		Overview / Action by	Actions
1.	Welcome and Introductions	Joel Azzopardi	<ul style="list-style-type: none"> Acknowledgment of Country. JA welcomed all to the meeting and asked for new attendees to introduce themselves. <ul style="list-style-type: none"> Nil The Minutes of TCG Meeting 54 (20 July 2023) were accepted as an accurate record of the meeting and were adopted by the TCG Group.
2.	Actions Arising		<ul style="list-style-type: none"> Nil actions arising
3.	Western Tunnelling Package (WTP) Works Overview - Nil report		<ul style="list-style-type: none"> Nil report
4.	Westmead Utility Relocation Works Overview - Nil report		<ul style="list-style-type: none"> Nil report
5.	Central Tunnelling Package (CTP) Works Overview - Nil report		<ul style="list-style-type: none"> Nil report

6.	Eastern Tunnelling Package (ETP) Works Overview <ul style="list-style-type: none"> - Nil report 		<p>KV spoke to the tabled slides noting as follows:</p> <ul style="list-style-type: none"> • Traffic Plan Status Update <ul style="list-style-type: none"> - Eastern Creek Precast Facility Site Operations CTMP recently approved - Hunter Street Construction Site Access: Anzac Bridge, Western suburbs HVLR to be submitted shortly (refer below) - Hunter Street East Construction site route HVLR (Gresham St) to be submitted shortly (refer below) • Hunter Street Construction sites access: Anzac Bridge, Western Suburbs proposed cross-city access route HVLR <ul style="list-style-type: none"> - Proposed routes provide access and egress to the western suburbs / The Bays via Anzac Bridge to Hunter Street sites - The current approved routes do not provide access to the west of Hunter Street - The intent is to use the proposed routes primarily for direct access to the west where required - The proposed new route includes the following road network: <ul style="list-style-type: none"> - Inbound Route <ul style="list-style-type: none"> - ANZAC Bridge eastbound - King St eastbound - Right onto Elizabeth St - Left onto St James Rd - Left onto Macquarie St - Left onto Hunter St - to Hunter St West site - Left onto Bent St – to Hunter St East site - Left onto O’Connell St - Outbound Route <ul style="list-style-type: none"> - Eastbound on Hunter St - Right onto Castlereagh St - Right onto Market St - Onto ANZAC Bridge westbound - The Response to Submission approved peak vehicle movements (up to 28 heavy vehicle movements) will be maintained from the Hunter Street east and west sites combined • Hunter Street East Construction site route HVLR (Gresham St) <ul style="list-style-type: none"> - The proposed route provides an alternate access to the currently approved access along Loftus Street which may be closed to traffic in the future and currently is restricted to vehicles less than 9m (due to an existing turn restriction from Bridge Street left turn into Loftus Street of vehicles of such size) - Various options were considered and discussed with CJP and the City of Sydney Council previously - The proposed new route includes the following road network: <ul style="list-style-type: none"> - Inbound Route <ul style="list-style-type: none"> - Gresham St in lieu of Loftus Street <p>Questions from the Attendees</p> <ul style="list-style-type: none"> • TB: Queried when will the CTMP/HVLR be provided. KV advised that the V will be submitted next week.
----	---	--	---

Item		Overview / Action by	Actions
			<p>Following receipt of comments, the CTMP will be updated and submitted.</p> <ul style="list-style-type: none"> • TB: Queried the timeline of the HVLR. KV advised the approval of the HVLR via DPE is generally one month • JA: Queried the potential timeframe of the closure of Loftus St. TB was unable to advise but will make the enquiries and provide an update when information is available <p>Actions:</p> <ul style="list-style-type: none"> • TB to provide an update on the potential timeframe of the closure of Loftus Street
7.	Other Matters:	All	Nil other matters raised.
8.	Next Meeting		The next TCG meeting is scheduled for 17 August 2023 at 3:30 pm.

REVIEW COMMENTS SHEET

DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	CLOSED OUT
SMWSTETP-JCG-SCB-SN100-TF-RPT-093012	Sydney Metro West - ETP - Heavy Vehicle Local Road Report for Use of Local Roads - Hunter St East	A.01	S3	01	8/08/2023	SCO	PKEYES				No Comments		Y
													Y
				02	8/08/2023	RMS	MTITA				No Comments		Y
													Y
				03	8/08/2023	SMD	PBROGAN				No Comments		Y
													Y
				04	9/08/2023	TFN	LWILBY	SMWSTETP-JCG-SCB-SN100-TF-RPT-093012	2.1 Proposed routes and local roads	NA	Street view (April 2023) indicates that there was hoarding around the building on Gresham Street, although prior to the hoarding the sight distance looking back up Bridge Street at this location was/is significantly limited. There is the potential for a truck heading west along Bridge Street to not observe a pedestrian stepping out onto the zebra crossing (or short cutting from a few metres down Gresham St to the zebra crossing) who is doing so under the impression that they (the pedestrian) has right of way. This may result in a collision between HV and pedestrian which is likely to have severe injury outcomes. Appreciate decals will be used, but given the nature of the priority at the crossing pedestrians are still likely to step out expecting other traffic including HV to give way. I would like to see consideration of a traffic marshall during the first couple of weeks to monitor the situation and ensure pedestrians are aware of trucks turning before entering the road way. A similar scenario is likely a	Observation	N
					25/08/2023	JCGJV	K. Varga	SMWSTETP-JCG-SCB-SN100-TF-RPT-093012	2.1 Proposed routes and local roads	NA	Section 2.1 updated to indicate Traffic Controller assistance will be provided at the intersections of Bridge / Gresham and Bent / Gresham.	Observation	N
				05	9/08/2023	TFN	LWILBY	SMWSTETP-JCG-SCB-SN100-TF-RPT-093012	2.7.3 Construction traffic volumes	NA	Figure 10 indicates that HV movements will be highest between 11 am and 4pm - this includes the lunch time peak which in this location is likely to have a significant increase in pedestrians moving about the local street network. This will be further exacerbated with the pedestrianisation of Loftus Street. Higher pedestrian numbers translates to higher risk through greater exposure. Has consideration been given to minimise movements during the lunch time peak or to use additional mitigation measures (such as traffic marshalls) to offset the increased risk during this period?	Observation	N
					25/08/2023	JCGJV	K. Varga	SMWSTETP-JCG-SCB-SN100-TF-RPT-093012	2.7.3 Construction traffic volumes	NA	Once the Gresham St route is approved, Loftus St will no longer be used as a HV route by JCGJV. Bridge St and Loftus St is a signalised intersection with red arrow pedestrian protection. Also refer to updated section 2.1 as indicated in comments 4.	Observation	N
				06	14/08/2023	HBI	GBYRNES				No Comments		Y
													Y
				07	14/08/2023	SMD	FVANDENBRI				No Comments		Y
													Y
				08	21/08/2023	SMD	SCLARKE				No Comments		Y
													Y

Appendix F Approval

[REDACTED]
Director Environment, Sustainability & Planning - Metro West
Sydney Metro
PO BOX K659
HAYMARKET NSW 1240

Attention: [REDACTED] – Manager Environment

27/9/23

Subject: Sydney Metro West, Eastern Tunnelling Package ‘Heavy Vehicle Local Road Report for Use of Local Roads – Hunter Street East Construction Site’, Revision B

Dear [REDACTED]

Thank you for submitting the ‘Heavy Vehicle Local Road Report for Use of Local Roads, Hunter Street East Construction, Revision B, dated 25 August 2023 (the HVLR) on 8 September 2023.

I note the HVLR:

- has been prepared in consultation with key stakeholders including City of Sydney Council, Customer Journey Planning and Transport for NSW.
- has been reviewed by Sydney Metro and no issues have been raised with the department.
- has been endorsed by a Level 3 Road Safety Auditor.

Accordingly, as nominee of the Planning Secretary, I approve the use of roads by heavy vehicles as outlined in the HVLR under condition D73 and D74 of SSI 19238057. For the avoidance of doubt, my approval for use of these roads by heavy vehicles applies only as necessary to allow for the use of Gresham Street as an approved haulage road.

Please ensure that the relevant Construction Traffic Management Plan is updated with reference to the HVLR and that the HVLR is made publicly available on the project website as soon as possible.

If there are any inconsistencies between the document and the conditions of approval, the conditions prevail.

If you have any enquiries please contact [REDACTED]

Yours sincerely

Acting Team Leader – Rail
Infrastructure Management

As nominee of the Planning Secretary