

CARPARK CERTIFICATION OF PROPOSED RESIDENTIAL DEVELOPMENT

9-11 Sydney Street in St Marys

Prepared for: GM Architects

N1715744A (Version 1a)

January 2018

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1. INTRODUCTION

Motion Traffic Engineers was commissioned by GM architects to prepare a car parking certification report of a proposed residential development at 9-11 Sydney Street in St Marys.

Vehicle access and egress to the car parking areas is via Sydney Street.

Parking is provided on basement level.

Reference is made to AS2890.1 (2004), and AS2890.6 and Council's Development Control Plan for compliance.

2. DRIVEWAY AND RAMPS

The details of the driveway/ramp from Sydney Street to carpark are as follows from the perspective of the inbound movement for descriptive purposes only:

- The width of the driveway is 5.8 metres at the property line and narrows down to 3.7 metres at the end of the ramp.
- The gradients along the centre line are as follows:
 - 5 percent for 5.7 metres
 - 12.5 percent for 2 metres
 - 25 percent for 5.75 metres
 - 12.5 percent for 2 metres

A convex safety mirror is required at the bottom of the ramp.

3. CAR SPACES

The details of the car parking areas are as follows:

Basement

- The car parking aisle is 5.8 metres Wide at minimum
- The 90-degree car space carpark is 2.4 metres wide and 5.4 metres long.
- The disabled car space is 2.4 metres wide and length of 5.4 metres
 - Shared zones of 2.4 metres wide and 5.4 metres long are provided for car space V1
 - Appropriate bollard is provided in shared zone
- Column setbacks comply with standards
- A blind aisle extension of 1 metre minimum is provided

4. SWEEP PATHS

A swept turning path analysis is performed using a B85 vehicle to confirm that vehicle movements are adequate.

The following Swept Paths have been performed:

- B85 forward inbound and reverse outbound of car space R8
- B85 reverse inbound and forward outbound of car space R1

All movements show adequate manoeuvrability.

5. SIGHT DISTANCE

The car driver's sight distance requirement to enter the external road is stated in Figure 3.2 of AS2890.1.

The sight distance varies according to the speed of the external road. Sydney Street has a speed limit of 50km/hr.

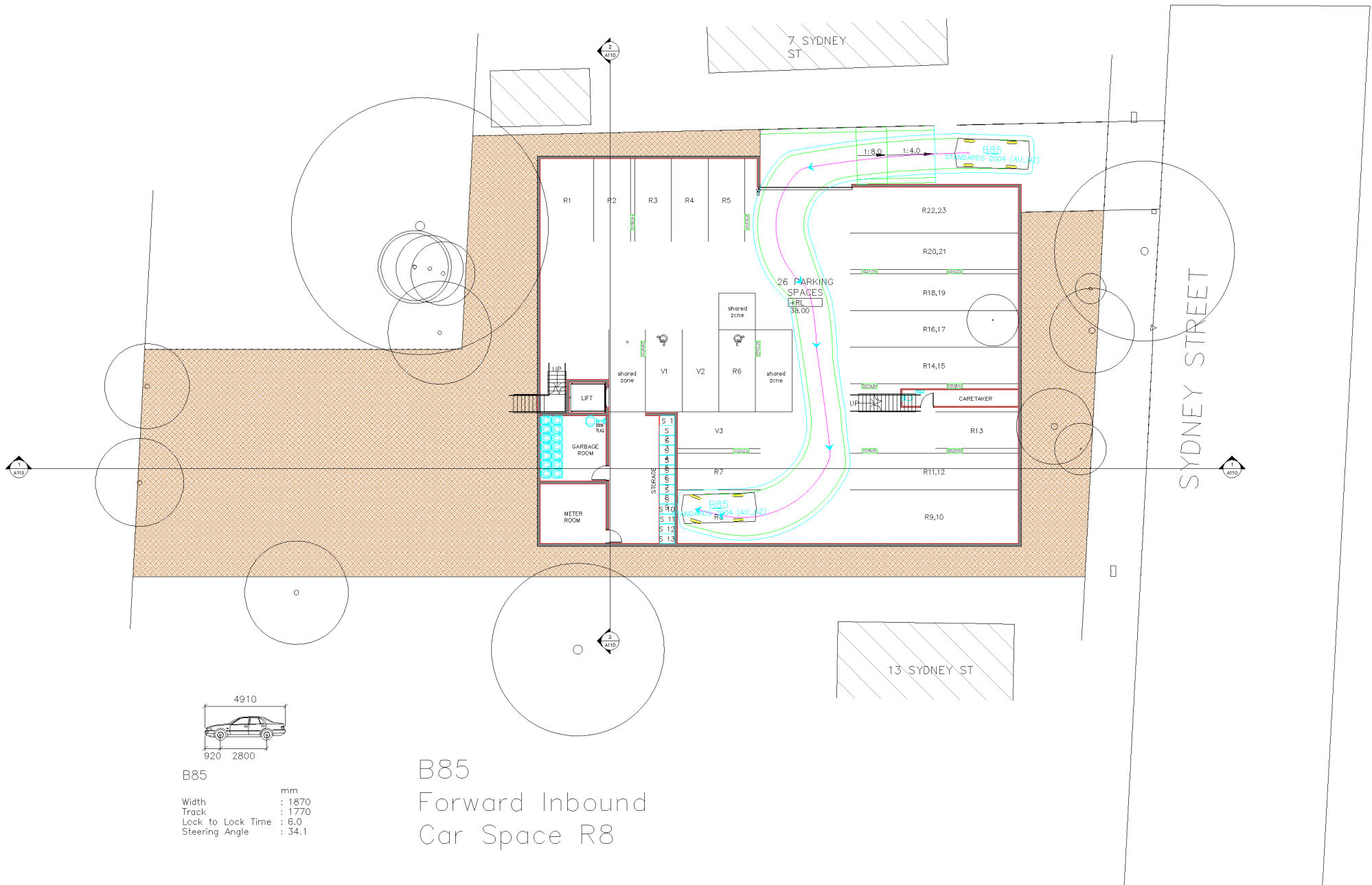
The minimum sight distance required is 45 metres. The minimum vehicle sight distance is met.

The pedestrian sight distance triangle is met as set out in Figure 3.3 of AS2890.1.

6. CONCLUSIONS AND RECOMMENDATIONS

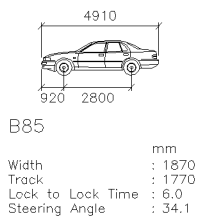
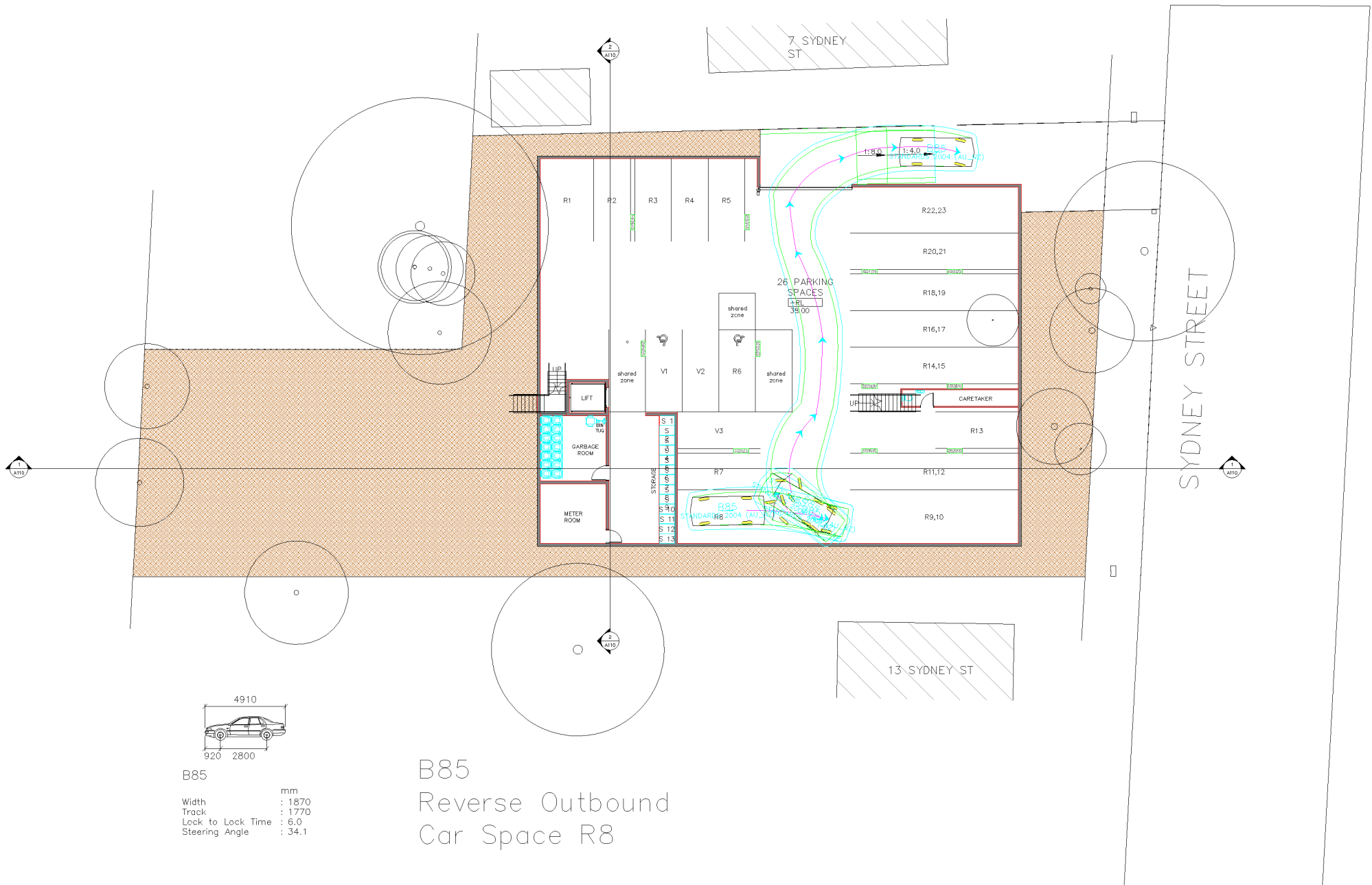
The car parking area and driveway is generally compliant with Australian Standards and Council's DCP.

APPENDIX A – SWEPT PATHS

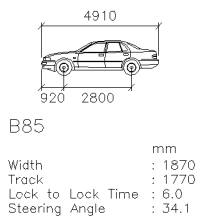
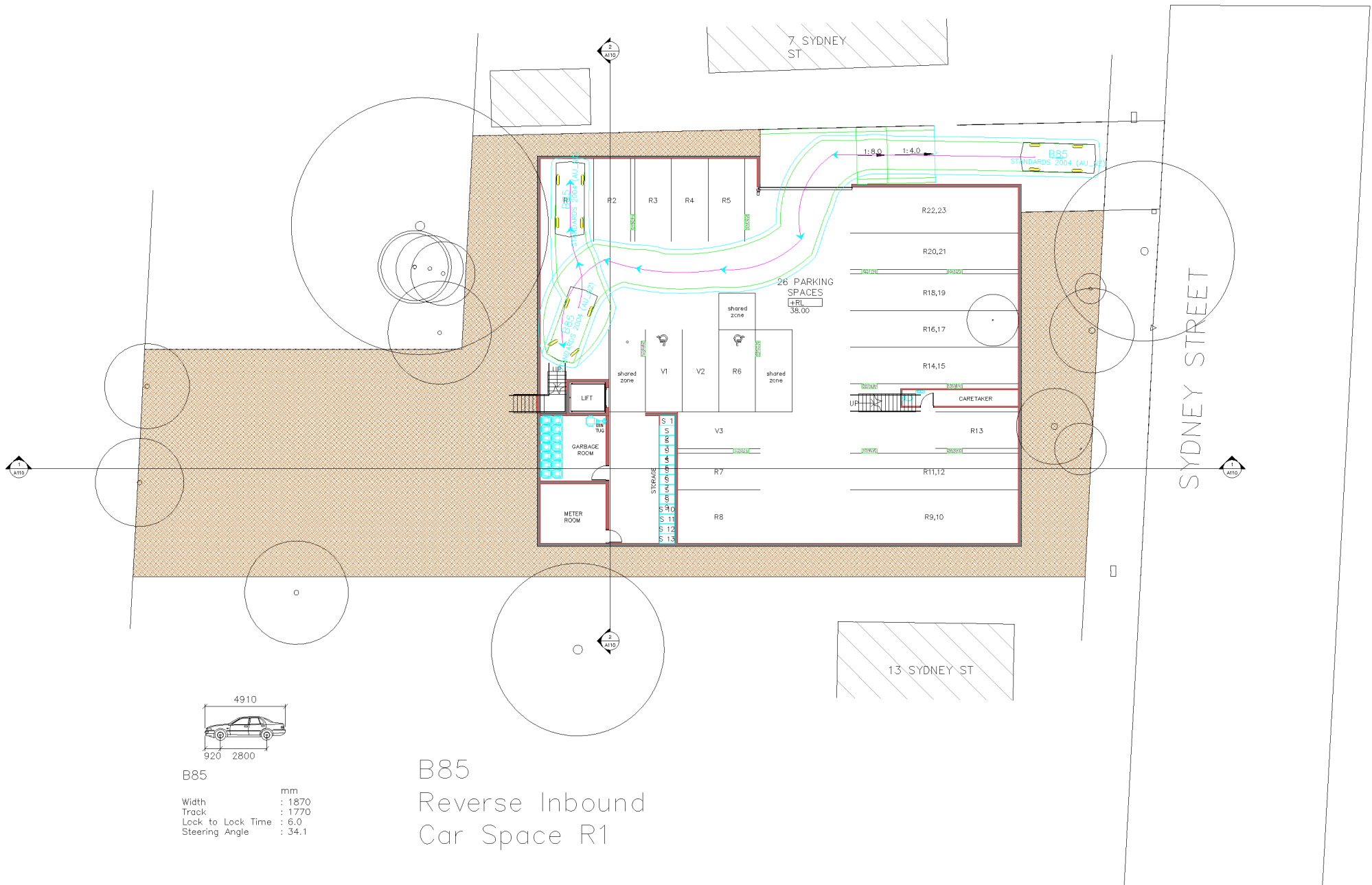


B85
 Width : 1870 mm
 Track : 1770 mm
 Lock to Lock Time : 6.0
 Steering Angle : 34.1

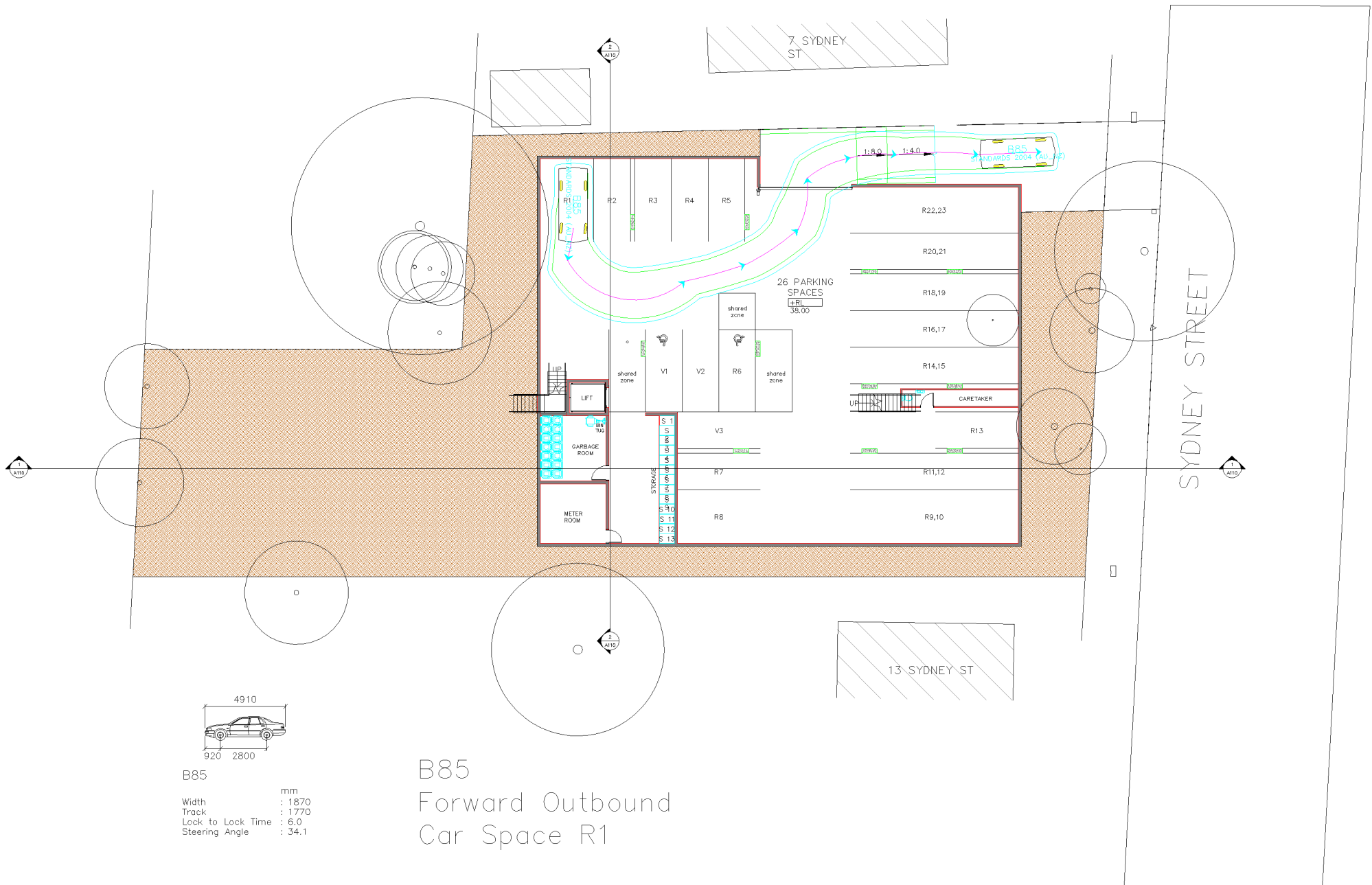
B85
 Forward Inbound
 Car Space R8



B85
 Reverse Outbound
 Car Space R8



B85
Reverse Inbound
Car Space R1



B85
 Width : 1870 mm
 Track : 1770 mm
 Lock to Lock Time : 6.0
 Steering Angle : 34.1

B85
 Forward Outbound
 Car Space R1