

APPENDIX E | Parking
Management
Plan

Parking Management Plan

26 Harris Street, Bicton

CW1131500



Prepared for
Armada Property Services

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Contact Information

Cardno (WA) Pty Ltd

ABN 77 009 119 000

11 Harvest Terrace
West Perth WA 6005
Australia

www.cardno.com

Phone +61 8 9273 3888

Fax +61 8 9486 8664

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Author(s):



Brian Sii
Traffic Engineer

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Scott Lambie
Team Leader – Traffic Engineer

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1 Introduction

Cardno was commissioned by Armada Property Services to prepare a Parking Management Plan (PMP) for the proposed childcare centre, located at 26A Harris Street, Bicton ('the Site').

This PMP has been prepared to address the City of Melville's request to describe / demonstrate the operation of car parking facilities, the car stacker use and the provision for both staff and parents/visitors. This PMP included the following discussions:

- > Safe operation of car stackers
- > Foreseeable matters and mitigation plan

2 Background

2.1 Site Context

The Site is located at 26A Harris Street, bounded by Canning Highway to the south, Harris Street to the west and existing residential developments to the north and east. Location of the Site is shown in **Figure 2-1**.

Figure 2-1 Site Location



2.2 Proposed Development

The proposed development is a child care centre, accommodating up to 74 children and 15 staff members.

2.3 Existing Public Transport Facilities

The nearest bus stops are located approximately 50 metre southeast of the Site. The bus stops are currently serviced by Bus Route 111 and 910. The bus routes are connected to multiply transport HUB within the Perth Metro area, providing public transport connectivity.

Based on previous studies, it is expected that parents whose children who attend the centre and who travel to work using public transport are likely to accompany their children to and from child care via public transport. The close proximity to the Canning Highway bus routes make this option particularly convenient and minimises the demand for on site parking.

2.4 Existing On-Street Parking

Formalised on-street parking embayment's are available within a comfortable walking distance from the Site, approximately 150m west along Foss Street. Location of the on-street parking bays are shown in **Figure 2-2**. Informal on street parking opportunities are also available within other nearby streets, however these are less likely to be utilised by drivers less familiar with the area.

Figure 2-2 Existing On-street Parking Bays in the Vicinity of the Site



Source: Nearmap

3 Access and Parking

3.1 Access Arrangement

Vehicular access to the Site is provided via the existing crossover on Harris Street. Pedestrian access will be via the existing concrete footpath on Harris Street. The access arrangement of the Site is shown in **Figure 3-1**.

Figure 3-1 Access Arrangement



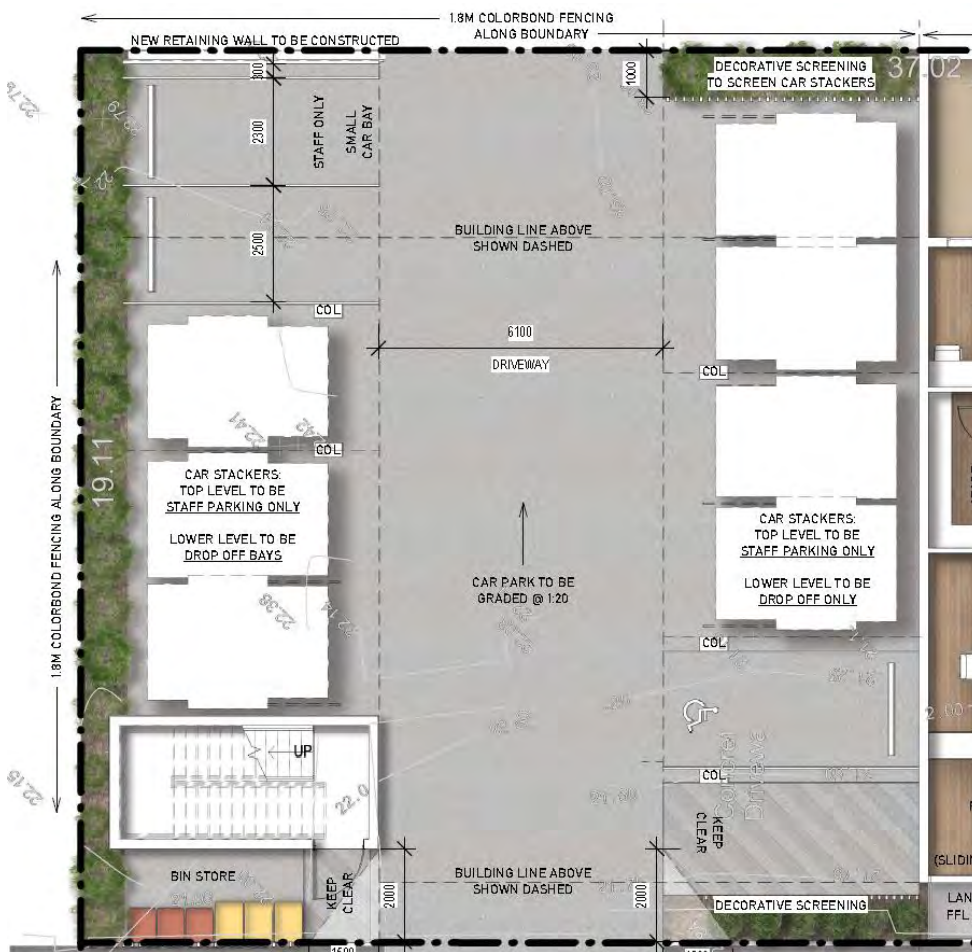
3.2 Car Parking Requirements and Provision

The car parking provision requirements as per the *City of Melville Local Planning Policy 1.6 Car Parking and Access*, and the proposed car parking provision by the development are presented in **Table 3-1**. It is noted that the proposed parking provision satisfied the minimum parking requirements. The car parking layout proposed is shown in **Figure 3-2**.

Table 3-1 Car Parking Requirements and Provision

Land Use	Car Parking Requirement	Bays Required	Bays Provided
Child Minding Centre	1 bay per 10 children	7.4 bays required for 74 children	8 + 1 ACROD Bay
	0.5 bay per staff member	7.5 bays for 15 staff	8 (7 car stackers + 1 small car bay)
Total		15 bays	17 car bays

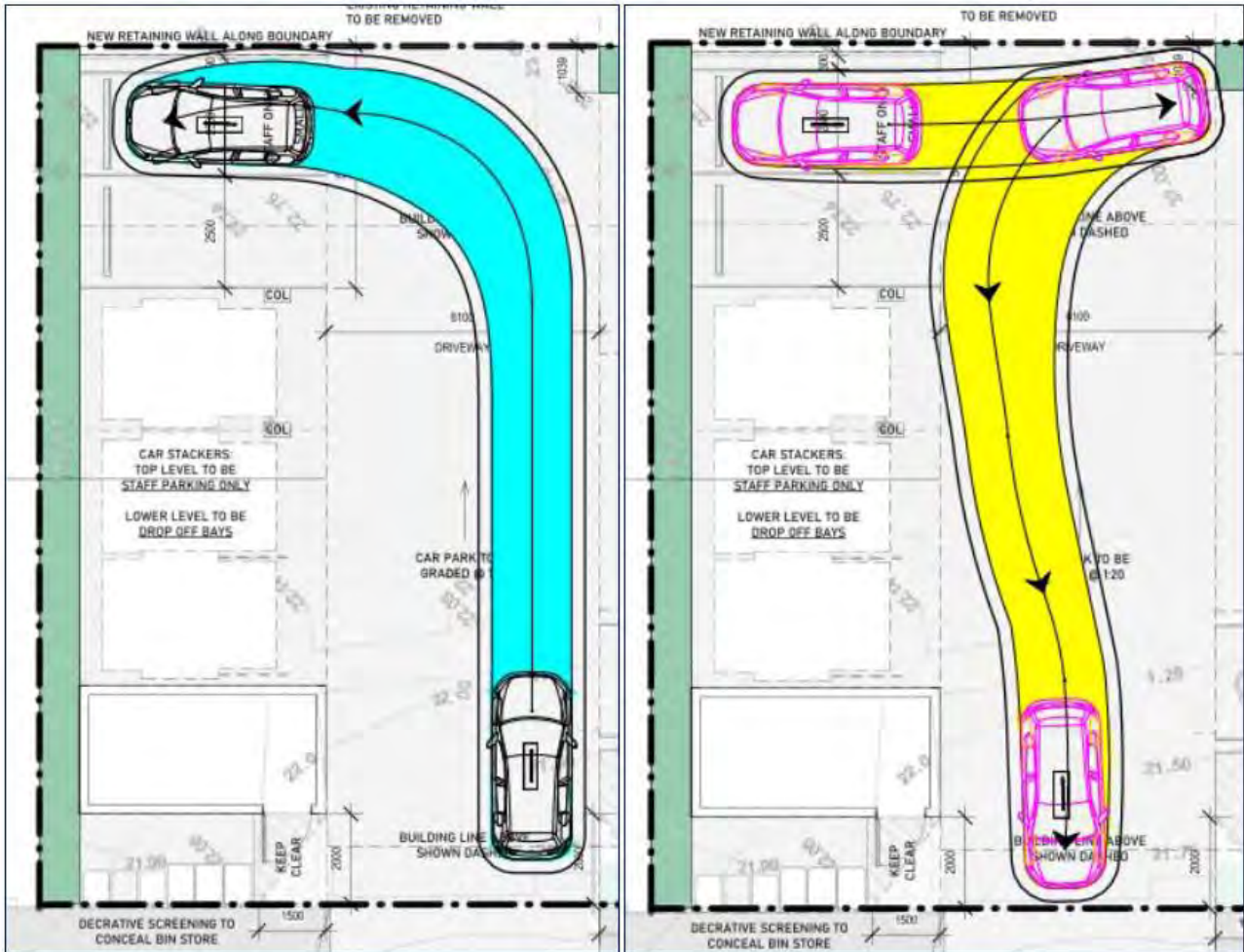
Figure 3-2 Car Park Layout



3.3 Small Car Bays

A small car bay is proposed for staff member use, located to the north of the car park. The small car bay is proposed to be 2.3m wide, with additional 300mm additional width as per AS2890.1. A swept path assessment was conducted, demonstrating that a small car is able to enter an exit the bay appropriately as shown in **Figure 3-3**. As this is a small car bay, it is proposed that this bay be specifically allocated to a staff member with an appropriately sized vehicle to ensure that larger vehicles do not attempt to use the bay.

Figure 3-3 Small Car Swept Path



3.4 ACROD Bay

An ACROD bays is proposed within the Site, located near the main entrance of the child care centre. The dimension of the ACROD bays is provided to compliant with AS2890.6.

3.5 Operation of Car Stackers

It is noted that each car stacker is proposed to accommodate up to two vehicles. The first vehicle (staff parking) will enter the bay and be lifted to make space for the second vehicle (visitor), parking under the first vehicle. Staff members will generally arrive before the child care opens. Therefore, all staff members will be instructed to park and lift their cars to make space for parents' vehicles.

A similar example of car stacker proposed is shown in **Figure 3-4**.

Figure 3-4 Car Stacker (Illustration purpose only)



Source: Autostacker

3.6 Staff Parking Bays Allocation

In order to ensure that sufficient parking bays are provided for visitors/parents, the number of staff-parking bays on-site shall be firmly restricted. This can be enforced by allocating parking bays to designated staff members only. Any remaining staff members will carpool or utilise public transport.

4 Risk Mitigation Plans

This section outlines the mitigation plans of the potential risk that could occur during the operation of car park, especially during the peak hour.

4.1 Car Stacker Failure

In rare occasions, where a car stacker fails to operate, the parking bay will be reserved for visitor/parent parking. The staff member who would normally use the parking bay will have to park the vehicle off-site, or take public transport.

To avoid any undesirable operation, car stackers should be serviced and maintained regularly by the owner to ensure smooth and safe operation of car stackers.

4.2 Overflow Visitor Vehicles

The number of visitor parking bays are provided in accordance with the minimum parking requirements stated in the *City of Melville Local Planning Policy 1.6 Car Parking and Access*. Generally, a parking bay will be occupied for approximately 5 minutes where parents would park, pick-up or drop-off their children, and leave. In ideal circumstances, the car park would be able to provide capacity for over 84 separate visitors to the site in 1 hour.

Although rare, there could be instances where more than 8 visitors would arrive simultaneously, fully occupying the visitor bays. Due to the short aisle length (6 bays), visitors wishing to enter the Site will be able to identify the fully occupied car park before entering. Should this occur, the vehicle will be required to circulate around the block, and re-enter the Site once the car park has been cleared.

4.3 General Information for Visitors

It is encouraged that all new visitors/parents be briefed on the car park arrangements and mitigation plans after their child is enrolled and prior to the first day of attendance to ensure smooth car park operation. Additionally, appropriate signs shall be installed to individual bays to advise visitors of the unique parking environment and ensure that it is clear that visitors are able to park under the stackers.

5 Summary and Conclusions

The Parking Management Plan outlines the operation of the proposed car park, specifically on the operation of car stackers. The following summarises the outcome of the report.

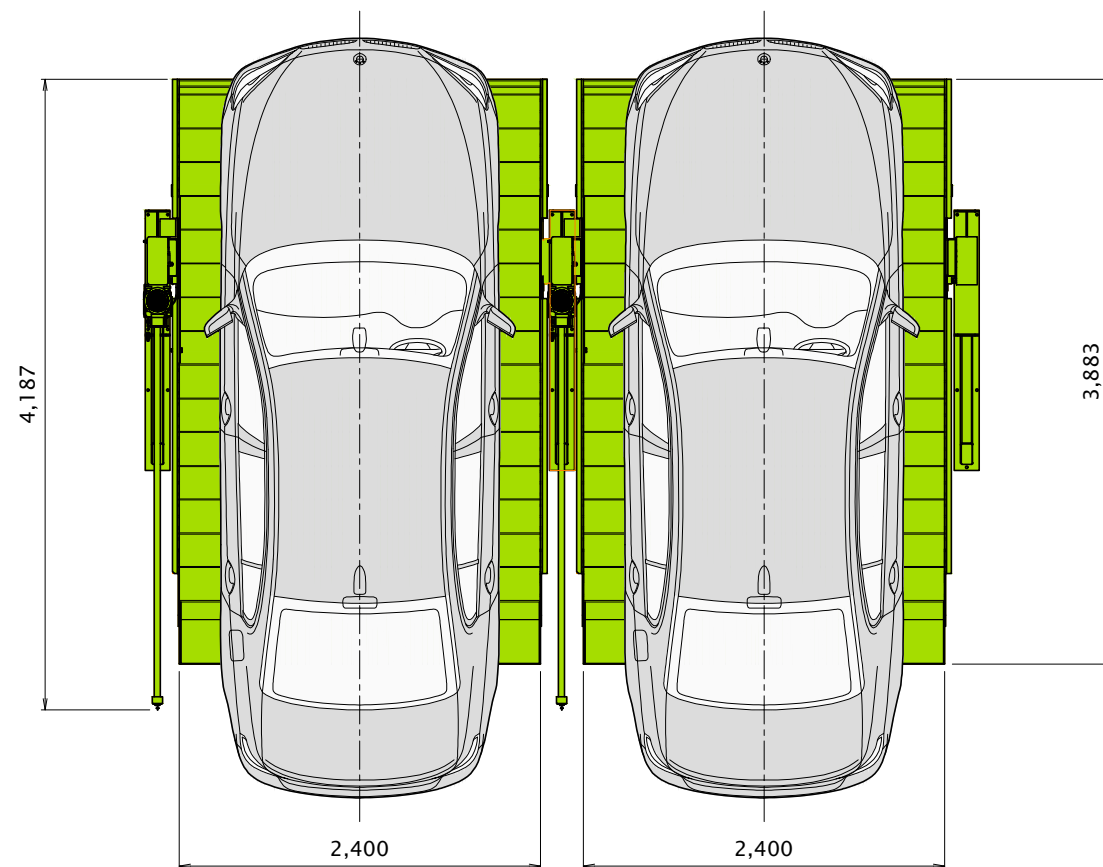
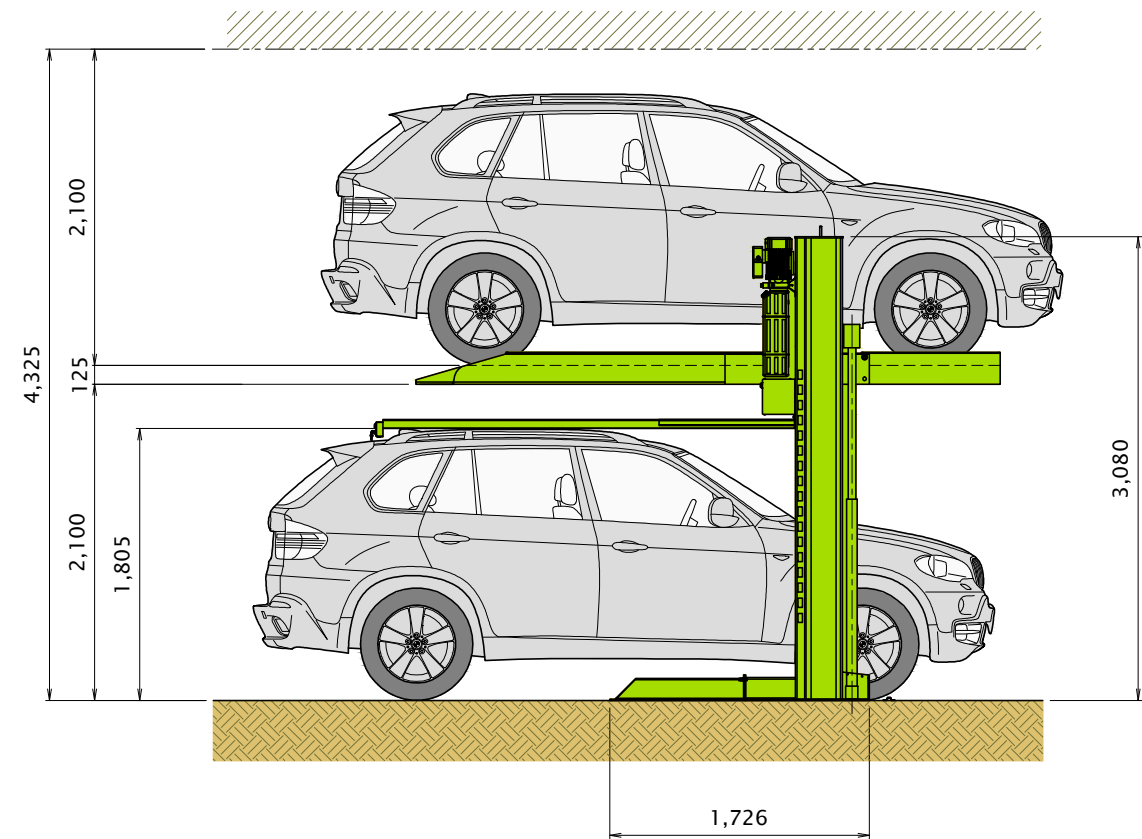
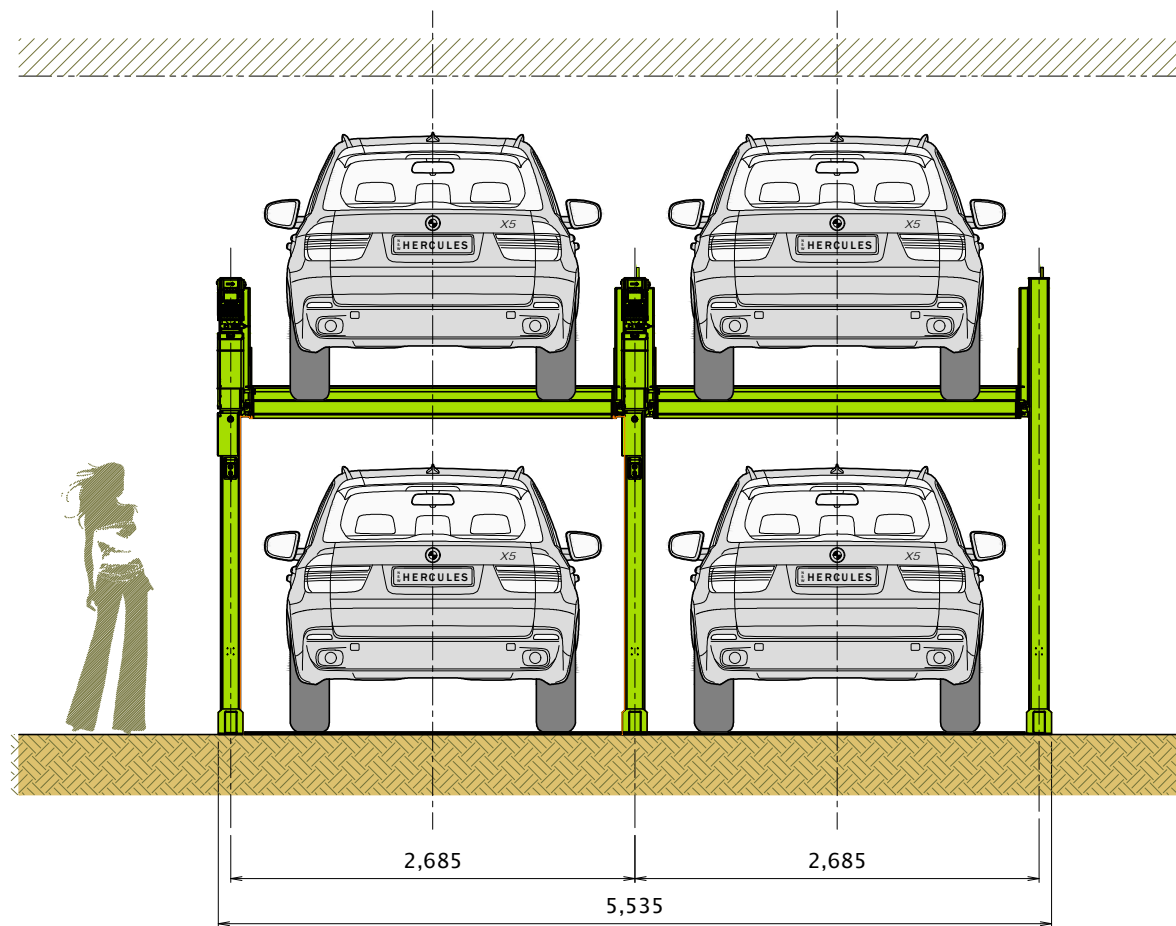
- > The proposed parking provision satisfy the parking requirements set out in the *City of Melville Local Planning Policy 1.6 Car Parking and Access*.
- > Bus stops are located within a close proximity of the Site, where parents and staff would potentially travel to and from the Site via a public bus.
- > Existing on-street parking bays are available in the vicinity of the Site, within a comfortable walking distance from the Site.
- > The car stacker's upper level will only be utilised by staff members, who will generally arrive earlier than the visitors/parents. Staff members would lift their car, prior to the arrival of visitors.
- > Staff parking bays are to be allocated to specific staff to ensure their vehicles can be appropriately parked and that staff members to not arrive by vehicle when bays may not be available.
- > All new visitors/parents will be briefed on the car park operations to ensure the PMP could be executed.

APPENDIX

A

INSERT APPENDIX TITLE HERE

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SPECIFICATION		
ACCOMMODATION	LENGTH	5,000 mm
	WIDTH	2,400 mm
	HEIGHT	2,050 mm
	WEIGHT	2,300 kg
PUMP MOTOR	2.2 kW	
LIFTING SPEED	55 sec	
POWER SOURCE	415V × 50HZ × 3P	
	240V × 50HZ × 1P	

..			MODEL NAME	HCP-D2-04	JOB		TITLE	2 × DOUBLE STACKER				
..					DATE	24th May 2017	SCALE	1 / 40	SUBJECT	LAYOUT		
..					DRAW	DESIGNED	CHECKED	REVIEWED	APPROVED	FILE NAME		
DATE	REVISIONS & DESCRIPTION	ENG'R			APPR'D	James Han				DWG NO.	HCP-D2-002	REV.

