

Transport Engineering

REF: N105797

DATE: 13 May 2021

LF Logistics
c/o TMX Insight
Level 1, 68 Moncur Street
WOOLLAHRA NSW 2025

Attention: Tarit Lal

Dear Tarit

RE: LOTS 23 & 24 MARSDEN PARK, MODIFICATION 5 TRANSPORT ASSESSMENT

Development Consent was provided on 16 August 2018 for a warehouse and distribution facilities estate on land located at Lots 23 and 24 Hollinsworth Road, Marsden Park. GTA Consultants prepared a Transport Impact Assessment (TIA)¹ that was submitted as part of the State Signification Development Application (SSD 8606), which should be read in conjunction with this letter for the broader traffic assessment.

Since the approval there have been four (4) modifications approved to the SSDA, with this letter prepared to address the traffic and transport implications of a proposed fifth modification specifically relating to Building 2A. The previous modifications (as relevant to traffic and parking) have been considered in this assessment.

Overview of Proposed Building 2A Modification

The modification seeks to install two mezzanine levels with a combined 12,284 square metres gross floor area (GFA) as part of fit-out works for Building 2A. The mezzanine levels will be in lieu of vertical racking/shelving systems typically installed in warehouse buildings and is in response to the footwear and apparel type of products to be stored on-site, that require manual handling rather than automation. This modification does not propose any changes to the building footprint or height, rather a tenant-specific requirement that would likely be removed at the end of the tenancy.

It is noted that the prospective tenant will also occupy Building 2B, with internal connections proposed between the two buildings to allow staff and vehicles to move between the two sites.

This modification considers the provisions for Building 2A, which has an approved GFA of 9,609 square metres (including 476 square metres of office and 9,133 square metres of distribution centre) and a car parking supply of 45 spaces. The mezzanine levels increase the GFA to 21,893 square metres, including 21,417 square metres of distribution centre and the office area unchanged.

A comparison between the approved and modified overall estate scheme (including the GFA of the additional mezzanine levels) is provided in Table 1 and suggests the modified scheme would result in an increase in GFA by approximately 6,213 square metres compared to approved scheme (or an approximately 5-6 per cent increase).

¹ GTA Consultants, *Lots 23 and 24 DC 262886 Hollinsworth Road, Marsden Park – Transport Impact Assessment* dated 15 November 2017

Table 1: Comparison of Proposed Land Uses

Land Use	Approved Estate Scheme Area (sqm GFA)	Last Mod Estate Scheme Area (sqm GFA)	This Mod Estate Scheme Area (sqm GFA)	Net Change Area (sqm GFA)
Warehouse/ Distribution	101,139	97,175	109,459	8,320
Office	6,633	4,526	4,526	-2,107
Total	107,772	101,701	113,985	6,213

Traffic and Parking Assessment

Tenant-specific staffing information obtained for Building 2A suggests there will be up to 63 staff on site on a typical day (including three office staff).

The Building 2A population is lower than the TfNSW Guide to Traffic Generation Developments (GTGD, 2002), which identified a mean floor area per employee of 226 square metres (i.e. 97 staff for Building 2A when applied to the warehouse, including additional mezzanine levels, and office space).

Car parking provisions were approved based on the requirements of the GTGD (TfNSW, 2002). The car parking requirements for the modified Building 2A (including the GFA of the additional mezzanine levels) are summarised in Table 2.

Table 2: Building 2A - Car Parking Requirements (TfNSW, 2002)

Land Use	Modified Floor Area (sqm GFA)	Parking Rate	Parking Requirement
Warehouse/ Distribution	21,417	1 space per 300sqm GFA	71
Office	476	1 space per 40sqm GFA	12
Total	21,893		83 spaces

There are currently 45 car parking spaces available for Building 2A. The typical population for Building 2A (up to 63 staff) generates demand of 53 spaces at a typical vehicle occupancy of 1.2 persons per car.

Given the low truck demand generated by the prospective tenant for Building 2A (5-8 trucks daily), it is proposed to convert a portion of the Building 2A loading hardstand area to overflow car parking for a further 38 vehicles. The overflow parking should be separated from the loading dock using removable bollards (with chain) when in use. The overflow car parking increases the supply for Building 2A to 83 spaces, which complies with the GTGD requirements.

Blacktown City Council has requested as part of the Pre-DA discussions that additional car parking above the GTGD requirement is also provided to account for any unexpected increase in future demand. As such, a further 19 overflow spaces are also proposed in the Building 2B loading hardstand area to satisfy Council's request, as this building will also be occupied by the prospective tenant.

Tenant-specific operational information anticipates 5-8 trucks daily (10-16 truck movements daily) for Building 2A. Based on the staffing and operational information, Building 2A is expected to generate approximately 30-35 vehicle movements per hour, or 85 vehicle movements daily. This is considerably less than the traffic generation that would have been apportioned to Building 2A out of the total site floor area in the SSDA TIA (excluding the additional mezzanine levels) using rates from the TfNSW GTGD (Technical Direction 2013/04a: August 2013), being 54 vehicle movements in the site peak hour and 442 movements daily. Applying these TfNSW GTGD rates to the total Building 2A area (including additional mezzanine levels) results in 122 vehicle movements in the site peak hour and 1,007 movements daily. Therefore, the tenant is expected to generate significantly less daily traffic, with no further traffic analysis required.

The tenant proposes to use the single approved driveway for the Building 2A loading hardstand area as one-way entry for both Buildings 2A and 2B. The two approved driveways for Building 2B loading hardstand area are proposed to be one-way exits for both buildings, with a nine-metre circulation aisle between the two buildings. This arrangement improves circulation and efficiency through the loading hardstand areas, reducing potential conflicts.

A review of the additional car parking suggests it will not have any implication on truck manoeuvring within the remaining hardstand area of the loading docks, with all parking spaces and aisle width compliant with Australian Standards for Off Street Car Parking (AS2890.1:2004). Swept paths and the design review are attached to this letter.

Conclusion

A first-principles assessment based on tenant-specific staffing and operational information (as completed above) is the most accurate method to understanding traffic and parking generated by a development. Furthermore, comments received from TfNSW on the SSDA (dated 23 February 2018) recommended lower parking provisions to promote increased public transport usage in the future once the future bus link is complete that will provide frequent bus transit services, along with the completion of the future extension of the Sydney Metro from Schofields to St Marys via Marsden Park. Notwithstanding, Blacktown City Council has requested that additional car parking above the GTGD requirement is provided to account for any unexpected increase in demand. Additional overflow car parking is provided in the loading hardstand areas of Buildings 2A and 2B to satisfy Council's request.

On the basis of the above assessment:

- This modification does not propose any changes to the building footprint or height, rather a tenant-specific internal layout requirement that would likely be removed at the end of the tenancy.
- The additional mezzanine levels do not increase traffic generation and parking requirements beyond that assessed as part of the SSDA transport assessment and the subsequent on-site provisions.
- The prospective tenant would have lower operational traffic and parking requirements than typical industrial/ warehouse tenants.
- Additional overflow car parking is proposed in the loading hardstand areas of the two buildings, accommodating any unexpected future demand.
- The proposal to have a single vehicle entry point and two exit points shared between the two buildings will improve circulation, efficiency and safety.
- The proposed modification can be supported from a traffic and transport perspective.

As such, the proposed modification to Building 2A would have no further traffic-related impacts on the surrounding road network compared with the approved scheme.

I trust the above provides the information you require. Should you have any questions or require any further information, please do not hesitate to contact me on (02) 8448 1800.

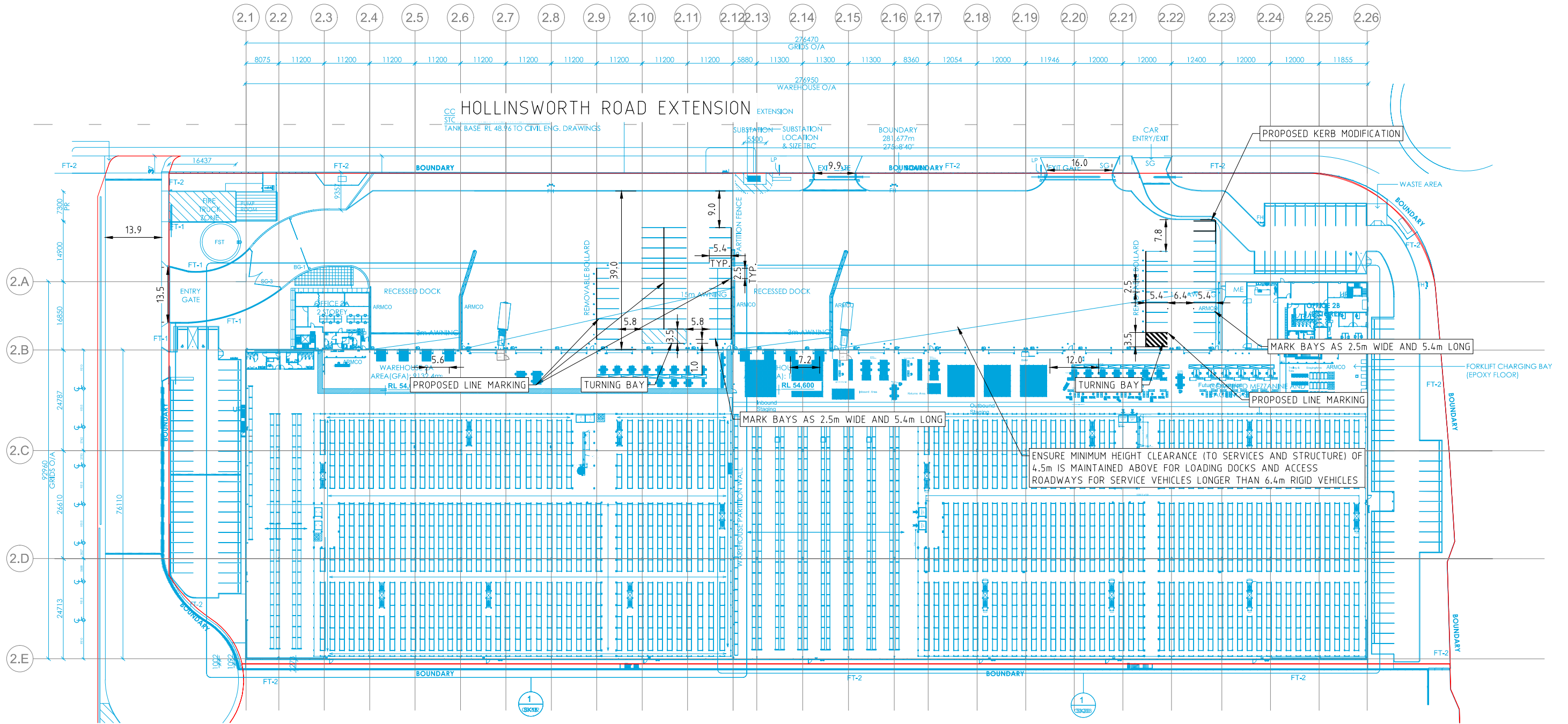
Yours sincerely

GTA CONSULTANTS



Brett Maynard
Director

Attachment – Swept paths and compliance review



ARCHITECTURAL BASE IN BLUE
DRAWING 191127-CD201
REVISION 20
BY PACE ARCHITECTS
DATED 05.05.2021

DRAWING 191127-CD102
REVISION 18
BY PACE ARCHITECTS
DATED 05.05.2021



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Adelaide 08 8334 3600
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PRELIMINARY PLAN
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WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE
APPROXIMATE ONLY AND THEIR EXACT POSITION
SHOULD BE PROVEN ON SITE. NO GUARANTEE IS
GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED
R.ZHANG

APPROVED BY
B.MAYNARD

DESIGN CHECK
A.MODESSA

DATE ISSUED
11 MAY 2021

SCALE
A3 0 5 10 20 1:1000

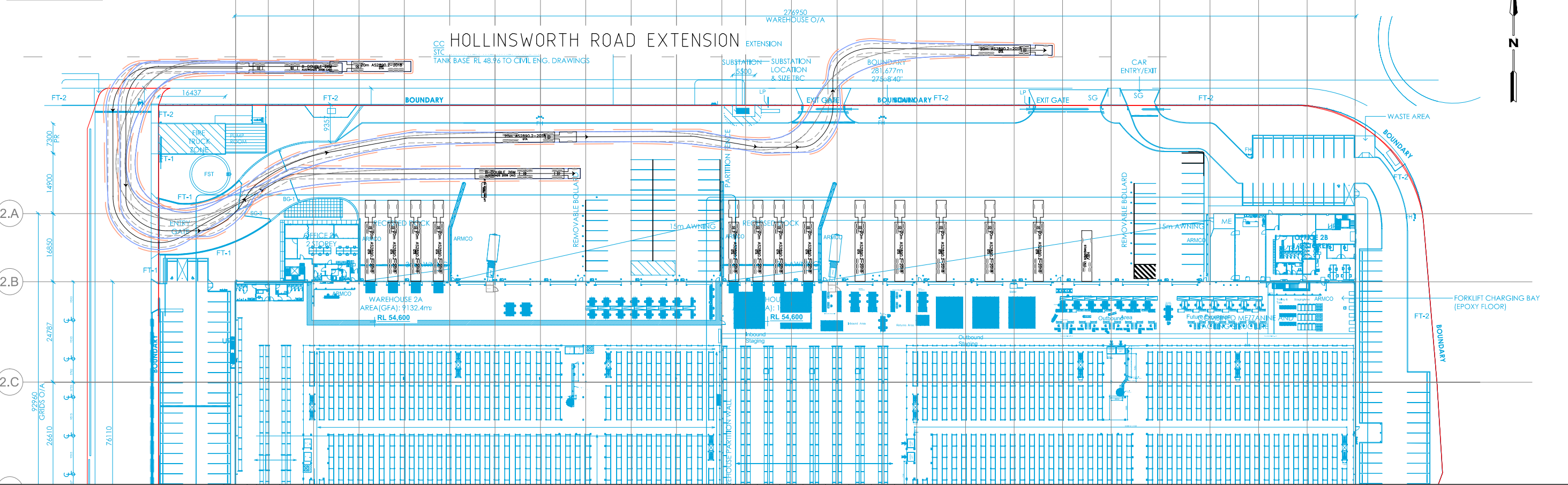
CAD FILE NO.
N105797-01-P4.DWG

LOTS 23 AND 24 HOLLINSWORTH ROAD, MARSDEN PARK
BUILDING 2A AND 2B

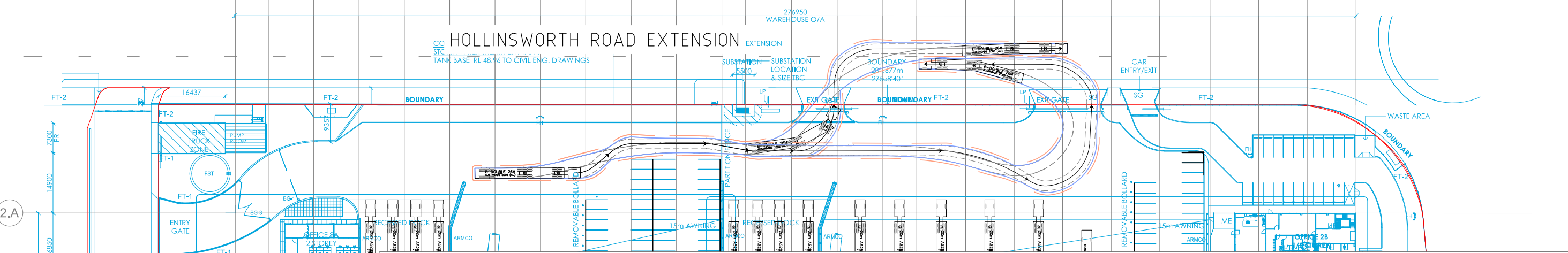
CAR PARK COMPLIANCE REVIEW

DRAWING NO. N105797-01-01 SHEET 01 OF 04 ISSUE P4

VEHICLE ENTRY

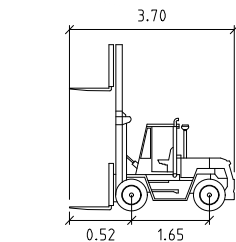


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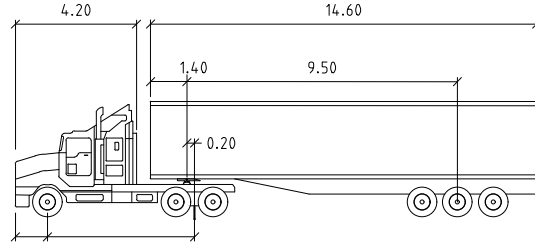
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TOYOTA 8FG25 FORK LIFT

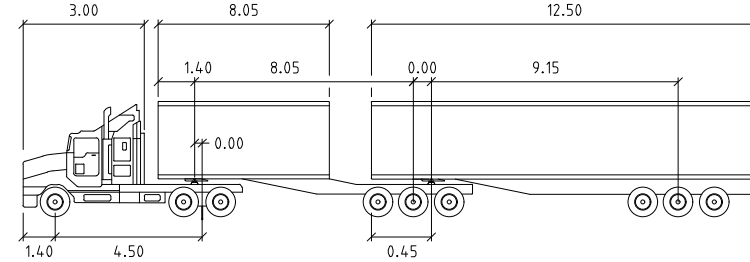
Width	: 1.15
Track	: 1.15
Lock to Lock Time	: 3.0
Steering Angle	: 74.4



20m AS2890.2-2018

Tractor Width	: 2.50
Trailer Width	: 2.50
Tractor Track	: 2.50
Trailer Track	: 2.50

Lock to Lock Time	: 6.0
Steering Angle	: 28.3
Articulating Angle	: 70.0



B-DOUBLE 26M

Tractor Width	: 2.50
Trailer Width	: 2.50
Tractor Track	: 2.50
Trailer Track	: 2.50

Lock to Lock Time	: 6.0
Steering Angle	: 23.4
Articulating Angle	: 70.0

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 600mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

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R.ZHANG

APPROVED BY
B.MAYNARD

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A.MODESSA

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SCALE
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CAD FILE NO.
N105797-01-P4.DWG

LOTS 23 AND 24 HOLLINSWORTH ROAD, MARSDEN PARK
BUILDING 2A AND 2B

VEHICLE SWEEP PATH ASSESSMENT

DRAWING NO. N105797-01-02

SHEET 02 OF 04

ISSUE P4

VEHICLE ENTRY

2.A

2.B

2.C

VEHICLE EXIT

2.A

2.B

ARCHITECTURAL BASE IN BLUE
DRAWING 191127-CD201
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DATED 05.05.2021

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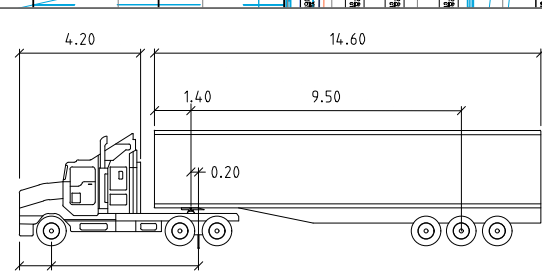
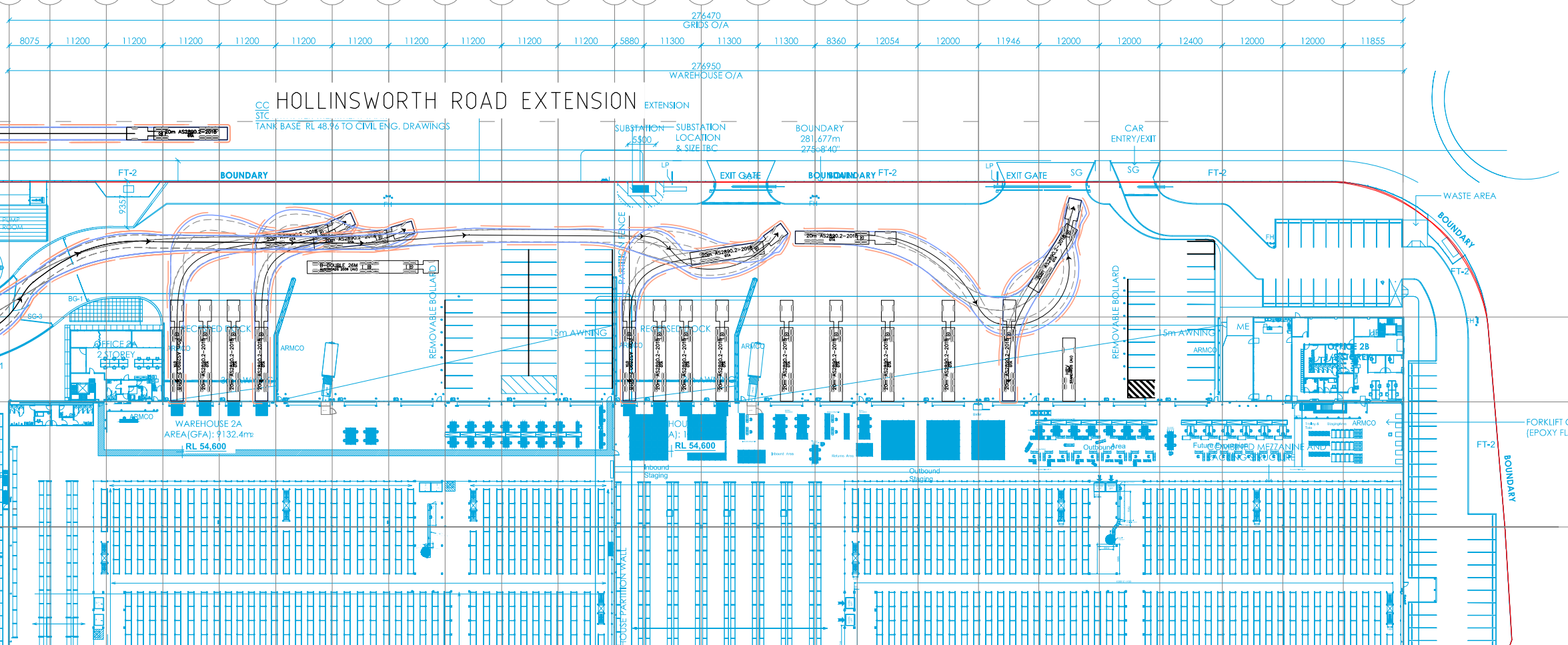
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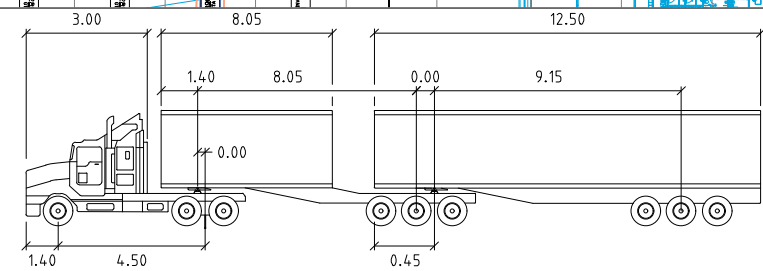
LOTS 23 AND 24 HOLLINSWORTH ROAD, MARSDEN PARK
BUILDING 2A AND 2B

VEHICLE SWEEP PATH ASSESSMENT
DRAWING NO. N105797-01-03 SHEET 03 OF 04 ISSUE P4



20m AS2890.2-2018

Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		



B-DOUBLE 26M

Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 23.4
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

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- VEHICLE BODY PATH
- 600mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

VEHICLE ENTRY

2.A

2.B

2.C

VEHICLE EXIT

2.A

2.B

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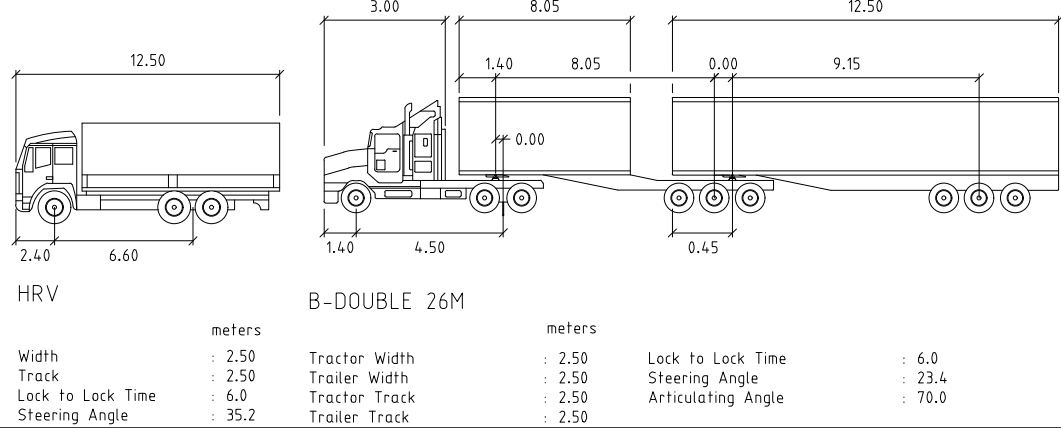
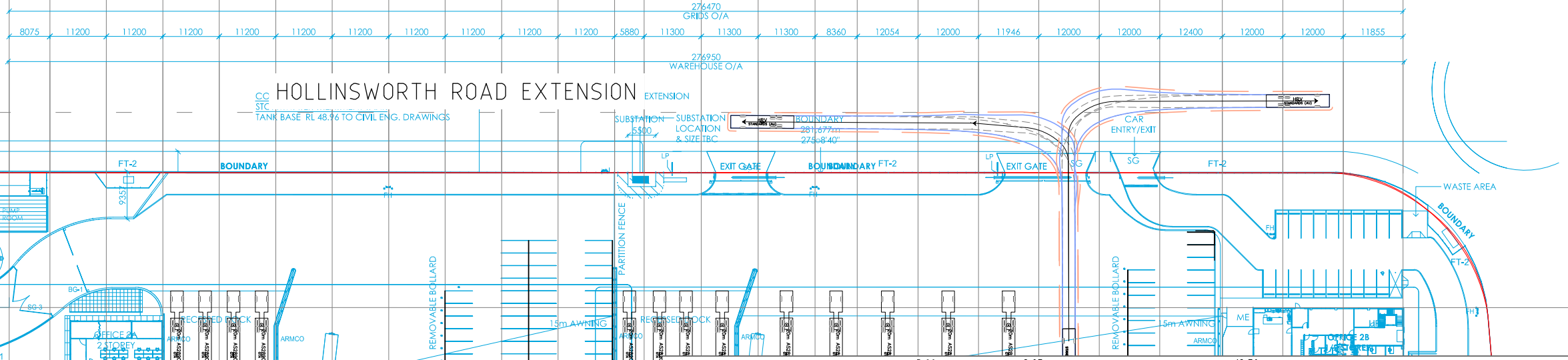
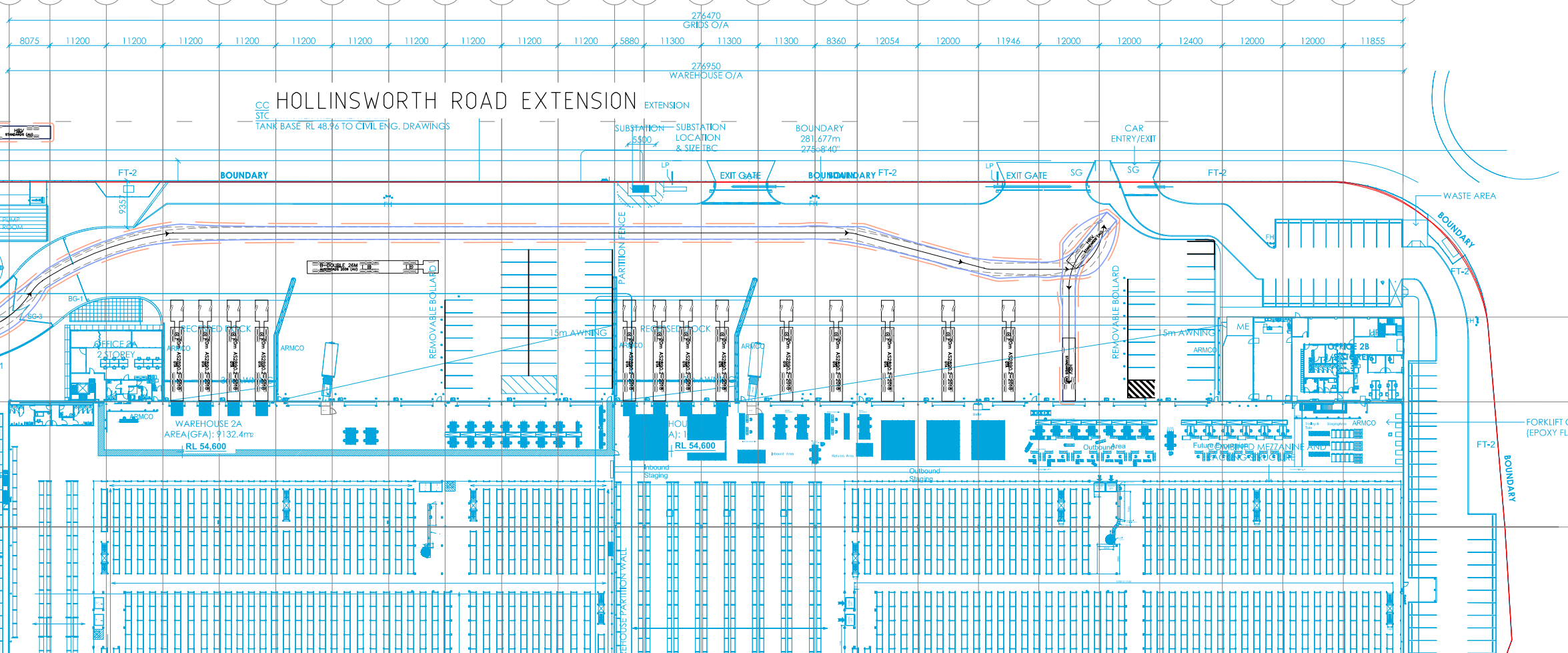
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LOTS 23 AND 24 HOLLINSWORTH ROAD, MARSDEN PARK
BUILDING 2A AND 2B

VEHICLE SWEEP PATH ASSESSMENT
DRAWING NO. N105797-01-04 SHEET 04 OF 04 ISSUE P4



SWEEP PATH KEY	
	VEHICLE CENTRE LINE
	VEHICLE TYRE PATH
	VEHICLE BODY PATH
	600mm CLEARANCE FROM VEHICLE BODY
ASSUMED SPEED 5km/h	