7 March 2025

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TO	Simon Wilkes (Director, Urbis Pty Ltd)
FROM	Masoud Khodadadifard (Senior Transport Engineer, Ason Group)
CC	Wayne Moodie (Senior Development Manager, Formus) Mack Brinums (Principal Transport Engineer, Ason Group)
SUBJECT	Initial Transport Advice – 125, 145,155,165 & 175 Lawson Road, Badgerys Creek

Dear Simon,

Formus engaged Ason Group to provide initial transport advice as part of the State Significant Development Application (SSDA) for the proposed warehouse development at 125, 145, 155, 165 and 175 Lawson Road, Badgerys Creek.

Introduction

This technical note details all key initial transport related matters, assumptions and initial design review comments, with consideration for the following:

- Review and commentary on the background information and site context, including the approach of Transport for NSW (TfNSW) to the planned Aerotropolis road network and surrounding precincts.
- Assessment of the relevant car parking rates applicable to the development as per the Western Sydney Aerotropolis Phase 2 DCP 2022 (DCP).
- Preliminary design comments and considerations for the proposed layout.

The location of the site is shown in **Figure 1**.

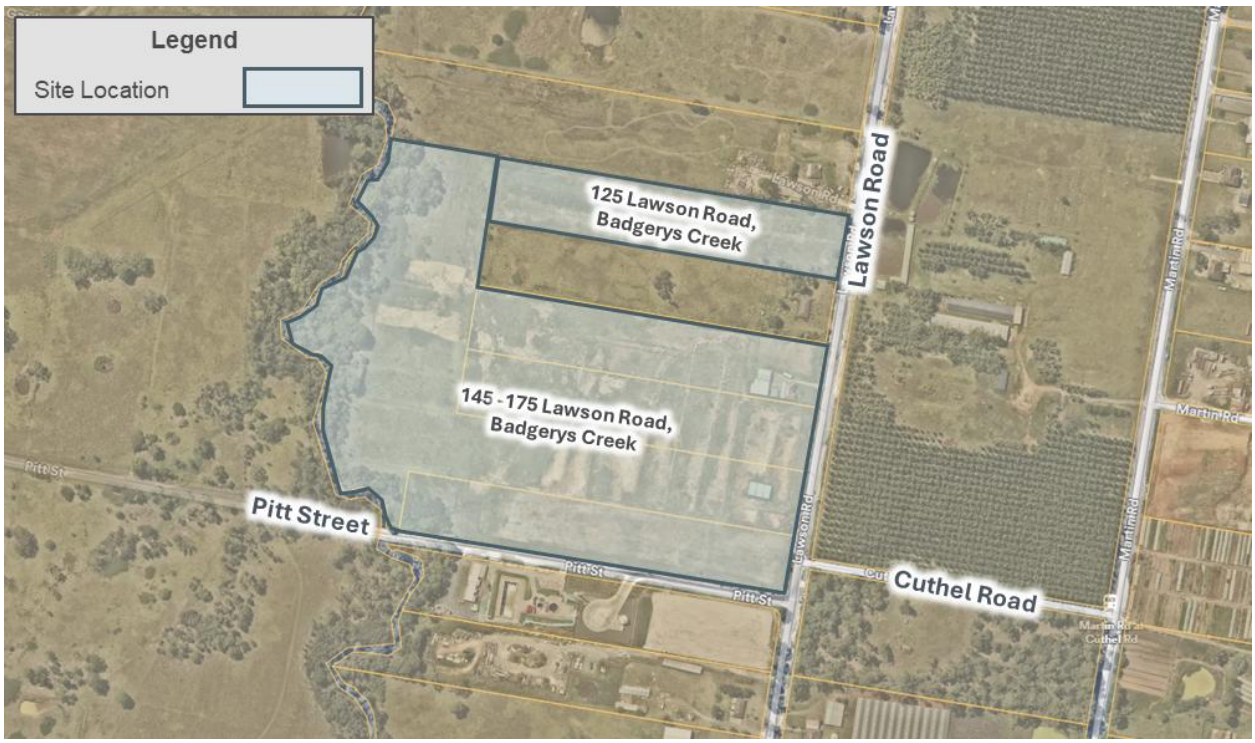

Figure 1: Site Location and Context

Future Road Network

The planned Western Sydney Aerotropolis (WSA) road network as envisaged in the Aerotropolis Precinct Plan is shown in **Figure 2**.

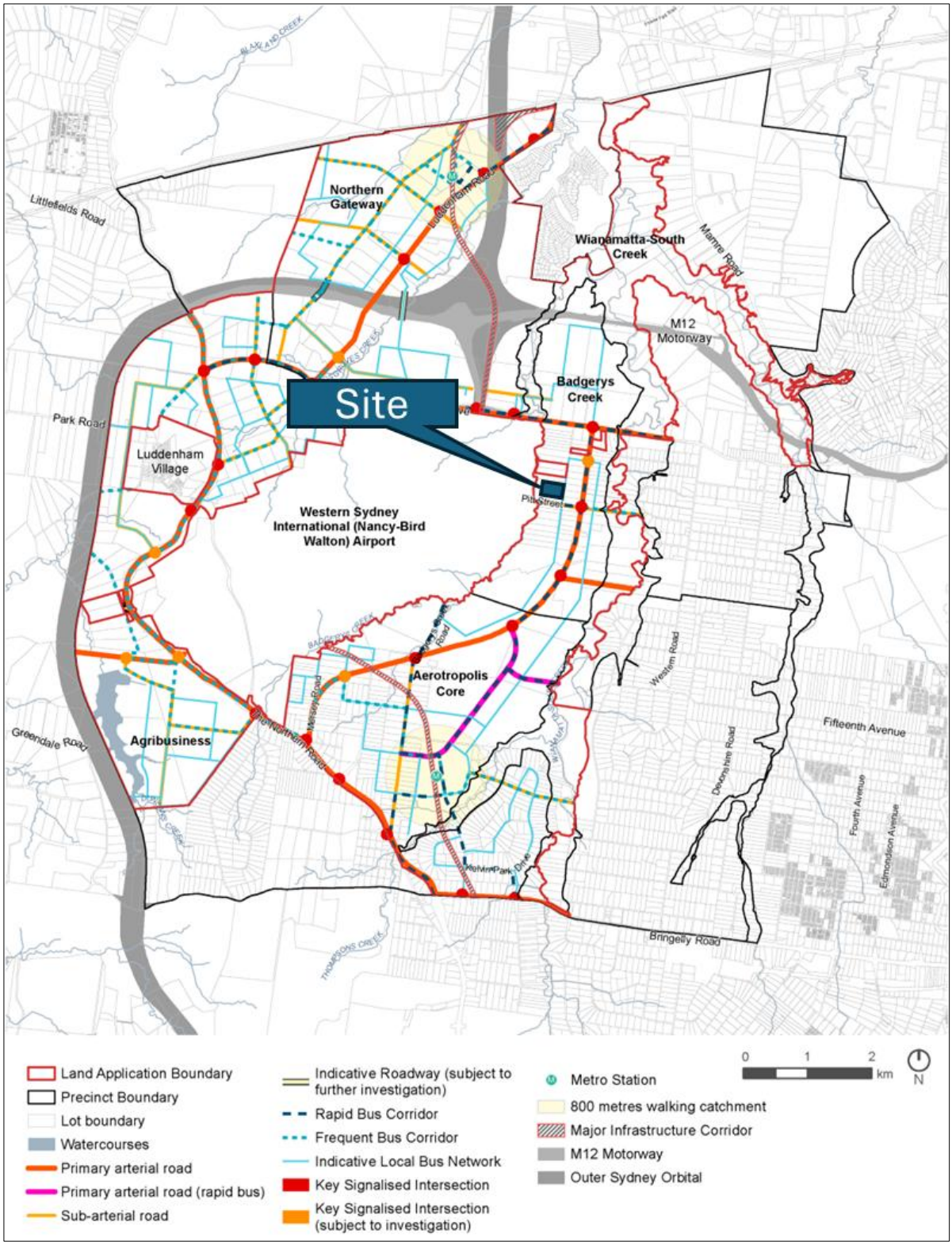

Figure 2: Future Western Sydney Aerotropolis Road

The following outlines the proposed road network upgrade within the broader road network:

Pitt Street West – Sub-Arterial Road Upgrade:

According to the Parklands SEPP, Pitt Street West is planned to be a 40.0m-wide sub-arterial road. **Figure 3** shows the key transport corridors in the vicinity of the site.

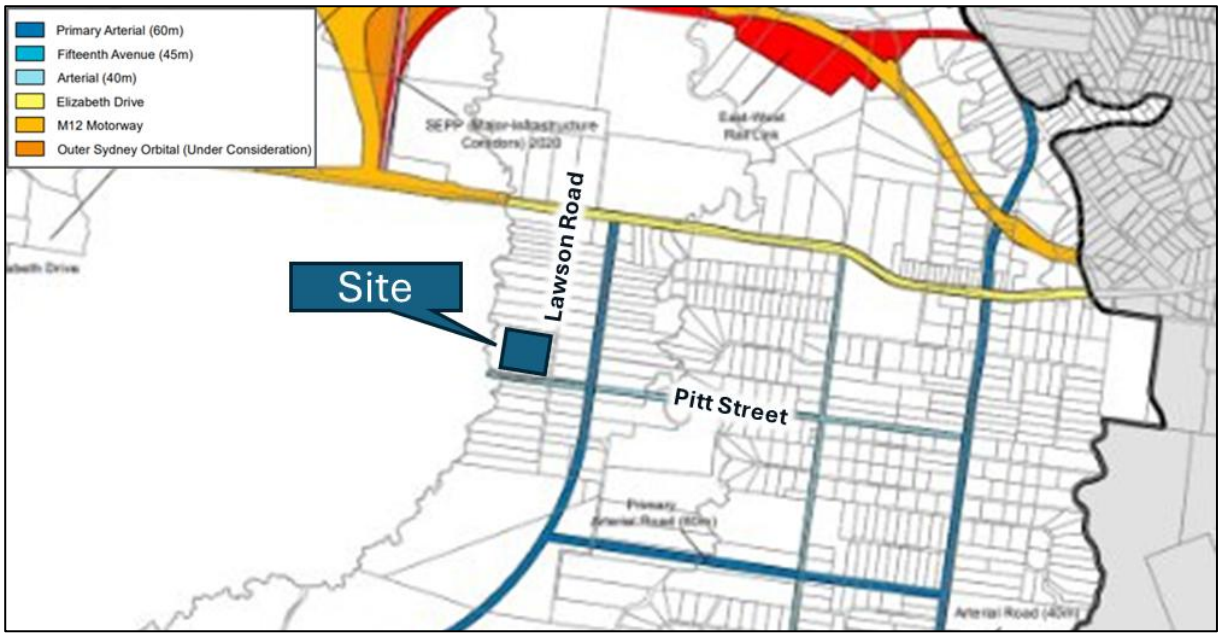

Figure 3: Key Transport Corridors in the Vicinity of the Site

Figure 4 illustrates the typical arrangement for a sub-arterial road within the Western Sydney Aerotropolis, as per the DCP.

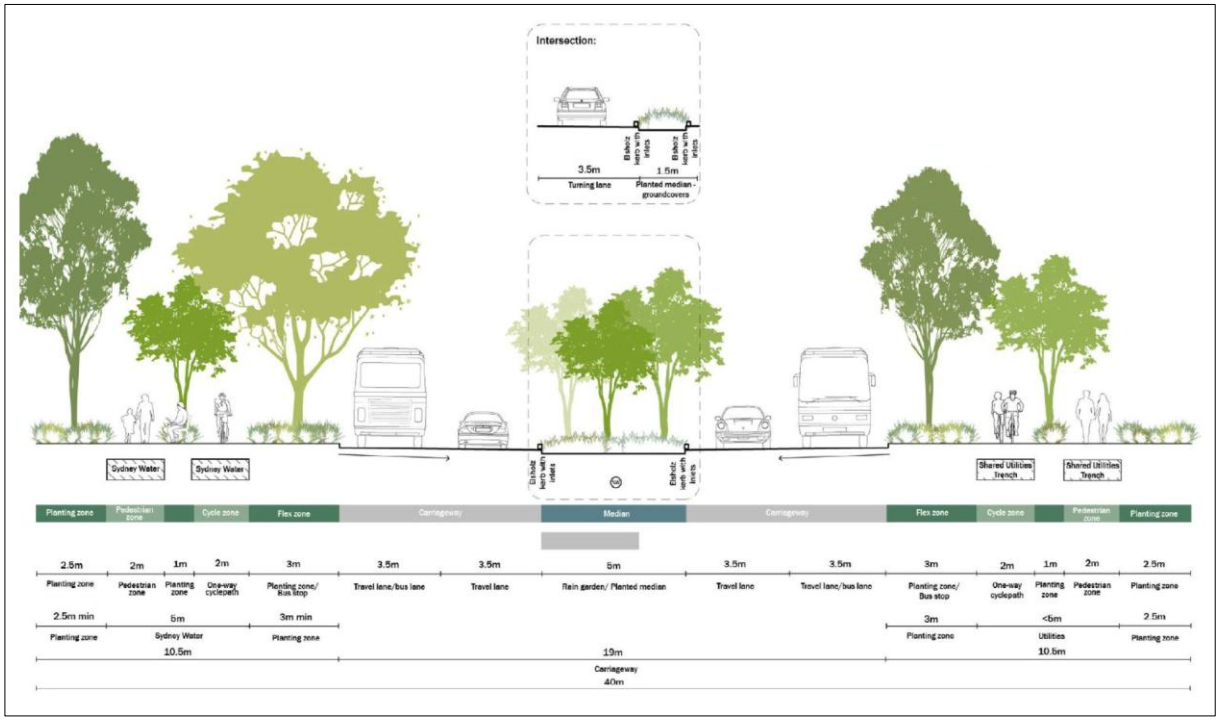

Figure 4: Sub-Arterial Road Typical Arrangement, DCP

Preliminary survey measurements indicate that the existing road is approximately 15m wide, requiring an additional 25m of road cross-section. As shown in **Figure 5** a snapshot from SEPP (Western Parkland City – Western Sydney Aerotropolis) 2020 Transport & Arterial Road Infrastructure Map suggests that the widening will occur towards the site adjacent to the Pitt Street and Lawson Road intersection.

Figure 5: Snapshot of SEPP (Western Parkland City – WSA) Transport & Arterial Road Infrastructure Map

It is noted that at the time of writing, the proposed road upgrade along Pitt Street is awaiting funding. A request was made to TfNSW via email (development.sydney@transport.nsw.gov.au) on 19 February 2025 to understand the future intended upgrade of Pitt Street with a response pending.

Lawson Road – Collector Road Upgrade *(No planned upgrade)*:

Preliminary measurements from the received survey PDF file indicate that Lawson Road is currently approximately 20m wide. The DCP requires a road reserve of 25.6m, with a variable width of up to 26.4m at key intersections. A typical collector road cross-section is illustrated in **Figure 6**.

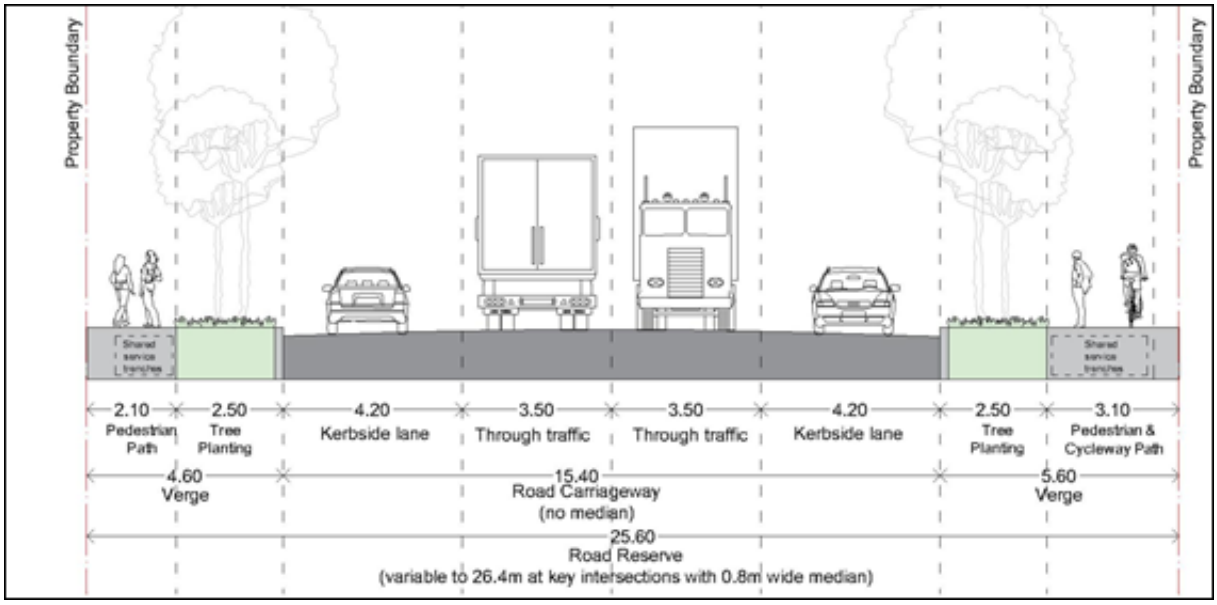

Figure 6: Collector Road Typical Arrangement, DCP

Intersection of Pitt Street and Lawson Road

No planned intersection layouts or details on the intersection treatment for the intersection of Pitt Street and Lawson Road appear to be publicly available. However, as presented in Figure 2 there would only be one traffic light intersection along Pitt Street, which the Aerotropolis Precinct Plans suggest would be at Martin Road. Therefore, it is assumed this will likely be planned as a standard priority-controlled (give-way) intersection. The upgrade of this intersection will require input from Council, particularly regarding the planned cross-section for Lawson Road as a Collector Road. Engagement with Council is recommended to confirm.

Site Access Arrangement

The DCP states: *"Where a site has frontage to a classified road, provide access to an alternate road."* Considering this requirement, access via Lawson Road is likely to be preferred by stakeholders, given the proposed function of Pitt Street as a sub-arterial road. Additionally, the sub-arterial cross-section includes a central median, whereas the collector road (Lawson Road) does not, meaning an access point on Lawson Road is less likely to have turning restrictions imposed (e.g. restricted to left-in left-out vehicle movements only).

The following website also indicates that driveways along Pitt Street may be limited in some areas: https://www.transport.nsw.gov.au/projects/current-projects/western-sydney-international-airport-precinct-road-network

Our view is that site access via Lawson Road would be preferred. Access via Pitt Street would likely present an approvals challenge and if supported at all, would likely be restricted to left turns on entry and exit. Any Lawson Road access would also need to be adequately separated from the Pitt Street/ Lawson Road intersection (ideally at least 50 metres).

Proposal

The proposal being investigated by project team is summarised in **Table 1**.

TABLE 1: DCP PARKING RATES

Warehouse #	Location	Land Use	Gross Building Footprint (m^2)
1	145 -175 Lawson Road, Badgerys Creek	Warehouse	4,345
		Office	2,000
2	125 Lawson Road, Badgerys Creek	Warehouse	1,015
		Office	100
3		Warehouse	1,015
		Office	100
4		Warehouse	1,475
		Office	100
5		Warehouse	4,740
		Office	150

The proposed concept plan is reproduced at a reduced scale in **Figure 7**.

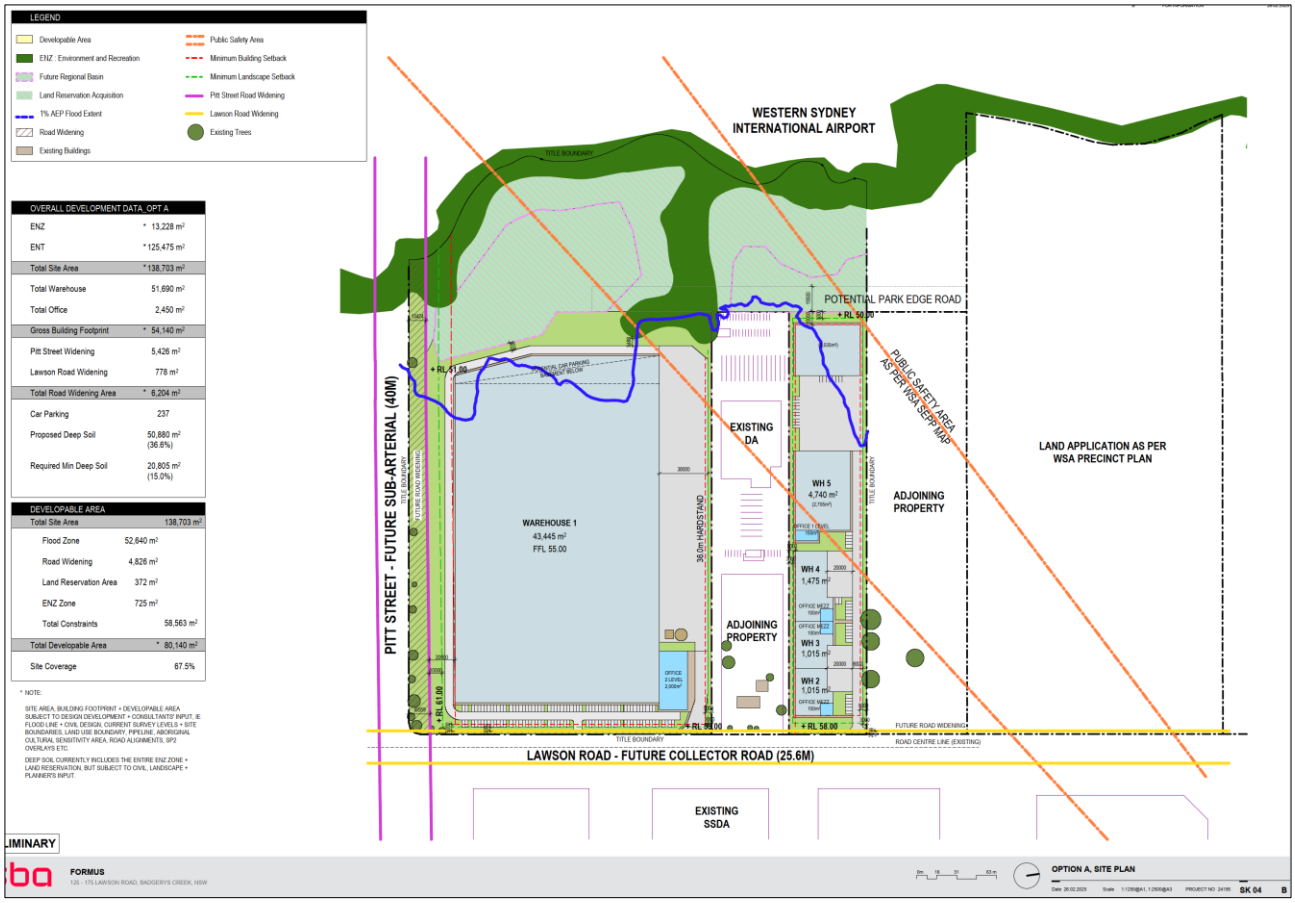

Figure 7: Proposed Concept Design

Parking Assessment

Parking Rates

Based on the DCP, the required car parking rates for warehouses and distribution centres are as follows:

- Warehouse areas: A minimum of 1 car space per 300 sqm of GFA and a maximum of 1 car space per 100 sqm of GFA.
- Office areas: 1 car space per 40 sqm of GFA.

Table 2 details the requirements for the development, based on the parking rates detailed above.

TABLE 2: DCP PARKING RATES

Warehouse #	Land Use	Gross Building Footprint (m^2)	Minimum Spaces Permitted	Maximum Spaces Permitted	Spaces Proposed
1	Warehouse	43,445	145	435	113[1]
	Office	2,000	50	50	
	Total	45,445	195	485	
2	Warehouse	1,015	4	12	6
	Office	100	3	3	
	Total	1,115	7	15	
3	Warehouse	1,015	4	12	6
	Office	100	3	3	
	Total	1,115	7	15	
4	Warehouse	1,475	5	15	8
	Office	100	3	3	
	Total	1,575	8	18	
5	Warehouse	4,740	16	48	22
	Office	150	4	4	
	Total	4,890	20	52	
Total		**55,155**	**237**	**585**	**155**

Note 1: It is noted that a basement car parking area will be provided for Warehouse 1. However, the supplied plan does not indicate the number of car parking spaces.

The current parking supply would need to be increased to comply with the DCP however we note that the quantum of warehouse 1 basement parking is yet to be confirmed though would be expected to meet or exceed the minimum requirements specified above.

Design Comments

A preliminary design review for the concept layout has been completed with no major concerns raised at this early planning stage. Further reviews will be provided, including vehicle swept paths as part of ongoing design development. The initial review is included in **Attachment 1**.

Conclusion

Key outcomes from our findings include:

- Pitt Street West Sub-Arterial Road Upgrade: Planned as a 40.0m-wide road including a 5.0m median. The existing road is approximately 15m wide, requiring an additional 25m of road cross-section. Expansion is expected to be more towards the site based on the SEPP Transport and Arterial Road Infrastructure Map.
- Lawson Road Collector Road Upgrade: Currently 20m wide, with the DCP requiring a road reserve of 25.6m, expanding to 26.4m at key intersections.
- Pitt Street/ Lawson Road Intersection: No planned intersection layout identified. Only one signalised intersection is expected along Pitt Street (likely at Martin Road), suggesting this intersection will likely remain priority controlled (give-way).

- Site Access Arrangement: As per DCP, sites with frontage to a classified road must provide access via an alternate road. Given Pitt Street's sub-arterial function and central median, Lawson Road is the preferred access option to minimise turning restrictions and approvals risk. Driveways along Pitt Street may need to be limited, where feasible. Lawson Road access should be located a minimum 50 metres north of the Pitt Street intersection.
- Generally, no major transport related issues have been identified with the concept layout provided to date.

Yours sincerely,

Masoud Khodadadifard

Senior Transport Engineer

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Attachment 1 – Preliminary Design Commentary

REVISIONS

REV	DESCRIPTION	DATE
A	FOR INFORMATION	24.02.2025

LEGEND

- Developable Area
- ENZ : Environment and Recreation
- Future Regional Basin
- Land Reservation Acquisition
- 1% AEP Flood Extent
- Road Widening
- Existing Buildings
- Public Safety Area
- Minimum Building Setback
- Minimum Landscape Setback
- Pitt Street Road Widening
- Lawson Road Widening
- Existing Trees

OVERALL DEVELOPMENT DATA_OPT A	
ENZ	* 13,228 m²
ENT	*125,475 m²
Total Site Area	*138,703 m²
Total Warehouse	51,690 m²
Total Office	2,450 m²
Gross Building Footprint	* 54,140 m²
Pitt Street Widening	5,426 m²
Lawson Road Widening	778 m²
Total Road Widening Area	* 6,204 m²
Car Parking	237
Proposed Deep Soil	50,880 m² (36.6%)
Required Min Deep Soil	20,805 m² (15.0%)

* NOTE:

The plan does not show access to the western basement car park.

To improve safety, these car parking spaces should not have direct access to the hardstand area, where heavy vehicles manoeuvre.

Based on the Western Sydney Aerotropolis Development Control Plan 2022, minimum required car parking rates for warehouses are:

1 car space per 300 sqm of GFA for warehouse areas.
1 car space per 40 sqm of GFA for office areas.

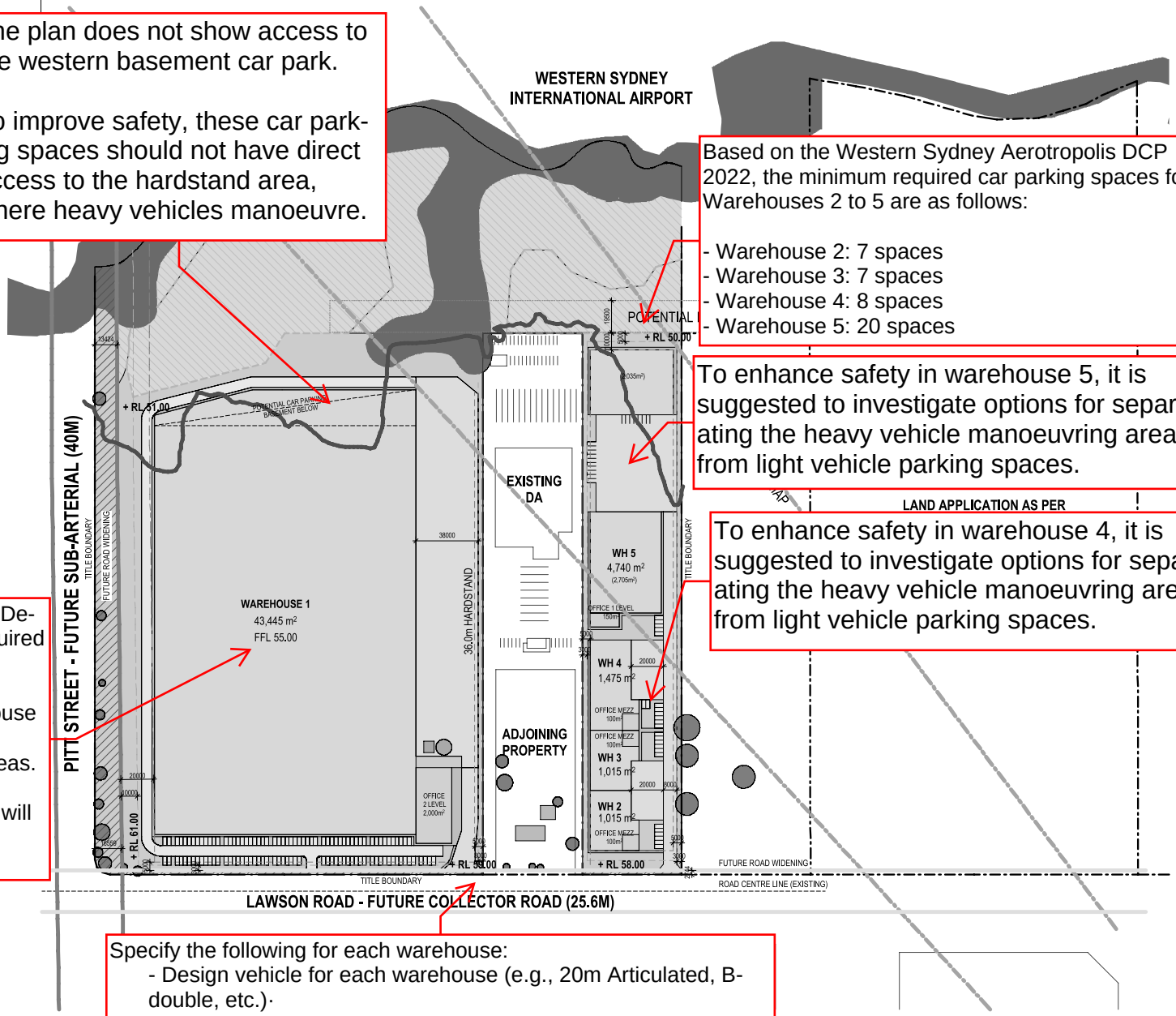
For Warehouse 1, a total of 195 car spaces will be required.

Based on the Western Sydney Aerotropolis DCP 2022, the minimum required car parking spaces for Warehouses 2 to 5 are as follows:

- Warehouse 2: 7 spaces
- Warehouse 3: 7 spaces
- Warehouse 4: 8 spaces
- Warehouse 5: 20 spaces

To enhance safety in warehouse 5, it is suggested to investigate options for separating the heavy vehicle manoeuvring area from light vehicle parking spaces.

To enhance safety in warehouse 4, it is suggested to investigate options for separating the heavy vehicle manoeuvring area from light vehicle parking spaces.



Specify the following for each warehouse:
- Design vehicle for each warehouse (e.g., 20m Articulated, B-double, etc.)·
- Loading dock locations for each warehouse
- Grades and gradients for areas where RLs are changing.

PRELIMINARY

sba

FORMUS
125 - 175 LAWSON ROAD, BADGERYS CREEK, NSW

31 63 m

OPTION A, SITE PLAN

Date 24.02.2025 Scale 1:1250@A1, 1:2500@A3 PROJECT NO 24195 SK 04 A