Central Station Main Works Project

Construction Traffic Management Plan Addendum 15

- Eastern Entrance Construction

Central Station Main Works Project
Eastern Entrance Construction - Traffic Management Plan

Project name	**Central Station Main Works**
Client	Sydney Metro City & South West – Sydney Metro
Client contract number	SMCSWCSM-LOR-SMC-LM-PLN-000015
Laing O'Rourke contract number	K51

Revision history

Rev	Date	Description	Reviewed	INT/Date	Authorised
A	08/09/2020	For Review	SL		
B	22/01/2021	Review	SL		

Management reviews

Review Date	Reviewed By	Details	Initial	Date

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LAING O'ROURKE

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1. Introduction

This addendum provides additional information to, and forms a part of, the Central Station Main Works Construction Traffic Management Plan (CTMP) SMCSWSMC-LOR-SMC-TF-PLN-000001_7, this addendum has been written in accordance to all relevant standards, codes, acts and regulations as outlined in the Central Station Main Works Construction Traffic Management Plan (CTMP)

This addendum has been developed in alignment with the Sydney Metro City & Southwest Chatswood to Sydenham Construction Traffic Management Framework. Laing O'Rourke (LOR) uphold a commitment of compliance with this CTMF.

CTMP Addendum 5 Eastern Entrance Works (SMCSWCSM-LOR-SMC-LM-PLN-000006) detailed the enabling works required for the East Entrance including service diversions, piling and excavation. This CTMP illustrates LORs plan for the construction works of the Eastern Entrance including tower crane installation, completion of the structure and installation of external and external and internal finishes including works to Randle Lane.

2. Compliance Matrix

2.1 Minister's Conditions of Approval

The Minister's Conditions of Approval (CoA) are addressed with the full descriptions provided in Appendix F of Central Station Main Works Project Construction Traffic Management Plan Rev 7.

3. Key Personnel

Position	Name	Contact
Project Manager	Dave Leaver	0448 117 308
Superintendent	Dave Breslin	0429 360 298
Construction Manager	Oisin Farrell	0439 834 805
Project Engineer	Sam Laporte	0455 857 406
Logistics Manager	Daniel Kelly	0437 315 649
Site Engineer	Daniel Lobb	0409 983 376
Emergency Contact number		1800 CSM 000

4. Works Location

Figure 1 shows the work site location, previously known as the Bounce Hotel.

The Bounce Hotel, which was demolished in preparation for the construction of the new Eastern Entrance for Central Station was located at 20-28 Chalmers Street, Surry Hills. The majority of site activities and vehicle access to the Eastern Entrance worksite is via Randle Lane.

Randle Lane is a local road located directly to the rear of the 20-28 Chalmers Street located between Elizabeth Street and Randle Street.

Figure 1 - East Entrance Worksite

4.1 Considerations for access at this location

- Existing route of access for general traffic is restricted to a left hand turn into Randle Lane from Elizabeth Street. Therefore, the majority of access to the work area will be from the North heading south.
- The majority of vehicle movements would be during day shift between the hours of 0700 - 1800. Deliveries will be scheduled outside of the peak traffic hours where possible.
- The Eastern Entrance is restricted to rigid vehicle deliveries only. Large deliveries will need to be delivered via Randle Street.
- The Sydney Light Rail on Chalmers street results in vehicle access via Randle Lane only.
- Randle lane is a single directional street with passing space available along the length of the lane.
- Roads leading into and out of the work area are local roads.
- The left hand turn from Randle Lane onto Randle Street is a sharp turn. Entering Randle Lane from Randle Street is less of a turn.
- A number of existing properties use Randle Lane for vehicle access to parking. Access to basement car parking to properties off Randle Lane will be maintained at all times except in consultation with affected occupiers and agreement with affected owners for alternative parking, storage or other forms.
- Construction traffic generated as a result of these works will adhere to Vehicle routing as per EIS and planning approvals and as outlined in the Central Station Main Works CTMP. Outline of vehicle routing to and from the worksite can be found in Appendix B.

4.2 Stakeholder Consultation

LORAC will endeavour to carry out works for this project to produce minimal disruption to members of the community. Regular notifications and updates will be provided to the community as per the CSM Community Communications Strategy Management Plan

The community will be notified of any current and upcoming changes to the traffic conditions that have the potential to impact them, prior to their occurrence.

Notifications to the community will be done for the following:–

- Changes to traffic conditions requiring traffic alerts
- Construction commencement
- Changes to the scope of work

Figure 2 - An overview of the sensitive receivers in the vicinity of the Eastern Entrance Worksite. Consultation between these receivers and the Central Station Main Works Community and Stakeholder Engagement team will continue for the duration of the works.

This CTMP has been developed through consultation with all members of the Traffic Control Group (TCG). Table 1 below identifies the stakeholders consulted during the development of this CTMP.

Stakeholder	Date	Consultation	Main Contact People
TCG	08/09/2020	All members	SCO/ RMS/ Council/ Metro
SCO	08/09/2020	Submission of CTMP	Giovanny Ramirez, Jake Coles, Stephen Brown, Aaron Gale

RMS	08/09/2020	Submission of CTMP	Carl Mella, Quac Minh La
City of Sydney	08/09/2020	Submission of CTMP	Tony Ly, Van Le
Sydney Metro	08/09/2020	Submission of CTMP	Philip Brogan, David Garrod

Table 1 – Stakeholder engagement

5. Eastern Entrance Construction Stages

5.1 Construction and Internal fit out of Entrance building

December 2020 – November 2022

5.1.1 Scope of Works

Construction of Eastern Entrance from Chalmers Street to Sydney Trains Eastern Suburbs Railway including FRP, internal fit out and finishes, lifts and escalators build and commissioning.

Note the enabling works including bulk excavation of the worksite are detailed in Addendum 5 Eastern Entrance Works (SMCSWCSM-LOR-SMC-LM-PLN-000006)

Figure 3 - East Entrance view from Chalmers Street

5.1.2 Traffic Configuration

Works Zone continued to be utilised on Randle Lane to enable deliveries to the worksite (Figure 4).

A minimum 2.5m clear route will be maintained for emergency vehicles.

Refer to TCP in Appendix 6.1 Randle Lane Works Zone

5.1.3 Vehicle Forecast & movements

Vehicle Types

Construction Vehicles required to undertake these works –

- Site base crane
- Flatbed trucks/ hiabs – delivery/removal of site material
- Light vehicles/ utes for small deliveries.
- Concrete agitators

Vehicle movements

Continue delivery of general construction materials, tools and equipment to site including formwork, rebar, concrete, cladding, glazing etc.

Heavy Vehicle movements are not expected to exceed 20 per shift, with no more than 4 per hour in peak hours. (7am-10am, 4pm-6pm)

Through traffic is planned to be maintained for this stage. Whilst lifting and loading/ unloading, LOR Traffic Controllers within the laneway may temporarily hold general traffic vehicles until the lift is complete/ made safe.

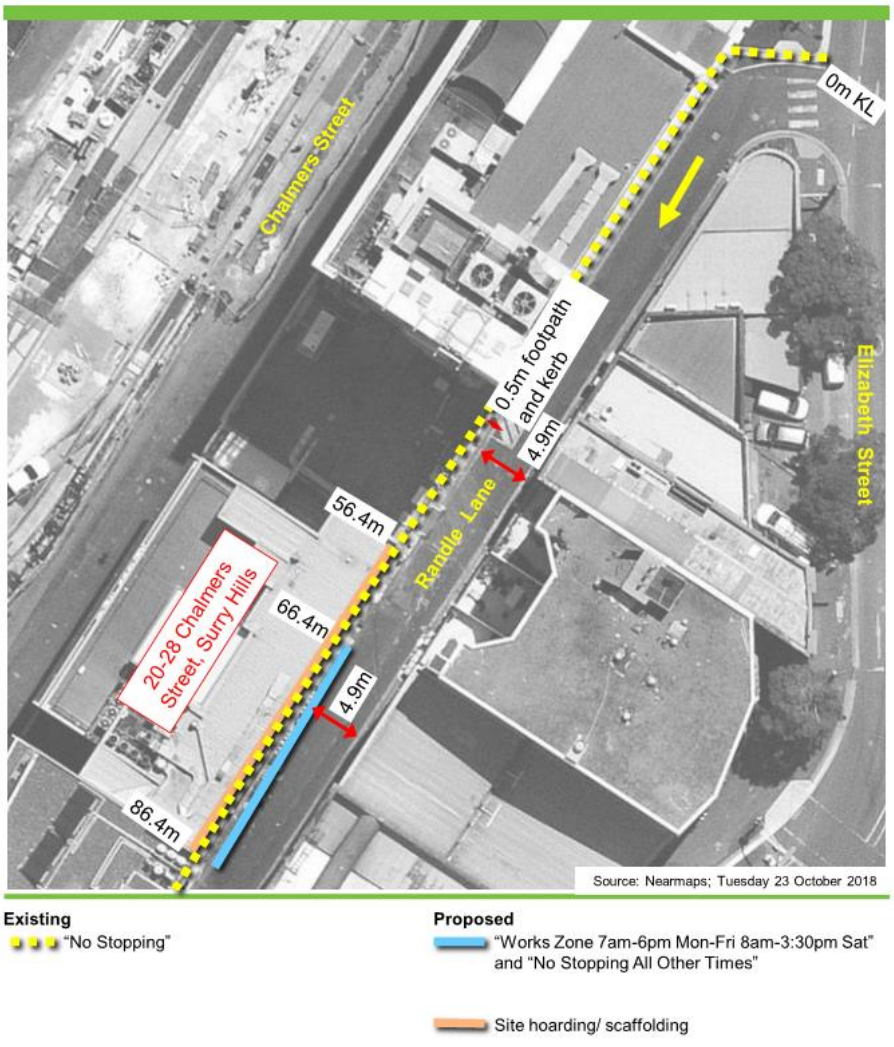

Figure 4 - Existing Works Zone in use on Randle Lane

5.2 Tower Crane Installation and removal

Installation in March 2021 and removal in August 2021 (exact date TBC).

5.2.1 Scope of work

Installation and removal of site based tower crane. A mobile crane is used to lift the crane components into place from Randle Lane. Some of the longest jib components will need to be transported from Randle Street Loading Zone to Randle Lane.

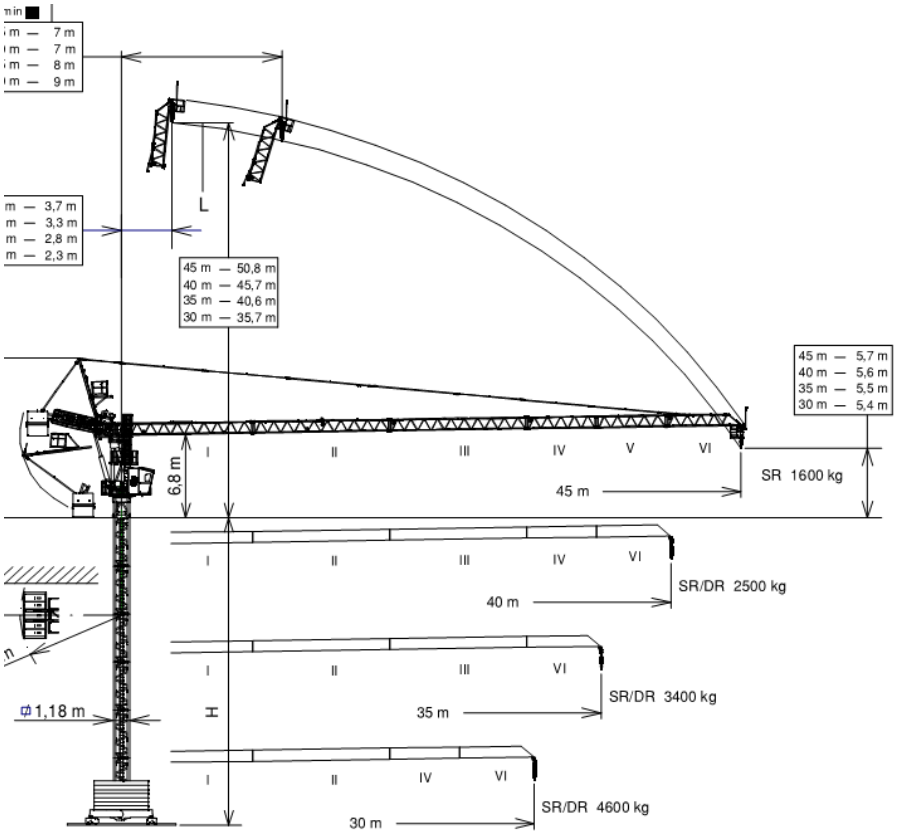

Figure 5 - J118HPA Tower Crane used at the Eastern Entrance

5.2.2 Traffic Configuration –

Closure of laneway in construction hours 7am-6pm Monday – Friday due to the lifting exclusion zone and the need to block the laneway with a mobile crane. This shall be managed by traffic control. Note re-opening of the laneway outside of these hours. Proposed TCP in 6.2 Randle Lane Closure – no through traffic.

It is currently expected two 48 hour closures will be required for the works. The road will be re-opened if works are finished early. Local access for residents will be maintained. If possible the road will be re-opened outside of construction hours (Figure 6)

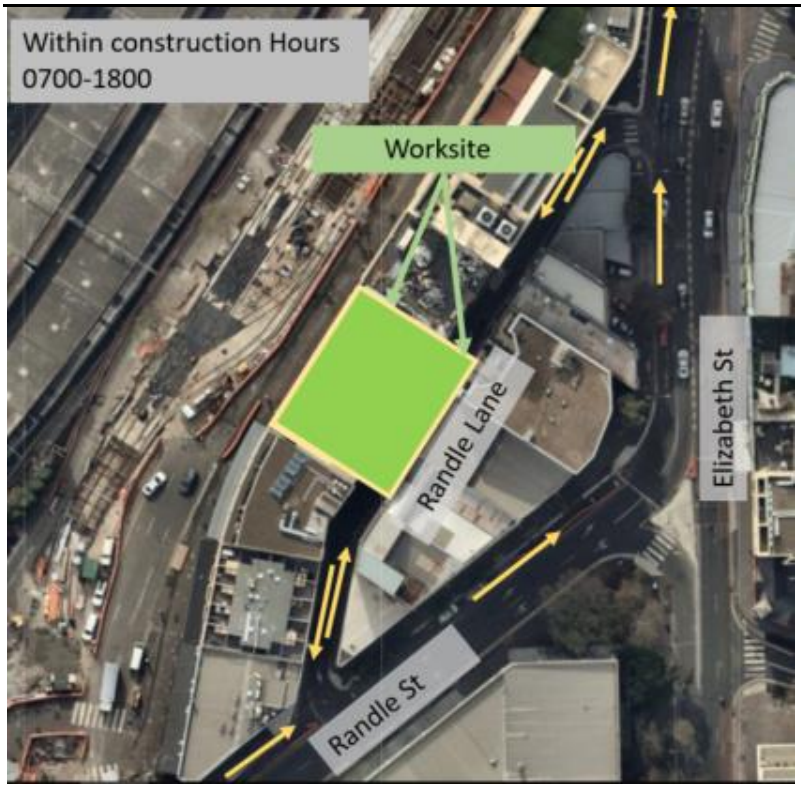

Figure 6 - Sketch showing traffic configuration and access

5.2.3 Vehicle Forecast & movements

Vehicle Types

Construction Vehicles required to undertake these works –

- 40-60T mobile Crane (for tower crane build/ dismantle)
- Flatbed trucks – delivery and removal of crane components to Randle Lane
- Semi-trailers – delivery and removal of jib components to Randle Street
- Compact crane - to transport jib components from Randle Street to Randle Lane.

Vehicle movements

Estimated 20 Heavy Vehicle movements required in total for install and removal. Majority of crane components can be delivered on rigid trucks directly to Randle Lane. The longer jib pieces (10.2m) are delivered on a semi-trailer to Randle Street and then transported to Randle Lane using a compact mobile crane.

An ROL will be applied for as per normal practice for occupancy of roadway and management of traffic on Randle St for this manoeuvre (refer to TCP 6.4 Machinery Offload on Randle St).

5.3 Passenger Lifts and Escalators Deliveries

March 2021 – September 2021

5.3.1 Scope of Works

Delivery of passenger lifts and escalators (L&E) components to Randle Lane via Randle Street. Large components (escalator sections 9.0m long) will be delivered on semi-trailers to Randle Street Loading Zone and then transported to the worksite in Randle Lane.

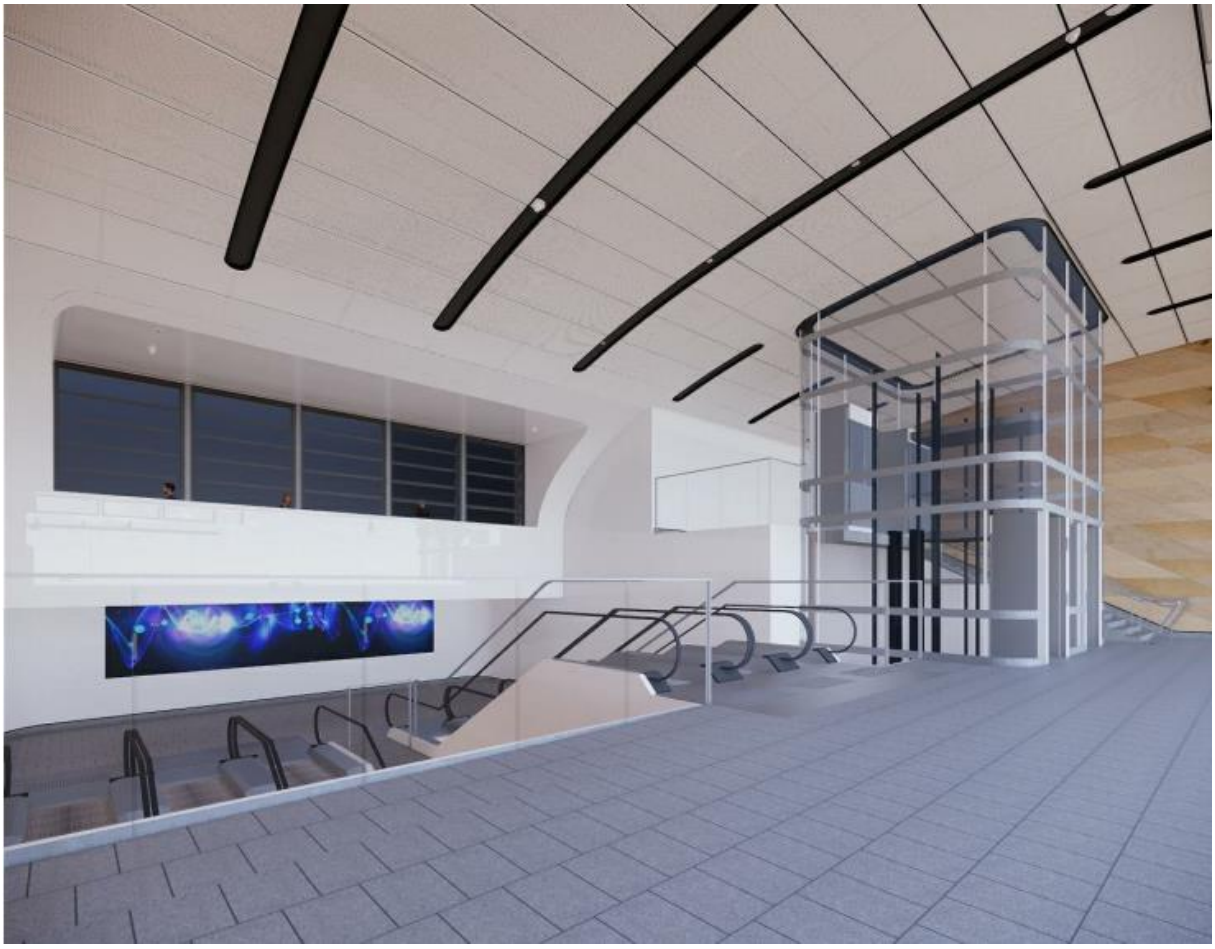

Figure 7 - Internal view of Eastern Entrance showing escalators and passenger lifts

5.3.2 Traffic Configuration

Semi-trailer and mobile compact crane arrives to Randle Street Loading Zone in non-peak times. Compact mobile crane lifts L&E equipment and transports it to Randle Lane worksite. Site based crane lifts L&E equipment into place.

Relevant TCP in 6.4 Machinery Offload on Randle St

Construction Vehicles required to undertake these works –

- Site base crane
- Semi-trailers – delivery of L&E equipment to Randle Street
- Compact crane to handle L&E equipment from Randle Street to Randle Lane.

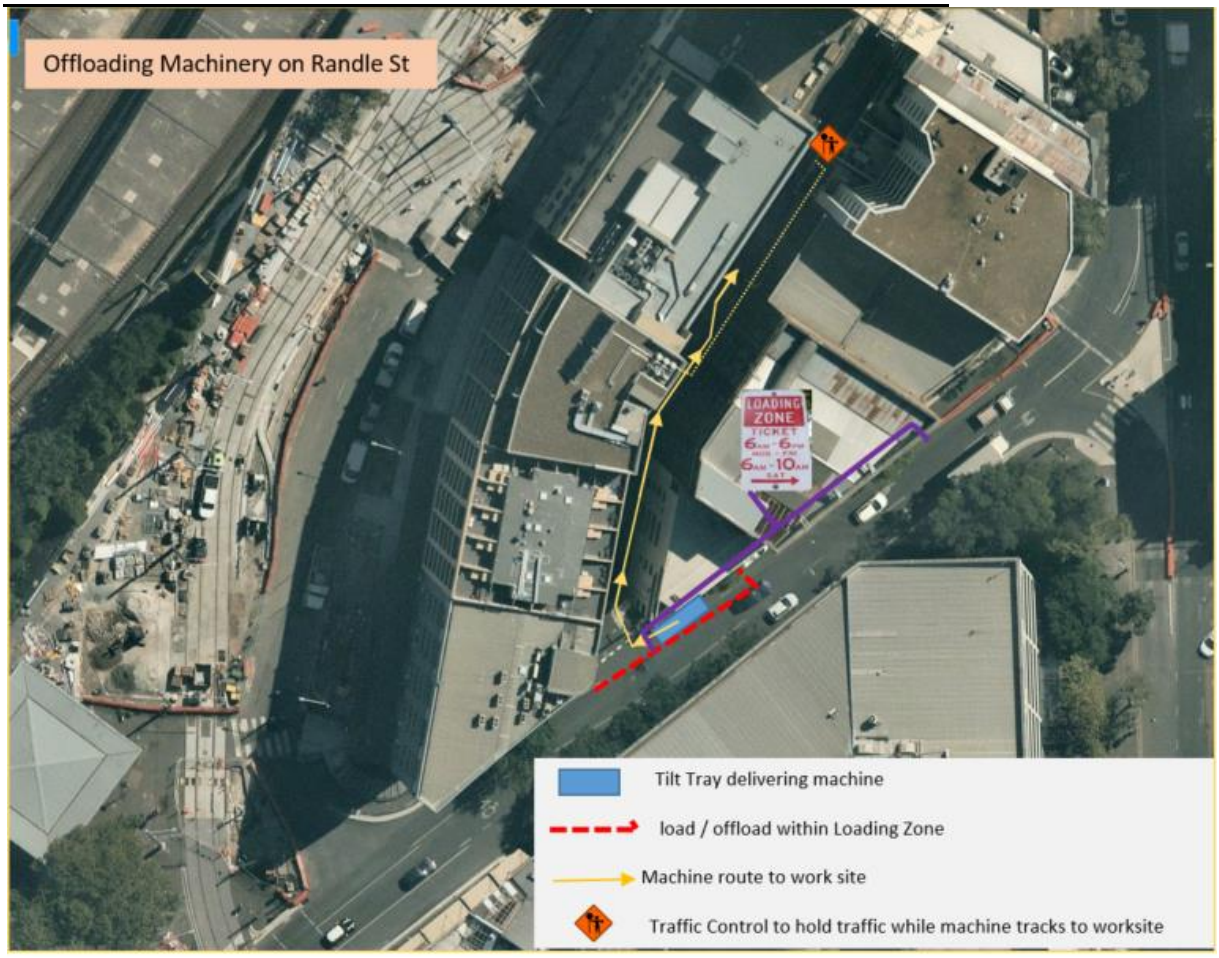

Figure 8 - use of Loading Zone on Randle Street for offloading machinery

Should the Loading Zone be inaccessible or unavailable for use an ROL will be obtained for occupation of the eastern traffic lane on Randle St, outside of peak hours for unloading purposes.

5.4 External Works on Randle Lane

August 2021 – December 2021

5.4.1 Scope of Works

Completion of civil works to Randle Lane including construction a 6m deep shaft for the 33kV bulk power supply, completion of the Sydney Water diversion works and Installation of Randle Lane façade including scaffolding, brickwork and glazing.

The construction of the shaft for the 33kV works at Central Station are an additional scope of works that has been instructed to LOR to complete.

Figure 9 – Exterior view of Randle Lane showing brick façade and glazing

5.4.2 Traffic Configuration

During the civil excavation works the width of the laneway will be occupied. This will result in closure of the laneway both inside and outside construction hours. This would be managed by 24/7 traffic control (Figure 10). The size of the shaft (5m x 3m in plan) prevents a road plate or similar from being used to cover the excavation and allow traffic through.

During the façade installation works there is not the space on Randle Lane to accommodate the width of an access scaffold, a delivery vehicle and maintain 2.6m clearance. Therefore the laneway

will be closed during the day to allow works to progress. At the moment it is intended to re-open the laneway at night to general traffic (Figure 6)

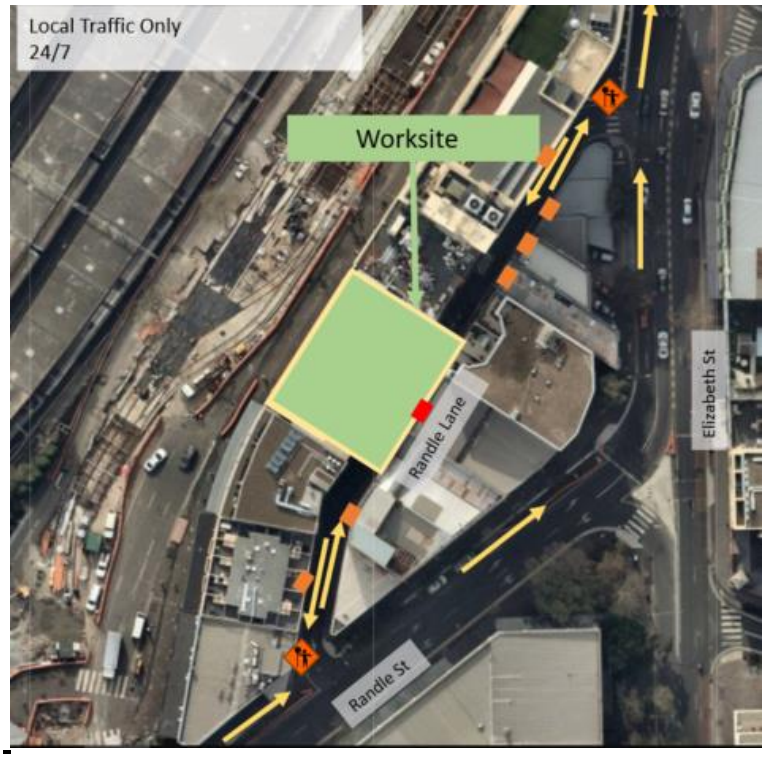

Figure 10 - Orange marks show residents carparks. Red mark shows vehicle entrance to 7 Randle Street which is temporarily blocked. Note this is agreed with the owner of the 7-15 Randle Street (a developer)

An estimated quantity of spoil of 150T is removed from the worksite during this stage

As through travel will not be available for delivery, Heavy Vehicles are reversed into the worksite, under the guidance of traffic control from Randle St, outside of peak hour (10am - 4pm) (Appendix 6.5 Heavy Vehicle reverse Randle Street to worksite on Randle Lane).

An ROL will be applied for as per normal practice for occupancy of roadway and management of traffic on Randle Street for all reversing manoeuvres.

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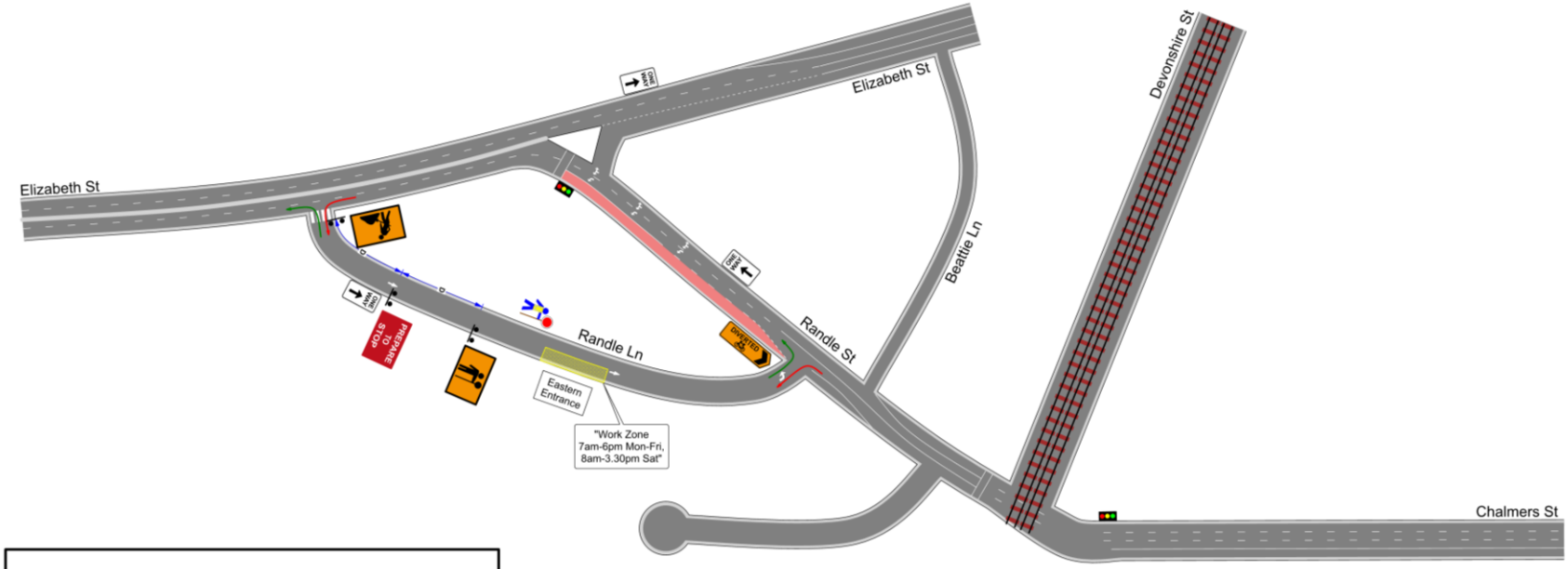
6. Appendix A. Traffic Control Plans

6.1 Randle Lane Works Zone



TCP NOTE'S

- When Loading / Unloading Traffic Controller to spot for pedestrians and incoming general traffic.
- 2.6m clear lane maintained for vehicle traffic

Client: Laing O'Rourke

Scope of Works: Construction works

Job location: Randle Ln, Surry Hills

Author: Sandeep kumar Kolimi

Cert. No: 0051756294

Plan No: TCP- STOP/SLOW-PEDESTRIAN

PLAN NOT TO SCALE

TCP - 61, 83 USED AS A GUIDE

WORKERS ON FOOT

NO GO ZONE =

RESTRICTED ZONE =

SHARED ZONE =

SITE EXIT =

SITE ENTRY =

EVACUATION POINT =

Implemented By

Name -

Cert No -

Date -

Signed -

Dimension 'D'

AS 1742.3: A distance expressed in metres, determined in accordance with Clause 4.1.5 and used for positioning of advance signs and related purposes.

Speed of Traffic km/h	Dimension m
55 or less	15
56 to 65	45
Greater than 65	speed of traffic, in Km/h

WORK ZONE=

Taper Lengths

Approximate speed of traffic	Traffic control at beginning of taper	Lateral shift	Merge taper
45 or less	15	0	15
46 - 55	15	15	30
56 - 65	30	30	60
66 - 75	N/A	70	115
76 - 85	N/A	80	130
86 - 95	N/A	90	145
96 - 105	N/A	100	160
Greater than 105	N/A	110	180

Traffic Management

Web: www.ddtraffic.com.au

Email: sydney@dd-group.com.au

Phone: 1300 597 622

D&D Traffic Management does not accept liability for implementation of this tcp if not directly involved in its implementation

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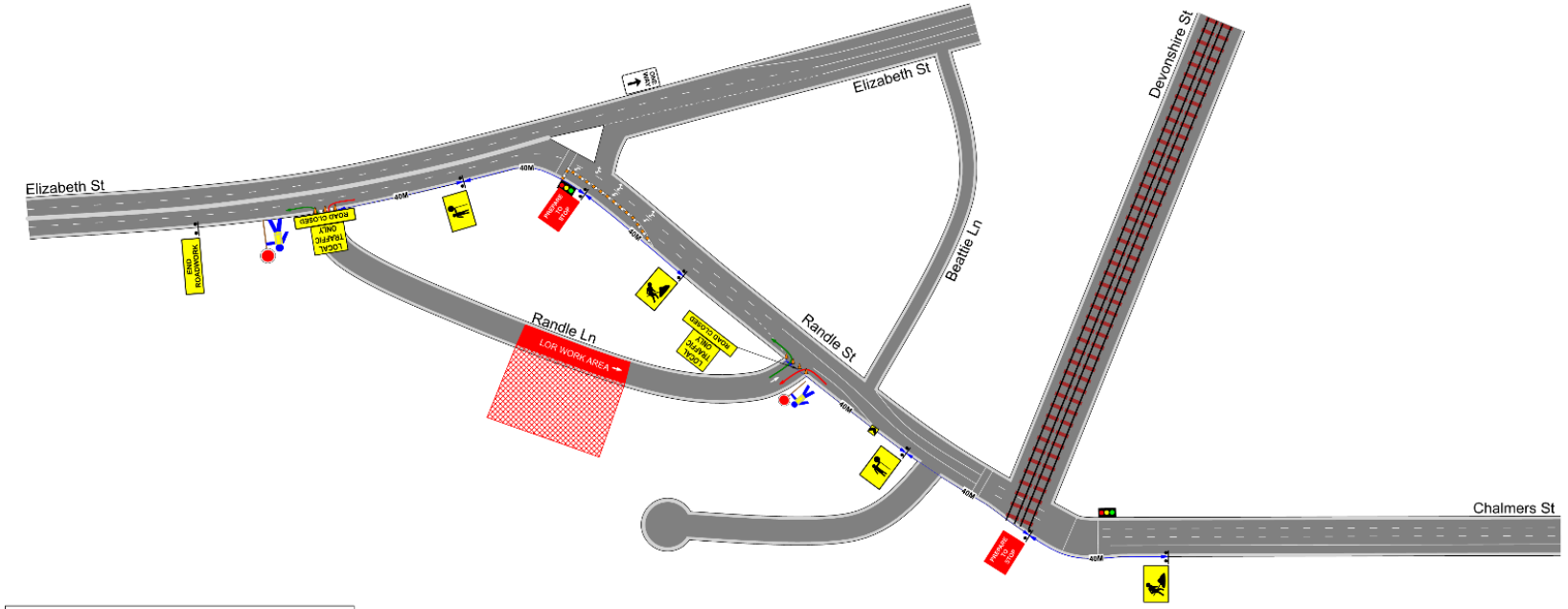
6.2 Randle Lane Closure – no through traffic



Client: Laing O'Rourke Scope of Works: Construction works Job location: Randle Ln, Surry Hills			***WORKERS ON FOOT*** NO GO ZONE = RESTRICTED ZONE = SHARED ZONE = SITE EXIT = X SITE ENTRY = E EVACUATION POINT = EP	**Implemented By** Name - Cert No - Date - Signed -	Dimension 'D' AS 1742.3: A distance expressed in metres, determined in accordance with Clause 4.1.5 and used for positioning of advance signs and related purposes. Speed of Traffic km/h / Dimension m 55 or less: 15 56 to 65: 45 Greater than 65: speed of traffic, in Km/h	Taper Lengths Approximate speed of traffic / Traffic control at beginning of taper / Lateral shift taper / Merge taper 45 or less: 15 / 0 / 15 46 - 55: 15 / 15 / 30 56 - 65: 30 / 30 / 60 66 - 75: N/A / 70 / 115 76 - 85: N/A / 80 / 130 86 - 95: N/A / 90 / 145 96 - 105: N/A / 100 / 160 Greater than 105: N/A / 110 / 180	Web: www.ddtraffic.com.au Email: sydney@dd-group.com.au Phone: 1300 597 622 D&D Traffic Management does not accept liability for implementation of this tcp if not directly involved in its implementation	N
Author: Sandeep kumar Kolimi Cert. No: 0051756294	Plan No:XXXXXX PLAN NOT TO SCALE	TCP - 83 USED AS A GUIDE					

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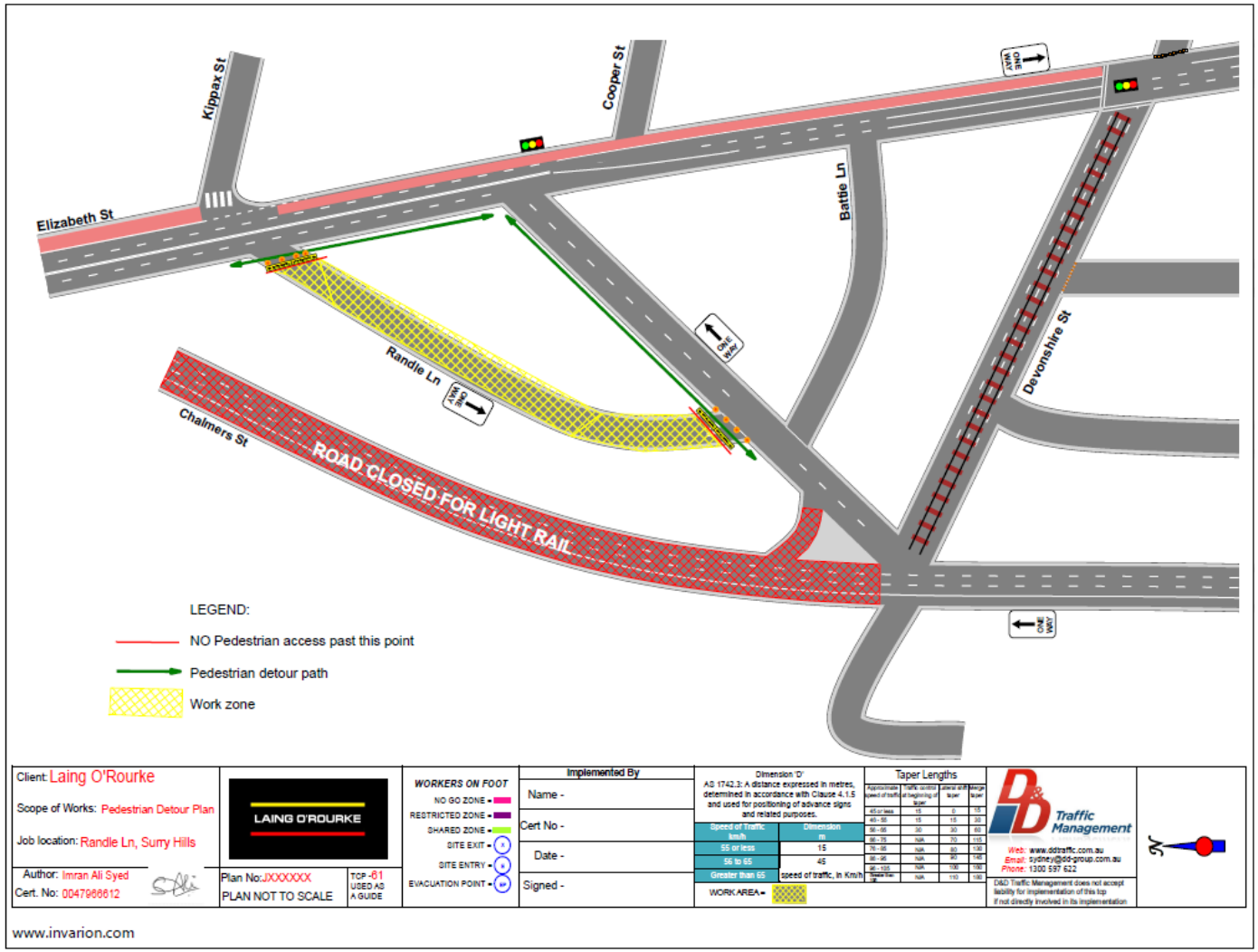
6.3 Randle Lane Closure – Pedestrian diversion



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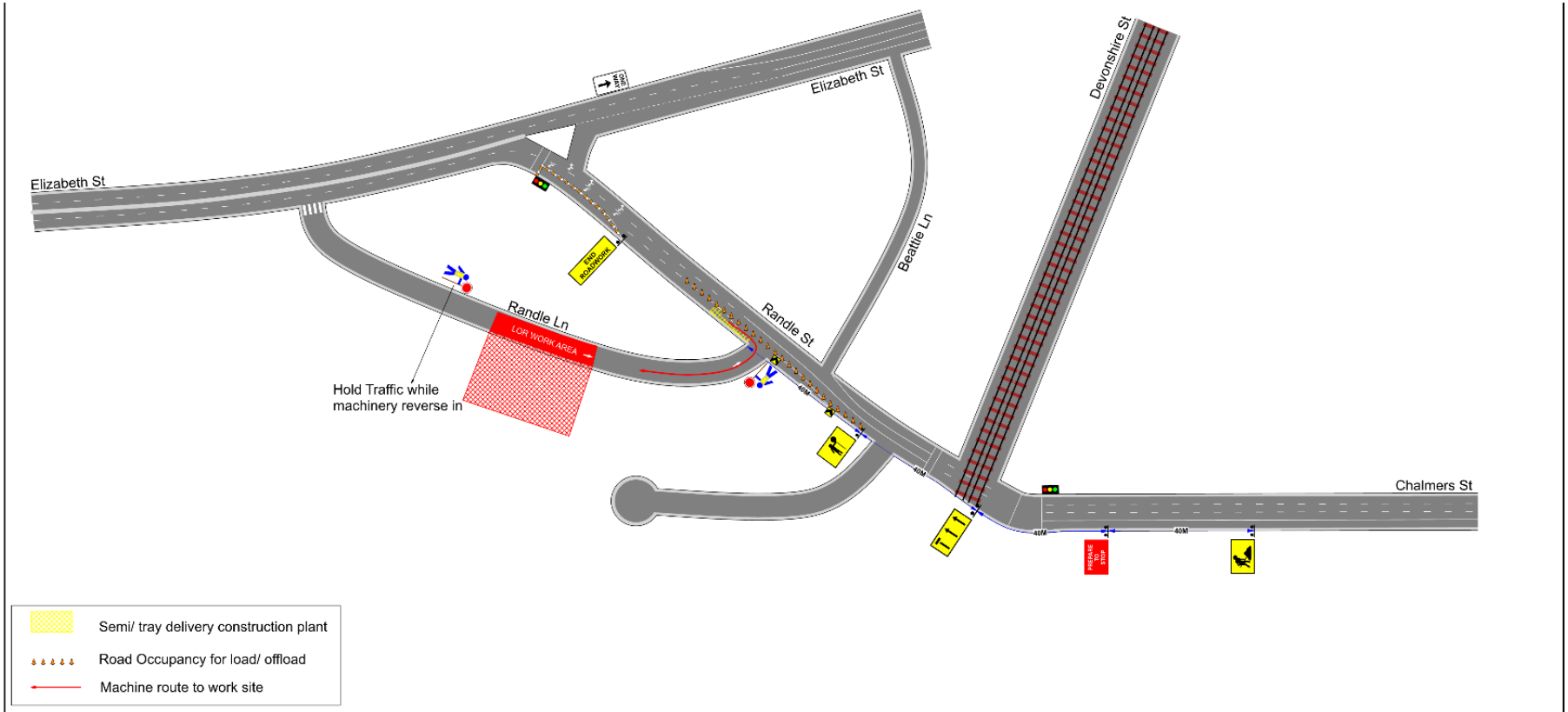
6.4 Machinery Offload on Randle Street



Client: Laing O'Rourke Scope of Works: Construction works Job location: Randle Ln, Surry Hills			**WORKERS ON FOOT** NO GO ZONE = RESTRICTED ZONE = SHARED ZONE = SITE EXIT = X SITE ENTRY = E EVACUATION POINT = EP
Author: Sandeep kumar Kolimi Cert. No: 0051756294	Plan No:XXXXXX PLAN NOT TO SCALE	TCP -83, 101 USED AS A GUIDE	

Implemented By
Name -
Cert No -
Date -
Signed -

Dimension 'D'
AS 1742.3: A distance expressed in metres, determined in accordance with Clause 4.1.5 and used for positioning of advance signs and related purposes.

Speed of Traffic km/h	Dimension m
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Greater than 65	speed of traffic, in Km/h

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56 - 65	30	30	60
66 - 75	N/A	70	115
76 - 85	N/A	80	130
86 - 95	N/A	90	145
96 - 105	N/A	100	160
Greater than 105	N/A	110	180

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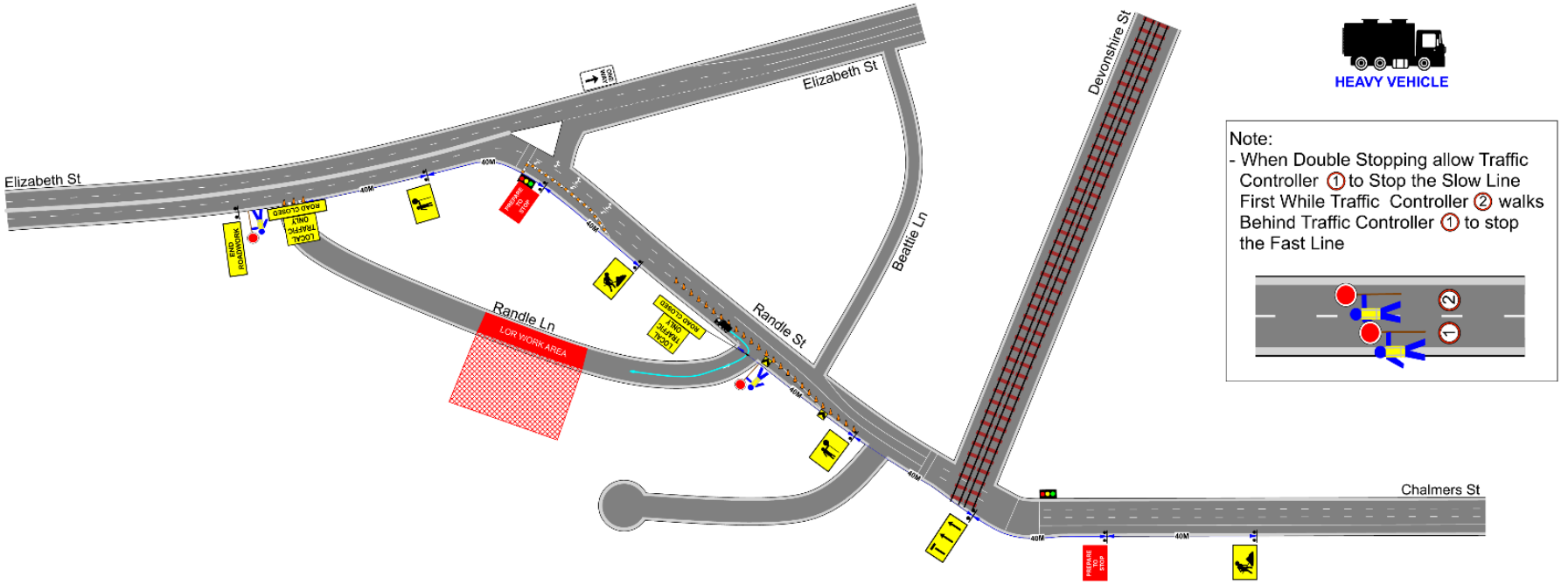
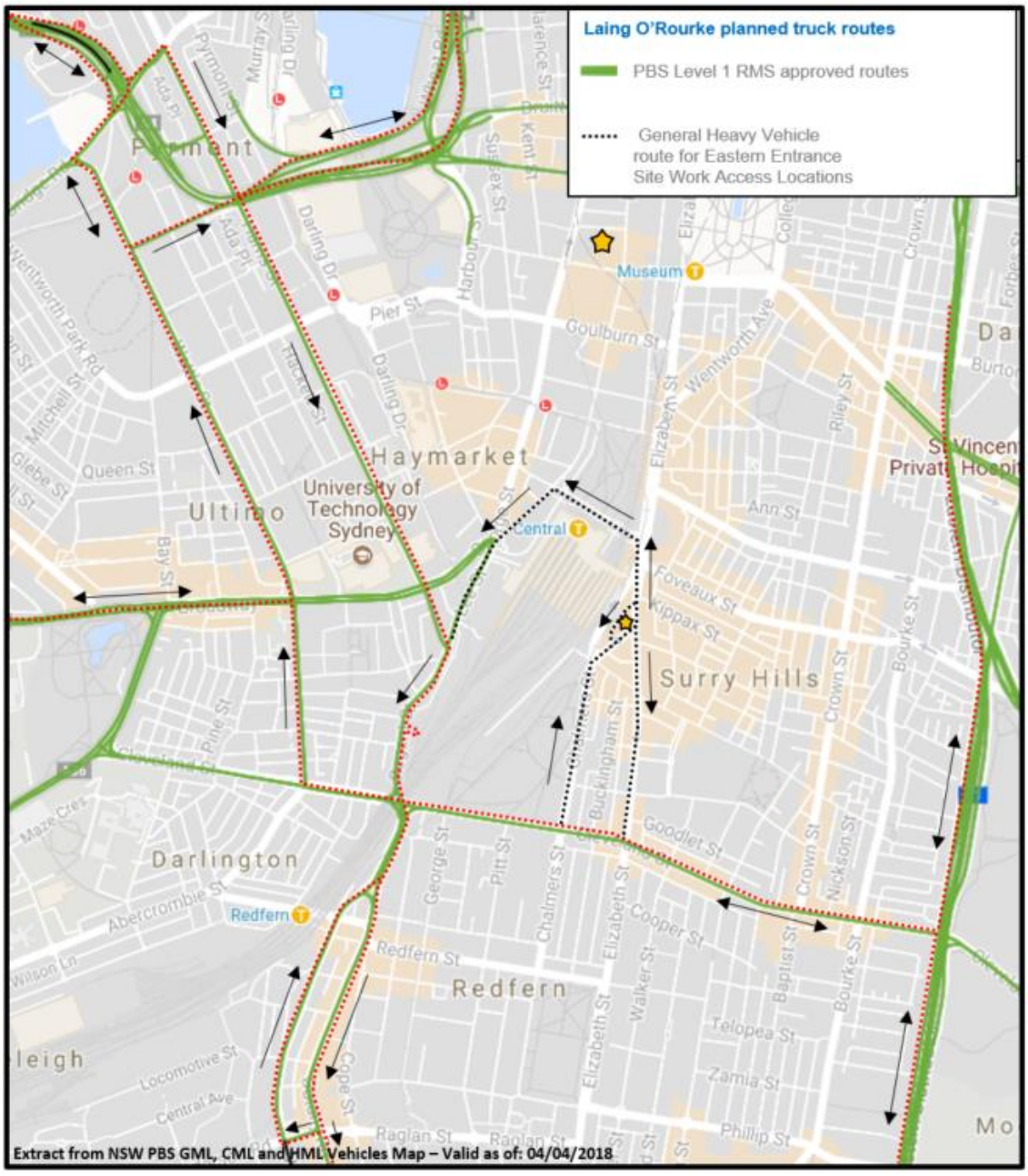
6.5 Heavy Vehicle reverse Randle Street to worksite on Randle Lane



Client: Laing O'Rourke Scope of Works: Construction works Job location: Randle Ln, Surry Hills			***WORKERS ON FOOT*** NO GO ZONE = RESTRICTED ZONE = SHARED ZONE = SITE EXIT = X SITE ENTRY = E EVACUATION POINT = EP	**Implemented By** Name - Cert No - Date - Signed -	Dimension 'D' AS 1742.3: A distance expressed in metres, determined in accordance with Clause 4.1.5 and used for positioning of advance signs and related purposes. Speed of Traffic km/h / Dimension m 55 or less: 15 56 to 65: 45 Greater than 65: speed of traffic, in Km/h	Taper Lengths Approximate speed of traffic / Traffic control at beginning of taper / Lateral shift taper / Merge taper 45 or less: 15 / 8 / 15 46 - 55: 15 / 15 / 30 56 - 65: 30 / 30 / 60 66 - 75: N/A / 70 / 115 76 - 85: N/A / 80 / 130 86 - 95: N/A / 90 / 145 96 - 105: N/A / 100 / 160 Greater than 105: N/A / 110 / 180	*Web:* www.ddtraffic.com.au *Email:* sydney@dd-group.com.au *Phone:* 1300 597 622 D&D Traffic Management does not accept liability for implementation of this tcp if not directly involved in its implementation	
Author: Sandeep kumar Kolimi Cert. No: 0051756294	Plan No:XXXXXX PLAN NOT TO SCALE	TCP -83 USED AS A GUIDE					

7. Appendix B. Vehicle Routing



8. Appendix C. Stakeholder consultation – Extract from SCO/ RMS comments register (CSM-GEN-SMCSWCSM-RMS-CSM-GEN-XXXXX)

To be included following submission

9. Appendix D. Stakeholder consultation – Extract from Sydney Metro comments register

To be included following submission