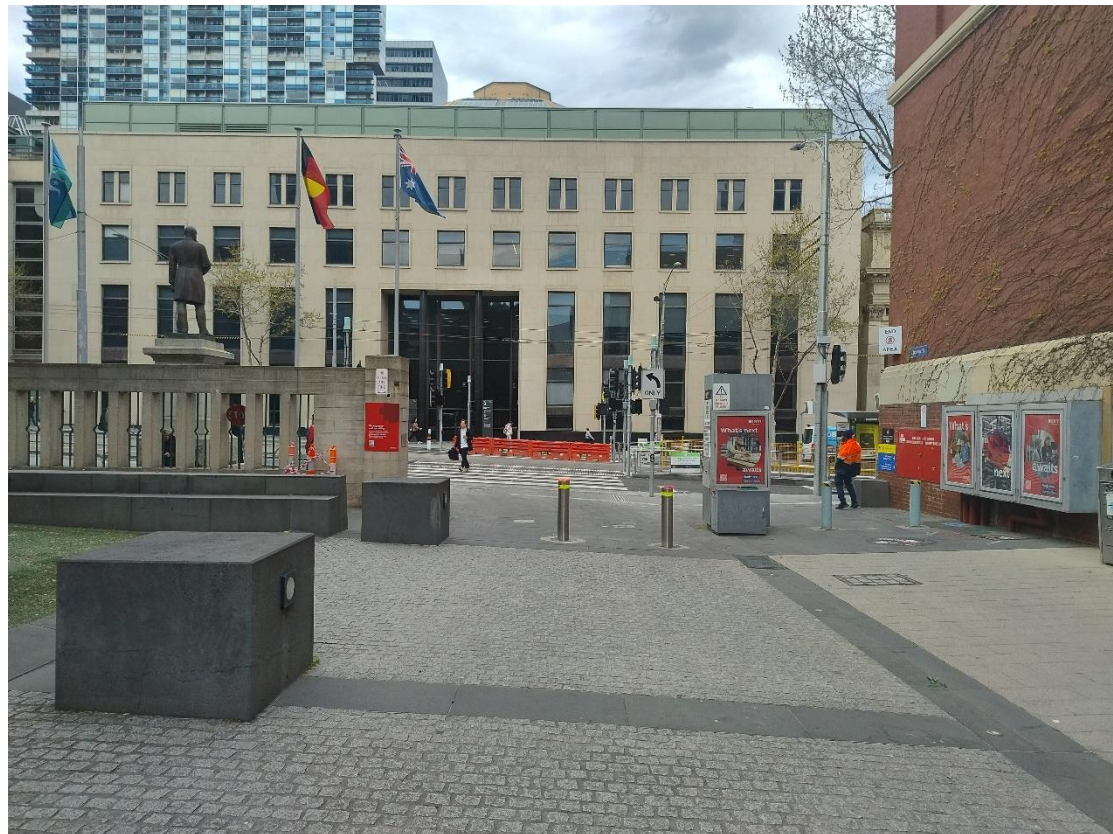# RMIT Bowen Street
# Loading Management Plan

RMIT University

Prepared for:
RMIT University

22 October 2024

Project/File:
300305232

**Loading Management Plan**

| Revision | Description | Author | Date | Quality Check | Date | Independent Review | Date |
|---|---|---|---|---|---|---|---|
| A-dr | Draft for review | B. Armstrong | | M. Henderson | | S. Davies | |
| | | | | | | | |
| | | | | | | | |

**Loading Management Plan**

Prepared by

_____
Signature

_____
Printed Name

Reviewed by

_____
Signature

_____
Printed Name

Approved by

_____
Signature

_____
Printed Name

# Table of Contents

**List of Appendices**
**Appendix A   General Vehicle Traffic Management Procedure**
**Appendix B   Larger Vehicle Traffic Management Procedure**

# 1     Introduction

RMIT's Melbourne City Campus is located in the north-east corner of Melbourne CBD and the main campus area is bound by Swanston Street, Russell Street, La Trobe Street and Victoria Street.

Bowen Street is a shared area within RMIT and is one of the key vehicle entry and servicing points for the university. Due to the ongoing Meto Tunnel Project works which occupy Franklin Street, all vehicle access to Bown Street is currently restricted to/from La Trobe Street. Access is controlled by retractable bollards and is attended by security from 6am to 2pm. During these hours, RMIT has advised that in the order of 30 vehicle movements are typically observed.

Recently, as part of the La Trobe Street Tram Stop Upgrade project, a new tram super stop has been constructed on La Trobe Street immediately east of Swanston Street. The new arrangement at La Trobe Street between Swanston Street and Bowen Street includes:

- New double length super tram stop
- Reduction to one traffic lane in each direction
- Upgraded signalised pedestrian crossing at Swanston Street
- Raised crossing at Rodda Lane, including zebra crossing immediately east of Rodda Lane.
- New pedestrian operated signals at the east end of the tram stop, directly opposite Bowen Street.

As a direct result of the project, RMIT vehicle access to/from Bowen Street must now occur through the new signalised pedestrian crossing.

The proposed vehicles access arrangements to/from Bowen Street considered within this report were approved as part of the Super Stop design. As such, this Management Plan does not propose any new traffic movements in or out of Bowen Street compared to what has already been approved. The purpose of the Management Plan is to set out how these approved movements can occur in a managed environment.

# 2    Traffic Management Procedure

## 2.1    Access During External Works

There are currently ongoing works around RMIT which include the closure of La Trobe Street in the eastbound direction between Elizabeth Street and La Trobe Street until early 2025. Until La Trobe Street eastbound is reopened, access to Bowen Steet is only accessible via a U-turn from the hook turn slot at the Swanston Street / La Trobe Street intersection.  It is noted there is currently no opposing eastbound traffic on La Trobe Street.

All vehicles (including 19m semis) are required to undertake this U-turn manoeuvre at Swanston Street to then enter Bowen Street. Vehicles travelling westbound along La Trobe Street are not undertake a right turn and to cross the tram tracks to access Bowen Street.

A map of these movements is shown in Figure 2.1.

When La Trobe Street eastbound reopens to traffic, arriving to the site from La Trobe Street (west) should be used in preference to undertaking this U-turn manoeuvre.

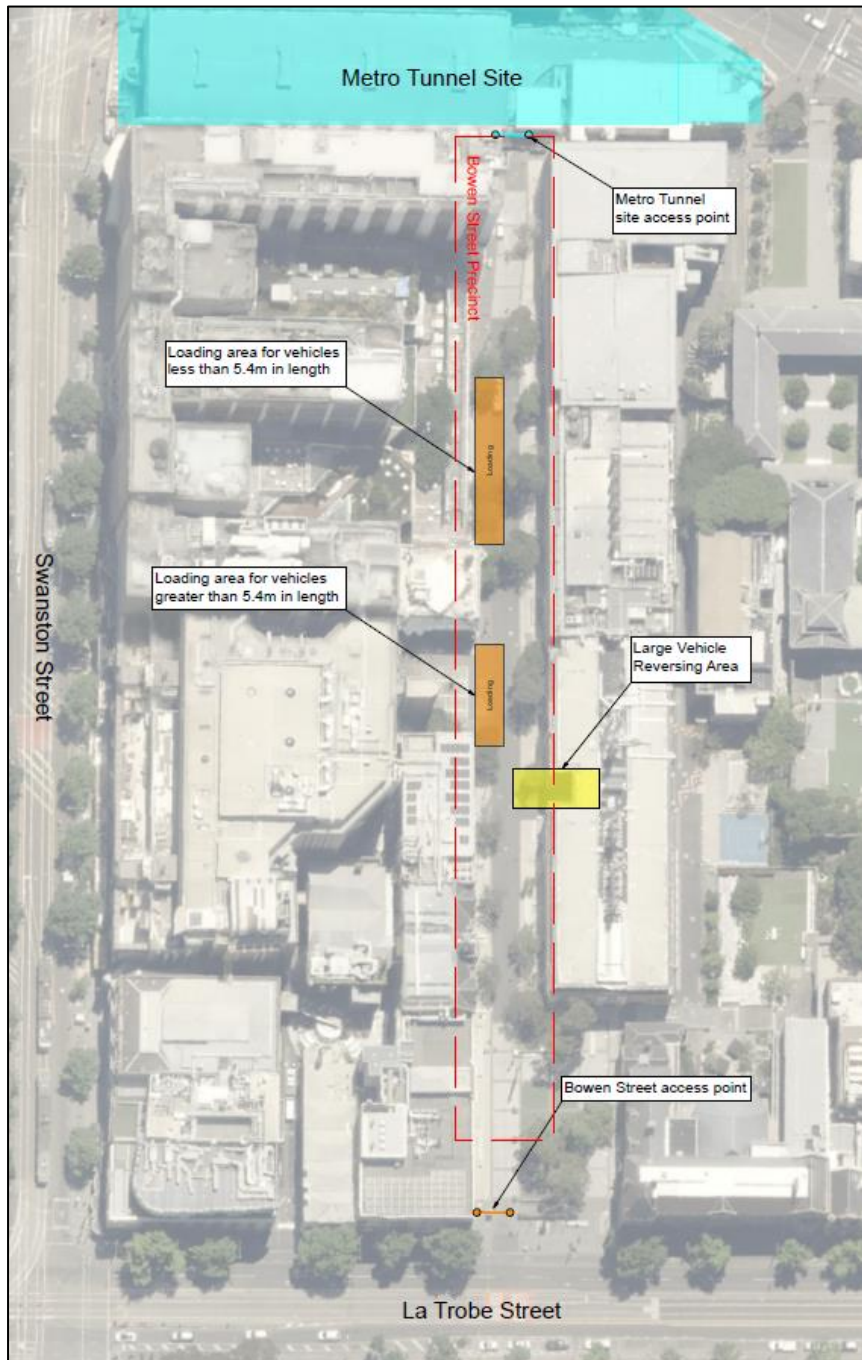*Figure 2.1: Bowen Street Access*

## 2.2    Bowen Street Loading Areas

Bowen Street has four loading bays located in the northbound direction along Bowen Street including:

- 3x bays at the northern end of Bowen Street suitable for vehicles up to 5.4m in length
- 1x bay opposite Bowen Plaza suitable for vehicles over 5.4m in length.

*Figure 2.2: Bowen Street Loading Area*

## 2.3    General Vehicle Access

Vehicles up to and including MRV (8.8m) vehicle are to access Bowen Street via a left-in, left-out arrangement at Bowen Street.

On a typical day, there is in the order of 30 vehicle movements in or out of Bowen Street made by vehicles of 8.8m or less in length.

A detailed breakdown of the traffic management procedure for general vehicle access is contained in Appendix A.

## 2.4    Large Vehicle Access

Any vehicles greater than 8.8m in length are physically unable to undertake a left turn into Bowen Street.

Typically, XX vehicle movements are undertaken by 12.5m HRVs each week. The access area requirement for a 12.5m HRV includes the mounting of the central island but does not require the vehicle to travel on the tram carriageway as shown in Figure 2.3.

Access to Bowen Street by 19m vehicles or similar typically occurs less than five time per year. As per the design solution for the La Trobe Tram Super Stop, a 19m semi truck trailer will require access to both sides of the tram tracks to undertake movements into and out of Bowen Street as shown in Figure 2.4.

A detailed breakdown of the traffic management procedure for each vehicle is contained in Appendix B and Appendix C respectively.
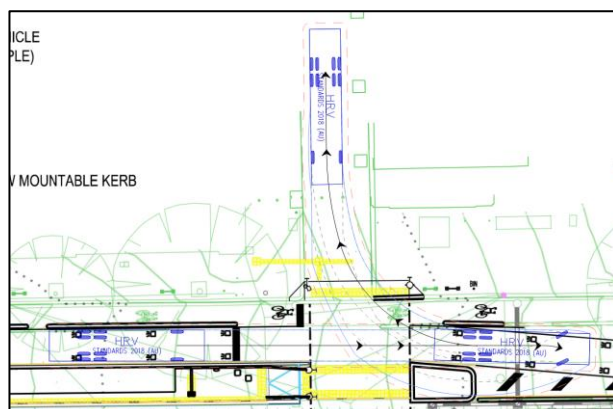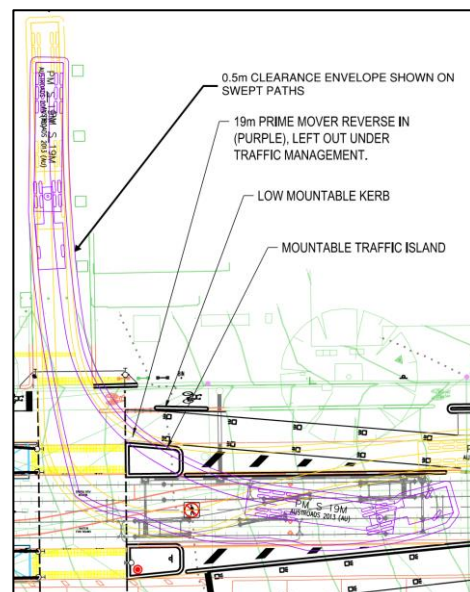
*Figure 2.3: Bowen Street Loading Area*



*Figure 2.4: Bowen Street Loading Area*



Source: LAT-ARU-PWD-PKB-SKT-CRD-LBC-R0951 prepared by ARUP

# 2.5    Ultimate Condition from early 2025

Works associated with the Metro Tunnel Project are ongoing which currently occupy Franklin Street on RMIT's northern boundary. It is expected that in early 2025 that Franklin Street will be reopened to traffic and will again enable vehicle access for RMIT to Bowen Street as it did prior to the Metro Tunnel Project works.

Once opened, the majority of general vehicle access can occur via ingress at Franklin Street, turnaround within Bowen Street and exit via Franklin Street, as shown in Figure 2.5. It is noted that manual traffic management is not required at the Franklin Street access.

Due to weight restrictions on Bowen Street near Franklin Street, larger vehicles (typically greater than an 8.8m MRV) will continue to be required to access Bowen Street via La Trobe Street and follow the plan set out in Appendix B.

It is recommended that this plan is reviewed to ensure alignment with the as built conditions of Franklin Street.

*Figure 2.5: Proposed Franklin Street / Bowen Street Concept Layout Plan*
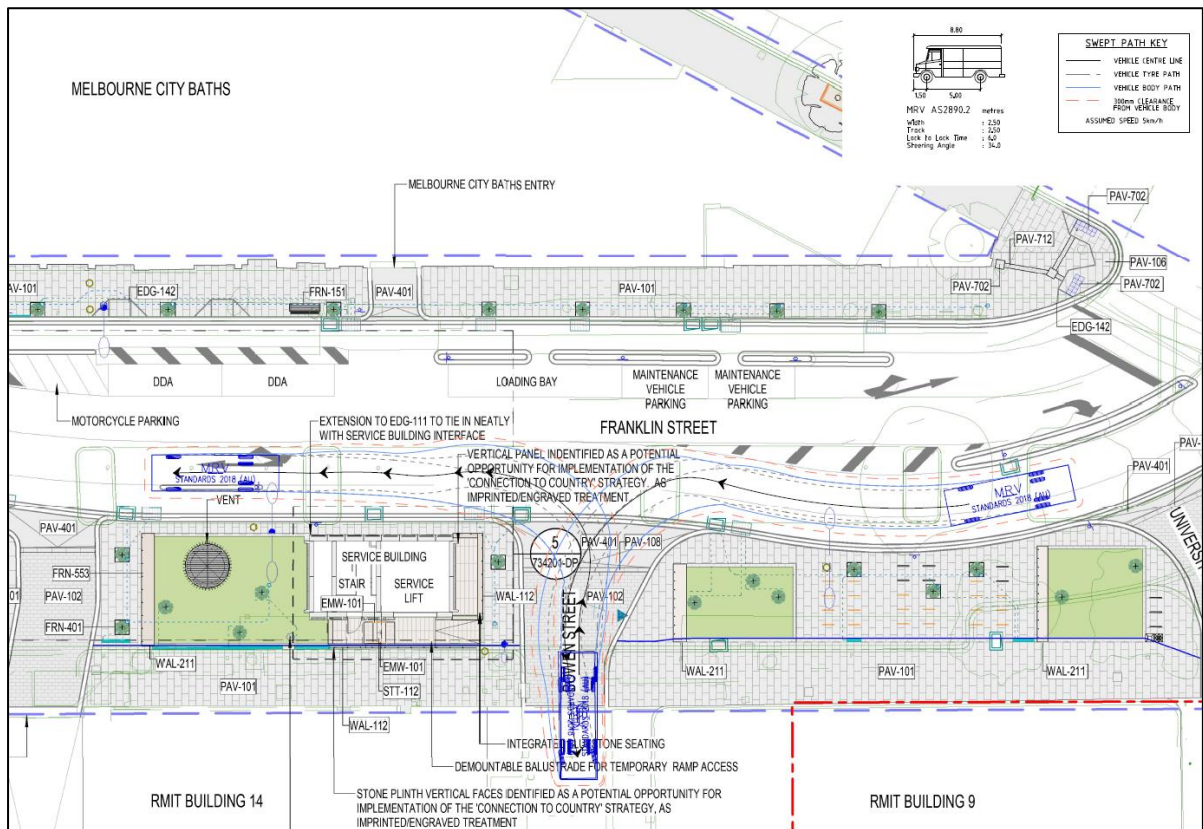
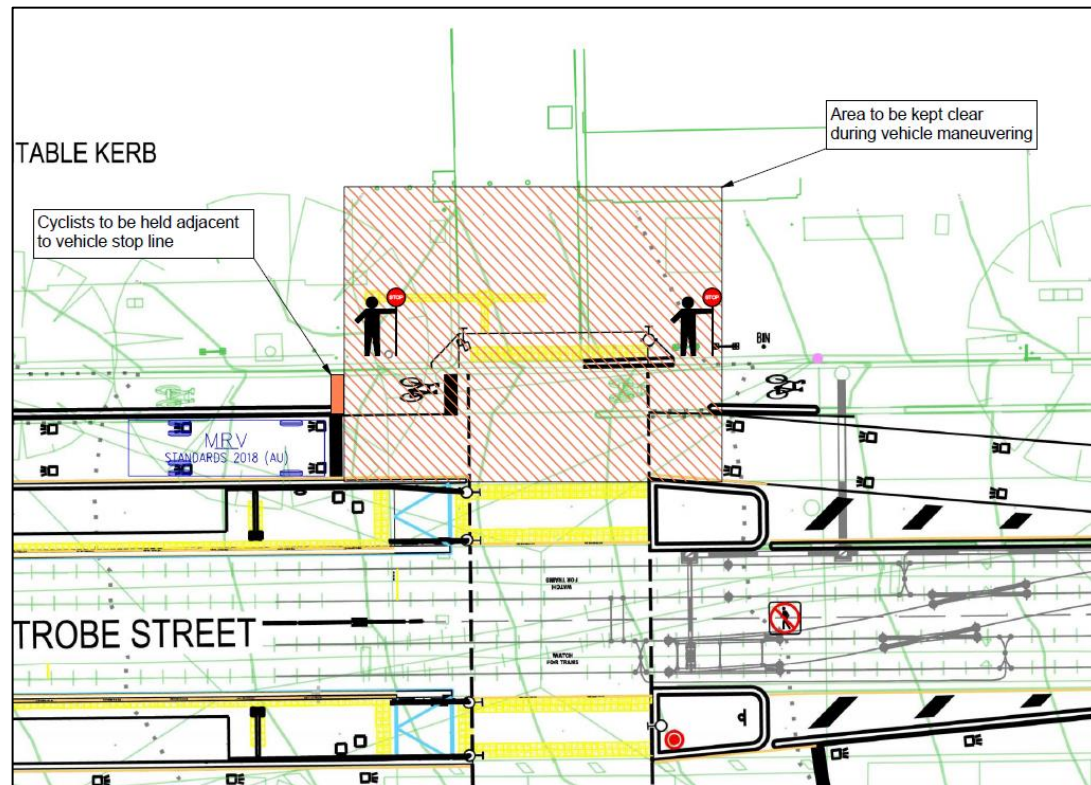*Figure 2.6: Future Access Arrangements – via Franklin Street*

# Appendix A

General Vehicle Traffic Management Procedure

# Appendix A  General Vehicle Traffic Management Procedure

1. Arriving vehicle to provide forward notice to RMIT of intended arrival time. Advanced warning to be provided by the vehicle 5-10minute prior to arrive so that on-site traffic controllers can prepare for vehicle arrive arrival.

2. Vehicle to hold on La Trobe Street at the pedestrian operated signal hold line and wait for a 'PROCEED WITH CAUTION' signal from traffic management.

3. Upon vehicle arrival or sighting of vehicle, traffic controllers are required to:

   - clear area (demarked by orange hatched in image) of pedestrians, generally defined as the area between the retractable bollards on Bowen Street to the new tram platform on La Trobe Street.
   - No pedestrian crossing is allowed north-south of La Trobe Street (north side of tram tracks).
   - Hold eastbound cyclists in line with the vehicle hold line. It is important that bicycles are not permitted to stop at the bicycle hold line as the truck swept path (provided by DTP) traverses over the hold line.
   - Retractable bollard to be lowered within Bowen Street. This will trigger a beeping sound which will assist notifying pedestrians of the presence of a vehicle.
   - It is expected that an absolute minimum of 2x traffic controller will be required to achieve this. It is strongly recommended that the ability to achieve compliance with the above is reviewed and traffic controllers added as necessary.
   - It is also recommended that supporting signage is added at pedestrian entries.
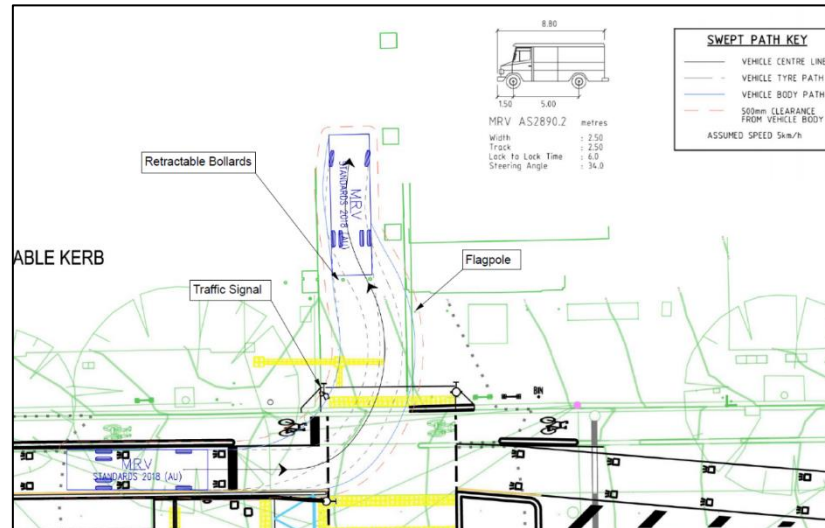
| | |
|---|---|
| **4** | When the area is controlled, lead traffic controller to give 'PROCEED WITH CAUTION' signal to vehicle.<br><br>Traffic controller or vehicle spotter to guide vehicle to past into Bowen Street, past retractable bollards. |  |

**5**      La Trobe Street returned to normal operations.

**6**      RMIT Security (or vehicle spotter if available) to accompany vehicle to relevant loading area.

**7**      When delivery activities are complete, Campus security are notified that the vehicle is ready to undertake a turnaround movement within Bowen Street and exit the site in a forward manner.

        The vehicle cannot move without RMIT security present (as per current TMP).

**8**      Vehicle to proceed to the retractable bollards under the direction of RMIT security (as per current TMP).
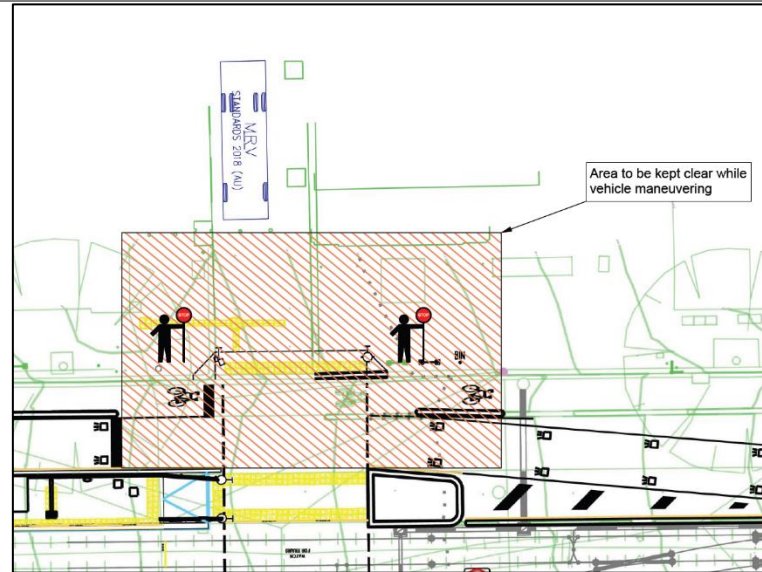
- Vehicle to hold at retractable bollards while the La Trobe Street / Bown Street intersection is controlled via traffic controllers, who are required to:

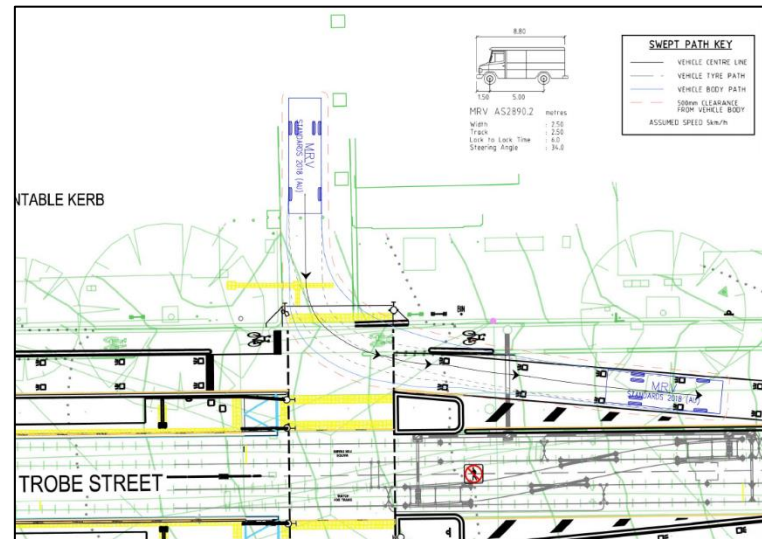- clear area (demarked by orange hatched in image) of pedestrians, generally defined as the area between the retractable bollards on Bowen Street to the new tram platform on La Trobe Street.
- No pedestrian crossing is allowed north-south of La Trobe Street (north side of tram tracks).
- Hold eastbound cyclists at cyclist hold line.
- Retractable bollard to be lowered within Bowen Street. This will trigger a beeping sound which will assist notifying pedestrians of the presence of a vehicle.
- 



9   When the area is controlled, lead traffic controller to give 'PROCEED WITH CAUTION' signal to vehicle.

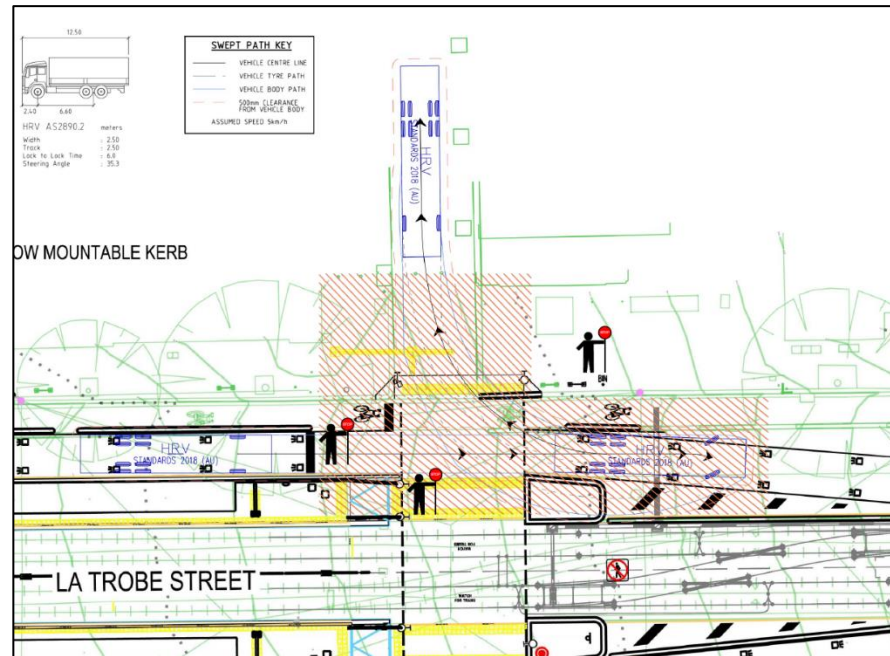Traffic controller or spotter usher vehicle onto La Trobe Street.

# Appendix B

12.5m HRV Traffic Management Procedure

# Appendix B  12.5m HRV Vehicle Traffic Management Procedure

1.   All vehicle arrives of this time to be scheduled in advance. Traffic management to be present on site prior to scheduled arrival of vehicle.

2.   Vehicle arrives holds on La Trobe Street at the pedestrian operated signal hold line and wait for a 'PROCEED WITH CAUTION' signal from traffic management.

3.   Upon vehicle arrival or sighting of vehicle, traffic controllers are required to:

- Hold eastbound traffic.
- clear area (demarked by orange hatched in image) of pedestrians, generally defined as the area between the retractable bollards on Bowen Street to the new tram platform on La Trobe Street.
- No pedestrian crossing is allowed north-south of La Trobe Street (north side of tram tracks).
- Hold eastbound cyclists in line with the vehicle hold line.
- Retractable bollard to be lowered within Bowen Street. This will trigger a beeping sound which will assist notifying pedestrians of the presence of a vehicle.



4   When the area is controlled, lead traffic controller to give 'PROCEED WITH CAUTION' signal to vehicle.

Vehicle to forward into the tram carriage way area and undertake the reverse movement into Bowen Street.

5   Once vehicle is past the bollards, La Trobe Street can be returned to normal operations.

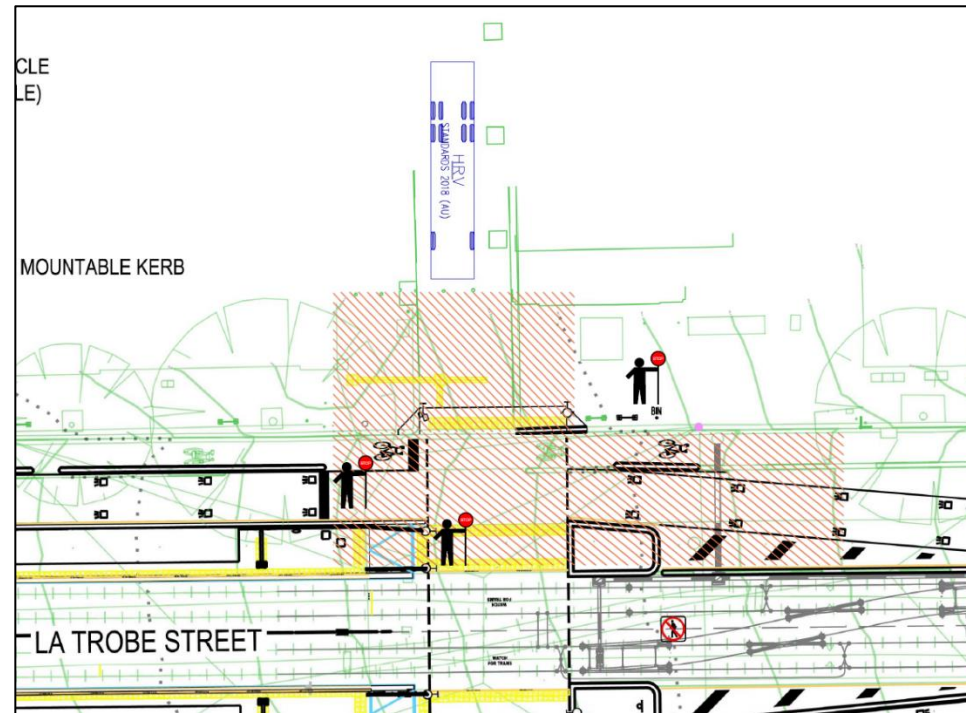| 6 | RMIT Security (or vehicle spotter if available) to accompany vehicle to loading area. |
|---|---|

| 7 | When delivery activities are complete, Campus security are notified that the vehicle is ready exit the site in a forward manner.<br><br>The vehicle cannot move without RMIT security present. |
|---|---|

8    Vehicle to proceed to and hold at the retractable bollards under the direction of RMIT security (as per current TMP).

Traffic management controllers to set up area for vehicle departure, including:

- clear area (demarked by orange hatched in image) of pedestrians, generally defined as the area between the retractable bollards on Bowen Street to the new tram platform on La Trobe Street.
- No pedestrian crossing is allowed north-south of La Trobe Street (north side of tram tracks).
- Hold eastbound cyclists at cyclist hold line.
- Retractable bollard to be lowered within Bowen Street. This will trigger a beeping sound which will assist notifying pedestrians of the presence of a vehicle.
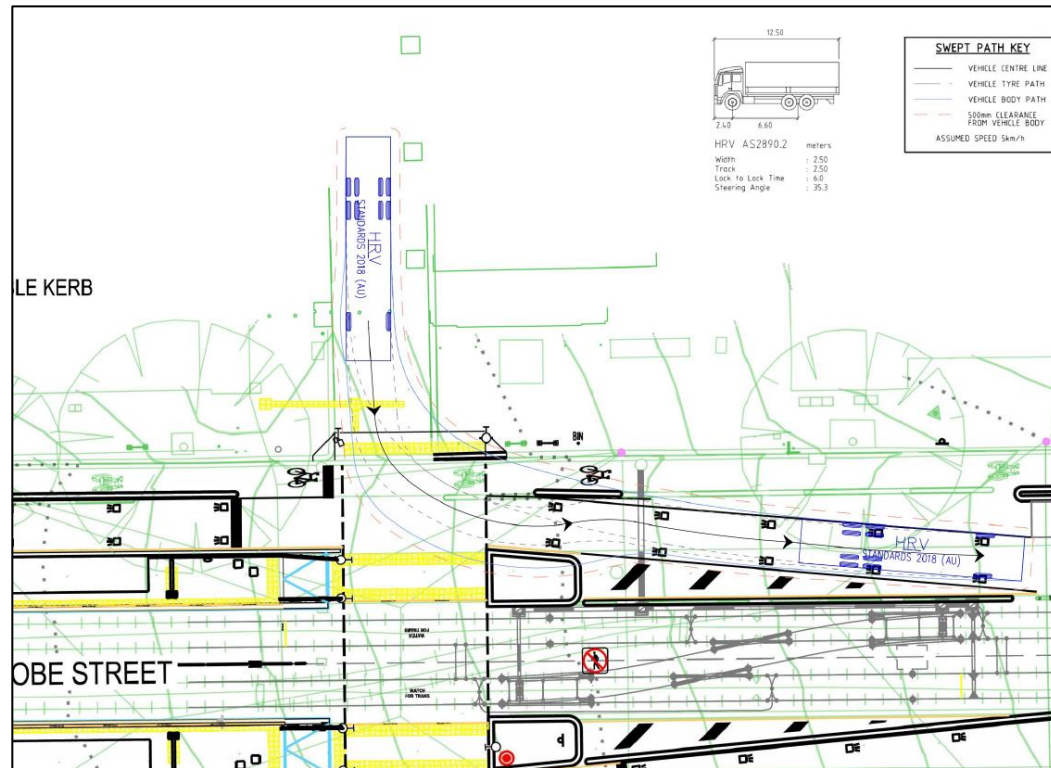
**9** When the area is controlled, lead traffic controller to give 'PROCEED WITH CAUTION' signal to vehicle.

Traffic controller or spotter usher vehicle onto La Trobe Street.

# Appendix C

19m Vehicle Traffic Management Procedure

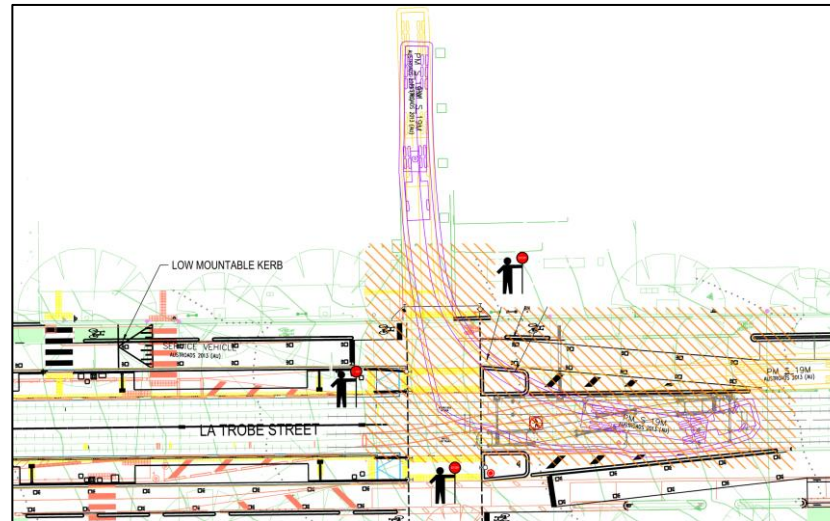# Appendix C  19m Vehicle Traffic Management Procedure

**1.**

All vehicle arrives of this time to be scheduled in advance. Traffic management to be present on site prior to scheduled arrival of vehicle.

**2.**   Vehicle arrives holds on La Trobe Street at the pedestrian operated signal hold line and wait for a 'PROCEED WITH CAUTION' signal from traffic management.

**3.**   Upon vehicle arrival or sighting of vehicle, traffic controllers are required to:

- Hold eastbound traffic.
- Hold eastbound cyclists.
- Clear area (demarked by orange hatched in image) of pedestrians, generally defined as the area between the retractable bollards on Bowen Street to the far side of the new tram platform on La Trobe Street.
- No pedestrian crossing is allowed north-south of La Trobe Street
- Retractable bollard to be lowered within Bowen Street. This will trigger a beeping sound which will assist notifying pedestrians of the presence of a vehicle.

The arrival vehicle should be held on La Trobe Street to let any tram past prior to the vehicle entering the tram carriageway. Once the vehicle is within the tram carriageway, trams to hold while movements is undertaken.



**4**   When the area is controlled, lead traffic controller to give 'PROCEED WITH CAUTION' signal to vehicle.

Vehicle to forward into the tram carriage way area and undertake the reverse movement into Bowen Street.

**5**   Once vehicle is past the bollards, La Trobe Street can be returned to normal operations.

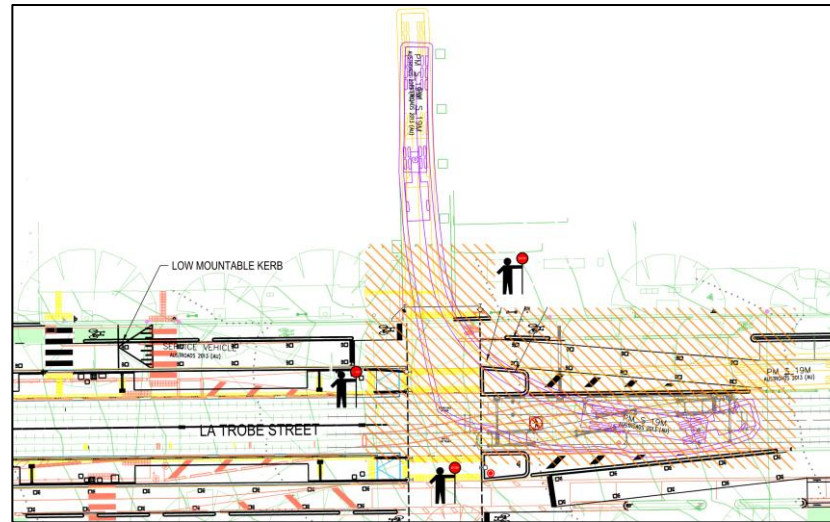| 6 | RMIT Security (or vehicle spotter if available) to accompany vehicle to loading area. |

| 7 | When delivery activities are complete, Campus security are notified that the vehicle is ready exit the site in a forward manner. The vehicle cannot move without RMIT security present. |

| 8 | Vehicle to proceed to and hold at the retractable bollards under the direction of RMIT security (as per current TMP).

Traffic management controllers to set up area for vehicle departure, including:

- Hold eastbound traffic.
- Hold eastbound cyclists.
- Clear area (demarked by orange hatched in image) of pedestrians, generally defined as the area between the retractable bollards on Bowen Street to the far side of the new tram platform on La Trobe Street.
- No pedestrian crossing is allowed north-south of La Trobe Street
- Retractable bollard to be lowered within Bowen Street. This will trigger a beeping sound which will assist notifying pedestrians of the presence of a vehicle.

As the exit movements requires access to the tram carriageway, the departing vehicle should be held at the bollards to let any tram past prior to the vehicle exiting |



| 9 | When the area is controlled, lead traffic controller to give 'PROCEED WITH CAUTION' signal to vehicle.

Traffic controller or spotter usher vehicle onto La Trobe Street. |

**Stantec**

Stantec is a global leader in sustainable architecture, engineering, and environmental consulting. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.