

Traffix Group

Traffic Engineering Assessment

Proposed Warehouse Development
35-65 Paramount Road, Tottenham

Prepared for
Cowes Bay Group Pty Ltd

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1. Introduction

Traffic Group has been engaged by Cowes Bay Group Pty Ltd to undertake a traffic engineering assessment for the proposed warehouse development at 35-65 Paramount Road, Tottenham.

The following report provides a detailed traffic engineering assessment of the car parking, traffic, access and loading considerations associated with the proposed development.

2. Existing Conditions

2.1. Subject Site

The subject site is located between Paramount Road and Olympia Street, approximately 500m south of Sunshine Road, in Tottenham as shown in the locality map at Figure 1.



Figure 1: Locality Map

The subject site includes the properties 35-65 Paramount Road and 99 Olympia Street with a logistics company currently operating out of the warehouse in the north-west corner of the site. The buildings in the north-east corner of the site and those fronting Paramount Road are currently not in use. The southern end of the site is undeveloped.

Access to the site is currently provided as follows:

- a fully directional access point in the north-east corner of the site to Paramount Road, opposite Indwe Street,
- a fully directional access point in the north-west corner of the site to Olympia Street for light vehicle use only, and
- a fully directional access point approximately midway along the Olympia Street frontage for truck use only.

Additional unused crossovers are located on Olympia Street, between the two functioning crossovers, and on Paramount, towards the southern end of the site's frontage.

An aerial view of the site is provided in Figure 2.



Figure 2: Aerial View of Subject Site

2.2. Land Use

The subject site is located across Industrial 1 Zone (IN1Z) and Industrial 3 Zone (IN3Z) as shown in the land use zoning map at Figure 3 below. The site is also subject to the following planning overlays:

- Heritage Overlay Schedule (HO152),
- Land Subject to Inundation Overlay Schedule (LSIO), and
- Public Acquisition Overlay Schedule (PAO1).

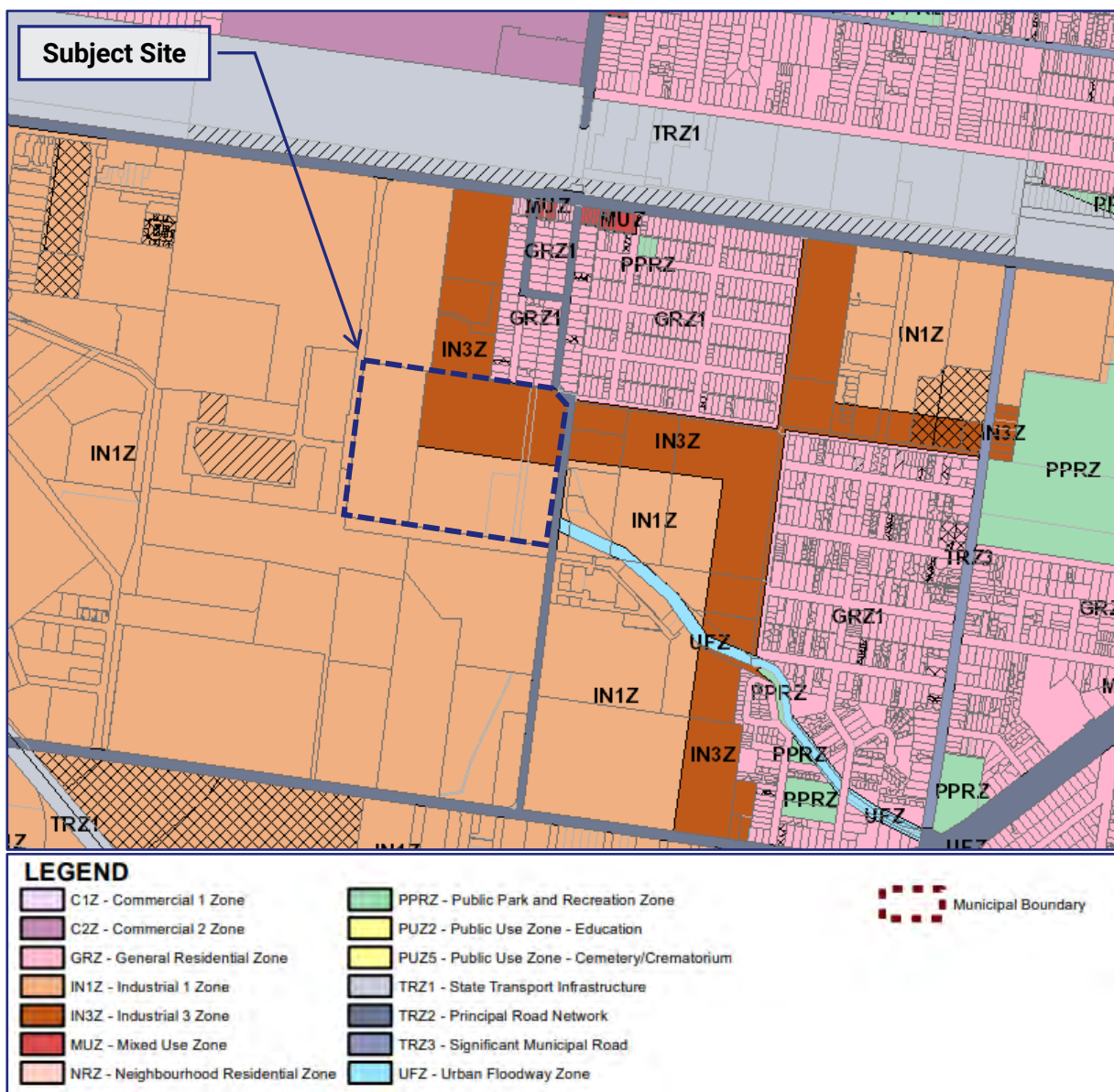


Figure 3: Land Use Zoning Map

Land uses surrounding the subject site are generally occupied by industrial type uses with some pockets of residential development to the north-east and east of the site.

2.3. Existing Road Network

2.3.1. Paramount Road

Paramount Road is a State declared arterial road and zoned Transport Zone 2 (TRZ2) – Principal Road network. It extends in a north-south direction for approximately 800m from Somerville Road to Indwe Street, where it continues as Dempster Street.

In the vicinity of the subject site, Paramount Road is constructed with an approximately 7.3m wide carriageway, providing a through traffic lane in each direction.

A footpath is provided on the east side of the road only.

A posted speed limit of 60km/h applies to Paramount Road in the vicinity of the subject site and reduces to 50km/h to the north of the site, where Paramount Road changes to Dempster Street.

Photographs of Paramount Road, taken adjacent to the subject site, are presented in Figure 4 and Figure 5.



Figure 4: Paramount Road – View North



Figure 5: Paramount Road - View South

2.3.2. Olympia Street

Olympia Street is an industrial road which is classified as an access street in Maribyrnong City Council's Road register. It extends for approximately 570m in north-south direction from Sunshine Road to a dead end.

In the vicinity of the subject site, Olympia Street is constructed with an approximately 8.9m wide carriageway, providing for through traffic in each direction and kerbside parallel parking on the west side.

Photographs of Olympia Street, taken in the vicinity of the subject site, are presented in Figure 6 and Figure 7.



Figure 6: Olympia Street – View North



Figure 7: Olympia Street - View South

2.4. Sustainable Transport

2.4.1. Public Transport

Tottenham Railway Station, which operates on the Sunbury line, is located within approximately 400m walking distance of the subject site to the north. This service, as well as other public transport services, operating in the vicinity of the subject site are shown in the public transport map at Figure 8 below.

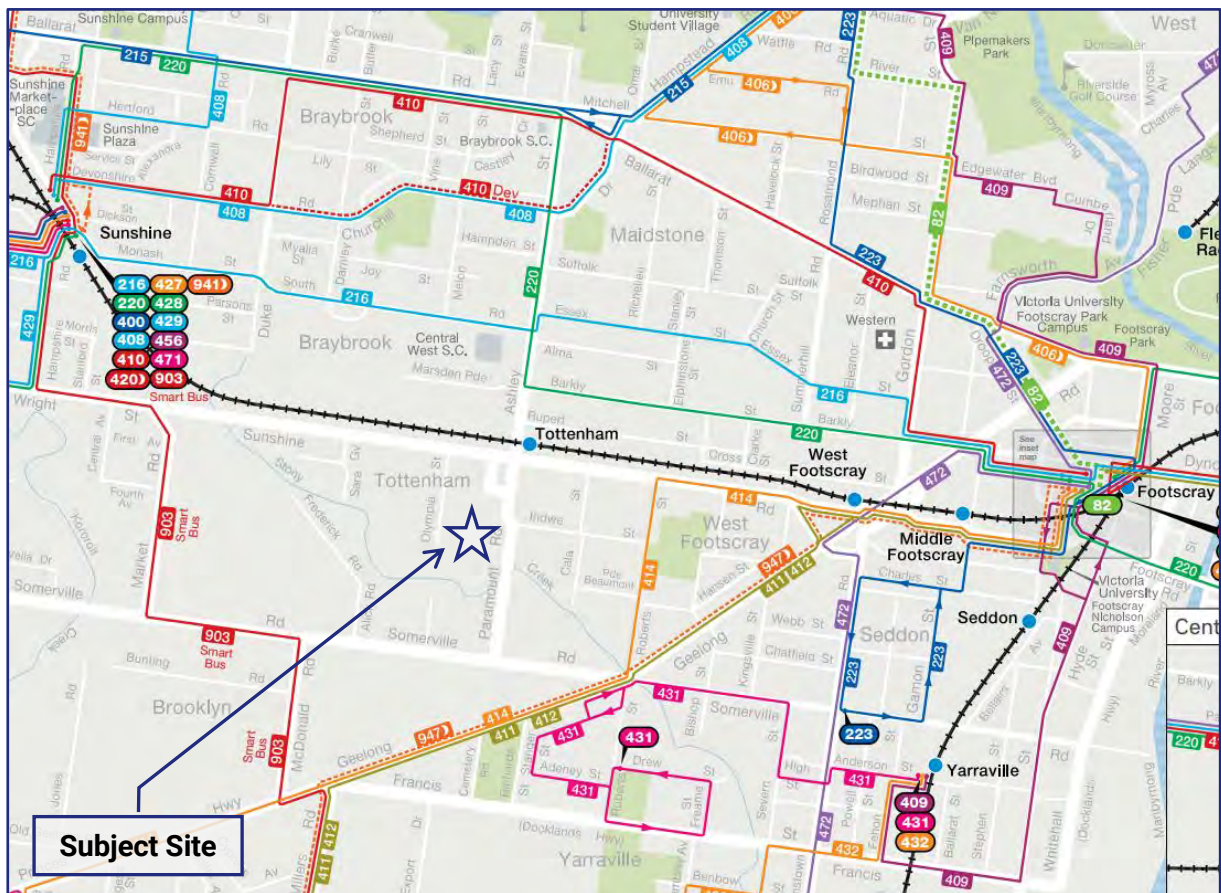


Figure 8: Public Transport Map

Notably, Tottenham Railway Station is only one stop from Sunshine Station and three stops from Footscray Station which are both major public transport hubs.

2.4.2. Bicycle and Pedestrian Provisions

Bicycle and pedestrian provisions in the vicinity of the subject site include:

- an off-road shared path along Stony Creek to the south-east of the site, and
- an off-road shared path along the north side of the railway line to the north of the site.

These, as well as other provisions in the vicinity of the subject site are shown in the Travelsmart Map at Figure 9.

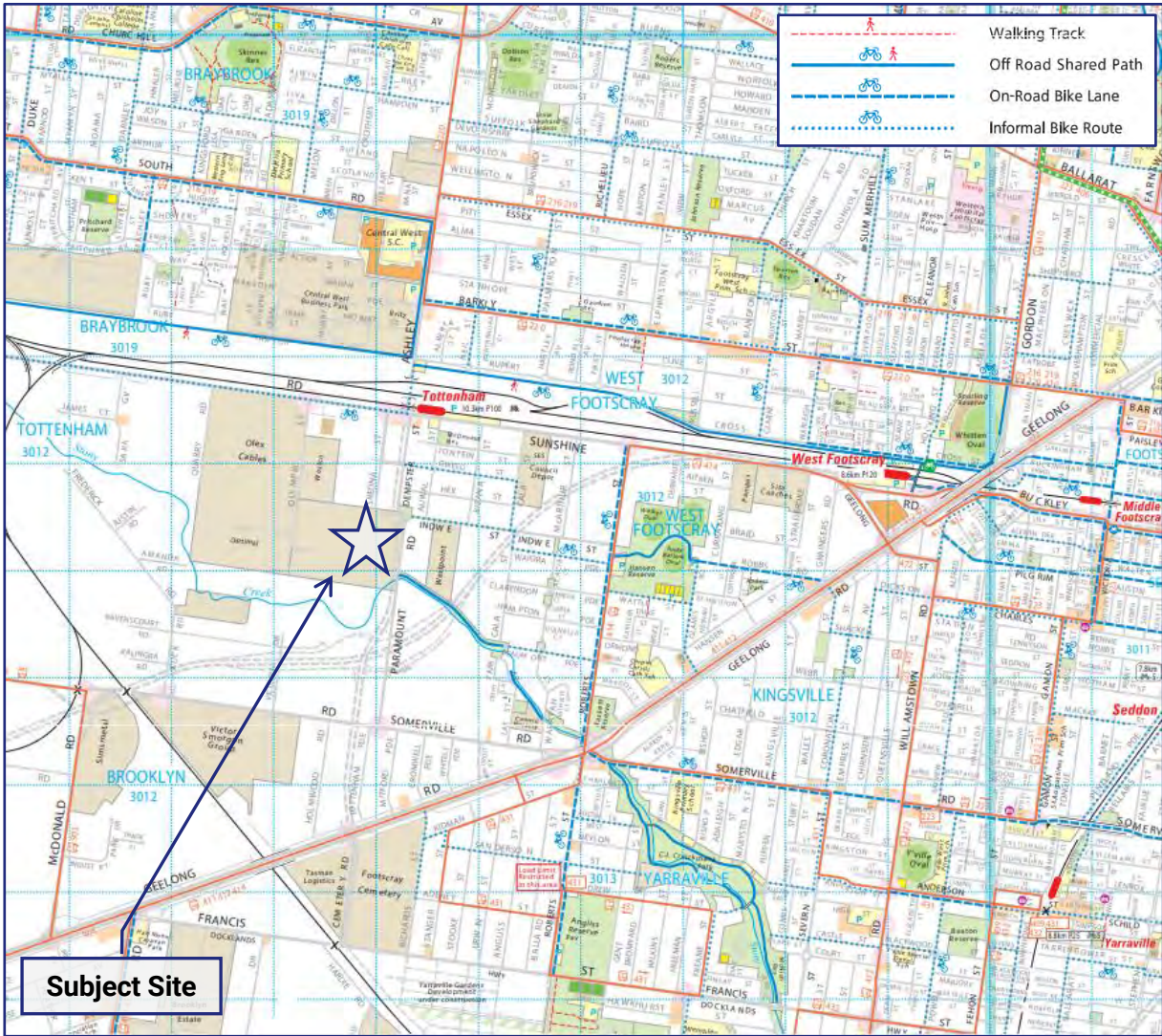


Figure 9: Maribyrnong Travelsmart Map

2.4.3. Principal Public Transport Network (PPTN)

The subject site located just outside of the principal public transport network (PPTN) area as shown in the PPTN area map at Figure 10 below.

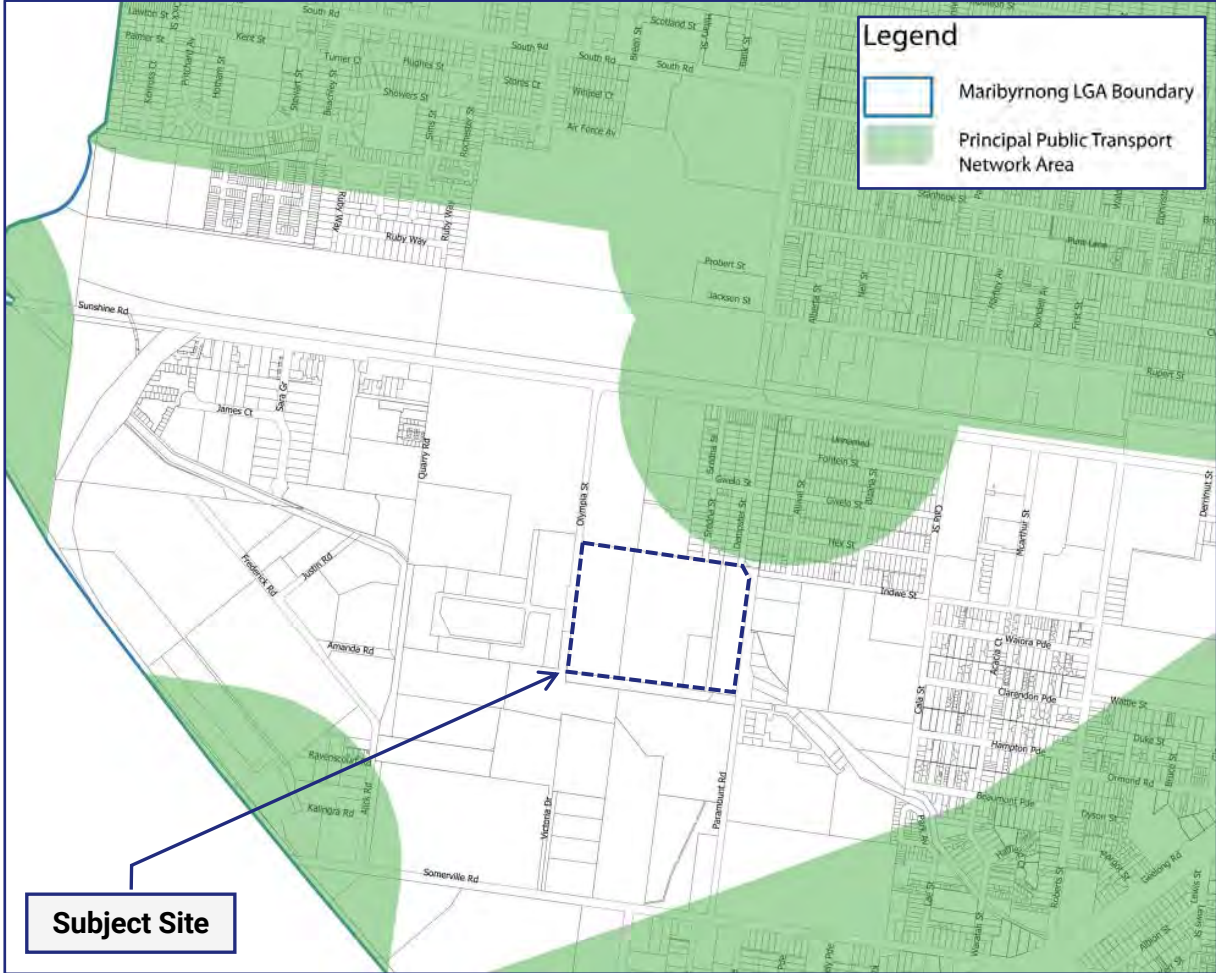


Figure 10: PPTN Area Map

2.5. Existing Traffic Volumes

2.5.1. Daily Traffic

Paramount Road

VicRoads Open Data hub indicates two-way daily traffic volumes of 3,700 vehicles along Paramount Road adjacent to the subject site.

Olympia Street

Traffic Group has commissioned 7-day tube counts on Olympia Street, taken approximately 50m south of Sunshine Road (to ensure that all traffic on Olympia Street is captured). The tube counts were undertaken between Friday 21st May and Thursday 27th May, 2021.

The tube counts indicated an average two-way weekday volume of 2,561 vehicles.

2.5.2. Peak Hour Traffic Volumes

Traffic Group has undertaken AM and PM peak hour traffic counts at the Paramount Road/Indwe Street intersection at the following times:

- 3:00pm-4:00pm on Wednesday 4th March, 2020, and
- 8:00am-9:00am on Thursday 5th March, 2020.

The surveyed times correspond with the peak hours obtained from SCATS data from the Paramount Road/Somerville Road and Sunshine Road/Sredna Street/Dempster Street intersections to the south and north of the site.

A summary of the observed volumes is outlined in Figure 11 below.

Traffic Group has also commissioned peak hour traffic counts at the Olympia Street/Sunshine Road intersection which were undertaken on Tuesday 25th May, 2021 from 6am to 10am and 2pm to 6pm.

The observed peak hour traffic volumes at this intersection are outlined in Figure 12 below.

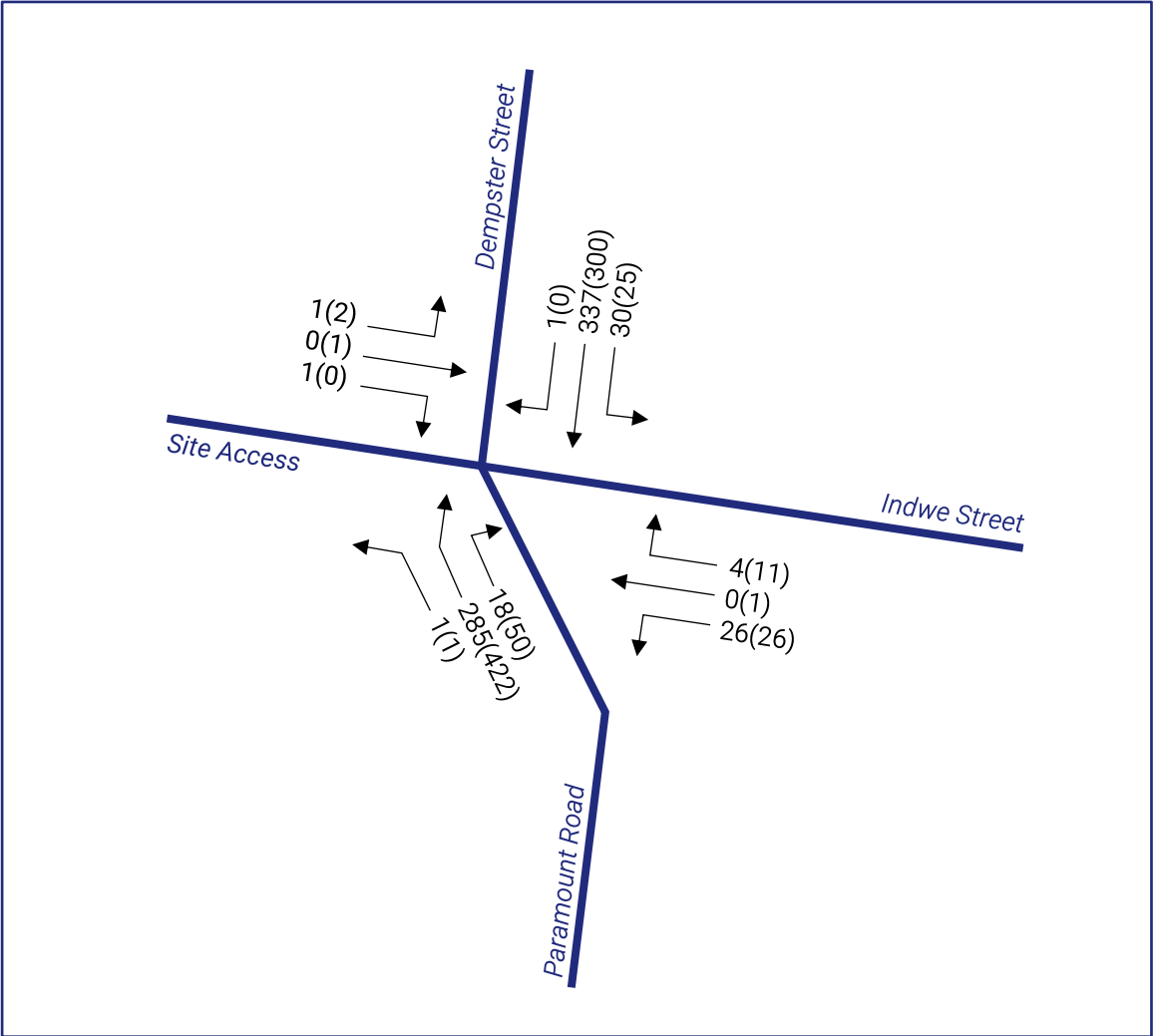


Figure 11: Paramount Road/Indwe Street - AM(PM) Peak Hour Existing Traffic Volumes

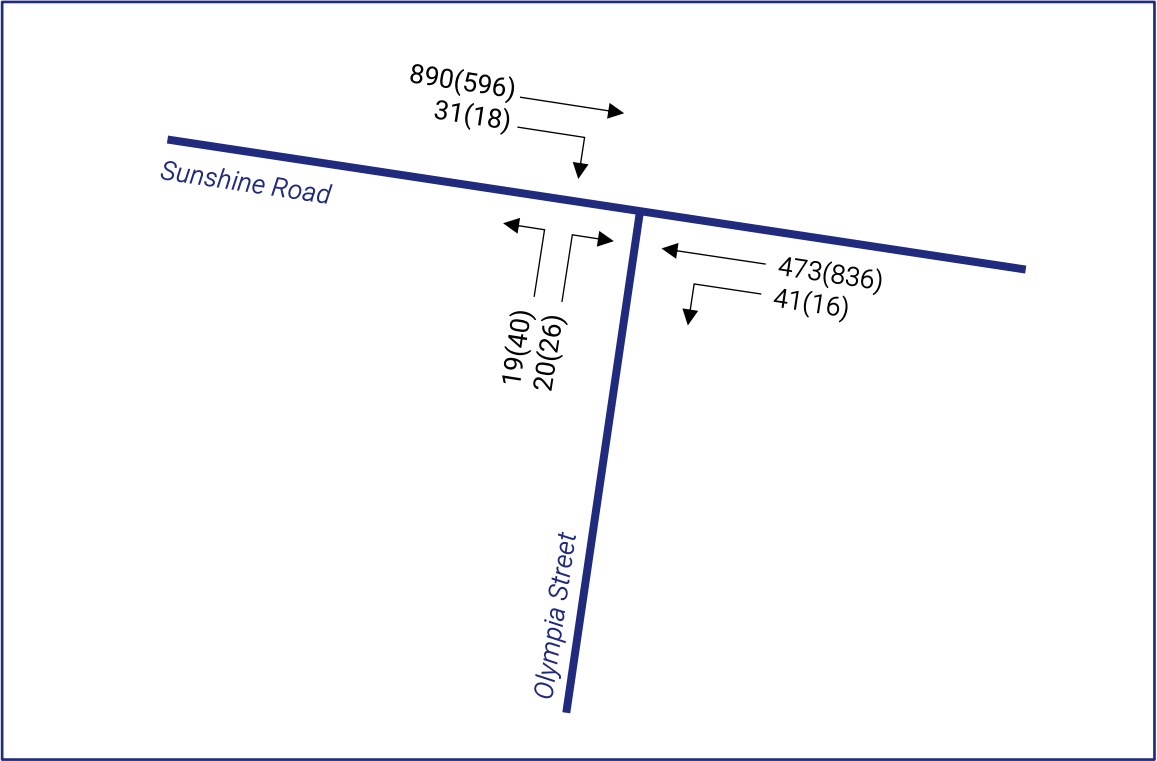


Figure 12: Olympia Street/Sunshine Road - AM(PM) Peak Hour Existing Traffic Volumes

3. Future Road Network

3.1. Paramount Road Public Acquisition Overlay

The Public Acquisition Overlay on Paramount Road along the east side of the site (as shown in Figure 13) is intended to accommodate an upgrade to Paramount Road as a part of the Principal Freight Network.

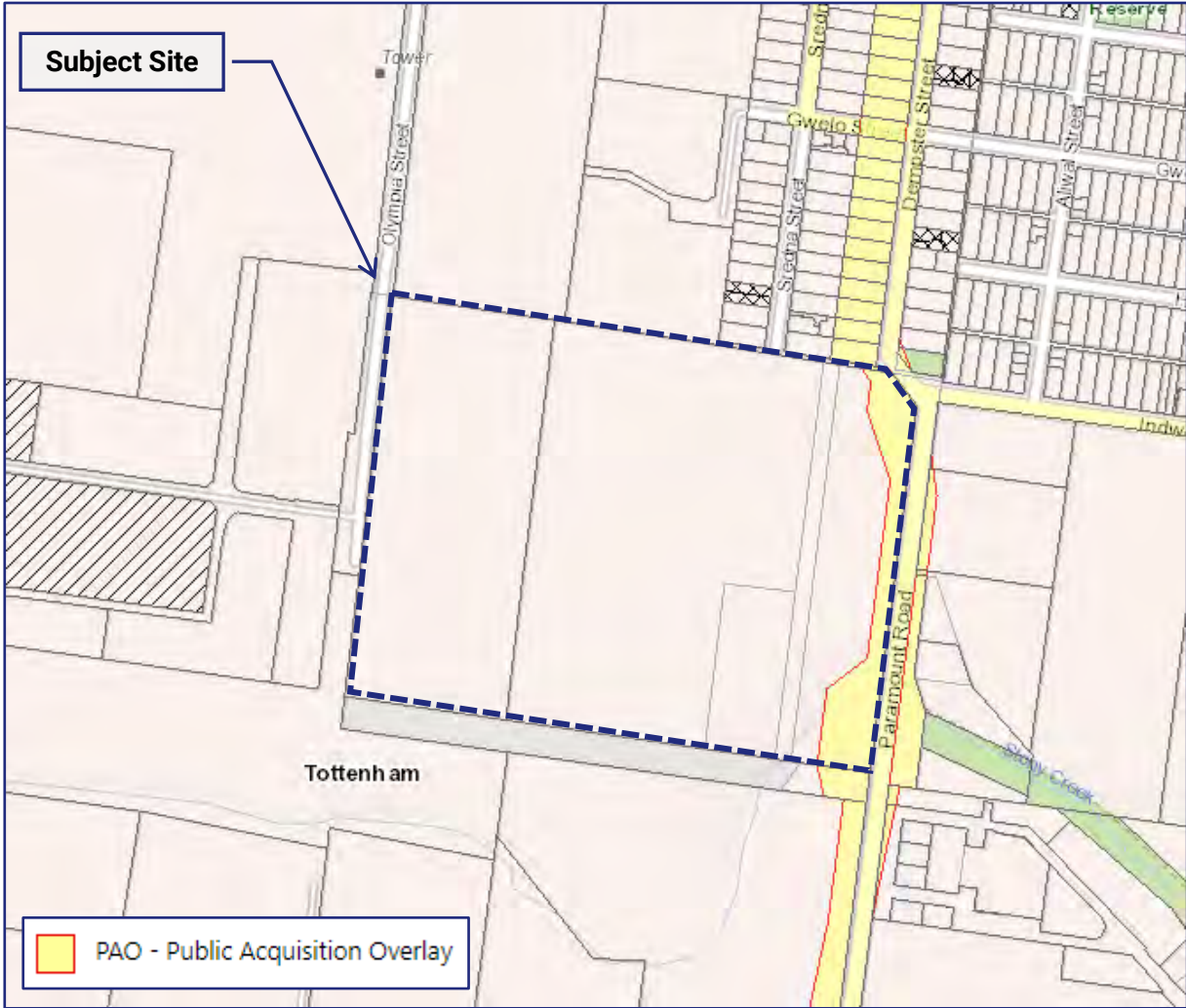


Figure 13: Public Acquisition Overlay in the Vicinity of the Site

This is further outlined in City of Maribyrnong’s Tottenham Employment Precinct Framework Plan (January 2020). An excerpt from this framework plan which provides an indication of the likely future conditions surrounding the subject site is shown in Figure 14.

We note that the Precinct Framework Plan also advocates for the upgrade and duplication of Paramount Road with a potential future cross-section provided as shown in Figure 15.

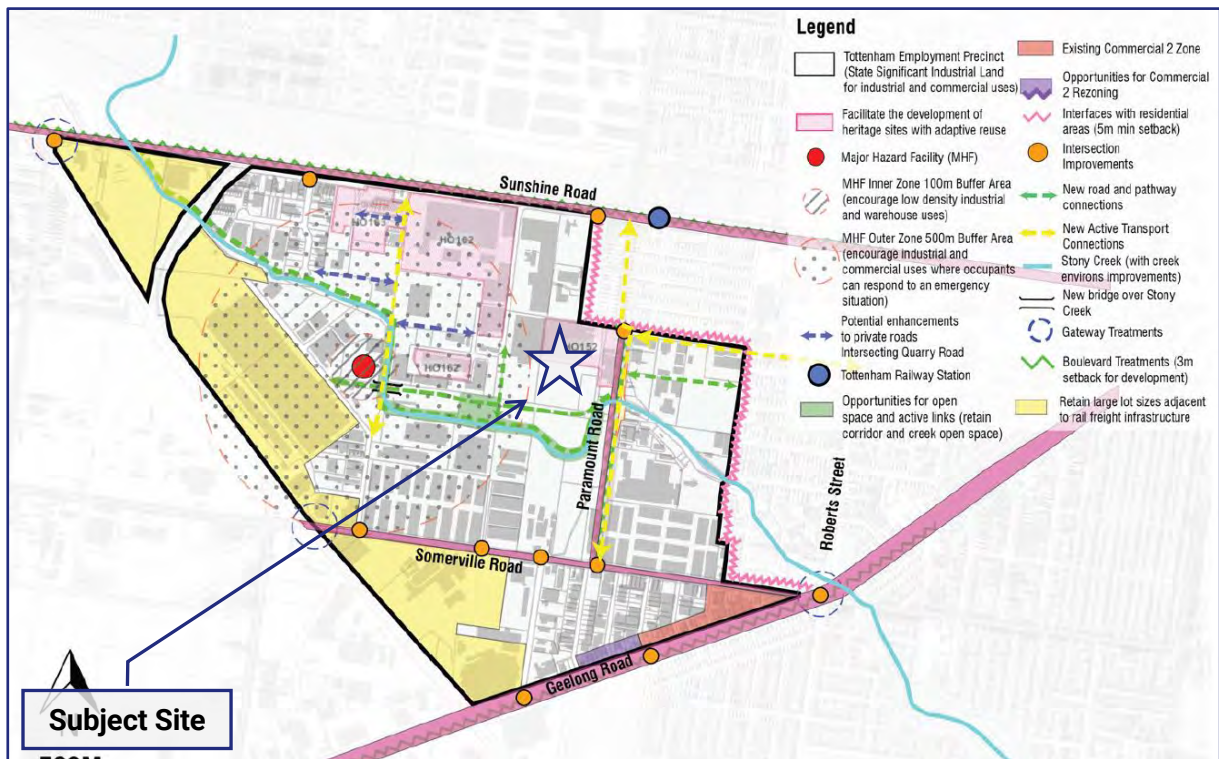


Figure 14: Tottenham Framework Plan



Figure 15: Tottenham Framework Plan - Potential Paramount Road Cross-section

3.2. Stony Creek Future Directions Plan

A draft for the Stony Creek Future Directions Plan 2020 was adopted by Council on 25 February 2020, with the plan outlining the future development and configuration of the Stony Creek corridor from Duke Street, Braybrook to Hyde Street, Yarraville.

Significantly, the plan includes the future construction of a new road between Paramount Road and Quarry road, along the southern boundary of the subject site. An excerpt from the

Stony Creek Future Directions Plan showing the layout of this road in the vicinity of the subject site is shown in Figure 16.

Notably, the eastern end of proposed new road is located within the subject site and accordingly, acquisition of a part of the subject site would be required.

The Stony Creek Future Directions Plan also includes the provision of a continuous shared path along the entire length of the corridor.

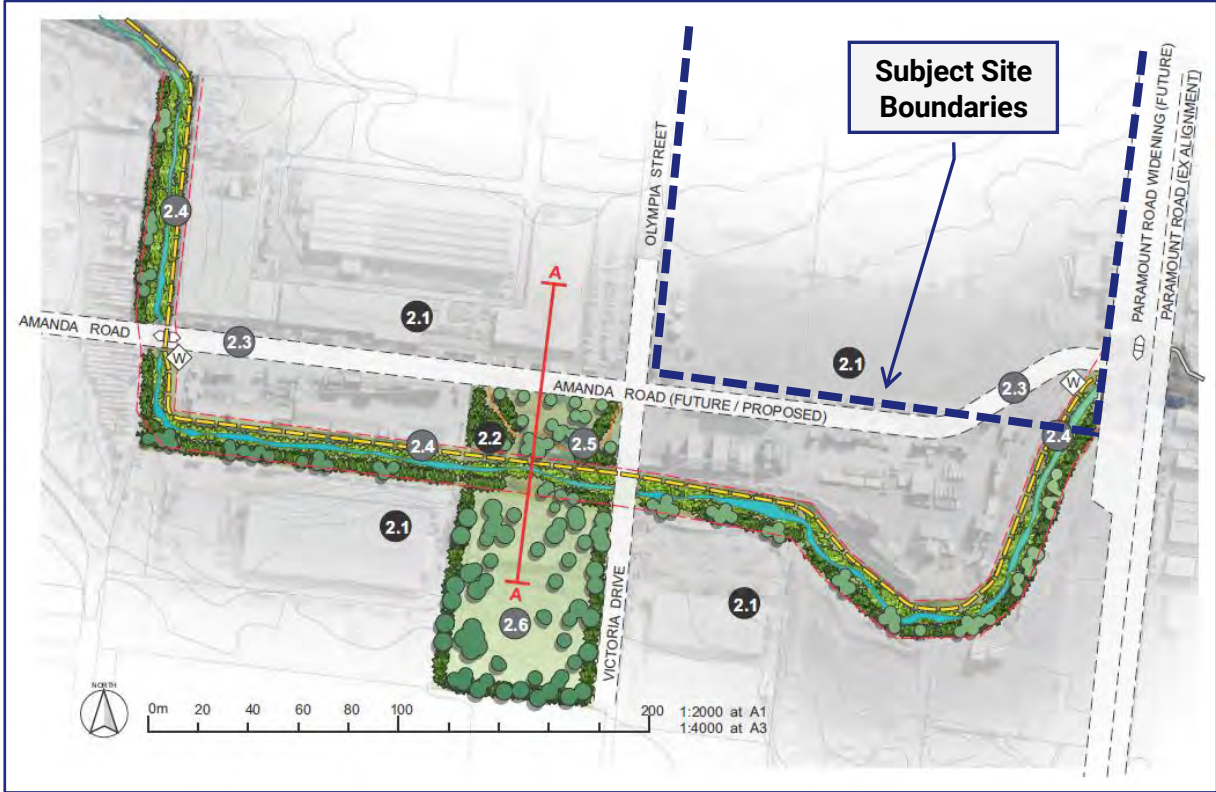


Figure 16: Proposed Future Road along Southern Boundary of Subject Site

4. Proposal

The proposal is to develop the site for the purposes of a multi-tenancy warehouse development with an additional standalone office use in Building C3 as outlined in Figure 17 and the following development schedule. All other office areas are associated with the warehouses and considered ancillary. We note that Building A is an existing building on site to be retained, with all other buildings new.

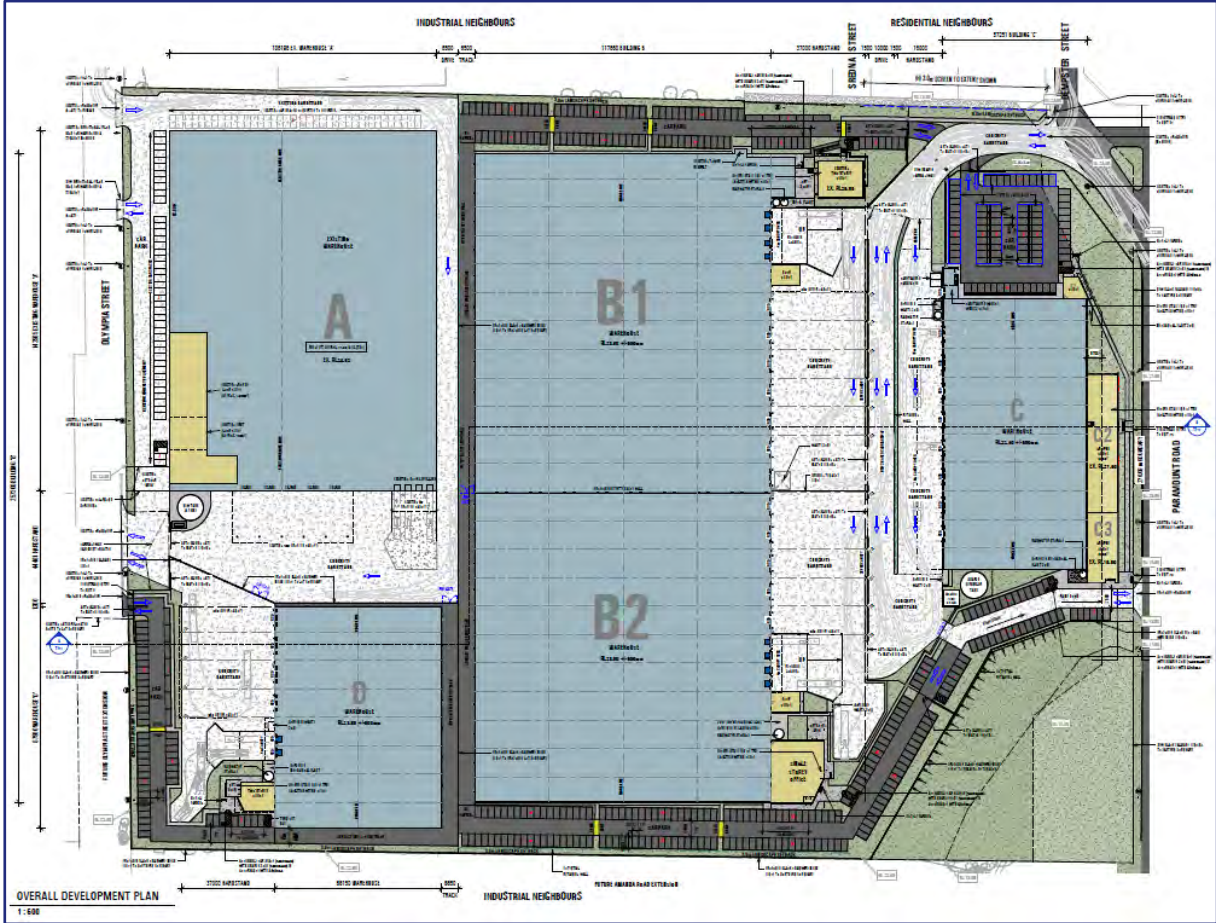


Figure 17: Proposed Site Layout

Table 1: Development Summary

Tenancy	Total Floor Area	Car Parking Provision	
		No. Spaces	Rate (per 100m ²)
Building A	16,411m ²	81 spaces	0.49
Building B1	16,640m ²	160 spaces	0.96

Tenancy	Total Floor Area	Car Parking Provision	
		No. Spaces	Rate (per 100m ²)
Building B2	15,063m ²	151 spaces	1.00
Building C (excluding office C3)	6,965m ²	75 spaces	1.03
Building C3 (office)	330m ²		
Building D	6,170m ²	56 spaces	0.91

Access to the development is proposed as follows:

- A modification of the existing Paramount Road access point at the northern end of the site to facilitate access to:
 - the Building B1 car parking area,
 - the northern Building C car parking area, and
 - the Building B and Building C loading/hardstand areas.
- A new crossover to Paramount Road at the southern end of the site to facilitate access to:
 - Building B2 car parking area, and
 - Southern Building C car parking area.
- Use of the existing northern Olympia Street crossover for entry movements to Building A.
- Use of the existing southern Olympia Street crossover to facilitate:
 - exit movements from Building A, and
 - access to the Building D loading/hardstand area.
- A new crossover at the southern edge of the site to Olympia Street for access to the Building D car parking area.

The proposed access arrangements largely separate light and heavy vehicle movements through the site, with car parking areas for Building B1 (adjacent to residential areas), Building B2 and Building C totally separated from heavy vehicle movements.

Development plans for the proposal, prepared by Qanstruct, are attached at Appendix A.

5. Car Parking Assessments

5.1. Statutory Requirements

Clause 52.06 of the Planning Scheme sets out the car parking requirements for new developments. The purpose of Clause 52.06 is:

- *To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.*
- *To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.*
- *To support sustainable transport alternatives to the motor car.*
- *To promote the efficient use of car parking spaces through the consolidation of car parking facilities.*
- *To ensure that car parking does not adversely affect the amenity of the locality.*
- *To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.*

Clause 52.06-5 states:

A car parking requirement in Table 1 is calculated by multiplying the figure in Column A or Column B (whichever applies) by the measure (for example square metres, number of patrons or number of bedrooms) in Column C.

Column A applies unless Column B applies.

Column B applies if:

- *any part of the land is identified as being within the Principal Public Transport Network Area as shown in the Principal Public Transport Network Area Maps (State Government of Victoria, 2018); or*
- *a schedule to the Parking Overlay or another provision of the planning scheme specifies that Column B applies.*

Accordingly, Column A rates apply to the subject site as it is not located within the PPTN area and not subject to a Parking Overlay.

The statutory car parking requirements for the proposed development are outlined in Table 2, noting that the use of all buildings aside from B

Table 2: Statutory Car Parking Requirements

Tenancy	Rate	Measure	Requirement	Provision
Building A	2 spaces to each premises plus 1.5 spaces to each 100m ² of net floor area	16,411m ²	248 spaces	81 spaces
Building B1		16,640m ²	251 spaces	160 spaces
Building B2		15,063m ²	227 spaces	151 spaces
Building C (excluding C3)		6,965m ²	106 spaces	75 spaces
Building C3 (office)	3.5 spaces to each 100m ² of net floor area	330m ²	11 spaces	
Building D	2 spaces to each premises plus 1.5 spaces to each 100m ² of net floor area	6,170m ²	94 spaces	56 spaces
Total		-	937 spaces	523 spaces

The proposed development generates a requirement to provide a total of 937 spaces across all buildings and the proposed provision of 523 spaces results in a shortfall of 414 spaces. Accordingly, a permit to reduce the car parking requirement is sought as a part of this application.

5.2. Car Parking Demand Assessment

Clause 52.06-7 requires that:

An application to reduce (including reduce to zero) the number of car parking spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay must be accompanied by a Car Parking Demand Assessment.

The Car Parking Demand Assessment must address the following matters, to the satisfaction of the responsible authority:

- *The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use.*
- *The variation of car parking demand likely to be generated by the proposed use over time.*
- *The short-stay and long-stay car parking demand likely to be generated by the proposed use.*
- *The availability of public transport in the locality of the land.*

- *The convenience of pedestrian and cyclist access to the land.*
- *The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.*
- *The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.*
- *Any empirical assessment or case study.*

A consideration of these matters is provided in Table 3.

Table 3: Car Parking Demand Assessment

Matter	Consideration
The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use.	Given the proposed use and the site’s location, we would not anticipate that there will be any notable level of multi-purpose trips associated with the site.
The variation of car parking demand likely to be generated by the proposed use over time.	Demands associated with the proposed development are anticipated to be almost entirely generated by staff. Accordingly, we would anticipate that most demands are likely to occur during business hours on weekdays. Some demands may be generated over night and on weekends given the 24/7 operating conditions of the proposed warehouses.
The short-stay and long-stay car parking demand likely to be generated by the proposed use.	Demands associated with the proposed development are anticipated to be almost entirely generated by staff and accordingly, we would anticipate long-stay car parking demands to be generated.

Matter	Consideration
<p>The availability of public transport in the locality of the land.</p>	<p>The subject site is located within convenient walking distance of Tottenham railway station. Notably, Tottenham Station is only one stop away from Sunshine Station and three stops away Footscray Station, both of which are major public transport hubs connecting to numerous other bus, rail and tram services.</p> <p>Further we note that the subject site is located just outside of the PPTN area, however for sites located within the PPTN area, Column B rates from Table 1 of Clause 52.06 would apply to the site. The column B rates for a warehouse land use are:</p> <ul style="list-style-type: none"> • <i>2 spaces to each premises plus</i> • <i>1 space to each 100m² of net floor area.</i> <p>The column B rates for an office land use are:</p> <ul style="list-style-type: none"> • <i>3 spaces to each 100m² of net floor area.</i>
<p>The convenience of pedestrian and cyclist access to the land.</p>	<p>The site is relatively accessible for cyclists from surrounding suburbs, or for pedestrian access from the nearby residential areas.</p>
<p>The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.</p>	<p>Bicycle parking is provided for all tenancies in excess of the statutory requirements outlined in Clause 52.34. Accordingly, staff electing to cycle to the site are well catered for.</p>
<p>The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.</p>	<p>N/A</p>

Matter	Consideration
<p>Any empirical assessment or case study.</p>	<p>The RTA Guide (2002)¹ provides the following in relation to car parking demands associated with warehouse land uses:</p> <p><i>All new warehouses on undeveloped sites must provide on-site parking for all vehicles used by employees. In the case of wholly redeveloped sites each site is treated on its merit. Provision of one car space per 300m² gross floor area is recommended.</i></p> <p><i>Variations on the recommended parking rate must be considered in the context of both current and potential users. While surveys might justify a lesser parking rate for a particular development, provision must be made for future users by setting aside (but not necessarily surfacing), space for car parking. The recommended rate of parking provision is in the middle range parking rate observed in the RTA's survey. The rates vary from one space per 80m² to one space per 960m², the mean and sample standard deviation figures being 338m² and 280m² respectively based on a sample of 10 sites. A particular situation where a parking rate greater than that recommended above is warranted, would be for a development with a greater than average employment density. The mean floor area per employee at the warehouses surveyed by the RTA was 226m² per employee.</i></p> <p>The statutory parking requirement for a warehouse does not always reflect the parking demand for very large warehouses. This is due to the increase in floor space not being proportional to an increase in employees, as often the extra space is required for storage and/or large machinery. Accordingly, we anticipate lower car parking demands for the warehouses on-site.</p> <p>Traffix Group has reviewed case study data for a number of warehouses in metropolitan Melbourne with floor areas ranging from 5,000m² to 15,000m² which showed an average peak parking demand of 0.37 spaces per 100m². Details of this case study data is provided at Appendix B.</p> <p>Additionally, Building A is currently provided with car parking at a rate only slightly higher than is proposed (86 spaces under existing conditions compared to 81 spaces proposed) and a review of aerial photography shows that a significant number of these spaces are generally unoccupied.</p>

Having regard to the above, we believe that the statutory car parking rate of 1.5 spaces per 100m² of floor area overestimates the car parking demands likely to be generated by the proposed warehouse uses.

Significantly, the column B rates, which take into account good access to public transport accessibility for sites within the PPTN area, are 1 space per 100m².

The RTA Guide suggests that car parking demands for warehouse uses should be provided at a rate of 0.33 spaces per 100m², with ranges from 1.25 spaces per 100m² to 0.1 spaces per 100m² observed. The RTA Guide also acknowledges that there is a variation between sites resulting from employment density. As warehouses become larger, it is expected that a greater proportion of the site will simply be used for additional storage and therefore result a reduced employment density and car parking demand rate, when compared to smaller warehouses.

Given that the proposed warehouses are relatively large (between 6,000m² and 17,000m²) and having regard to:

- the survey data outlined in the RTA Guide,
- the case study data reviewed for similar sized warehouses,
- the existing car parking provision and demands associated with building A on the site, and
- the site's proximity to public transport access,

we anticipate that the proposed warehouse tenancies will generate car parking demands in the order of 0.3 to 0.5 spaces per 100m² of floor area.

We believe that the statutory requirement for the office land use is an appropriate estimate of the car parking demands likely to be generated.

5.3. Adequacy of Car Parking Provision

Clause 52.06-7 also requires that:

Before granting a permit to reduce the number of spaces, the responsible authority must consider the following, as appropriate:

- *The Car Parking Demand Assessment*
- *Any relevant local planning policy or incorporated plan.*
- *The availability of alternative car parking in the locality of the land, including:*
 - *Efficiencies gained from the consolidation of shared car parking spaces.*
 - *Public car parks intended to serve the land.*
 - *On street parking in non residential zones.*
 - *Streets in residential zones specifically managed for non-residential parking.*
- *On street parking in residential zones in the locality of the land that is intended to be for residential use.*
- *The practicality of providing car parking on the site, particularly for lots of less than 300 square metres.*
- *Any adverse economic impact a shortfall of parking may have on the economic viability of any nearby activity centre.*

- *The future growth and development of any nearby activity centre.*
- *Any car parking deficiency associated with the existing use of the land.*
- *Any credit that should be allowed for car parking spaces provided on common land or by a Special Charge Scheme or cash-in-lieu payment.*
- *Local traffic management in the locality of the land.*
- *The impact of fewer car parking spaces on local amenity, including pedestrian amenity and the amenity of nearby residential areas.*
- *The need to create safe, functional and attractive parking areas.*
- *Access to or provision of alternative transport modes to and from the land.*
- *The equity of reducing the car parking requirement having regard to any historic contributions by existing businesses.*
- *The character of the surrounding area and whether reducing the car parking provision would result in a quality/positive urban design outcome.*
- *Any other matter specified in a schedule to the Parking Overlay.*
- *Any other relevant consideration.*

In this instance, the relevant consideration is the Car Parking Demand Assessment. It is anticipated that the proposed warehouses will generate a demand in the order of 0.3 to 0.5 spaces per 100m².

These buildings are provided with car parking at a rate of between 0.49 and 1.03 spaces per 100m². Accordingly, we anticipate that the demands of the proposed office, expected to generate a demand for only 11 spaces, and all warehouse tenancies can comfortably be accommodated on-site.

On this basis, we believe that the proposed on-site car parking provisions are appropriate.

5.4. Car Parking Design

Car parking areas are generally provided separately from loading/hardstand areas to minimise the interactions between heavy vehicles and light vehicle when manoeuvring to and from car parking spaces and loading docks.

The proposed car parking has been designed in accordance with Clause 52.06-9 of the Planning Scheme and Australian Standards, where relevant. Specifically, we note the following:

- all standard car parking spaces are provided with dimensions of 4.9m x 2.6m and are accessed from an aisle with a width of at least 6.4m,
- all parallel car parking spaces are provided with dimensions of 6.7m x 2.3m and are accessed from an aisle in excess of 3.6m,
- all disabled car parking spaces are provided with dimensions of 5.4m x 2.4m and an adjacent shared space of the same size, and
- a turnaround bay or no stopping area is provided at the end of all dead end aisles.

Accordingly, we are satisfied that the proposed car parking layouts are in accordance with the requirements of the Planning Scheme, relevant sections of the Australian Standards and will work well.

6. Traffic Impact Assessment

6.1. Traffic Generation

Peak Hour

To assess the likely peak hour traffic generation from the site, we have conservatively assumed that all on-site car parking spaces will be occupied by staff and these spaces will generate one inbound movement in the morning and outbound movement in the afternoon,

Given the typically varying start times associated with staff both within the same tenancy and from different tenancies, we would expect no more than 70% of these vehicle movements to occur within a single hour. Accordingly, the site is anticipated to generate the following total peak hour traffic volumes:

- AM Peak Hour – 366 inbound vehicle movements, and
- PM Peak Hour – 366 outbound vehicle movements.

Daily

The RTA Guide provides the following rate for daily vehicle trips for a warehouse development:

Daily vehicle trips = 4 per 100m² gross floor area

Application of this rate to the proposed development (with an overall gross floor area of 61,579m²) equates to a daily traffic generation of 2,462 vehicle trips.²

6.2. Traffic Distribution

All traffic from Building A and Building D will be distributed to Olympia Street. For the purposes of this assessment we have assumed that there will be a 50/50 split of traffic to/from the east and west along Sunshine Road. For the traffic travelling to/from the east, we have assumed that 50% of this traffic may travel to/from the south along Paramount Road.

All traffic from Building B and Building C will be distributed to Paramount Road, with a split between the northern and southern crossovers proportional to the number of car parking spaces they serve. Given the site's location, we anticipate that there will be an even split of traffic to and from the north and south of the site along Paramount Road.

² For simplicity, the small area of 'Office' proposed has been included as a part of the overall 'Warehouse' floor area for the purposes of this assessment, given its relatively minor size.

Peak Hour

Based on the above, the anticipated site generated peak hour traffic volumes at the Olympia Street/Sunshine Road intersection and site access points to Paramount Road is outlined in Figure 18 and Figure 19 respectively.

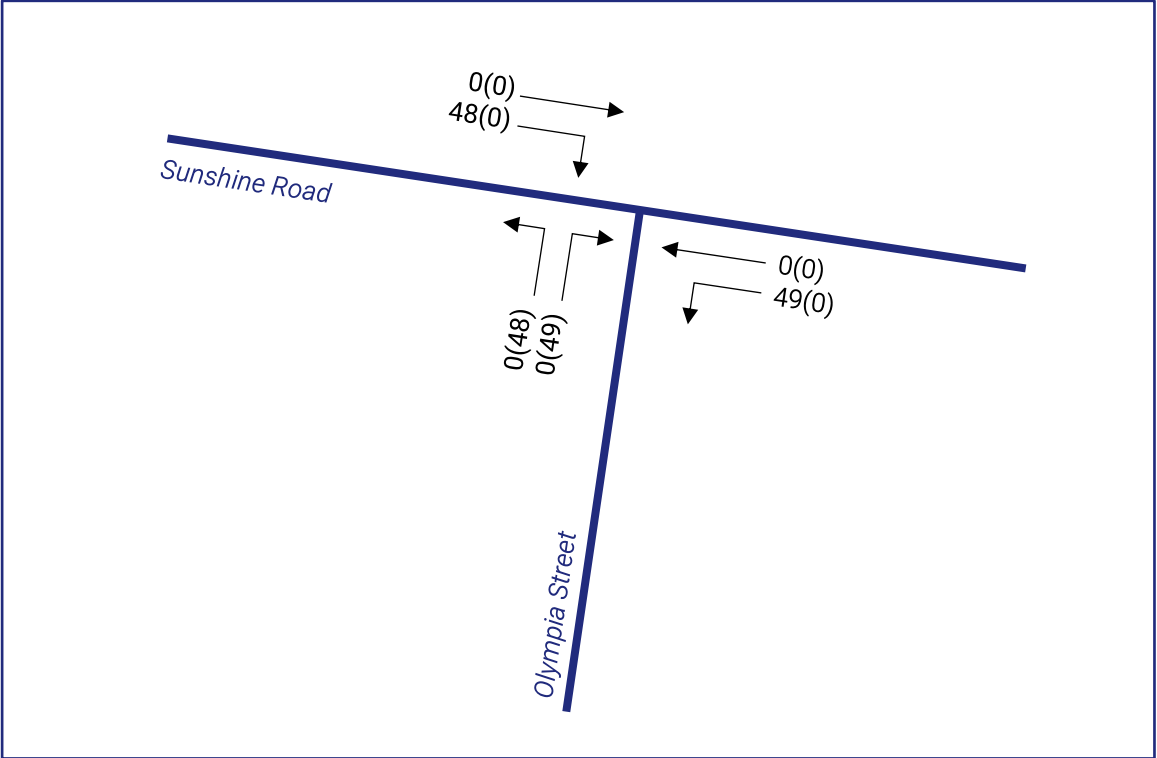


Figure 18: Olympia Street/Sunshine Road - AM(PM) Peak Hour Site Generated Traffic Volumes

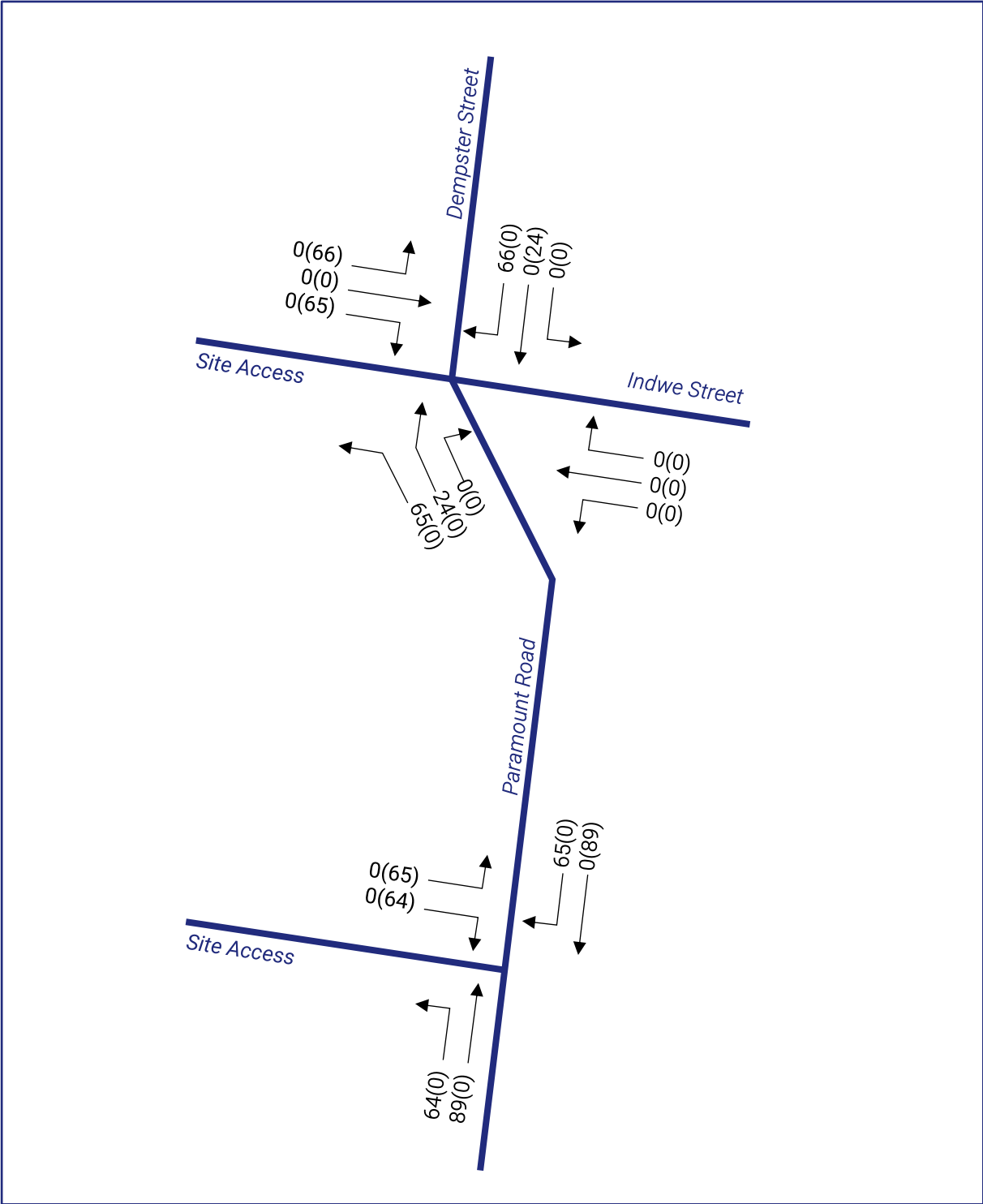


Figure 19: Paramount Road/Indwe Street - AM(PM) Peak Hour Site Generated Traffic Volumes

Daily

Based on the access points provided to each of the warehouse buildings, we anticipate the following site generated daily traffic volumes on Olympia Street and Paramount Road:

- Olympia Street – 905 daily vehicle movements
- Paramount Road – 1,557 daily vehicle movements

6.3. Traffic Impact

Peak Hour Impacts

The anticipated post-development peak hour traffic volumes at the Olympia Street/Sunshine Road intersection and the site’s Paramount Road access points are outlined in Figure 20 and Figure 21 below.

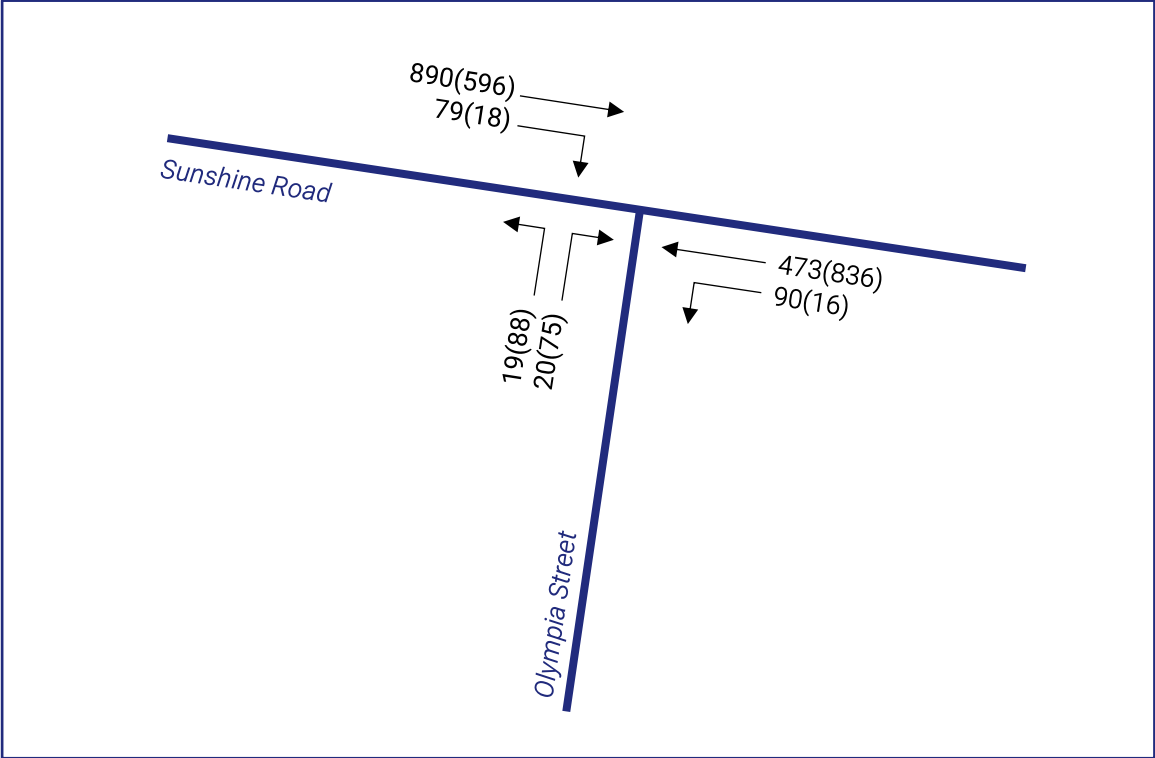


Figure 20: Olympia Street/Sunshine Road – Post-development AM(PM) Peak Hour Traffic Volumes

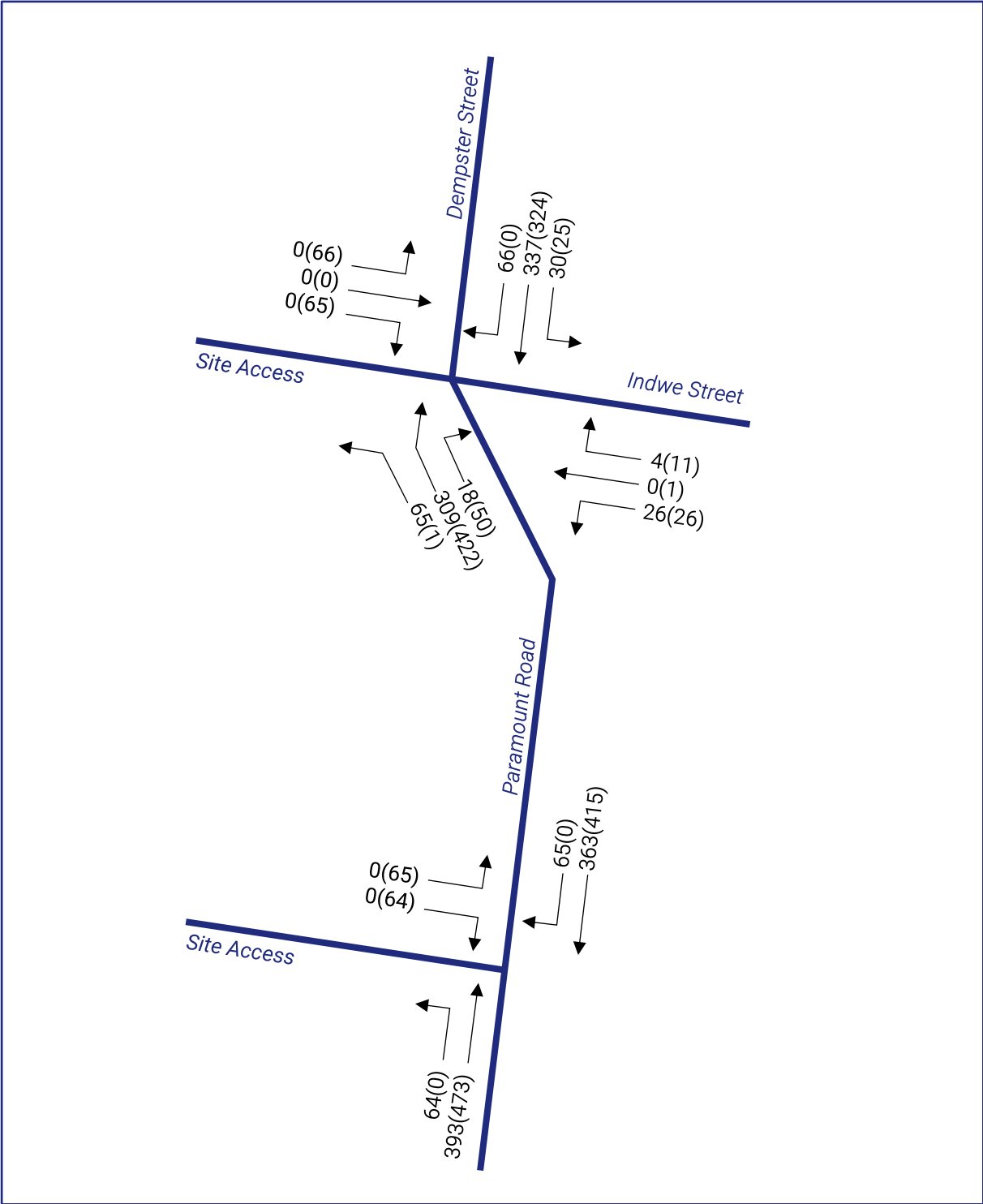


Figure 21: Paramount Road/Indwe Street – Post-Development AM(PM) Peak Hour Traffic Volumes

To assess the impact of the additional peak hour traffic generated by the site SIDRA analyses have been undertaken. SIDRA is an intersection modelling software that is widely used to assess the impacts of changed traffic conditions at existing intersections as well as impacts of new intersections. The key outputs of SIDRA are degree of saturation (DOS), average delay and 95th percentile queue length. For a sign controlled intersection, a DOS of up to 0.85 is considered acceptable operating conditions and for a signalised intersection a DOS of up to 0.95 is considered acceptable operating conditions.

An analysis of the following intersections has been undertaken:

- Olympia Street/Sunshine Road intersection,
- Northern Paramount Road access intersection, and
- Southern Paramount Road access intersection.

An analysis of these intersections has been undertaken under both existing and post development conditions (aside from the southern Paramount Road access as this is a new intersection)³. A summary of the results of the SIDRA analyses are outlined in Table 4 to Table 6 below, with detailed movement summaries attached at Appendix C.

Table 4: Olympia Street/Sunshine Road Intersection - Summary of SIDRA Results

Olympia Street/Sunshine Road Intersection						
Approach	DOS		Average Delay		95th %ile Queue	
	AM	PM	AM	PM	AM	PM
Existing						
South – Olympia St	0.408	0.419	66.4 sec	60.8 sec	21.6m	34.7m
East – Sunshine Rd	0.427	0.434	28.0 sec	10.7 sec	101.0m	111.1m
West – Sunshine Rd	0.431	0.391	7.8 sec	11.8 sec	112.9m	69.1m
Post-Development						
South – Olympia St	0.363	0.499	64.8 sec	49.2 sec	21.2m	77.9m
East – Sunshine Rd	0.491	0.506	30.6 sec	17.1 sec	116.9m	140.8m
West – Sunshine Rd	0.493	0.461	10.6 sec	17.3 sec	127.7m	116.2m

³ The assessment of the Olympia Street/Sunshine Road signalised intersection adopted optimised phasing splits generated by SIDRA based on the input traffic volumes. Accordingly, different phasing splits were used in the existing and post-development assessments which has resulted in improved post-development outcomes for the Olympia Street approach in the AM peak hour.

Table 5: Northern Paramount Road Access Intersection - Summary of SIDRA Results

Northern Paramount Road Access Intersection						
Approach	DOS		Average Delay		95 th %ile Queue	
	AM	PM	AM	PM	AM	PM
<i>Existing</i>						
South – Paramount Rd	0.185	0.284	0.6 sec	1.0 sec	1.4m	4.0m
East – Indwe St	0.024	0.032	7.3 sec	8.4 sec	0.6m	0.7m
North – Dempster St	0.212	0.188	0.5 sec	0.5 sec	0.1m	0.1m
West – Site Access	0.005	0.007	8.2 sec	9.0 sec	0.1m	0.2m
<i>Post-Development</i>						
South – Paramount Rd	0.230	0.285	1.5 sec	1.1 sec	2.0m	4.2m
East – Indwe St	0.024	0.036	7.5 sec	9.1 sec	0.6m	0.8m
North – Dempster St	0.268	0.201	2.0 sec	0.4 sec	6.1m	0.1m
West – Site Access	0.006	0.248	9.2 sec	10.8 sec	0.1m	6.5m

Table 6: Southern Paramount Road Access Intersection - Summary of SIDRA Results

Southern Paramount Road Access Intersection						
Approach	DOS		Average Delay		95 th %ile Queue	
	AM	PM	AM	PM	AM	PM
<i>Post-Development</i>						
South – Paramount Rd	0.262	0.272	0.9 sec	0.1 sec	0.0m	0.0m
North – Paramount Rd	0.272	0.240	1.8 sec	0.0 sec	5.9m	0.1m
West – Site Access	0.003	0.222	8.8 sec	10.2 sec	0.1m	5.5m

The results of the SIDRA analyses show that all of the intersections analysed will operate well within acceptable limits, post development. Importantly, the anticipated increase in DOS, delays and queueing is minimal, when comparing the existing and post development conditions.

Accordingly, we are satisfied that the peak hour traffic volumes generated by the proposed development can comfortably be accommodated by the surrounding road network without any noticeable impact.

Daily Impacts

It is anticipated that Olympia Street will carry an additional 905 daily vehicle movements, increasing the existing daily traffic volume from 2,561 to in the order of 3,500 vehicle movements per day.

We are satisfied that this level of traffic is within the environmental capacity of Olympia Street noting that the construction of the road and parking restrictions in place ensure that there is always clear space for two-way vehicle movement.

It is anticipated that Paramount Road will carry an additional 1,557 daily vehicle movements, increasing the existing daily traffic volume from 3,700 to in the order of 5,300 vehicle movements per day.

We are satisfied that this level of traffic is well within the capacity of Paramount Road noting that it is identified as an arterial road and a part of the principal road network.

7. Paramount Road Access Assessment

The northern Paramount Road access point is proposed to accommodate all heavy vehicle movements for Buildings B and C. Swept path diagrams have been prepared, copy attached at Appendix D, demonstrating that this access point can accommodate vehicles up to the size of B-doubles.

The southern Paramount Road access will only serve the car parking areas. Swept path diagrams have been prepared, copy attached at Appendix D, demonstrating that this access point can accommodate simultaneous movement by light vehicles.

As Paramount Road is zoned Transport Zone 2 (TRZ2) a permit under Clause 52.29 to alter access to a Road in a Transport Zone 2 is sought as a part of this application.

The purpose of Clause 52.29 is:

- *To ensure appropriate access to the Principal Road Network or land planned to form part of the Principal Road Network.*
- *To ensure appropriate subdivision of land adjacent to Principal Road Network or land planned to form part of the Principal Road Network.*

Clause 52.29-2 specifies that:

A permit is required to:

- *Create or alter access to:*
 - *A road in a Transport Zone 2.*
 - *Land in a Public Acquisition Overlay if a transport manager (other than a municipal council) is the acquiring authority and the acquisition is for the purpose of a road.*

Clause 52.29-6 outlined the following:

Before deciding on an application, in addition to the decision guidelines in clause 65, the responsible authority must consider:

- *The Municipal Planning Strategy and the Planning Policy Framework.*
- *The views of the relevant road authority.*
- *The effect of the proposal on the operation of the road and on public safety.*
- *Any policy made by the relevant road authority pursuant to schedule 2, clause 3 of the Road Management Act 2004 regarding access between a controlled access road and adjacent land.*

As outlined in previous sections of this report, we do not anticipate that either of the proposed access points will cause any adverse impact on the operation of Paramount Road and the proposed accesses have been designed to suitably accommodate the vehicle types required.

We note that sight distance to the south along Paramount Road from the southern access point is partially obstructed by vegetation on the west side of Paramount Road, as shown in Figure 22 below. We suggest that this vegetation is cutback to ensure that appropriate sight distance is provided for the southern access point.



Figure 22: Sight Distance to the South from Southern Paramount Road Access Point

Provided that this vegetation is cut back, we are satisfied that the proposed access locations will not impact on the safe and efficient operation of Paramount Road. We note that a break in the double white line in the centre of Paramount Road will also be required to permit right turn movements in to and out of the proposed crossover.

Having regard to the above, we believe that a permit under Clause 52.29 of the Planning Scheme is acceptable.

8. Bicycle Parking

The statutory bicycle parking requirements for the proposed development are outlined under Clause 52.34 of the Planning Scheme. The purpose of Clause 52.34 is:

- *To encourage cycling as a mode of transport.*
- *To provide secure, accessible and convenient bicycle parking spaces and associated shower and change facilities.*

No statutory bicycle parking requirements are specified for a 'Warehouse' land use. The statutory bicycle parking requirements for an 'Office' land use are as follows:

- *1 space for employees to each 300m² of net floor area is the net floor area exceeds 1,000m², and*
- *1 space to visitors to each 1,000m² of net floor area is the net floor area exceeds 1,000m²*

The proposed office use has a size of 330m² and accordingly does not generate any statutory bicycle parking requirement.

We note that the each tenancy is provided with bicycle racks adjacent to the building entries and we believe that this is sufficient to accommodate any demands generated by the proposed buildings.

9. Loading Considerations

Clause 65 of the Planning Scheme states:-

"Before deciding on an application or approval of a plan, the responsible authority must consider, as appropriate:

- *The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts."*

Each of the proposed tenancies is provided with hardstand and loading areas.

Swept path diagrams have been prepared (copy attached at Appendix D) demonstrating the following:

- B-double movements around Building A and through the hardstand areas of Buildings B1, B2 and Building C,
- Semi-trailer movements to and from the loading docks within the hardstand areas for all buildings.

Accordingly, we are satisfied that the proposed development can appropriately accommodate loading activities on the site.

10. Public Acquisition Overlay (PAO)

The proposal includes the provision of buildings and associated car parking within the PAO boundary. We understand that these buildings are to link to the façade of the existing buildings which front Paramount Road that are the subject of the Heritage Overlay.

A previous application on this site sought to demolish these buildings to allow all buildings to be setback from the PAO boundary. This application was subject to review at VCAT with the Tribunal refusing to grant a permit. The Tribunal decision (VCAT ref: No. P1647/2020) included the following conclusion regarding the conflicting heritage and PAO considerations:

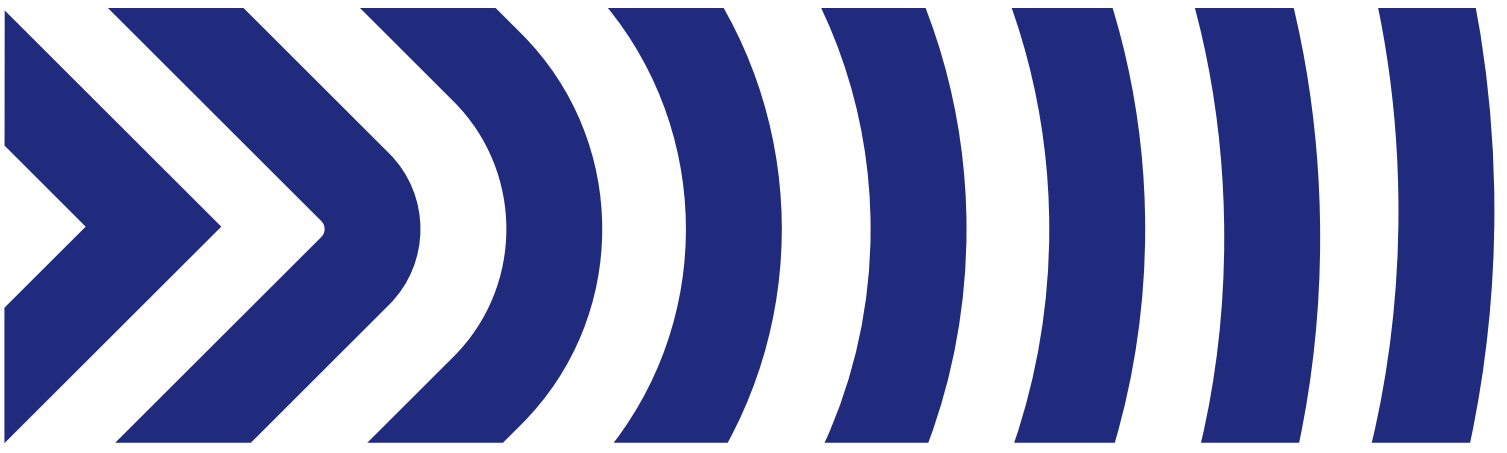
...there is too much uncertainty with respect to any plans under the PAO for me to give any weight to the prospect that Paramount Road will be widened or realigned so as to affect Building C (Heritage Building within the PAO Boundary) and at a particular point in time.

Accordingly, the current proposal has sought to retain the heritage buildings in line with this decision, which has resulted in development occurring within the PAO boundary.

11. Conclusions

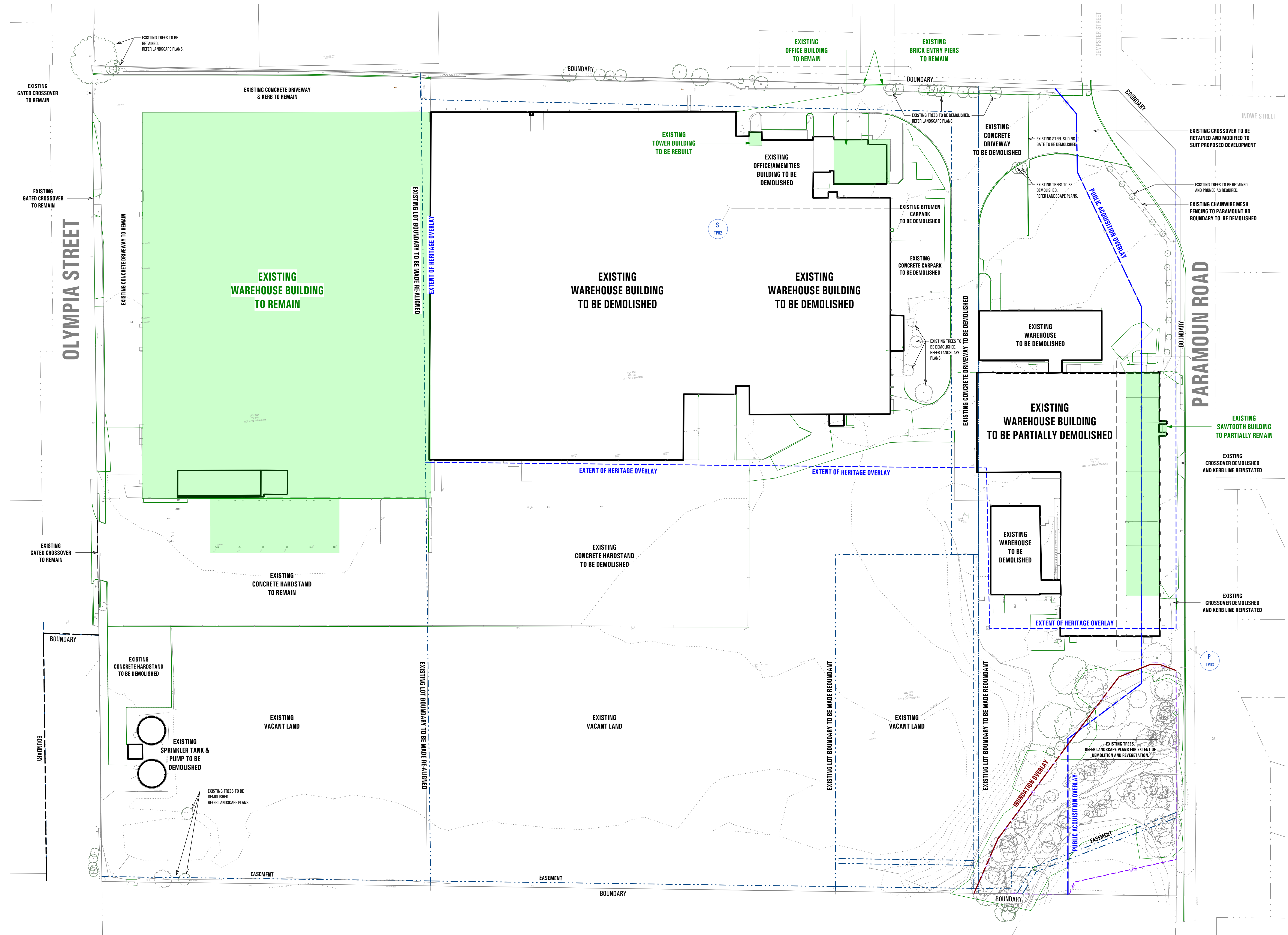
Having undertaken a detailed traffic engineering assessment of the warehouse development at 35-65 Paramount Road, Tottenham, we are of the opinion that:

- a) the proposed development generates a statutory car parking requirement to provide 937 car parking spaces and the proposed provision of 523 on-site car parking spaces falls short of the statutory requirement,
- b) a permit to reduce the car parking requirement under Clause 52.06 is sought and is acceptable in this instance having regard to:
 - i) the convenience of public transport services in the vicinity of the site,
 - ii) case study data, existing car parking rates on the site and column B rates from Clause 52.06, which take into account good access to public transport, which indicate that car parking demands less than the statutory requirement are likely to be generated, and
 - iii) the proposed on-site car parking provision being sufficient to accommodate the anticipated car parking demands generated by the proposed development,
- c) the level of traffic generated by the proposed development can be accommodated by the surrounding road network without any noticeable impact,
- d) the proposed development does not generate any statutory bicycle parking requirements,
- e) loading can be undertaken appropriately on-site,
- f) a permit under Clause 52.29 of the Planning Scheme is required to amend the access to Paramount Road and is acceptable in this instance having regard to:
 - i) the access being designed to suitably accommodate the required vehicle types, and
 - ii) the anticipated additional traffic generated by the proposed development having no noticeable impact on the operation of Paramount Road, and
- g) there are no traffic engineering reasons why a planning permit for the proposed warehouse development at 35-65 Paramount Road, Tottenham, should not be granted.



Appendix A

Proposed Development Plans



PARAMOUNT RD
35-65 PARAMOUNT ROAD, TOTTENHAM



SHEET NAME: EXISTING CONDITIONS AND DEMOLITION			
JOB NO.	4372	SCALE:	1 : 600
Drawing No:	TP01	ISSUE DATE:	2022-10-18
REVISION:	B	DRAWN BY:	MR

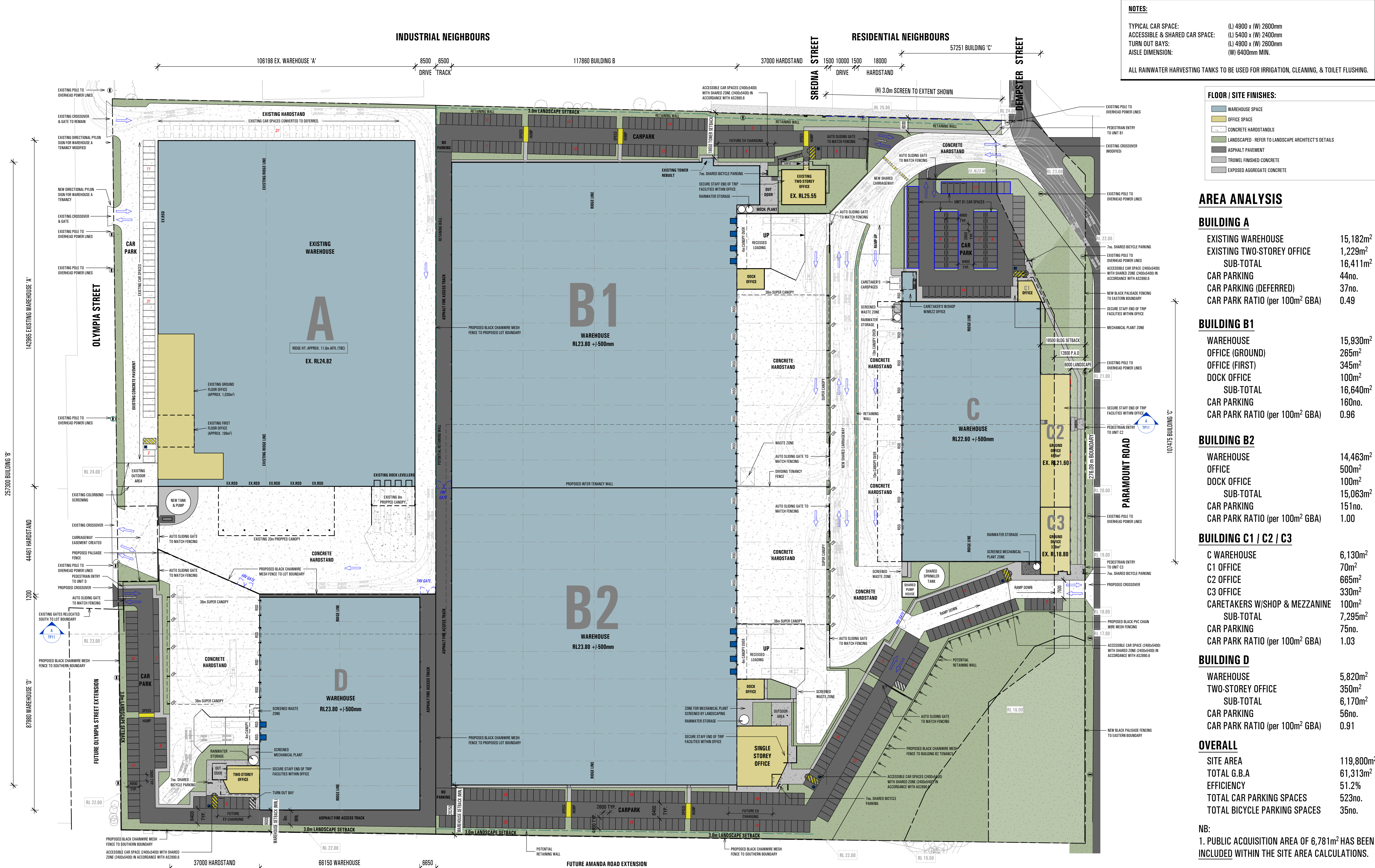
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ABN 88 765 907 859

500 Burwood Road,
Hawthorn, Victoria,
Australia 3122

Telephone (03) 9810 8300
Web: www.qanstruct.com.au





NOTES:
 TYPICAL CAR SPACE: (L) 4900 x (W) 2600mm
 ACCESSIBLE & SHARED CAR SPACE: (L) 5400 x (W) 2400mm
 TURN OUT BAYS: (L) 4900 x (W) 2600mm
 AISLE DIMENSION: (W) 6400mm MIN.
 ALL RAINWATER HARVESTING TANKS TO BE USED FOR IRRIGATION, CLEANING, & TOILET FLUSHING.

FLOOR / SITE FINISHES:

- WAREHOUSE SPACE
- OFFICE SPACE
- CONCRETE HARDSTANDS
- LANDSCAPED - REFER TO LANDSCAPE ARCHITECT'S DETAILS
- ASPHALT PAVEMENT
- TROWEL FINISHED CONCRETE
- EXPOSED AGGREGATE CONCRETE

AREA ANALYSIS

BUILDING A

EXISTING WAREHOUSE	15,182m ²
EXISTING TWO-STORY OFFICE	1,229m ²
SUB-TOTAL	16,411m ²
CAR PARKING	44no.
CAR PARKING (DEFERRED)	37no.
CAR PARK RATIO (per 100m ² GBA)	0.49

BUILDING B1

WAREHOUSE	15,930m ²
OFFICE (GROUND)	265m ²
OFFICE (FIRST)	345m ²
DOCK OFFICE	100m ²
SUB-TOTAL	16,640m ²
CAR PARKING	160no.
CAR PARK RATIO (per 100m ² GBA)	0.96

BUILDING B2

WAREHOUSE	14,463m ²
OFFICE	500m ²
DOCK OFFICE	100m ²
SUB-TOTAL	15,063m ²
CAR PARKING	151no.
CAR PARK RATIO (per 100m ² GBA)	1.00

BUILDING C1 / C2 / C3

C WAREHOUSE	6,130m ²
C1 OFFICE	70m ²
C2 OFFICE	665m ²
C3 OFFICE	330m ²
CARETAKERS W/SHOP & MEZZANINE	100m ²
SUB-TOTAL	7,295m ²
CAR PARKING	75no.
CAR PARK RATIO (per 100m ² GBA)	1.03

BUILDING D

WAREHOUSE	5,820m ²
TWO-STORY OFFICE	350m ²
SUB-TOTAL	6,170m ²
CAR PARKING	56no.
CAR PARK RATIO (per 100m ² GBA)	0.91

OVERALL

SITE AREA	119,800m ²
TOTAL G.B.A	61,313m ²
EFFICIENCY	51.2%
TOTAL CAR PARKING SPACES	523no.
TOTAL BICYCLE PARKING SPACES	35no.

NB:
 1. PUBLIC ACQUISITION AREA OF 6,781m² HAS BEEN INCLUDED WITHIN THE SITE AREA CALCULATIONS.
 2. INUNDATION OVERLAY AREA OF AN ADDITIONAL 1,200m² REMAINS WITHIN THE SITE AREA CALCULATIONS.

OVERALL DEVELOPMENT PLAN
 1 : 600

PARAMOUNT RD
 35-65 PARAMOUNT ROAD, TOTTENHAM



SHEET NAME: OVERALL DEVELOPMENT PLAN

JOB NO.	4372	SCALE:	As indicated	@B1 SIZED SHEET	PROJECT NORTH
Drawing No:	TP10	ISSUE DATE:	2022-10-18		
REVISION:	B	DRAWN BY:	MR		

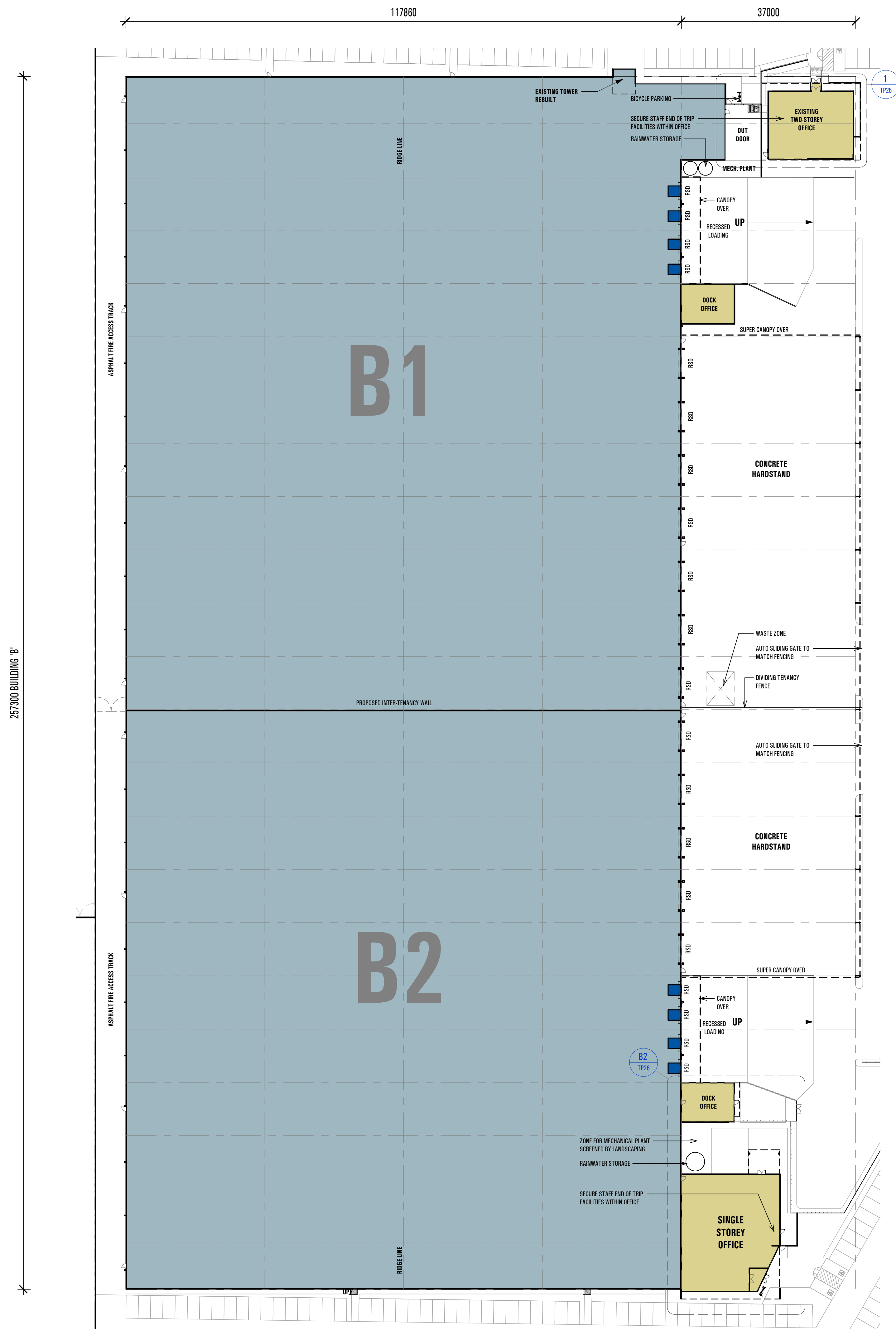
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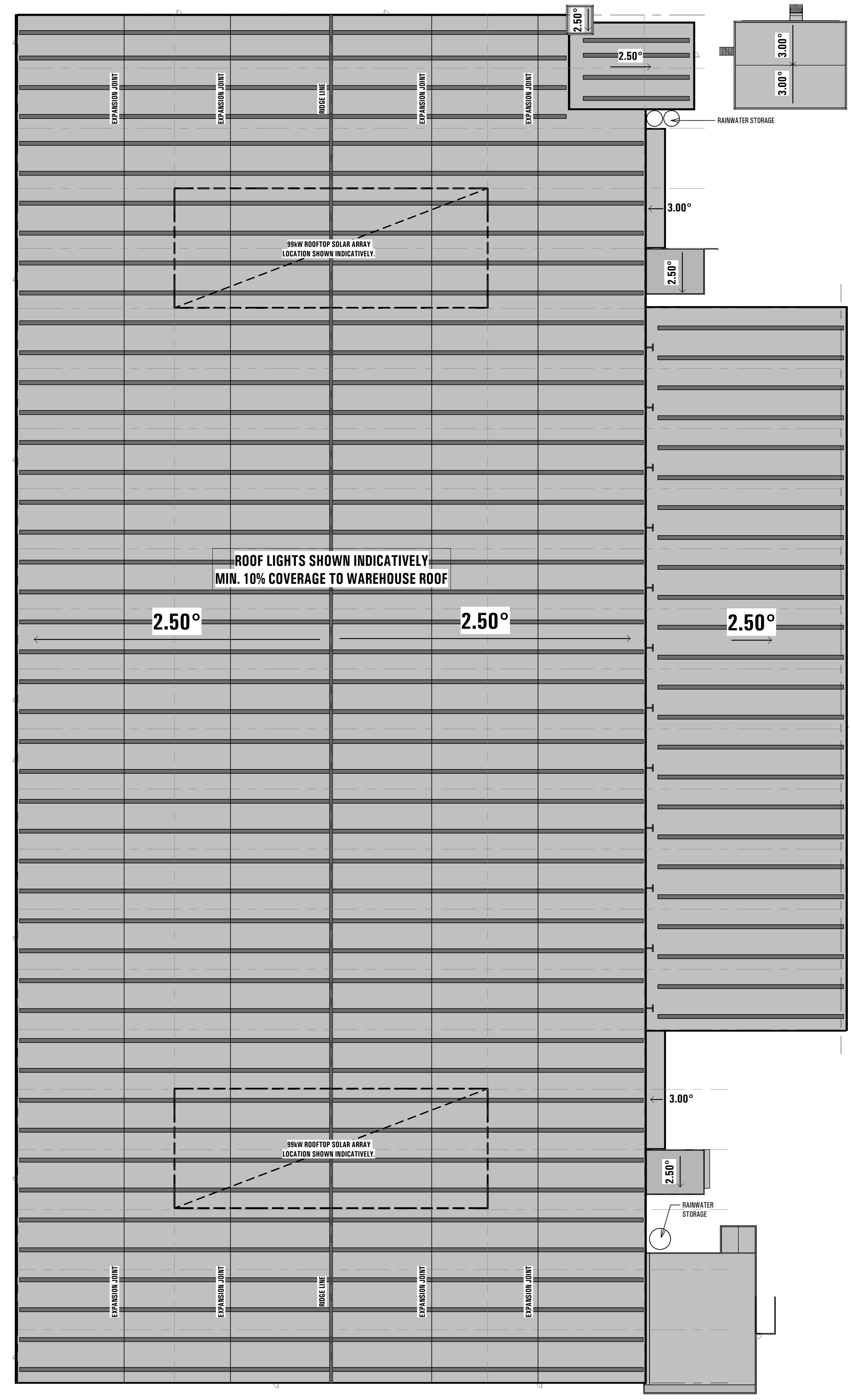
500 Burwood Road,
 Hawthorn, Victoria,
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Telephone (03) 9810 8300
 Web: www.ganstruct.com.au

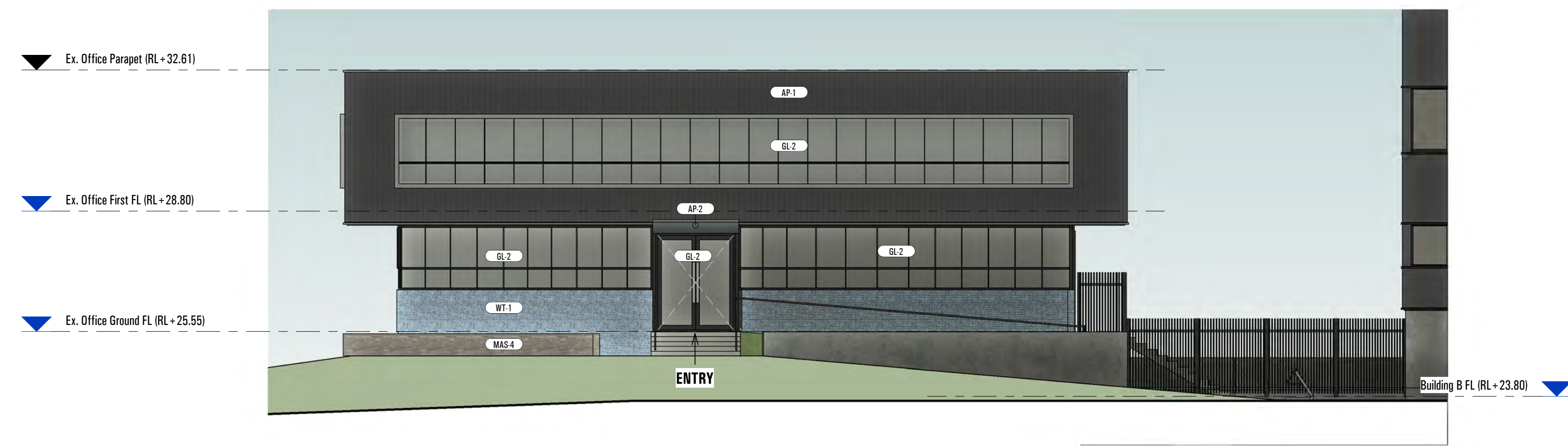




1 Bldg B Plan
1 : 500



2 Bldg B Plan (Roof)
1 : 500



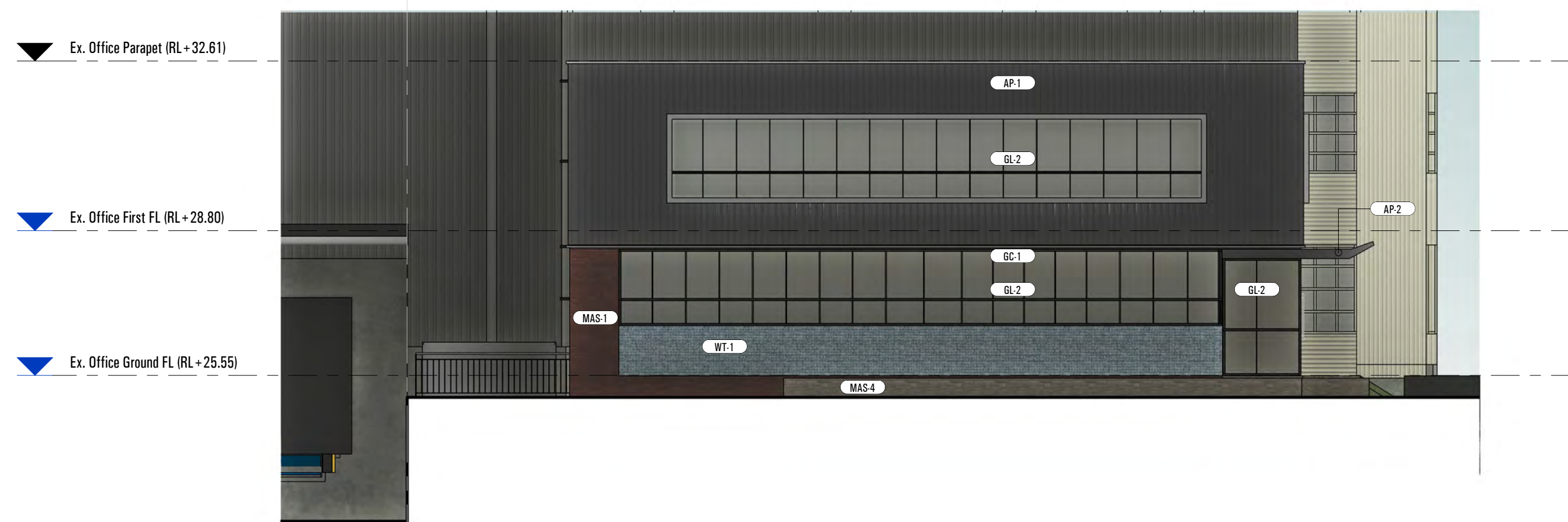
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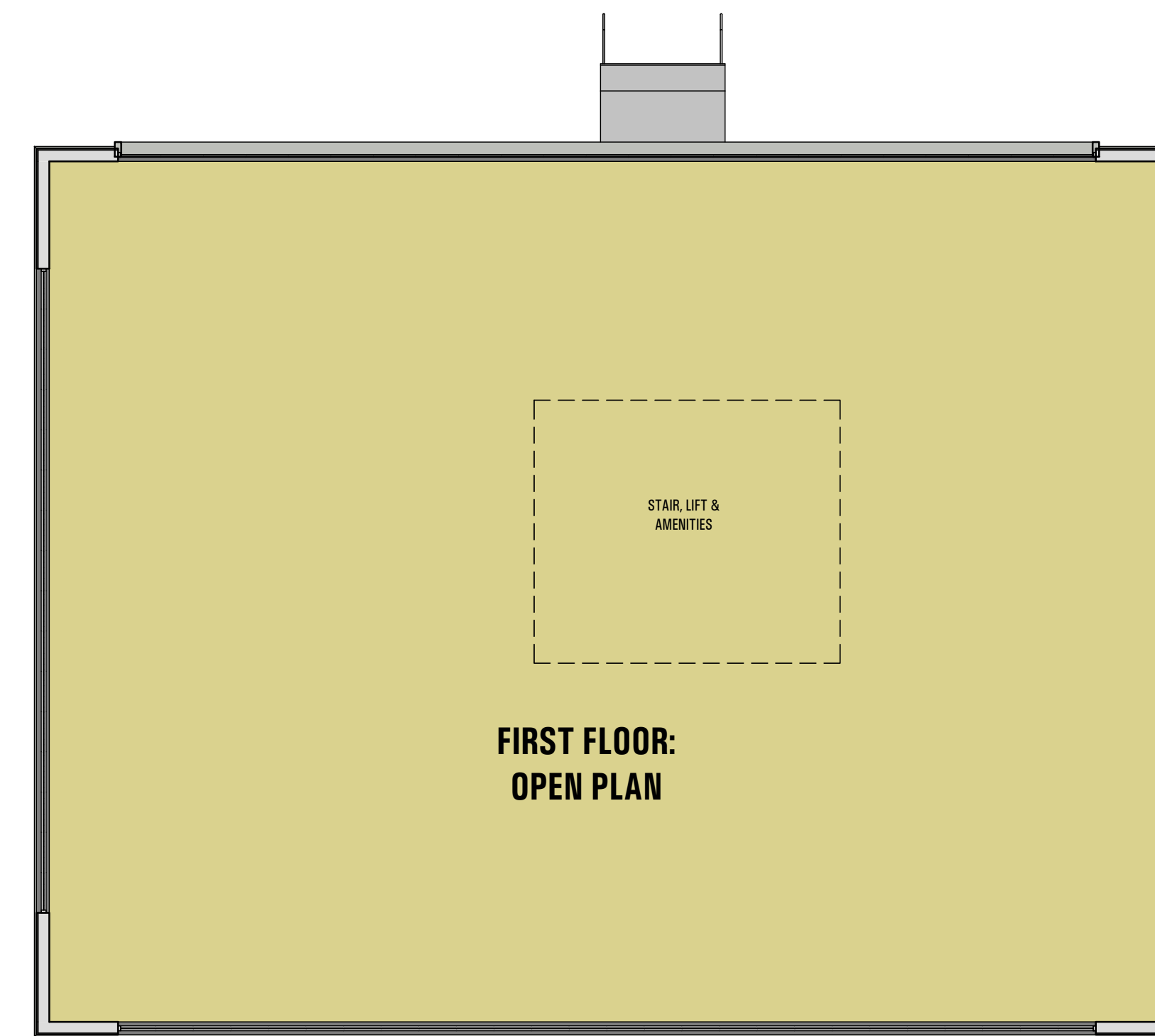
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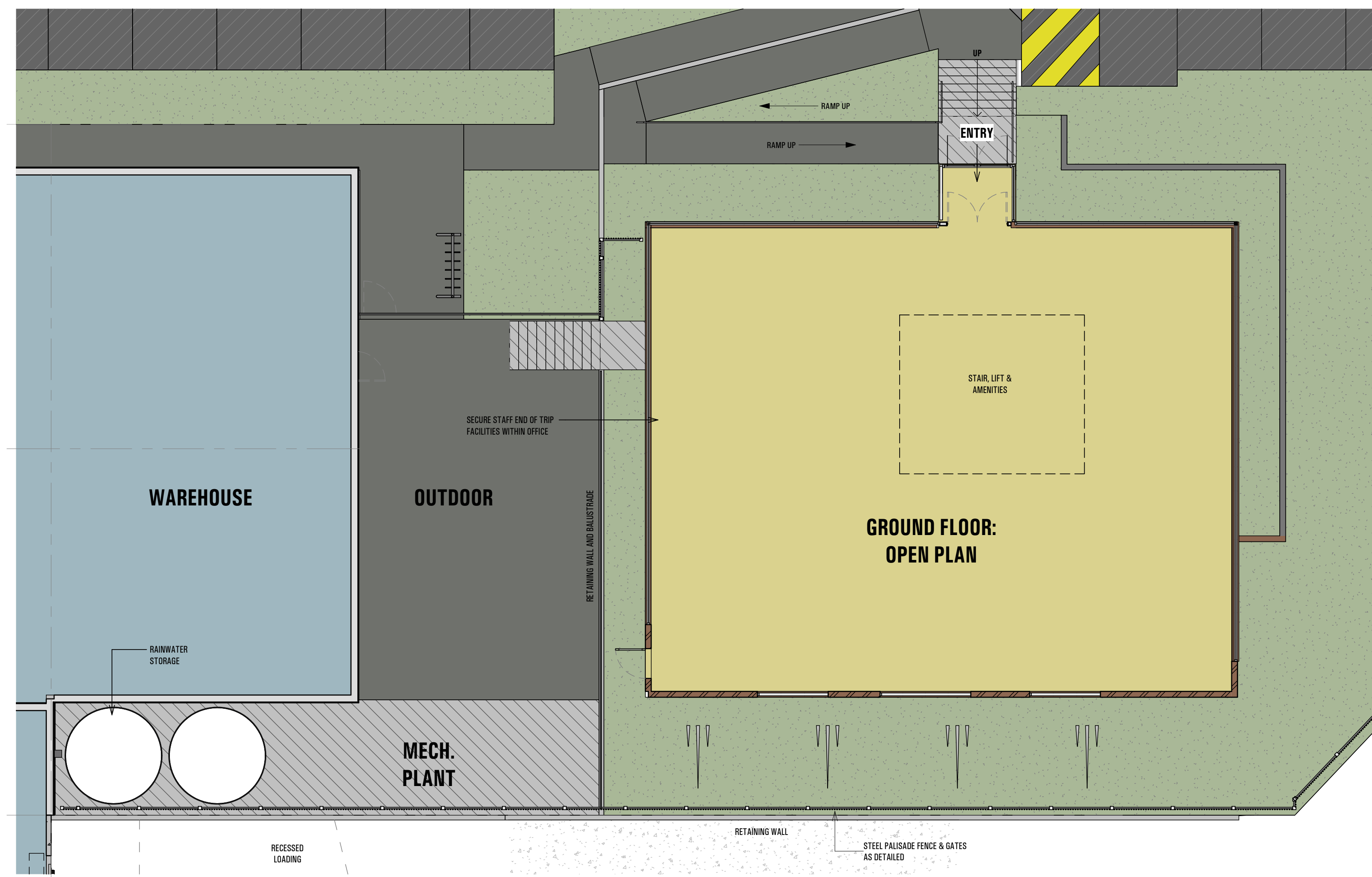
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E EAST ELEVATION
1:100



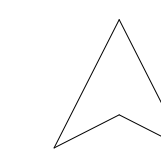
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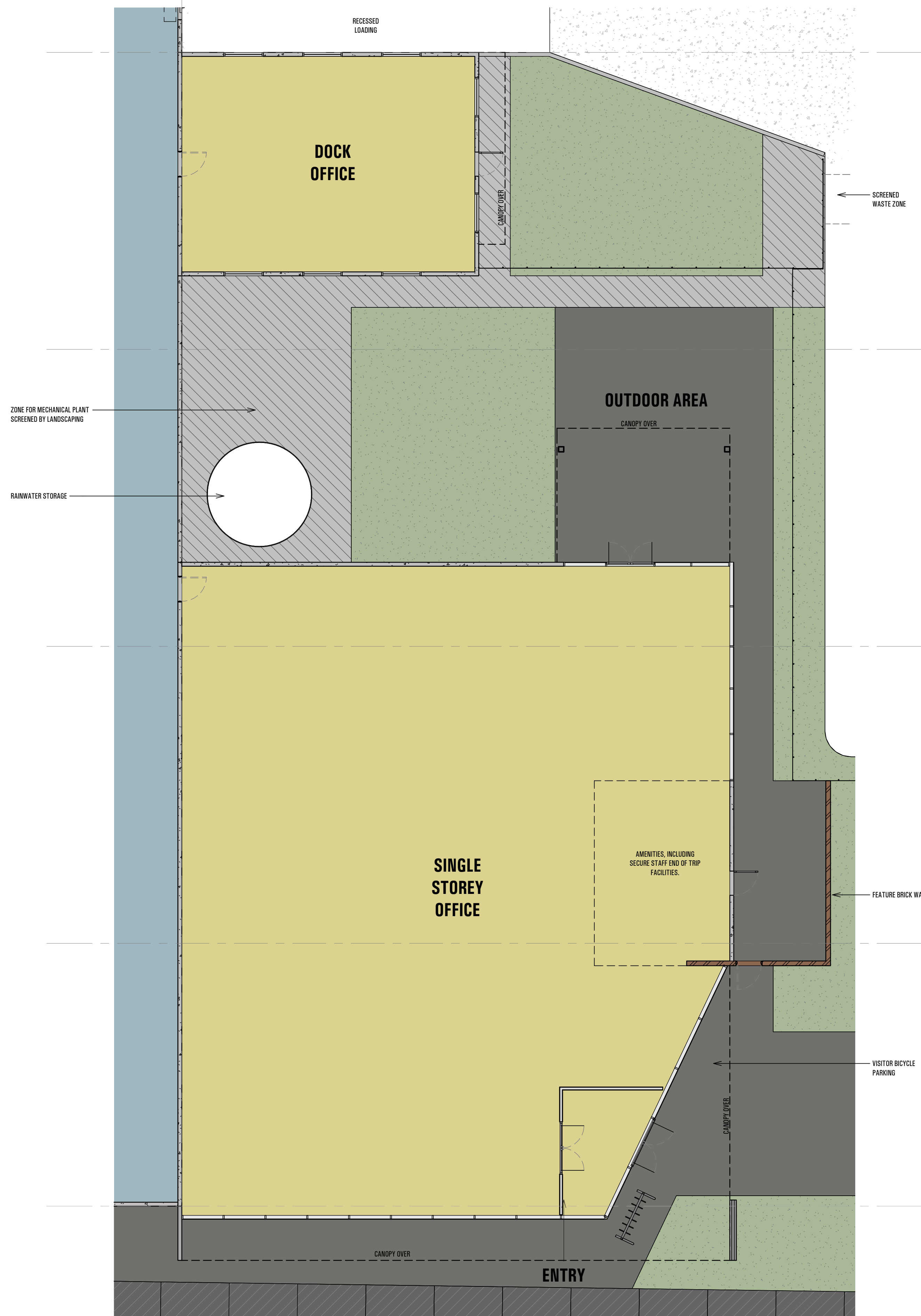


1 Bldg B1 Office - Ground Floor Plan
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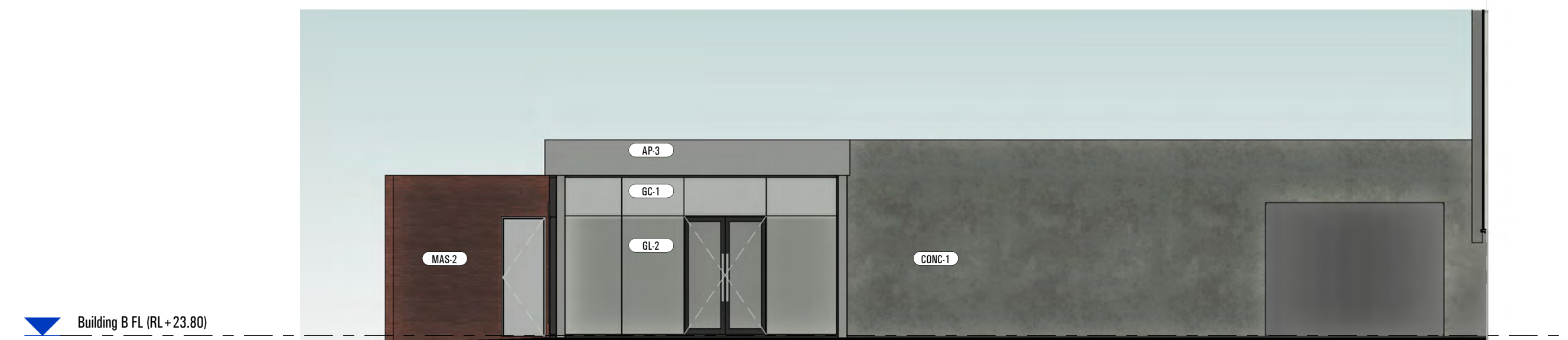
- EXTERNAL FINISHES:**
- AP.1 EXISTING 'GREY' STANDING SEAM NON COMBUSTIBLE ALUMINIUM CLADDING. REFER TO 'CONSERVATION WORKS' DETAILS.
 - AP.2 'BLACK' EXPRESS JOINTED NON COMBUSTIBLE ALUMINIUM CLADDING.
 - AP.3 'SILVER' EXPRESS JOINTED NON COMBUSTIBLE ALUMINIUM CLADDING.
 - CB.1 COLORBOND 'BASALT' (LAYERED VERTICAL)
 - CB.1H COLORBOND 'BASALT' (LAYERED HORIZONTAL)
 - CB.1M COLORBOND 'BASALT' DOWNPIPES
 - CB.5 COLORBOND 'MONUMENT' (LAYERED VERTICAL)
 - CB.6M COLORBOND 'NIGHT SKY' GAVES, GUTTERS, FOOTMOULDS, & BARGE CAPPIINGS.
 - CB.8 COLORBOND 'SURFMIST'
 - CB.8H COLORBOND 'SURFMIST' (LAYERED HORIZONTAL)
 - CB.8M COLORBOND 'SURFMIST' MOLDINGS (LEAVES GUTTER, DOWNPIPES, FOOTMOULDS, & BARGE CAPPIINGS)
 - CONC.1 NATURAL FINISH (TO PRECAST CONCRETE WALL PANEL)
 - GL.2 BLUE TINT VISION GLAZING TO FUTURE BCA 'PART J' REPORT.
 - GL.5 CLEAR VISION GLAZING TO FUTURE BCA 'PART J' REPORT.
 - GC.1 COLOURBACKED GLAZING TO FUTURE BCA 'PART J' REPORT.
 - MAS.1 MASONRY - EXISTING BRICK (REMEDIATED)
 - MAS.2 MASONRY - RECYCLED BRICK TO MATCH SAWTOOTH FACADE.
 - MAS.3 'BRICK LOOK' FORMLINER TO PRECAST CONCRETE. PAINT FINISH.
 - MAS.4 MASONRY - EXISTING STACKED STONE (REMEDIATED)
 - MAS.5 RENDER FINISH TO MASONRY
 - PW.1 POWDERCOAT FINISH (BLACK TO MATCH COLORBOND NIGHT SKY)
 - TR.1 TRANSLUCENT ROOF SHEETING
 - TR.2 TRANSLUCENT WALL SHEETING
 - WT.1 EXISTING MOSAIC WALL TILE (REMEDIATED)
 - ZIN.1 ZINCALUME FINISH

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Drawing No:	TP25	ISSUE DATE:	2022-10-18	
REVISION:	B	DRAWN BY:	MR	

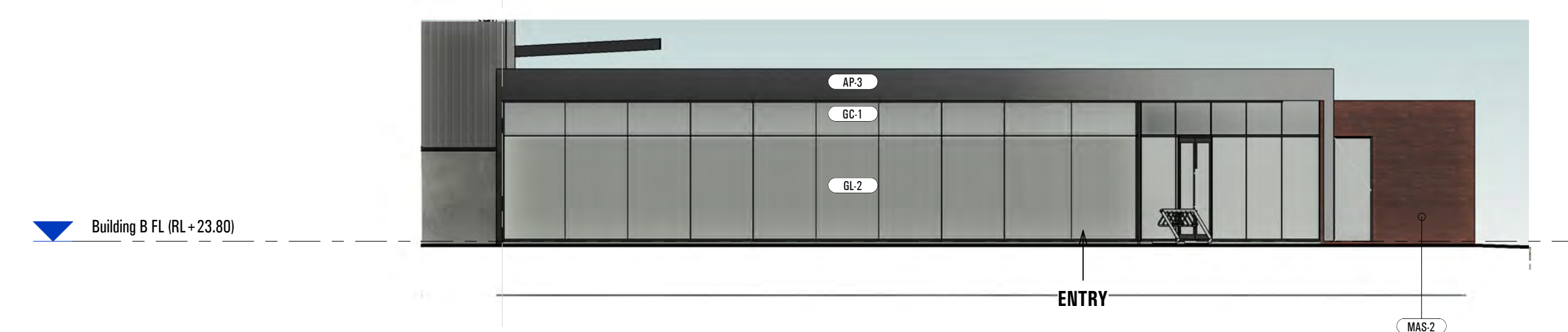




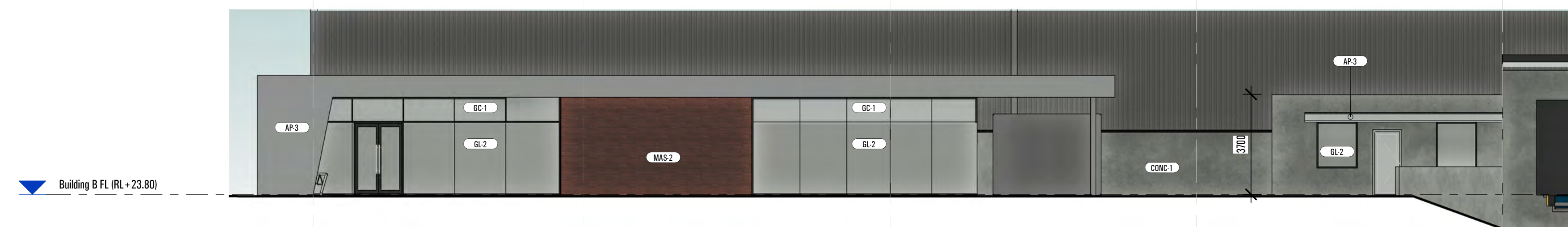
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N Bldg B2 North Elevation
1 : 100



S Bldg B2 South Elevation
1 : 125

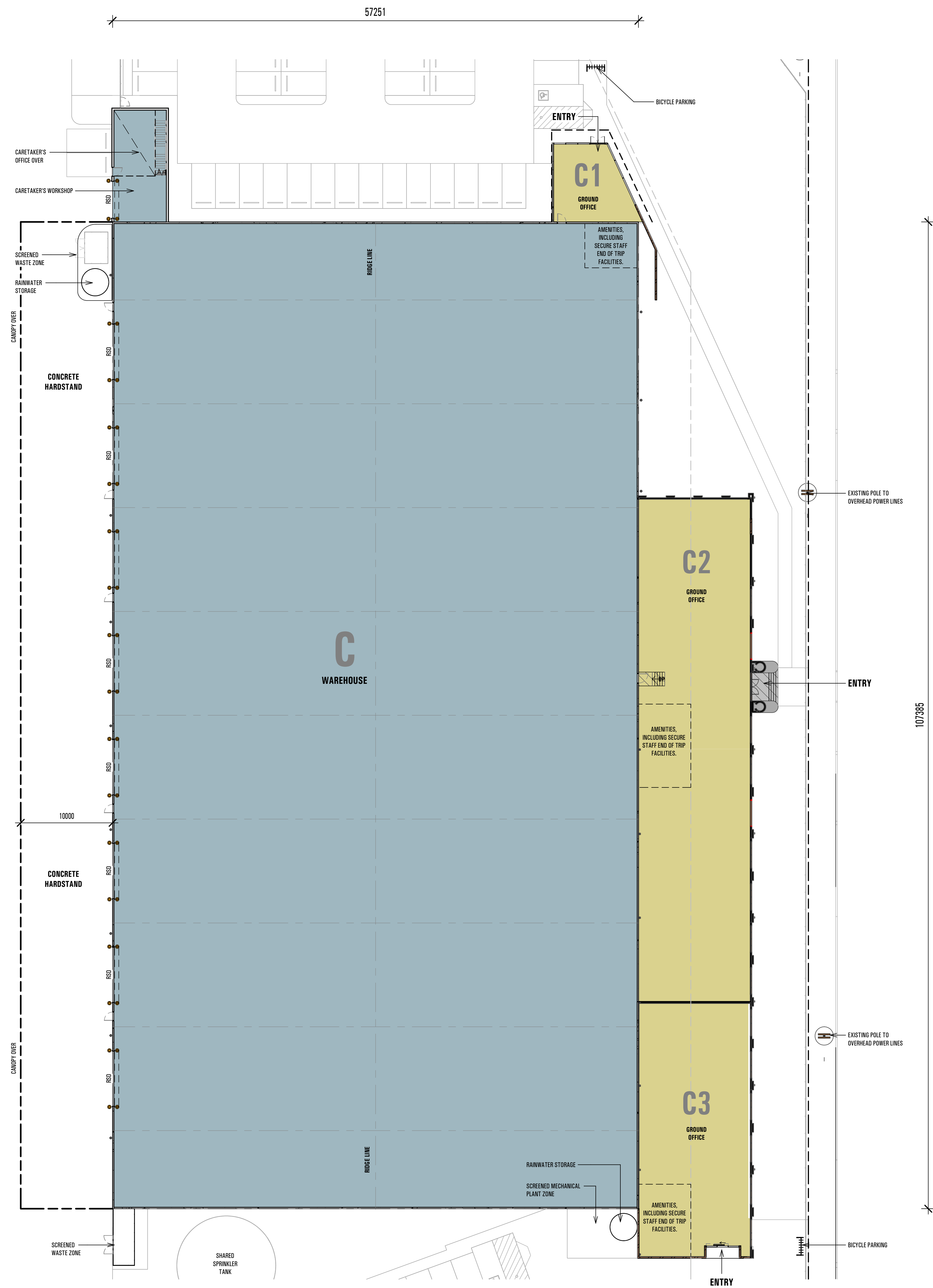


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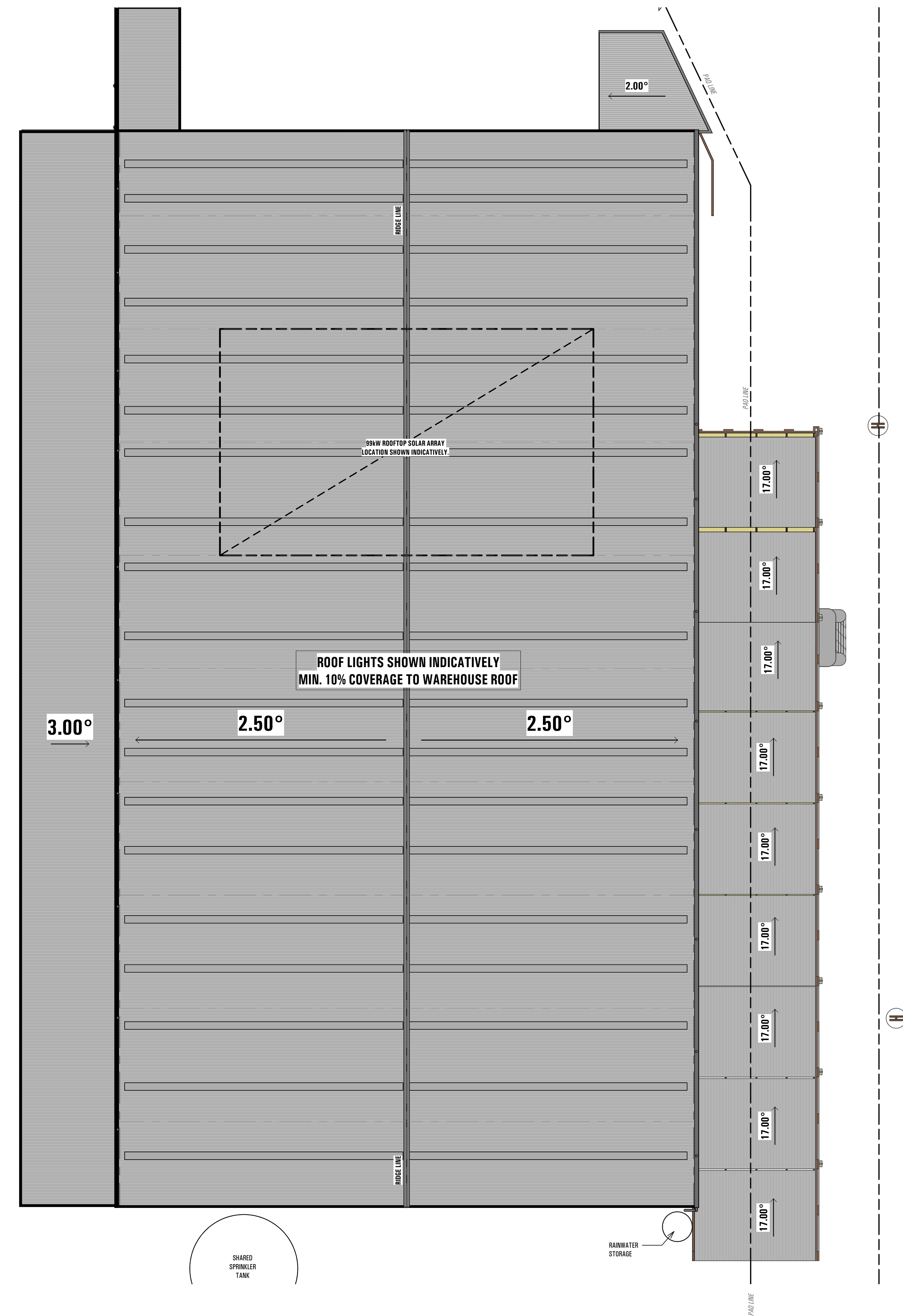
- EXTERNAL FINISHES:**
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 - AF.2 'BLACH' EXPRESS JOINTED NON COMBUSTIBLE ALUMINIUM CLADDING.
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 - TR.2 TRANSLUCENT WALL SHEETING
 - WT.1 EXISTING MOSAIC WALL TILE (REMEDIATED)
 - ZIN.1 ZINCALUME FINISH

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REVISION:	B	DRAWN BY:	MR

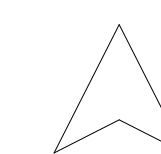
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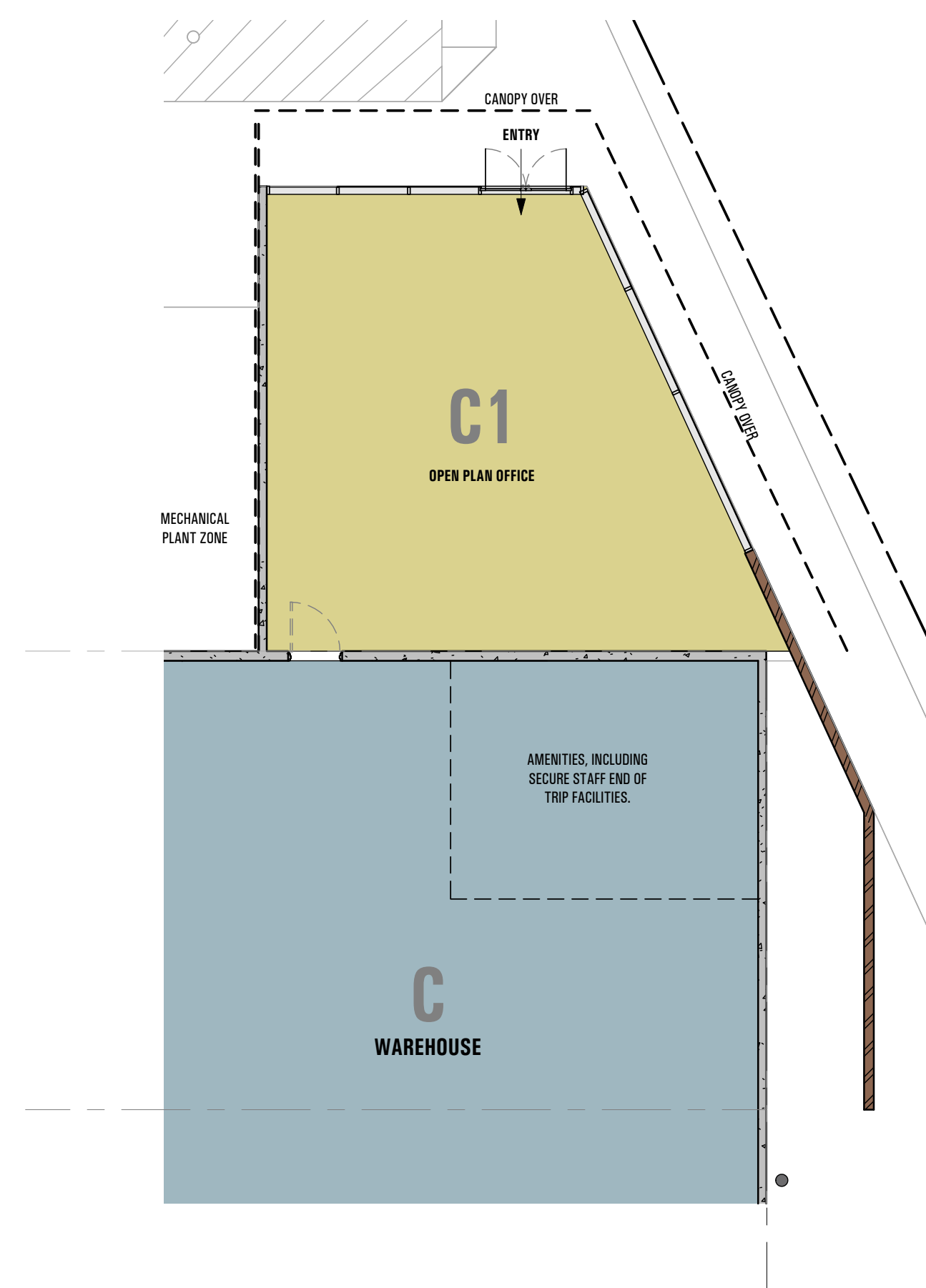


1 Bldg C Plan
1 : 250

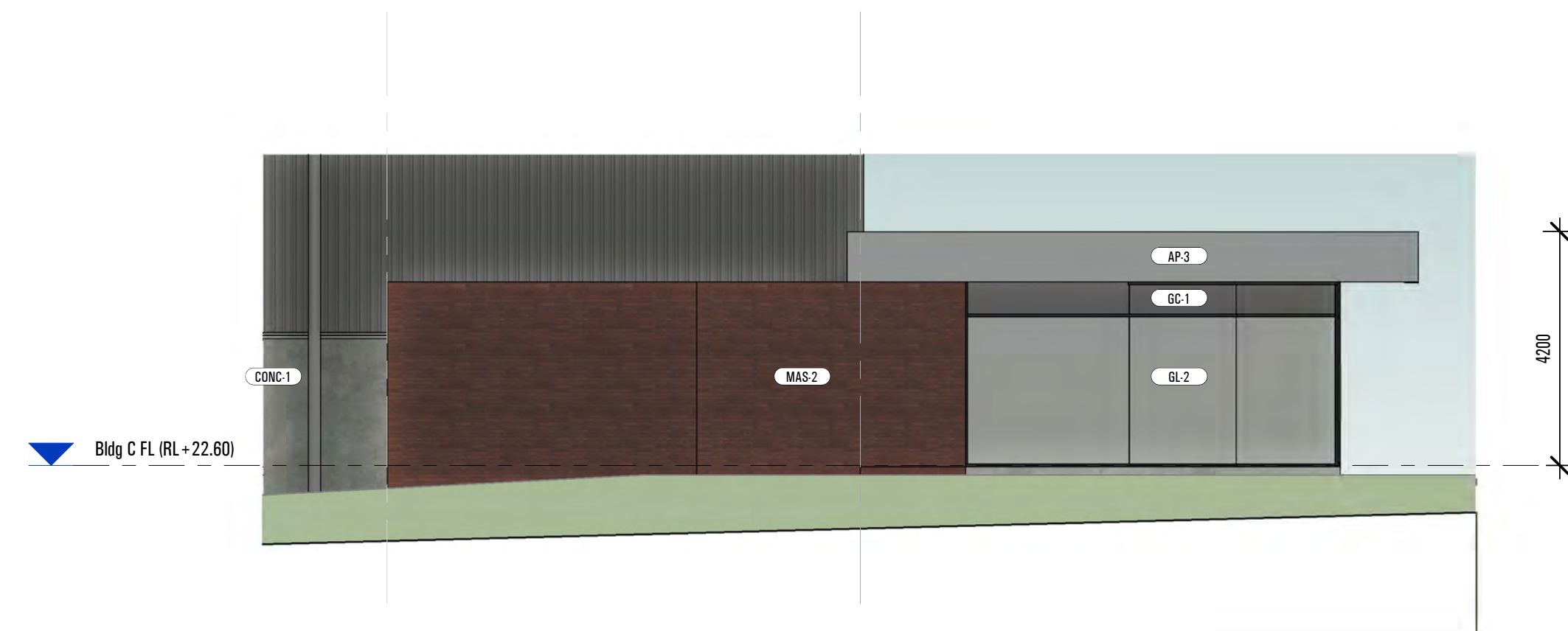


2 Bldg C Roof Plan
1 : 250

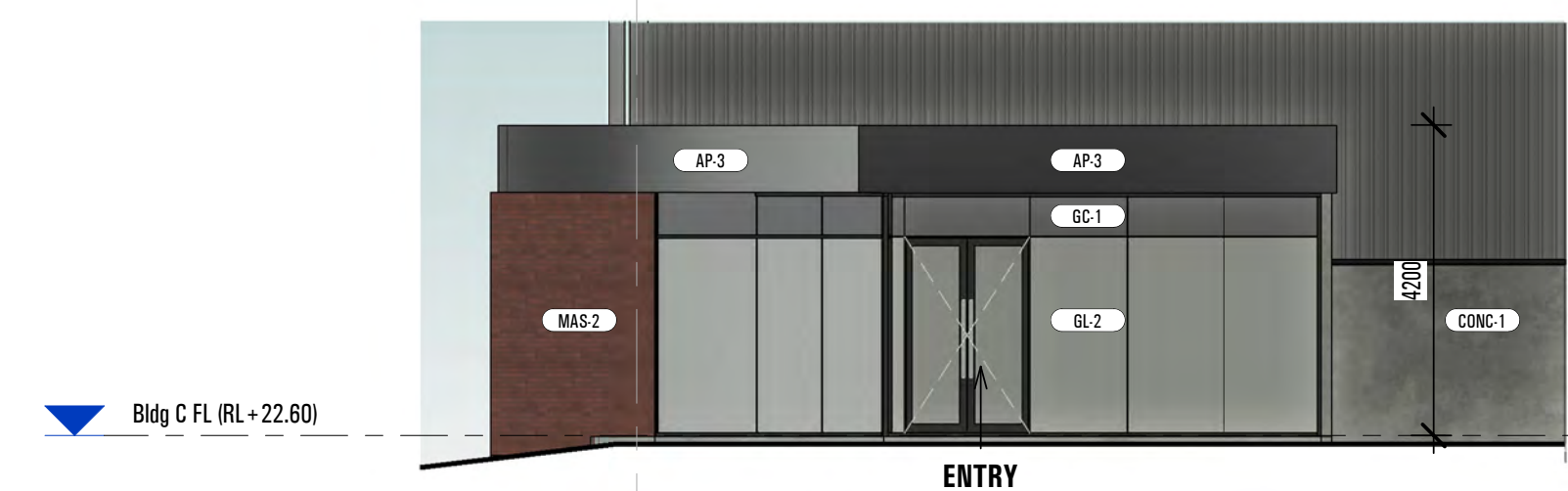




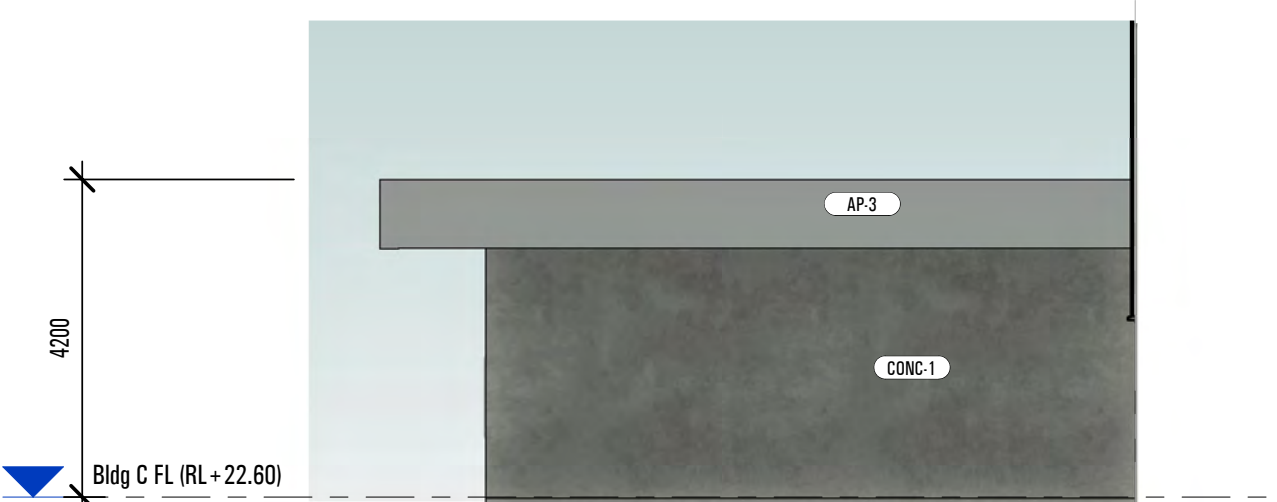
c1 Bldg C1 Office Plan
1 : 100



1E Bldg C1 Office Elevation - East
1 : 100



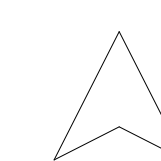
1N Bldg C1 Office Elevation - North
1 : 100

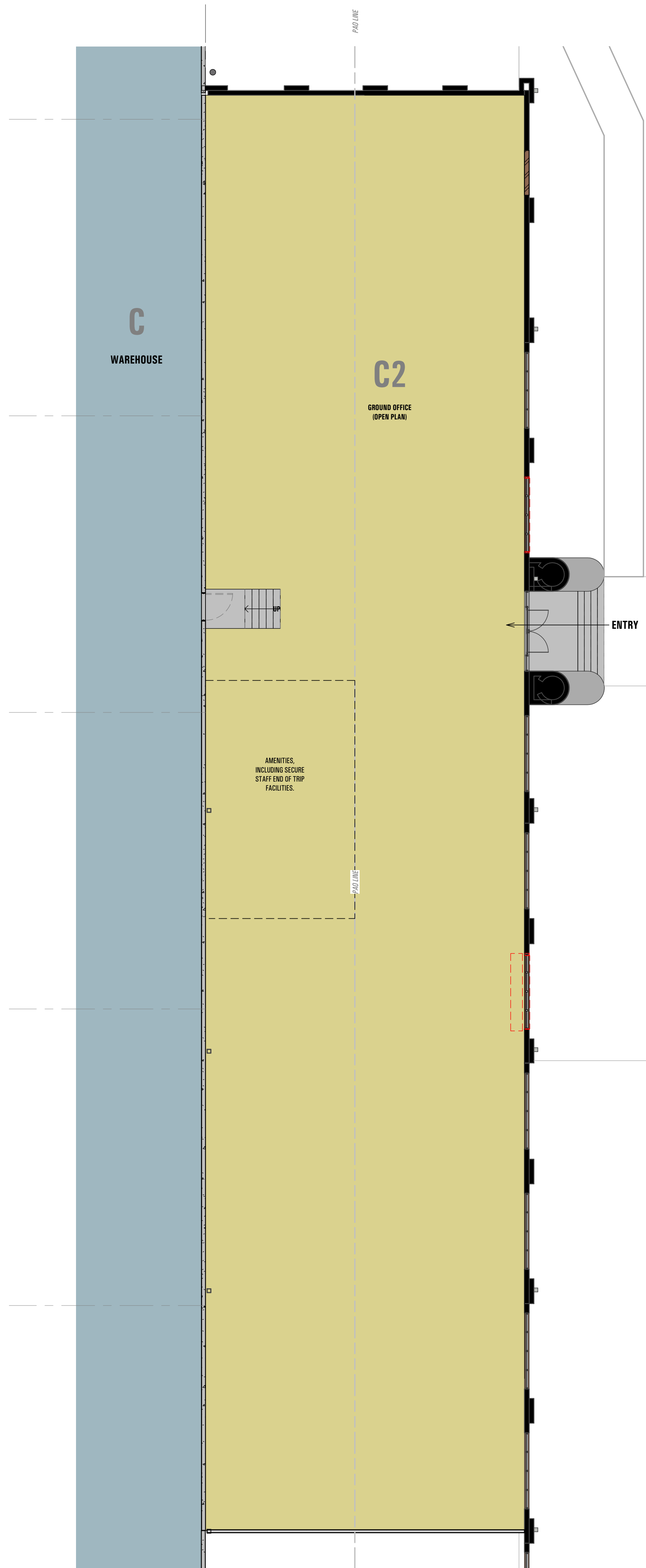


1W Bldg C1 Office Elevation - West
1 : 100

EXTERNAL FINISHES:

- AF 1 EXISTING 'GRIP' STANDING SEAM NON COMBUSTIBLE ALUMINIUM CLADDING. REFER TO 'CONSERVATION WORKS' DETAILS.
- AF 2 'BLACH' EXPRESS JOINTED NON COMBUSTIBLE ALUMINIUM CLADDING.
- AF 3 'SILVER' EXPRESS JOINTED NON COMBUSTIBLE ALUMINIUM CLADDING.
- CB 1 COLORBOND 'BASALT' (LAYED VERTICAL)
- CB 1H COLORBOND 'BASALT' (LAYED HORIZONTAL)
- CB 1M COLORBOND 'BASALT' DOWNPIPES
- CB 5 COLORBOND 'MONUMENT' (LAYED VERTICAL)
- CB 8M COLORBOND 'NIGHT SKY' LEAVES GUTTERS, FOOTMOULDS, & BARGE CAPPINGS.
- CB 8 COLORBOND 'SURFMIST'
- CB 8H COLORBOND 'SURFMIST' (LAYED HORIZONTAL)
- CB 8M COLORBOND 'SURFMIST' MOLDINGS (LEAVES GUTTER, DOWNPIPES, FOOTMOULDS, & BARGE CAPPINGS)
- CONC 1 NATURAL FINISH (TO PRECAST CONCRETE WALL PANEL)
- GL 2 BLUE TINT VISION GLAZING TO FUTURE BCA 'PART J' REPORT.
- GL 5 CLEAR VISION GLAZING TO FUTURE BCA 'PART J' REPORT.
- GL 7 COLOURBACKED GLAZING TO FUTURE BCA 'PART J' REPORT.
- MAS 1 MASONRY - EXISTING BRICK (REMEDIATED)
- MAS 2 MASONRY - RECYCLED BRICK TO MATCH SAWTOOTH FACADE.
- MAS 3 'BRICK LOOK' FORMLINER TO PRECAST CONCRETE. PAINT FINISH.
- MAS 4 MASONRY - EXISTING STACKED STONE (REMEDIATED)
- MAS 5 RENDER FINISH TO MASONRY
- PW 1 POWDERCOAT FINISH (BLACK TO MATCH COLORBOND NIGHT SKY)
- TR 1 TRANSLUCENT ROOF SHEETING
- TR 2 TRANSLUCENT WALL SHEETING
- WT 1 EXISTING MOSAIC WALL TILE (REMEDIATED)
- ZIN 1 ZINCALUME FINISH





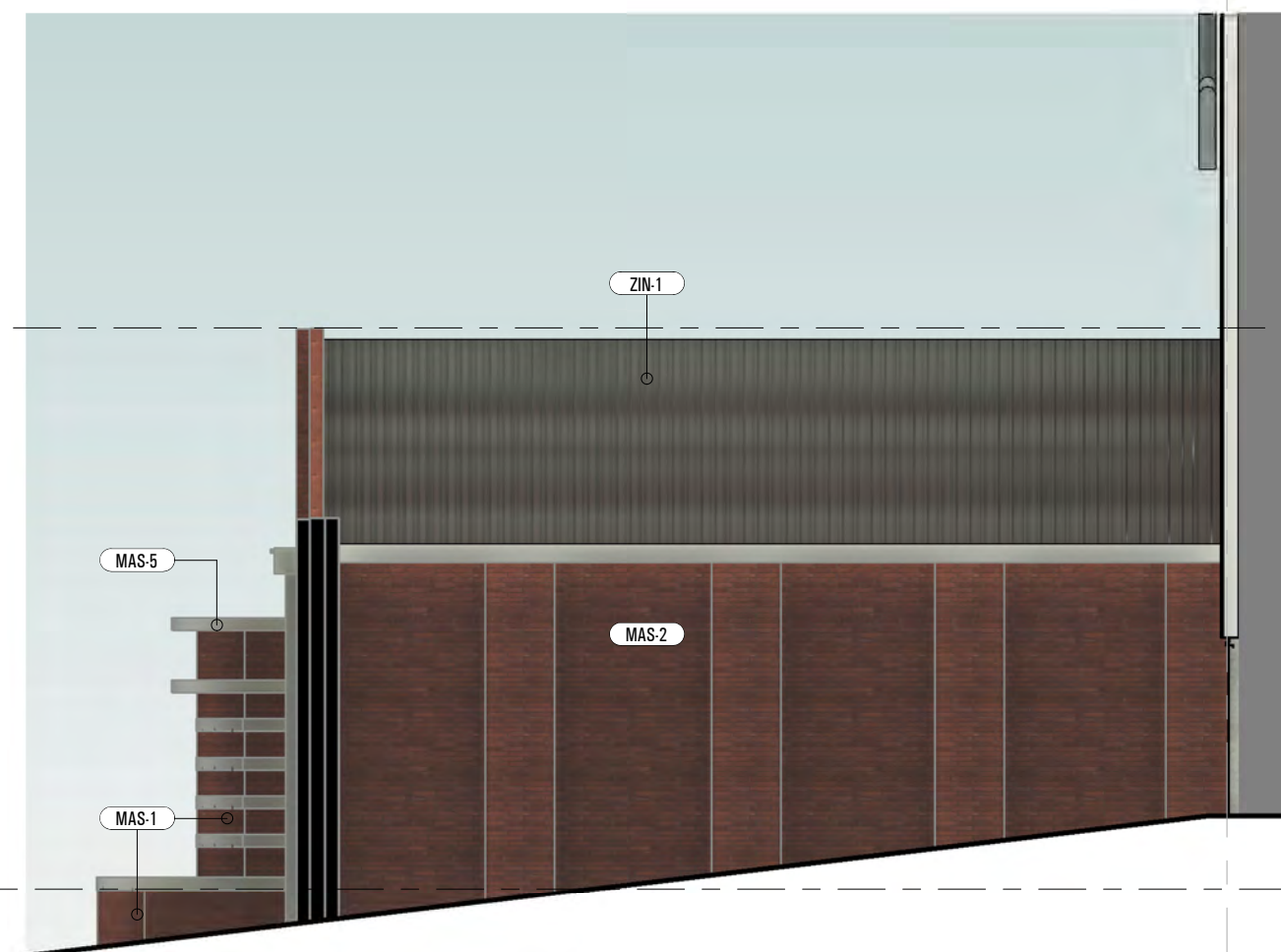
C2 Bldg C2 Office Plan
1 : 100

SAWTOOTH RIDGE HI (RL+29.15)
7550
C2 Office FL (RL+21.80)



2E Bldg C2 Office Elevation - East
1 : 100

SAWTOOTH RIDGE HI (RL+29.15)
7550
C2 Office FL (RL+21.80)

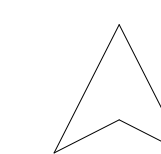


2N Bldg C2 Office Elevation - North
1 : 100

EXTERNAL FINISHES:

- AF-1 EXISTING 'GRIP' STANDING SEAM NON-COMBUSTIBLE ALUMINIUM CLADDING. REFER TO 'CONSERVATION WORKS' DETAILS.
- AF-2 'BLACK' EXPRESS JOINTED NON-COMBUSTIBLE ALUMINIUM CLADDING.
- CB-1 COLORBOND 'BASALT' (LAYERED VERTICAL)
- CB-1H COLORBOND 'BASALT' (LAYERED HORIZONTAL)
- CB-1M COLORBOND 'BASALT' DOWNPIPES
- CB-5 COLORBOND 'MONUMENT' (LAYERED VERTICAL)
- CB-6V COLORBOND 'NIGHT SKY' EAVES GUTTERS, FOOTMOULDS, & BARGE CAPPINGS
- CB-8 COLORBOND 'SURFMIST'
- CB-8H COLORBOND 'SURFMIST' (LAYERED HORIZONTAL)
- CB-8M COLORBOND 'SURFMIST' MOLDINGS (EAVES GUTTER, DOWNPIPES, FOOTMOULDS, & BARGE CAPPINGS)
- CONC-1 NATURAL FINISH (TO PRECAST CONCRETE WALL PANEL)
- GL-2 BLUE TINT VISION GLAZING TO FUTURE BCA 'PART J' REPORT.
- GL-5 CLEAR VISION GLAZING TO FUTURE BCA 'PART J' REPORT.
- GC-1 COLOURBACKED GLAZING TO FUTURE BCA 'PART J' REPORT.
- MAS-1 MASONRY - EXISTING BRICK (REMEDIATED)
- MAS-2 MASONRY - RECYCLED BRICK TO MATCH SAWTOOTH FACADE.
- MAS-3 'BRICK LOOK' FORMLINER TO PRECAST CONCRETE. PAINT FINISH.
- MAS-4 MASONRY - EXISTING STACKED STONE (REMEDIATED)
- MAS-5 RENDER FINISH TO MASONRY
- PW-1 POWDERCOAT FINISH (BLACK TO MATCH COLORBOND NIGHT SKY)
- TR-1 TRANSLUCENT ROOF SHEETING
- TR-2 TRANSLUCENT WALL SHEETING
- WT-1 EXISTING MOSAIC WALL TILE (REMEDIATED)
- ZIN-1 ZINCALUME FINISH

JOB NO.	4372	SCALE:	As indicated @B1 SIZED SHEET
Drawing No:	TP34	ISSUE DATE:	2022-10-18
REVISION:	B	DRAWN BY:	MR





c3 Bldg C3 Plan
1 : 100



3E Bldg C3 Office Elevation - East
1 : 100



3S Bldg C3 Office Elevation - South
1 : 100

EXTERNAL FINISHES:

- AP.1 EXISTING 'GRIP' STANDING SEAM NON COMBUSTIBLE ALUMINIUM CLADDING. REFER TO 'CONSERVATION WORKS' DETAILS.
- AP.2 'BLACK' EXPRESS JOINTED NON COMBUSTIBLE ALUMINIUM CLADDING.
- AP.3 'SILVER' EXPRESS JOINTED NON COMBUSTIBLE ALUMINIUM CLADDING.
- CB.1 COLORBOND 'BASALT' (LAYERED VERTICAL)
- CB.1H COLORBOND 'BASALT' (LAYERED HORIZONTAL)
- CB.1M COLORBOND 'BASALT' DOWNPIPES
- CB.5 COLORBOND 'MONUMENT' (LAYERED VERTICAL)
- CB.8M COLORBOND 'NIGHT SKY' GAVES, GUTTERS, FOOTMOULDS, & BARGE CAPPINGS
- CB.8 COLORBOND 'SURFMIST'
- CB.8H COLORBOND 'SURFMIST' (LAYERED HORIZONTAL)
- CB.8M COLORBOND 'SURFMIST' MOULDINGS (LEAVES GUTTER, DOWNPIPES, FOOTMOULDS, & BARGE CAPPINGS)
- CONC.1 NATURAL FINISH (TO PRECAST CONCRETE WALL PANEL)
- GL.2 BLUE TINT VISION GLAZING TO FUTURE BCA 'PART J' REPORT.
- GL.5 CLEAR VISION GLAZING TO FUTURE BCA 'PART J' REPORT.
- GL.7 COLOURBACKED GLAZING TO FUTURE BCA 'PART J' REPORT.
- MAS.1 MASONRY - EXISTING BRICK (REMEDIATED)
- MAS.2 MASONRY - RECYCLED BRICK TO MATCH SAWTOOTH FACADE.
- MAS.3 'BRICK LOOK' FORMLINER TO PRECAST CONCRETE. PAINT FINISH.
- MAS.4 MASONRY - EXISTING STACKED STONE (REMEDIATED)
- MAS.5 RENDER FINISH TO MASONRY
- PW.1 POWDERCOAT FINISH (BLACK TO MATCH COLORBOND NIGHT SKY)
- TR.1 TRANSLUCENT ROOF SHEETING
- TR.2 TRANSLUCENT WALL SHEETING
- WT.1 EXISTING MOSAIC WALL TILE (REMEDIATED)
- ZIN.1 ZINCALUME FINISH

SHEET NAME: Bldg C3 Office Details			
JOB NO.	4372	SCALE: As indicated	@B1 SIZED SHEET
Drawing No:	TP35	ISSUE DATE:	2022-10-18
REVISION:	B	DRAWN BY:	MR

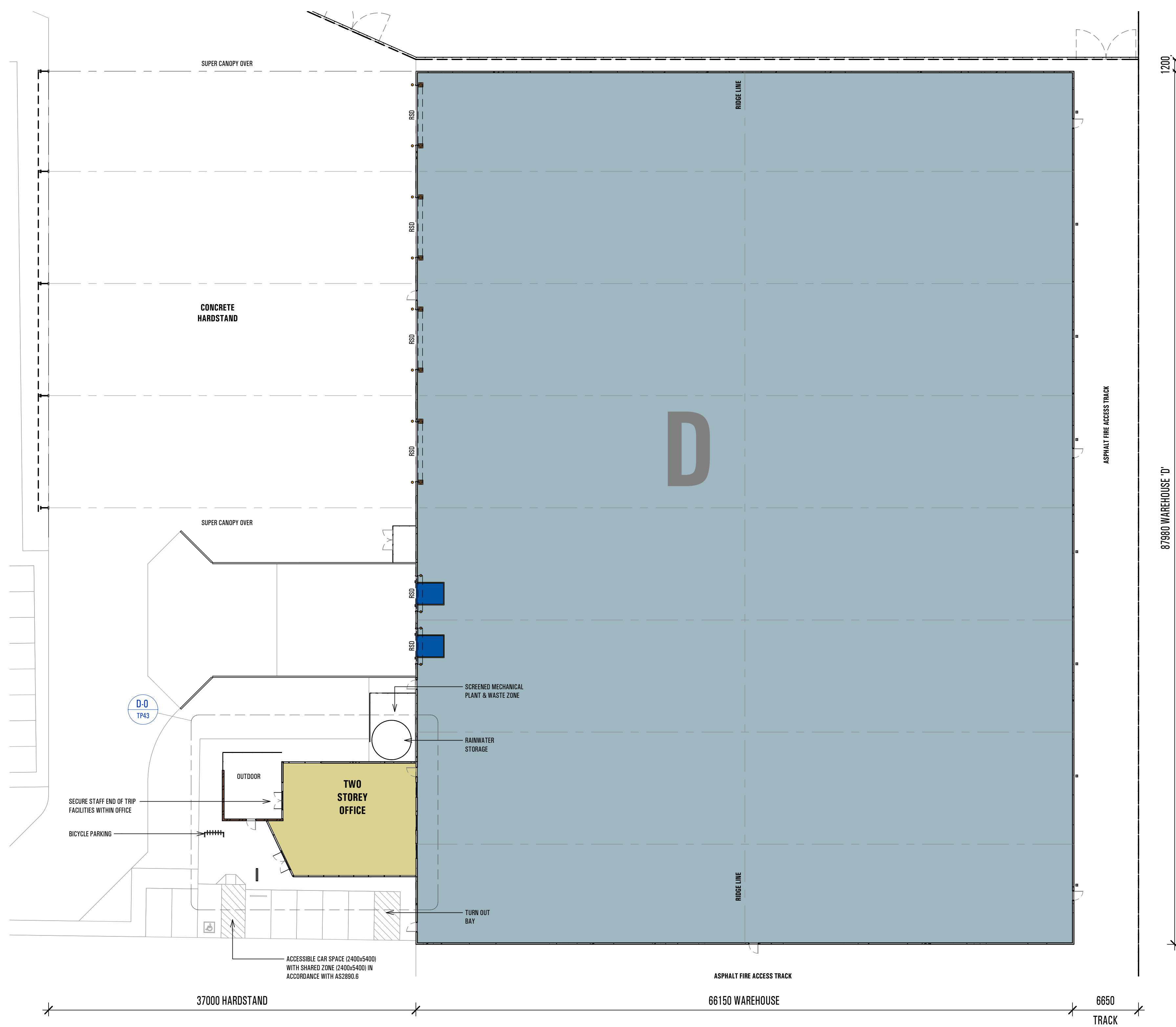
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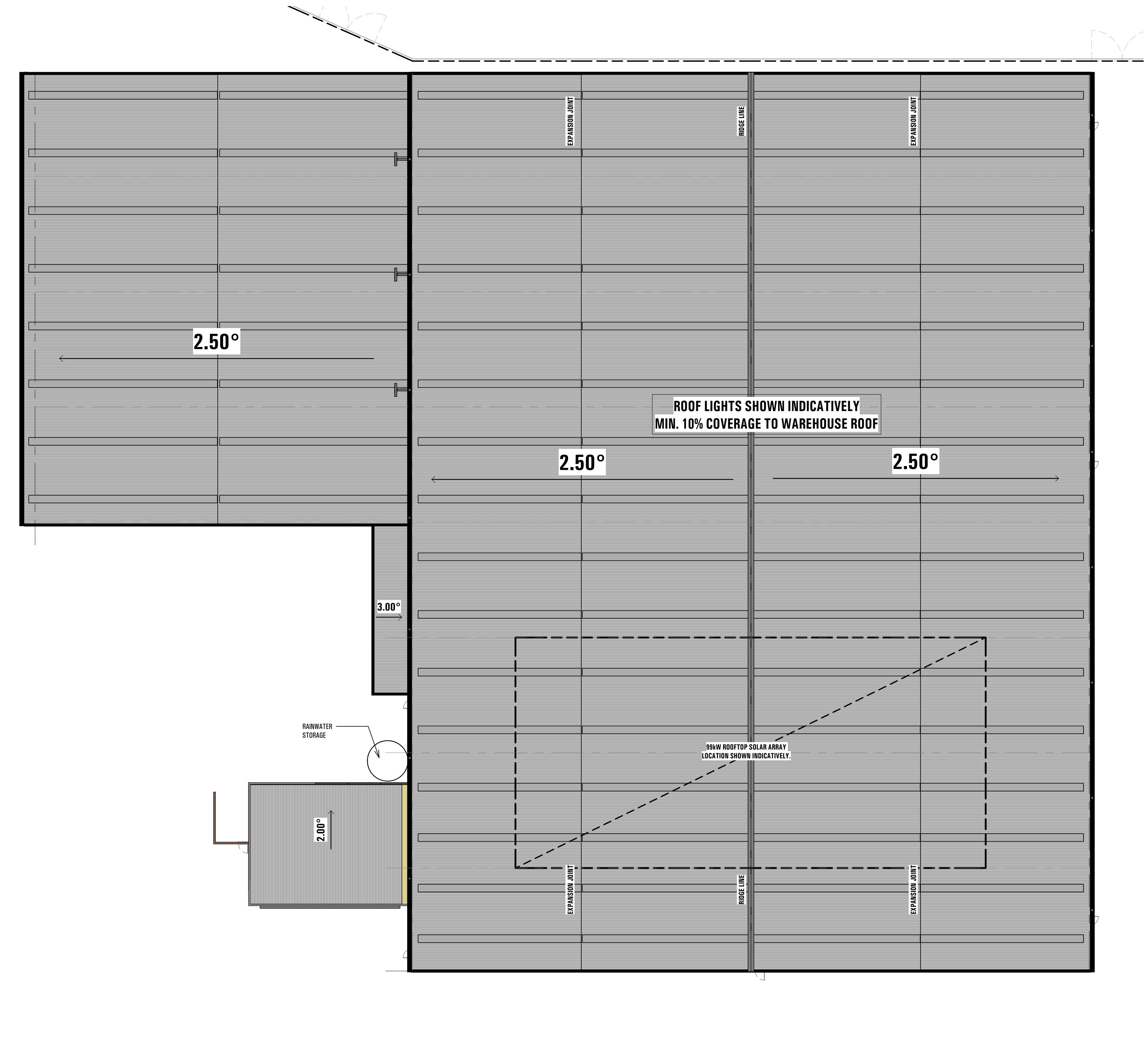
500 Burwood Road,
Hawthorn, Victoria,
Australia 3122

Telephone (03) 9810 8300
Web: www.ganstruct.com.au

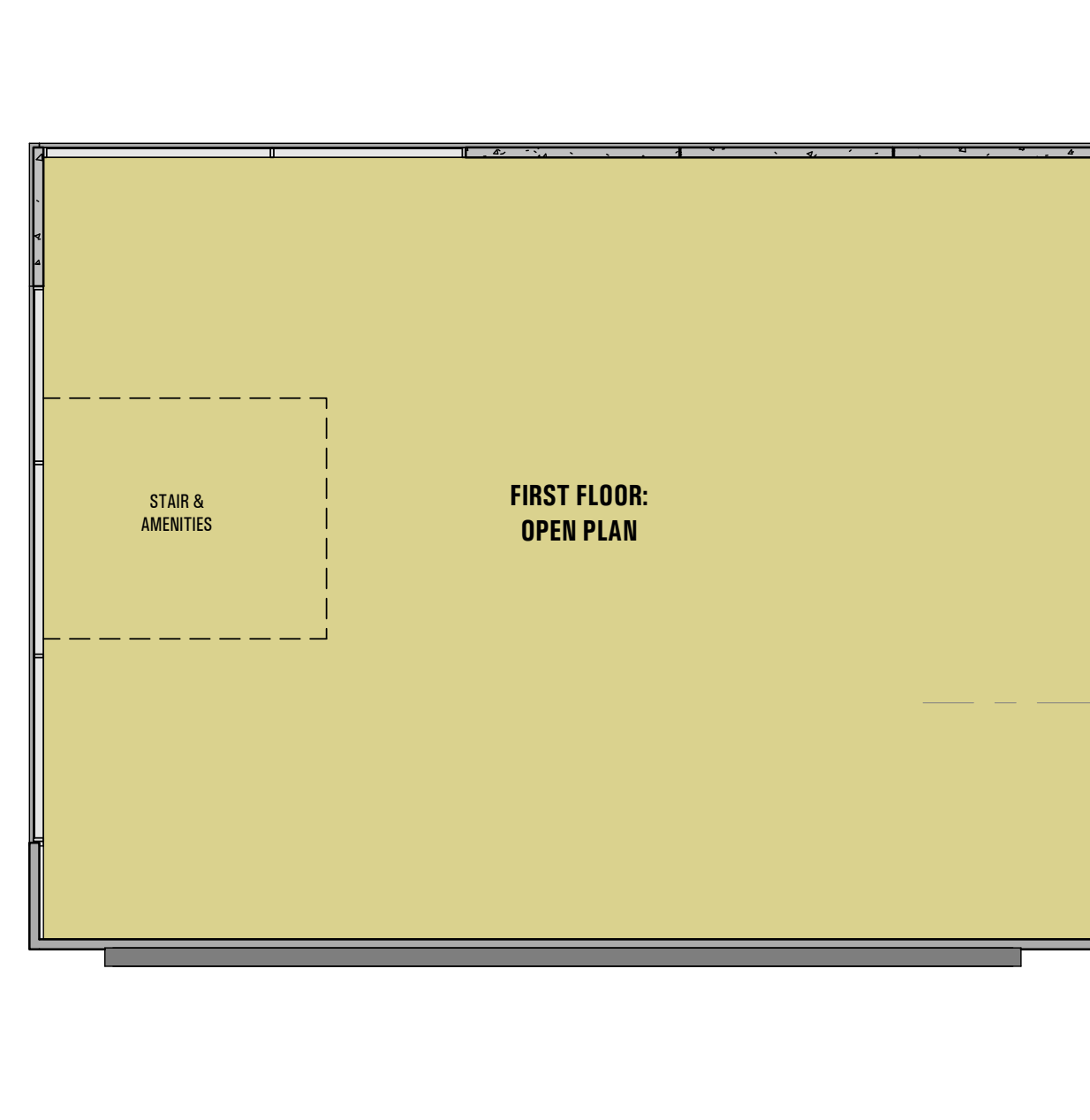




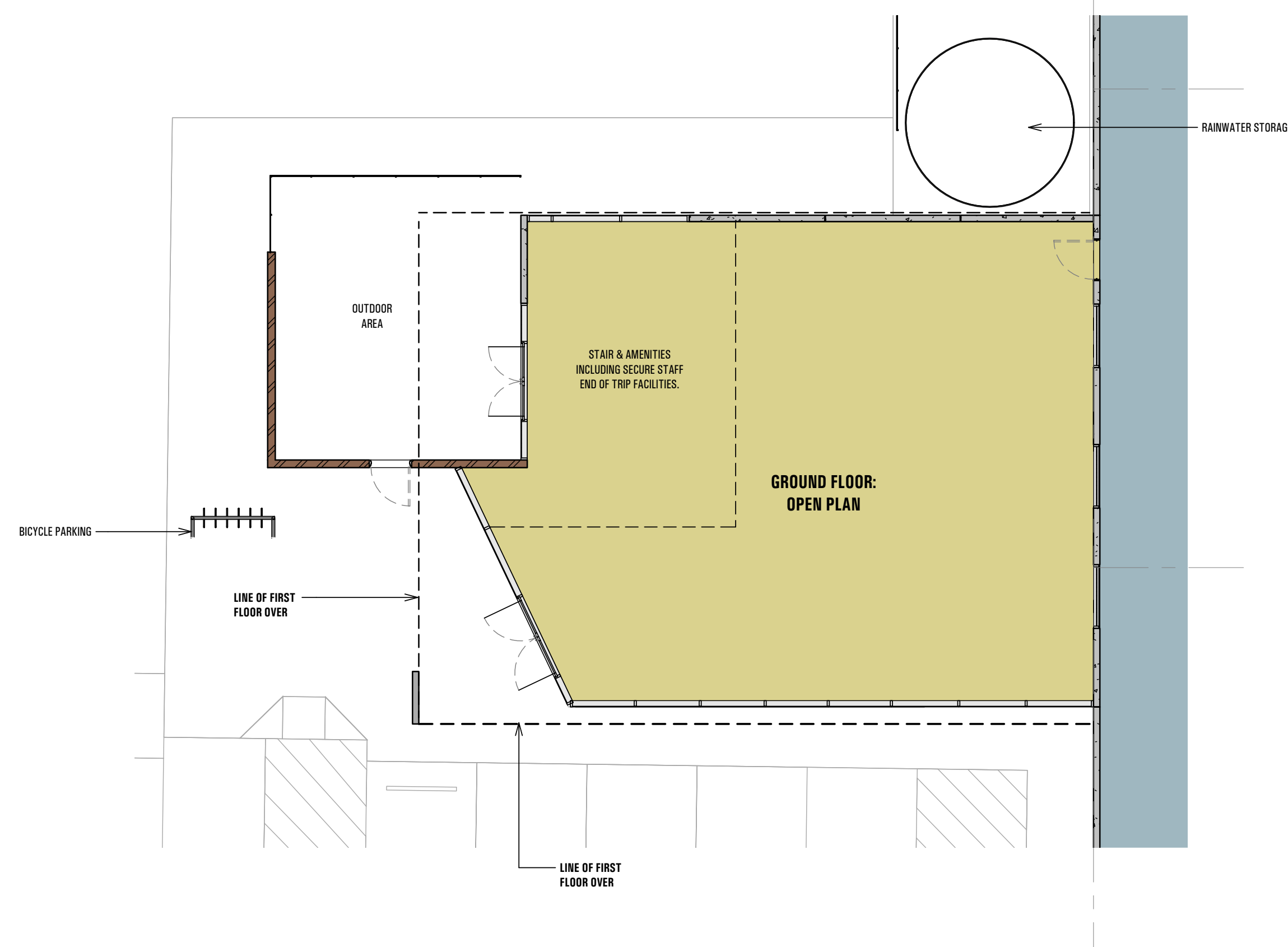
1 Bldg D Plan
1 : 250



2 Bldg D Plan (Roof)
1 : 250



D-1 Bldg D Office - First Floor Plan
1 : 100



D-0 Bldg D Office - Ground Floor Plan
1 : 100



N Bldg D Office - North Elevation
1 : 100



S Bldg D Office - South Elevation
1 : 100

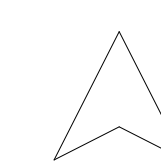


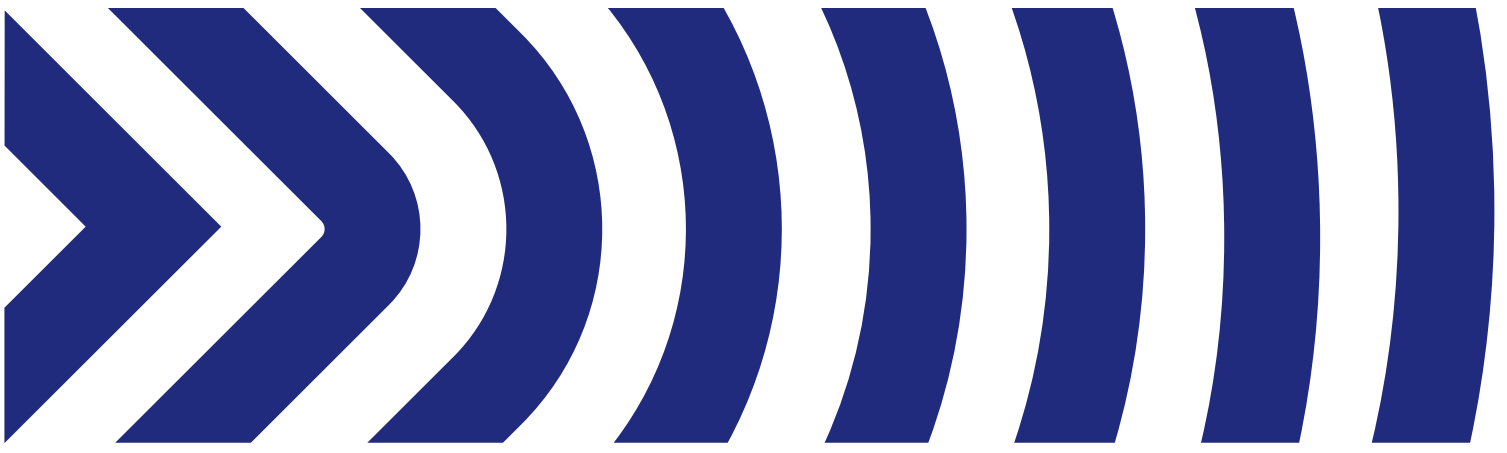
W Bldg D Office - West Elevation
1 : 100

EXTERNAL FINISHES:

- AL.1 EXISTING 'GRIP' STANDING SEAM NON-COMBUSTIBLE ALUMINIUM CLADDING. REFER TO 'CONSERVATION WORKS' DETAILS.
- AL.2 'BLACH' EXPRESS JOINTED NON-COMBUSTIBLE ALUMINIUM CLADDING.
- AL.3 'SHEVEE' EXPRESS JOINTED NON-COMBUSTIBLE ALUMINIUM CLADDING.
- CB.1 COLORBOND 'BASALT' (LAYERED VERTICAL)
- CB.1H COLORBOND 'BASALT' (LAYERED HORIZONTAL)
- CB.1M COLORBOND 'BASALT' DOWNPIPES
- CB.5 COLORBOND 'MONUMENT' (LAYERED VERTICAL)
- CB.6M COLORBOND 'NIGHT SKY' EAVES GUTTERS, FOOTMOLDS, & BARGE CAPPINGS
- CB.8 COLORBOND 'SURFMIST'
- CB.8H COLORBOND 'SURFMIST' (LAYERED HORIZONTAL)
- CB.8M COLORBOND 'SURFMIST' MOLDINGS (EAVES GUTTER, DOWNPIPES, FOOTMOLDS, & BARGE CAPPINGS)
- CONC.1 NATURAL FINISH (TO PRECAST CONCRETE WALL PANEL)
- GL.2 BLUE TINT VISION GLAZING TO FUTURE BCA 'PART J' REPORT.
- GL.3 CLEAR VISION GLAZING TO FUTURE BCA 'PART J' REPORT.
- GL.4 COLOURBACKED GLAZING TO FUTURE BCA 'PART J' REPORT.
- MAS.1 MASONRY - EXISTING BRICK (REMEDIATED)
- MAS.2 MASONRY - RECYCLED BRICK TO MATCH SAWTOOTH FACADE.
- MAS.3 'BRICK LOOK' FORMLINER TO PRECAST CONCRETE. PAINT FINISH.
- MAS.4 MASONRY - EXISTING STACKED STONE (REMEDIATED)
- MAS.5 RENDER FINISH TO MASONRY
- PW.1 POWDERCOAT FINISH (BLACK TO MATCH COLORBOND NIGHT SKY)
- TR.1 TRANSLUCENT ROOF SHEETING
- TR.2 TRANSLUCENT WALL SHEETING
- WT.1 EXISTING MOSAIC WALL TILE (REMEDIATED)
- ZIN.1 ZINCALUME FINISH

JOB NO.	4372	SCALE:	As indicated	@B1 SIZED SHEET
Drawing No:	TP43	ISSUE DATE:	2022-10-18	
REVISION:	B	DRAWN BY:	MR	

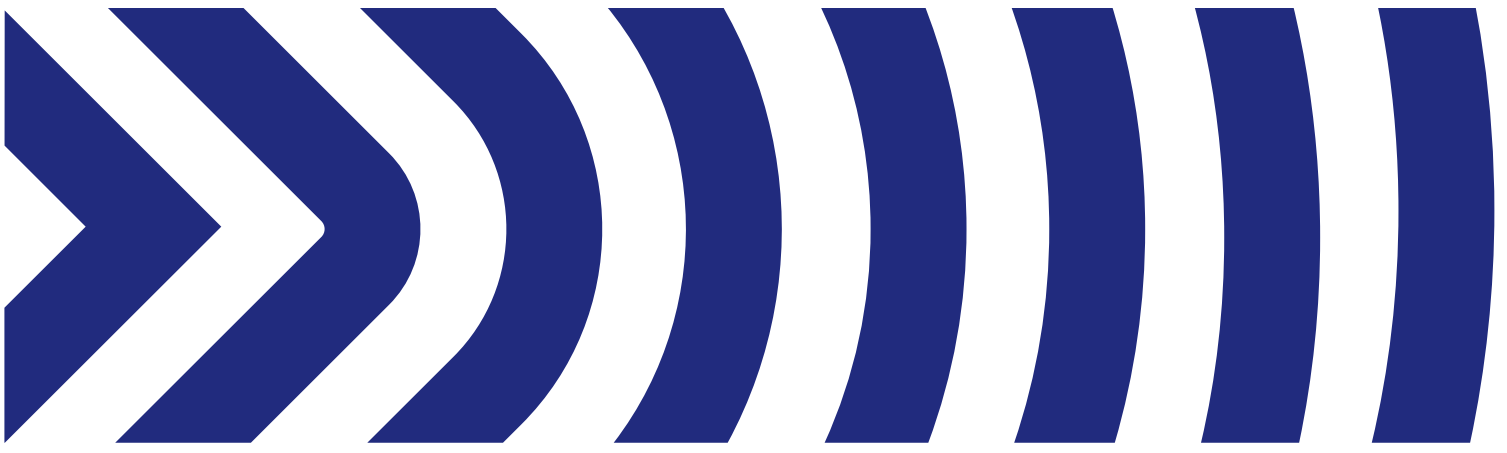




Appendix B

Case Study Data

Operator	Location	Sub-Location	Size	Peak Parking Rate (spaces/100sq.m)
			Total Floor Area (sq.m)	Weekday
Warehouse	Building 2, 1090-1124 Centre Road, Oakleigh South	Metro-Middle	10,046	0.22
Warehouse	Building 3, 1090-1124 Centre Road, Oakleigh South	Metro-Middle	9,428	0.15
Warehouse	25-29 Westgate Drive, Altona North	Metro-Middle	7,150	0.42
Warehouse	300 Lorimer Street, Port Melbourne	Metro-Inner	11,973	0.69
Warehouse	76 Naxos Way, Keysborough	Metro-Outer	7,357	0.82
Warehouse	66-76 Dunmore Drive, Truganina (Warehouse 1)	Metro-Outer	14,176	0.20
Warehouse	66-76 Dunmore Drive, Truganina (Warehouse 2)	Metro-Outer	13,695	0.07
			Average	0.37



Appendix C

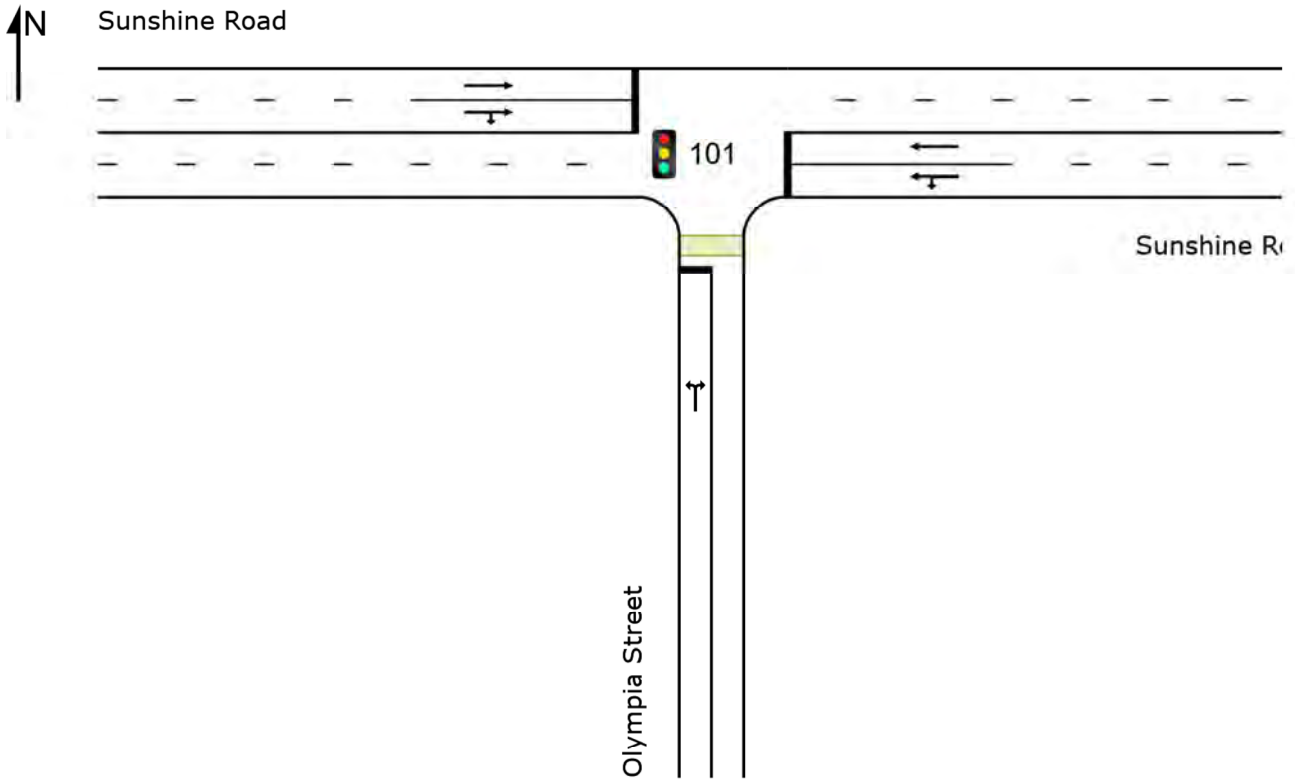
SIDRA Movement Summaries

SITE LAYOUT

 Site: 101 [Sunshine Rd/Olympia St - AM - Existing (Site Folder: General)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 101 [Sunshine Rd/Olympia St - AM - Existing (Site Folder: General)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Olympia Street														
1	L2	19	15.0	22	15.0	0.408	66.4	LOS E	2.7	21.6	0.99	0.75	0.99	28.2
3	R2	20	15.0	24	15.0	*0.408	66.4	LOS E	2.7	21.6	0.99	0.75	0.99	28.1
Approach		39	15.0	46	15.0	0.408	66.4	LOS E	2.7	21.6	0.99	0.75	0.99	28.1
East: Sunshine Road														
4	L2	41	15.0	48	15.0	0.427	32.9	LOS C	12.4	97.7	0.76	0.68	0.76	39.9
5	T1	473	15.0	556	15.0	*0.427	27.6	LOS C	12.8	101.0	0.77	0.67	0.77	41.1
Approach		514	15.0	605	15.0	0.427	28.0	LOS C	12.8	101.0	0.76	0.67	0.76	41.0
West: Sunshine Road														
11	T1	890	15.0	1047	15.0	0.431	7.4	LOS A	14.3	112.9	0.39	0.36	0.39	53.4
12	R2	31	15.0	36	15.0	*0.431	21.5	LOS C	14.3	112.9	0.62	0.57	0.62	45.6
Approach		921	15.0	1084	15.0	0.431	7.8	LOS A	14.3	112.9	0.40	0.37	0.40	53.1
All Vehicles		1474	15.0	1734	15.0	0.431	16.4	LOS B	14.3	112.9	0.54	0.48	0.54	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Olympia Street												
P1	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	214.7	208.6	0.97
All Pedestrians		50	53	54.3	LOS E	0.2	0.2	0.95	0.95	214.7	208.6	0.97

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: 101 [Sunshine Rd/Olympia St - AM - Existing (Site Folder: General)]

New Site
 Site Category: (None)
 Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

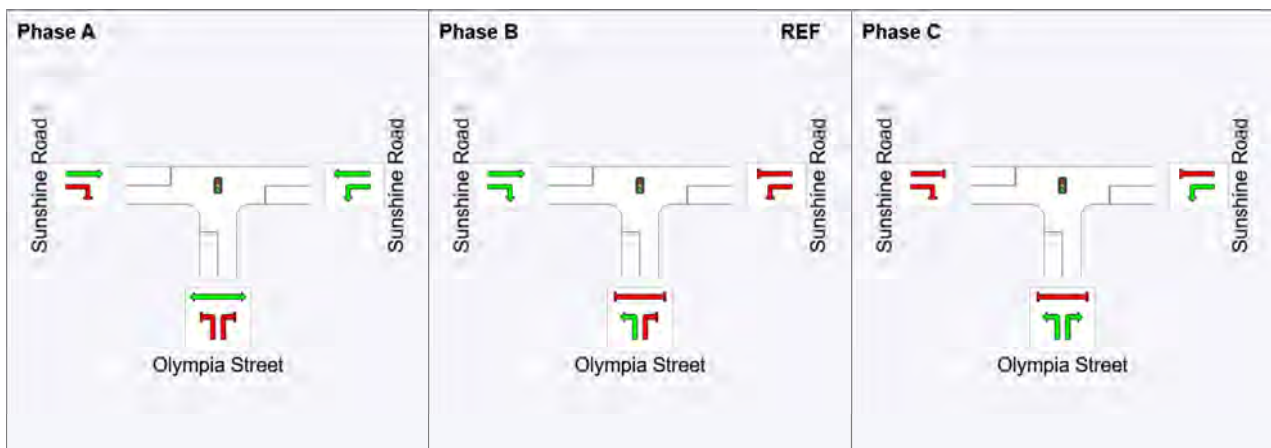
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Leading Right Turn
Reference Phase: Phase B
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	66	0	54
Green Time (sec)	48	48	6
Phase Time (sec)	54	54	12
Phase Split	45%	45%	10%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
 VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class (MC) Running	Undetected Movement
Mixed Running & Stopped MCs	Continuous Movement
Other Movement Class (MC) Stopped	Phase Transition Applied

MOVEMENT SUMMARY

Site: 101 [Sunshine Rd/Olympia St - AM - Post-Dev (Site Folder: General)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Olympia Street														
1	L2	19	15.0	22	15.0	0.363	64.8	LOS E	2.7	21.2	0.98	0.75	0.98	28.5
3	R2	20	15.0	24	15.0	*0.363	64.8	LOS E	2.7	21.2	0.98	0.75	0.98	28.4
Approach		39	15.0	46	15.0	0.363	64.8	LOS E	2.7	21.2	0.98	0.75	0.98	28.5
East: Sunshine Road														
4	L2	90	15.0	106	15.0	0.491	35.0	LOS C	14.1	111.5	0.79	0.73	0.79	38.6
5	T1	473	15.0	556	15.0	*0.491	29.8	LOS C	14.8	116.9	0.80	0.71	0.80	39.9
Approach		563	15.0	662	15.0	0.491	30.6	LOS C	14.8	116.9	0.80	0.71	0.80	39.7
West: Sunshine Road														
11	T1	890	15.0	1047	15.0	0.493	8.9	LOS A	16.2	127.7	0.43	0.40	0.43	52.0
12	R2	79	15.0	93	15.0	*0.493	29.3	LOS C	16.2	127.7	0.74	0.69	0.74	41.2
Approach		969	15.0	1140	15.0	0.493	10.6	LOS B	16.2	127.7	0.45	0.42	0.45	50.9
All Vehicles		1571	15.0	1848	15.0	0.493	19.1	LOS B	16.2	127.7	0.59	0.53	0.59	45.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Olympia Street												
P1	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	214.7	208.6	0.97
All Pedestrians		50	53	54.3	LOS E	0.2	0.2	0.95	0.95	214.7	208.6	0.97

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: 101 [Sunshine Rd/Olympia St - AM - Post-Dev (Site Folder: General)]

New Site
 Site Category: (None)
 Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

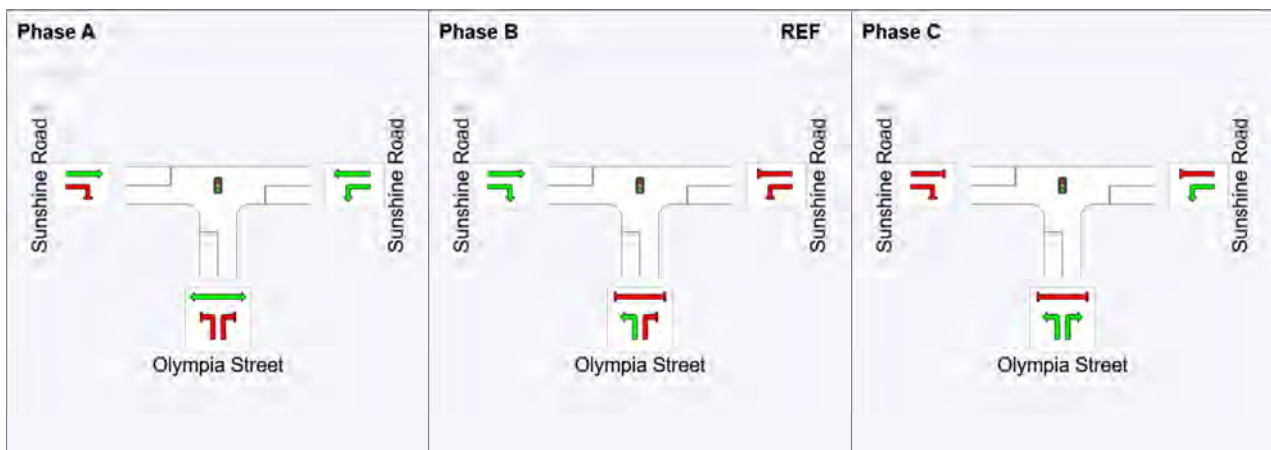
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Leading Right Turn
Reference Phase: Phase B
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	68	0	55
Green Time (sec)	46	49	7
Phase Time (sec)	52	55	13
Phase Split	43%	46%	11%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
 VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class (MC) Running	Undetected Movement
Mixed Running & Stopped MCs	Continuous Movement
Other Movement Class (MC) Stopped	Phase Transition Applied

MOVEMENT SUMMARY

Site: 101 [Sunshine Rd/Olympia St - PM - Existing (Site Folder: General)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Olympia Street														
1	L2	40	15.0	47	15.0	0.419	60.8	LOS E	4.4	34.7	0.97	0.77	0.97	29.5
3	R2	26	15.0	31	15.0	*0.419	60.8	LOS E	4.4	34.7	0.97	0.77	0.97	29.4
Approach		66	15.0	78	15.0	0.419	60.8	LOS E	4.4	34.7	0.97	0.77	0.97	29.4
East: Sunshine Road														
4	L2	16	15.0	19	15.0	0.434	16.1	LOS B	13.5	106.8	0.51	0.47	0.51	49.3
5	T1	836	15.0	984	15.0	*0.434	10.6	LOS B	14.1	111.1	0.52	0.47	0.52	51.0
Approach		852	15.0	1002	15.0	0.434	10.7	LOS B	14.1	111.1	0.52	0.47	0.52	50.9
West: Sunshine Road														
11	T1	596	15.0	701	15.0	0.391	10.7	LOS B	8.8	69.1	0.41	0.36	0.41	50.9
12	R2	18	15.0	21	15.0	*0.391	48.6	LOS D	7.8	61.3	0.90	0.74	0.90	33.9
Approach		614	15.0	722	15.0	0.391	11.8	LOS B	8.8	69.1	0.42	0.37	0.42	50.2
All Vehicles		1532	15.0	1802	15.0	0.434	13.3	LOS B	14.1	111.1	0.50	0.44	0.50	49.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Olympia Street												
P1	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	214.7	208.6	0.97
All Pedestrians		50	53	54.3	LOS E	0.2	0.2	0.95	0.95	214.7	208.6	0.97

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: 101 [Sunshine Rd/Olympia St - PM - Existing (Site Folder: General)]

New Site
 Site Category: (None)
 Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

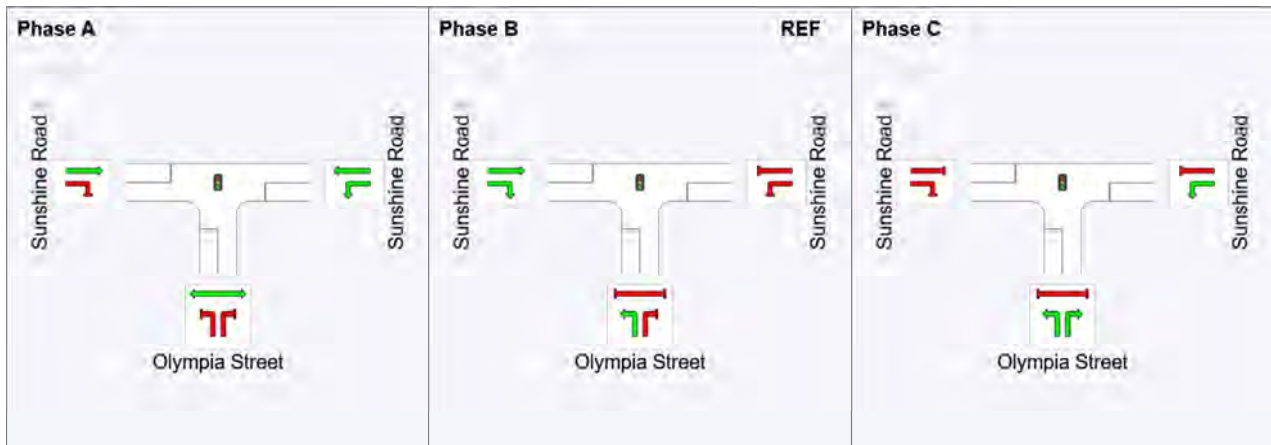
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Leading Right Turn
Reference Phase: Phase B
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	36	0	20
Green Time (sec)	78	14	10
Phase Time (sec)	84	20	16
Phase Split	70%	17%	13%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
 VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class (MC) Running	Undetected Movement
Mixed Running & Stopped MCs	Continuous Movement
Other Movement Class (MC) Stopped	Phase Transition Applied

MOVEMENT SUMMARY

Site: 101 [Sunshine Rd/Olympia St - PM - Post-Dev (Site Folder: General)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Olympia Street														
1	L2	88	15.0	104	15.0	0.499	49.2	LOS D	9.9	77.9	0.92	0.81	0.92	32.5
3	R2	75	15.0	88	15.0	*0.499	49.2	LOS D	9.9	77.9	0.92	0.81	0.92	32.4
Approach		163	15.0	192	15.0	0.499	49.2	LOS D	9.9	77.9	0.92	0.81	0.92	32.4
East: Sunshine Road														
4	L2	16	15.0	19	15.0	0.506	22.4	LOS C	17.1	135.3	0.64	0.58	0.64	45.5
5	T1	836	15.0	984	15.0	*0.506	17.0	LOS B	17.8	140.8	0.65	0.59	0.65	46.8
Approach		852	15.0	1002	15.0	0.506	17.1	LOS B	17.8	140.8	0.65	0.59	0.65	46.8
West: Sunshine Road														
11	T1	596	15.0	701	15.0	0.461	16.2	LOS B	14.7	116.2	0.57	0.51	0.57	47.3
12	R2	18	15.0	21	15.0	*0.461	52.7	LOS D	8.2	65.1	0.94	0.77	0.94	32.7
Approach		614	15.0	722	15.0	0.461	17.3	LOS B	14.7	116.2	0.59	0.51	0.59	46.7
All Vehicles		1629	15.0	1916	15.0	0.506	20.4	LOS C	17.8	140.8	0.65	0.58	0.65	44.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Olympia Street												
P1	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	214.7	208.6	0.97
All Pedestrians		50	53	54.3	LOS E	0.2	0.2	0.95	0.95	214.7	208.6	0.97

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: 101 [Sunshine Rd/Olympia St - PM - Post-Dev (Site Folder: General)]

New Site
 Site Category: (None)
 Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

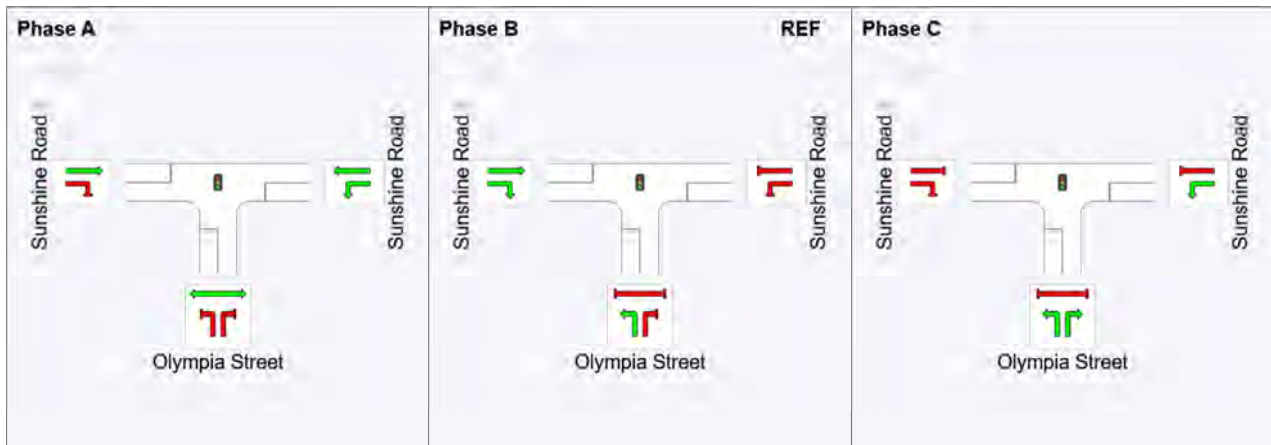
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Leading Right Turn
Reference Phase: Phase B
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	47	0	16
Green Time (sec)	67	10	25
Phase Time (sec)	73	16	31
Phase Split	61%	13%	26%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
 VAR: Variable Phase

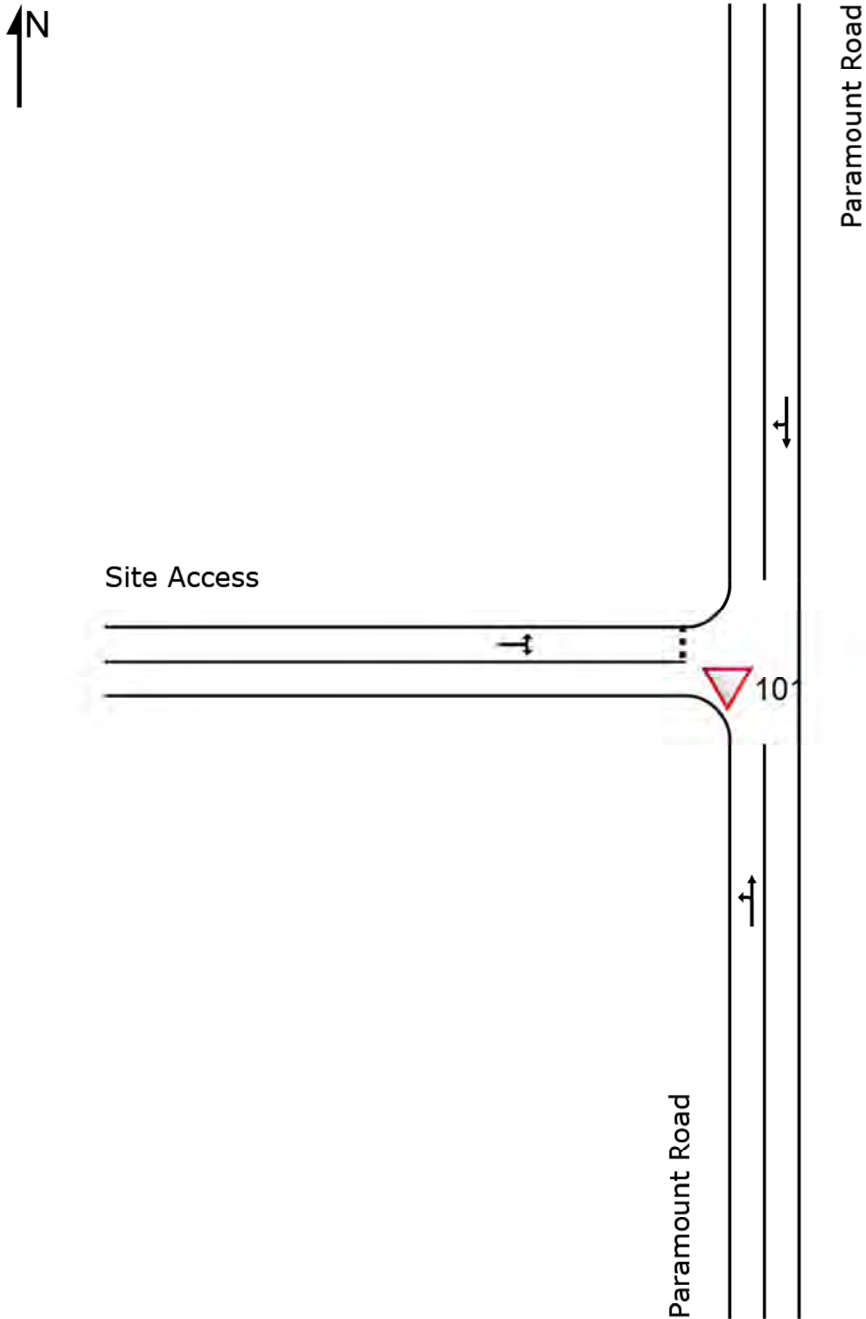
Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class (MC) Running	Undetected Movement
Mixed Running & Stopped MCs	Continuous Movement
Other Movement Class (MC) Stopped	Phase Transition Applied

SITE LAYOUT

▽ Site: 101 [Southern Paramount Road Access - AM Post-Dev
(Site Folder: General)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 101 [Southern Paramount Road Access - AM Post-Dev
(Site Folder: General)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Paramount Road														
1	L2	64	0.0	67	0.0	0.262	5.6	LOS A	0.0	0.0	0.00	0.08	0.00	57.5
2	T1	393	10.0	414	10.0	0.262	0.1	LOS A	0.0	0.0	0.00	0.08	0.00	59.0
Approach		457	8.6	481	8.6	0.262	0.9	NA	0.0	0.0	0.00	0.08	0.00	58.8
North: Paramount Road														
8	T1	363	10.0	382	10.0	0.272	0.7	LOS A	0.8	5.9	0.23	0.11	0.23	58.2
9	R2	65	0.0	68	0.0	0.272	8.1	LOS A	0.8	5.9	0.23	0.11	0.23	56.0
Approach		428	8.5	451	8.5	0.272	1.8	NA	0.8	5.9	0.23	0.11	0.23	57.8
West: Site Access														
10	L2	1	0.0	1	0.0	0.003	7.0	LOS A	0.0	0.1	0.50	0.62	0.50	51.2
12	R2	1	0.0	1	0.0	0.003	10.6	LOS B	0.0	0.1	0.50	0.62	0.50	50.7
Approach		2	0.0	2	0.0	0.003	8.8	LOS A	0.0	0.1	0.50	0.62	0.50	50.9
All Vehicles		887	8.5	934	8.5	0.272	1.3	NA	0.8	5.9	0.11	0.10	0.11	58.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: P:\Synergy\Projects\GRP2\GRP27111\07-Analysis\SIDRA\2022.08.31 - Amended Application\G27111 - SIDRA Analysis.sip9

MOVEMENT SUMMARY

Site: 101 [Southern Paramount Road Access - PM Post-Dev
(Site Folder: General)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Paramount Road														
1	L2	1	0.0	1	0.0	0.272	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	58.2
2	T1	473	10.0	498	10.0	0.272	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach		474	10.0	499	10.0	0.272	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
North: Paramount Road														
8	T1	415	10.0	437	10.0	0.240	0.0	LOS A	0.0	0.1	0.00	0.00	0.00	60.0
9	R2	1	0.0	1	0.0	0.240	8.3	LOS A	0.0	0.1	0.00	0.00	0.00	57.7
Approach		416	10.0	438	10.0	0.240	0.0	NA	0.0	0.1	0.00	0.00	0.00	60.0
West: Site Access														
10	L2	65	0.0	68	0.0	0.222	7.9	LOS A	0.8	5.5	0.59	0.81	0.61	50.2
12	R2	64	0.0	67	0.0	0.222	12.5	LOS B	0.8	5.5	0.59	0.81	0.61	49.7
Approach		129	0.0	136	0.0	0.222	10.2	LOS B	0.8	5.5	0.59	0.81	0.61	50.0
All Vehicles		1019	8.7	1073	8.7	0.272	1.3	NA	0.8	5.5	0.08	0.10	0.08	58.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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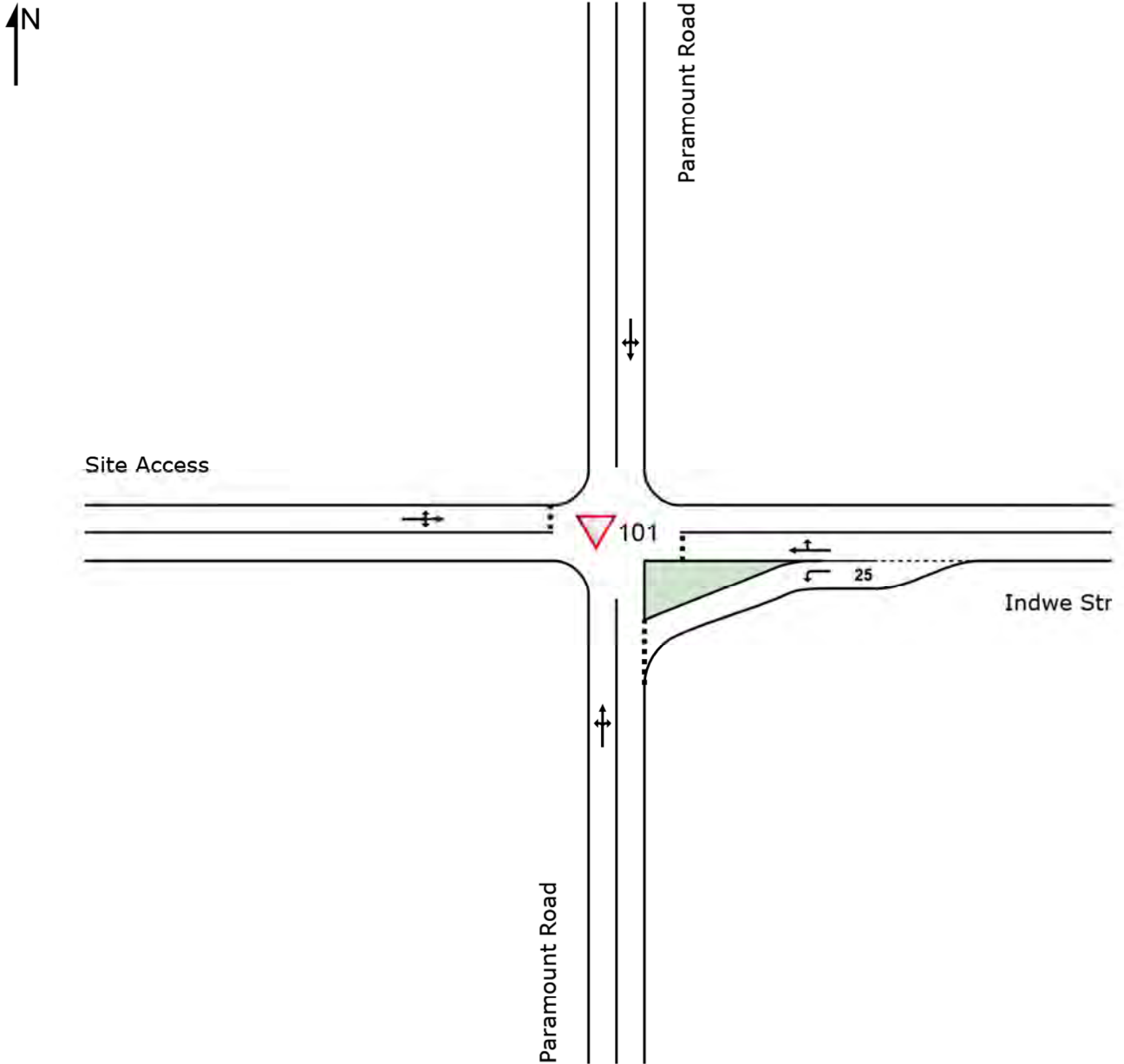
Project: P:\Synergy\Projects\GRP2\GRP27111\07-Analysis\SIDRA\2022.08.31 - Amended Application\G27111 - SIDRA Analysis.sip9

SITE LAYOUT

▽ Site: 101 [Northern Paramount Road Access - AM Existing
(Site Folder: General)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 101 [Northern Paramount Road Access - AM Existing
(Site Folder: General)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paramount Road														
1	L2	1	0.0	1	0.0	0.180	7.3	LOS A	0.2	1.4	0.08	0.04	0.08	57.7
2	T1	285	10.0	300	10.0	0.180	0.2	LOS A	0.2	1.4	0.08	0.04	0.08	59.3
3	R2	18	0.0	19	0.0	0.180	7.3	LOS A	0.2	1.4	0.08	0.04	0.08	57.4
Approach		304	9.4	320	9.4	0.180	0.6	NA	0.2	1.4	0.08	0.04	0.08	59.2
East: Indwe Street														
4	L2	26	0.0	27	0.0	0.024	6.9	LOS A	0.1	0.6	0.40	0.58	0.40	52.9
5	T1	1	0.0	1	0.0	0.010	7.9	LOS A	0.0	0.2	0.56	0.71	0.56	50.6
6	R2	4	0.0	4	0.0	0.010	10.3	LOS B	0.0	0.2	0.56	0.71	0.56	50.0
Approach		31	0.0	33	0.0	0.024	7.3	LOS A	0.1	0.6	0.43	0.61	0.43	52.4
North: Paramount Road														
7	L2	30	0.0	32	0.0	0.212	5.6	LOS A	0.0	0.1	0.00	0.05	0.00	57.9
8	T1	337	10.0	355	10.0	0.212	0.0	LOS A	0.0	0.1	0.00	0.05	0.00	59.5
9	R2	1	0.0	1	0.0	0.212	6.8	LOS A	0.0	0.1	0.00	0.05	0.00	57.3
Approach		368	9.2	387	9.2	0.212	0.5	NA	0.0	0.1	0.00	0.05	0.00	59.3
West: Site Access														
10	L2	1	0.0	1	0.0	0.005	6.5	LOS A	0.0	0.1	0.48	0.61	0.48	51.6
11	T1	1	0.0	1	0.0	0.005	8.0	LOS A	0.0	0.1	0.48	0.61	0.48	51.7
12	R2	1	0.0	1	0.0	0.005	10.0	LOS B	0.0	0.1	0.48	0.61	0.48	51.1
Approach		3	0.0	3	0.0	0.005	8.2	LOS A	0.0	0.1	0.48	0.61	0.48	51.5
All Vehicles		706	8.8	743	8.8	0.212	0.9	NA	0.2	1.4	0.06	0.07	0.06	58.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Northern Paramount Road Access - AM - Post-Dev (Site Folder: General)]

New Site
 Site Category: (None)
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paramount Road														
1	L2	65	0.0	68	0.0	0.230	6.0	LOS A	0.3	2.0	0.08	0.12	0.08	56.9
2	T1	309	10.0	325	10.0	0.230	0.2	LOS A	0.3	2.0	0.08	0.12	0.08	58.4
3	R2	18	0.0	19	0.0	0.230	7.4	LOS A	0.3	2.0	0.08	0.12	0.08	56.6
Approach		392	7.9	413	7.9	0.230	1.5	NA	0.3	2.0	0.08	0.12	0.08	58.1
East: Indwe Street														
4	L2	26	0.0	27	0.0	0.024	6.9	LOS A	0.1	0.6	0.40	0.58	0.40	52.9
5	T1	1	0.0	1	0.0	0.012	9.5	LOS A	0.0	0.3	0.63	0.76	0.63	49.7
6	R2	4	0.0	4	0.0	0.012	11.5	LOS B	0.0	0.3	0.63	0.76	0.63	49.1
Approach		31	0.0	33	0.0	0.024	7.5	LOS A	0.1	0.6	0.44	0.61	0.44	52.3
North: Paramount Road														
7	L2	30	0.0	32	0.0	0.268	7.2	LOS A	0.8	6.1	0.23	0.13	0.23	56.3
8	T1	337	10.0	355	10.0	0.268	0.5	LOS A	0.8	6.1	0.23	0.13	0.23	57.8
9	R2	66	0.0	69	0.0	0.268	7.5	LOS A	0.8	6.1	0.23	0.13	0.23	55.7
Approach		433	7.8	456	7.8	0.268	2.0	NA	0.8	6.1	0.23	0.13	0.23	57.4
West: Site Access														
10	L2	1	0.0	1	0.0	0.006	6.6	LOS A	0.0	0.1	0.51	0.64	0.51	50.9
11	T1	1	0.0	1	0.0	0.006	9.3	LOS A	0.0	0.1	0.51	0.64	0.51	51.0
12	R2	1	0.0	1	0.0	0.006	11.6	LOS B	0.0	0.1	0.51	0.64	0.51	50.4
Approach		3	0.0	3	0.0	0.006	9.2	LOS A	0.0	0.1	0.51	0.64	0.51	50.8
All Vehicles		859	7.5	904	7.5	0.268	2.0	NA	0.8	6.1	0.17	0.15	0.17	57.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Northern Paramount Road Access - PM Existing
(Site Folder: General)]

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paramount Road														
1	L2	1	0.0	1	0.0	0.284	7.3	LOS A	0.5	4.0	0.13	0.07	0.13	57.2
2	T1	422	10.0	444	10.0	0.284	0.3	LOS A	0.5	4.0	0.13	0.07	0.13	58.8
3	R2	50	0.0	53	0.0	0.284	7.2	LOS A	0.5	4.0	0.13	0.07	0.13	57.0
Approach		473	8.9	498	8.9	0.284	1.0	NA	0.5	4.0	0.13	0.07	0.13	58.6
East: Indwe Street														
4	L2	26	0.0	27	0.0	0.023	6.7	LOS A	0.1	0.6	0.37	0.57	0.37	53.0
5	T1	1	0.0	1	0.0	0.032	9.6	LOS A	0.1	0.7	0.66	0.84	0.66	49.0
6	R2	11	0.0	12	0.0	0.032	12.4	LOS B	0.1	0.7	0.66	0.84	0.66	48.4
Approach		38	0.0	40	0.0	0.032	8.4	LOS A	0.1	0.7	0.46	0.66	0.46	51.5
North: Paramount Road														
7	L2	25	0.0	26	0.0	0.188	5.6	LOS A	0.0	0.1	0.01	0.05	0.01	57.9
8	T1	300	10.0	316	10.0	0.188	0.0	LOS A	0.0	0.1	0.01	0.05	0.01	59.5
9	R2	1	0.0	1	0.0	0.188	7.7	LOS A	0.0	0.1	0.01	0.05	0.01	57.3
Approach		326	9.2	343	9.2	0.188	0.5	NA	0.0	0.1	0.01	0.05	0.01	59.4
West: Site Access														
10	L2	2	0.0	2	0.0	0.007	7.2	LOS A	0.0	0.2	0.53	0.65	0.53	51.0
11	T1	1	0.0	1	0.0	0.007	9.5	LOS A	0.0	0.2	0.53	0.65	0.53	51.2
12	R2	1	0.0	1	0.0	0.007	12.0	LOS B	0.0	0.2	0.53	0.65	0.53	50.6
Approach		4	0.0	4	0.0	0.007	9.0	LOS A	0.0	0.2	0.53	0.65	0.53	51.0
All Vehicles		841	8.6	885	8.6	0.284	1.2	NA	0.5	4.0	0.10	0.09	0.10	58.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: P:\Synergy\Projects\GRP2\GRP27111\07-Analysis\SIDRA\2022.08.31 - Amended Application\G27111 - SIDRA Analysis.sip9

MOVEMENT SUMMARY

Site: 101 [Northern Paramount Road Access - PM - Post-Dev (Site Folder: General)]

New Site
 Site Category: (None)
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Paramount Road														
1	L2	1	0.0	1	0.0	0.285	7.4	LOS A	0.6	4.2	0.14	0.07	0.14	57.2
2	T1	422	10.0	444	10.0	0.285	0.3	LOS A	0.6	4.2	0.14	0.07	0.14	58.8
3	R2	50	0.0	53	0.0	0.285	7.4	LOS A	0.6	4.2	0.14	0.07	0.14	56.9
Approach		473	8.9	498	8.9	0.285	1.1	NA	0.6	4.2	0.14	0.07	0.14	58.6
East: Indwe Street														
4	L2	26	0.0	27	0.0	0.025	7.1	LOS A	0.1	0.7	0.43	0.60	0.43	52.8
5	T1	1	0.0	1	0.0	0.036	9.9	LOS A	0.1	0.8	0.70	0.88	0.70	48.2
6	R2	11	0.0	12	0.0	0.036	13.7	LOS B	0.1	0.8	0.70	0.88	0.70	47.6
Approach		38	0.0	40	0.0	0.036	9.1	LOS A	0.1	0.8	0.51	0.69	0.51	51.1
North: Paramount Road														
7	L2	25	0.0	26	0.0	0.201	5.6	LOS A	0.0	0.1	0.01	0.04	0.01	57.9
8	T1	324	10.0	341	10.0	0.201	0.0	LOS A	0.0	0.1	0.01	0.04	0.01	59.5
9	R2	1	0.0	1	0.0	0.201	7.7	LOS A	0.0	0.1	0.01	0.04	0.01	57.3
Approach		350	9.3	368	9.3	0.201	0.4	NA	0.0	0.1	0.01	0.04	0.01	59.4
West: Site Access														
10	L2	66	0.0	69	0.0	0.248	7.7	LOS A	0.9	6.5	0.59	0.81	0.64	49.7
11	T1	1	0.0	1	0.0	0.248	11.2	LOS B	0.9	6.5	0.59	0.81	0.64	49.9
12	R2	65	0.0	68	0.0	0.248	14.0	LOS B	0.9	6.5	0.59	0.81	0.64	49.3
Approach		132	0.0	139	0.0	0.248	10.8	LOS B	0.9	6.5	0.59	0.81	0.64	49.5
All Vehicles		993	7.5	1045	7.5	0.285	2.5	NA	0.9	6.5	0.17	0.18	0.17	57.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

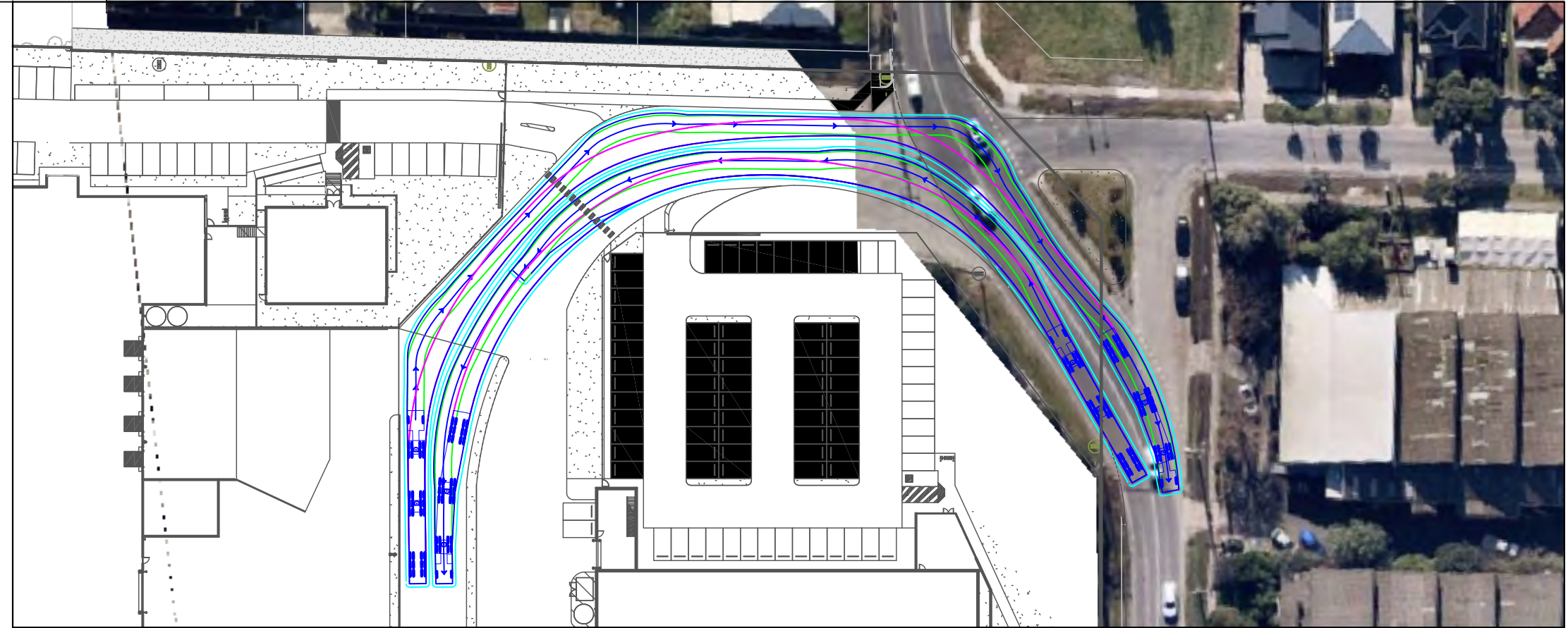
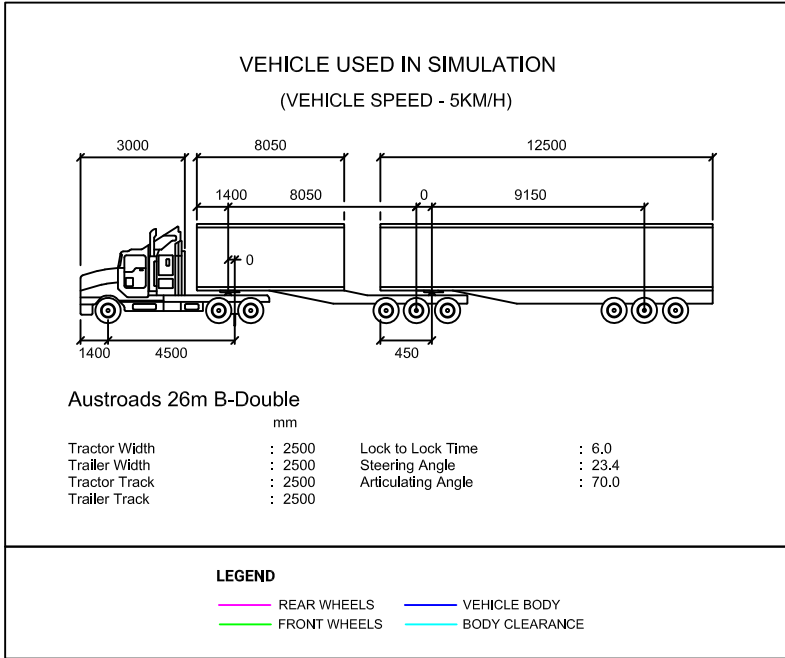


Appendix D

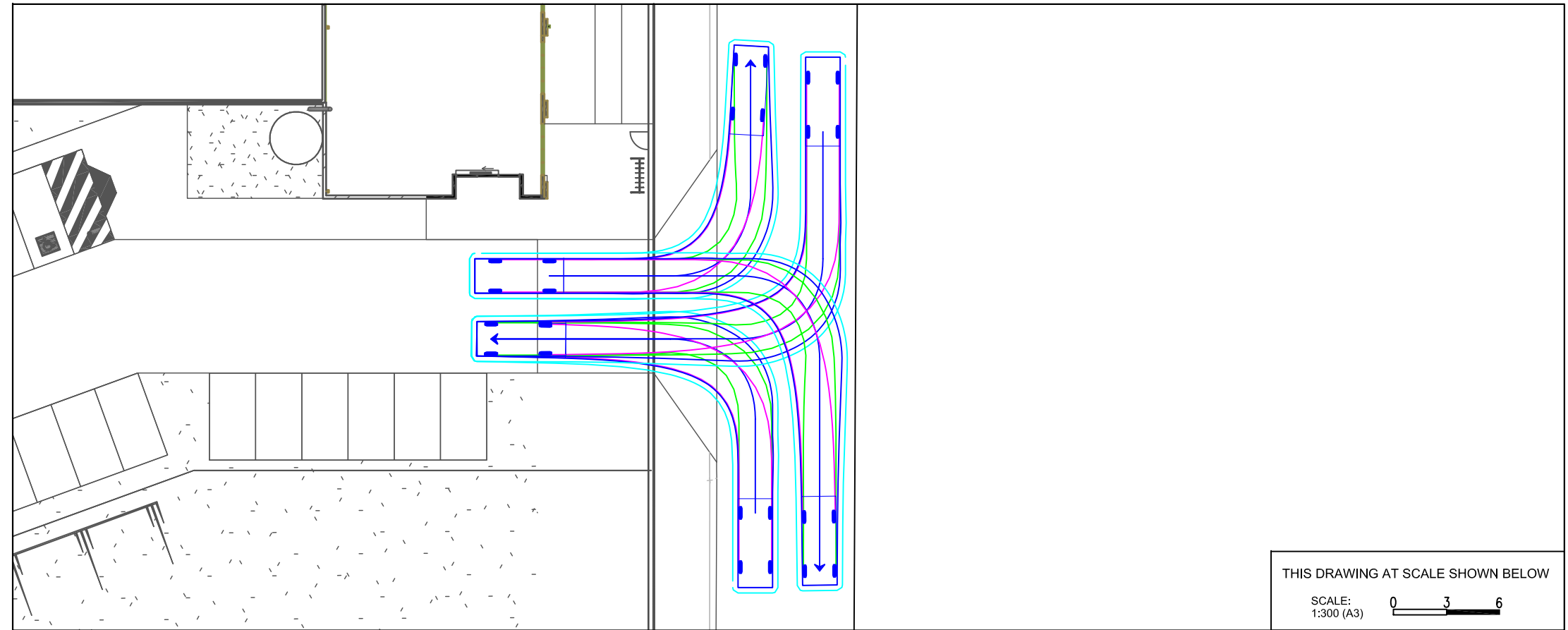
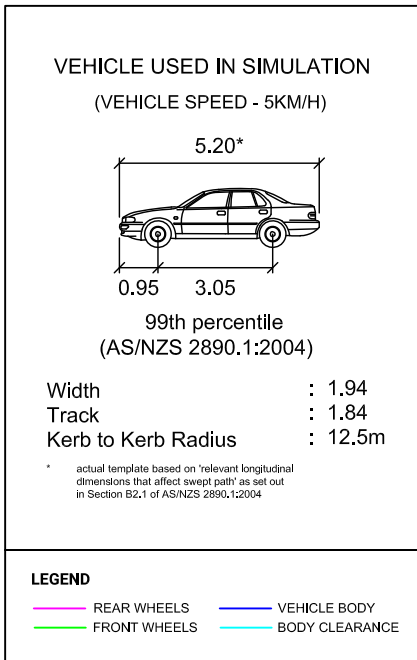
Swept Path Diagrams

VEHICLE PROFILE

NORTHERN PARAMOUNT ROAD ACCESS POINT



SOUTHERN PARAMOUNT ROAD ACCESS POINT



THIS DRAWING AT SCALE SHOWN BELOW

SCALE: 1:300 (A3)

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A	14/10/2022		M. KOORN	H. TURNBULL

35-65 PARAMOUNT ROAD, TOTTENHAM
PROPOSED WAREHOUSE DEVELOPMENT

GENERAL NOTES:

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FILE NAME: G27111-02A
SHEET NO.: 01/06



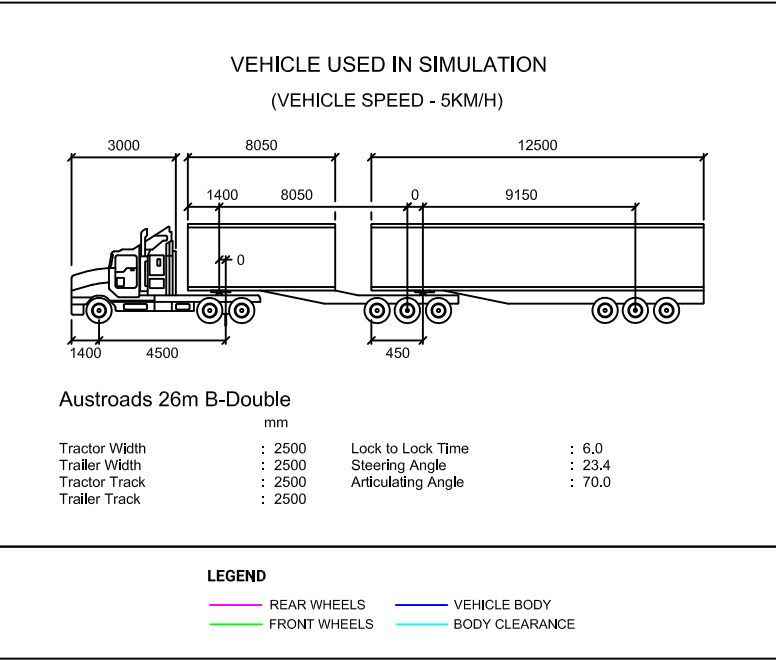
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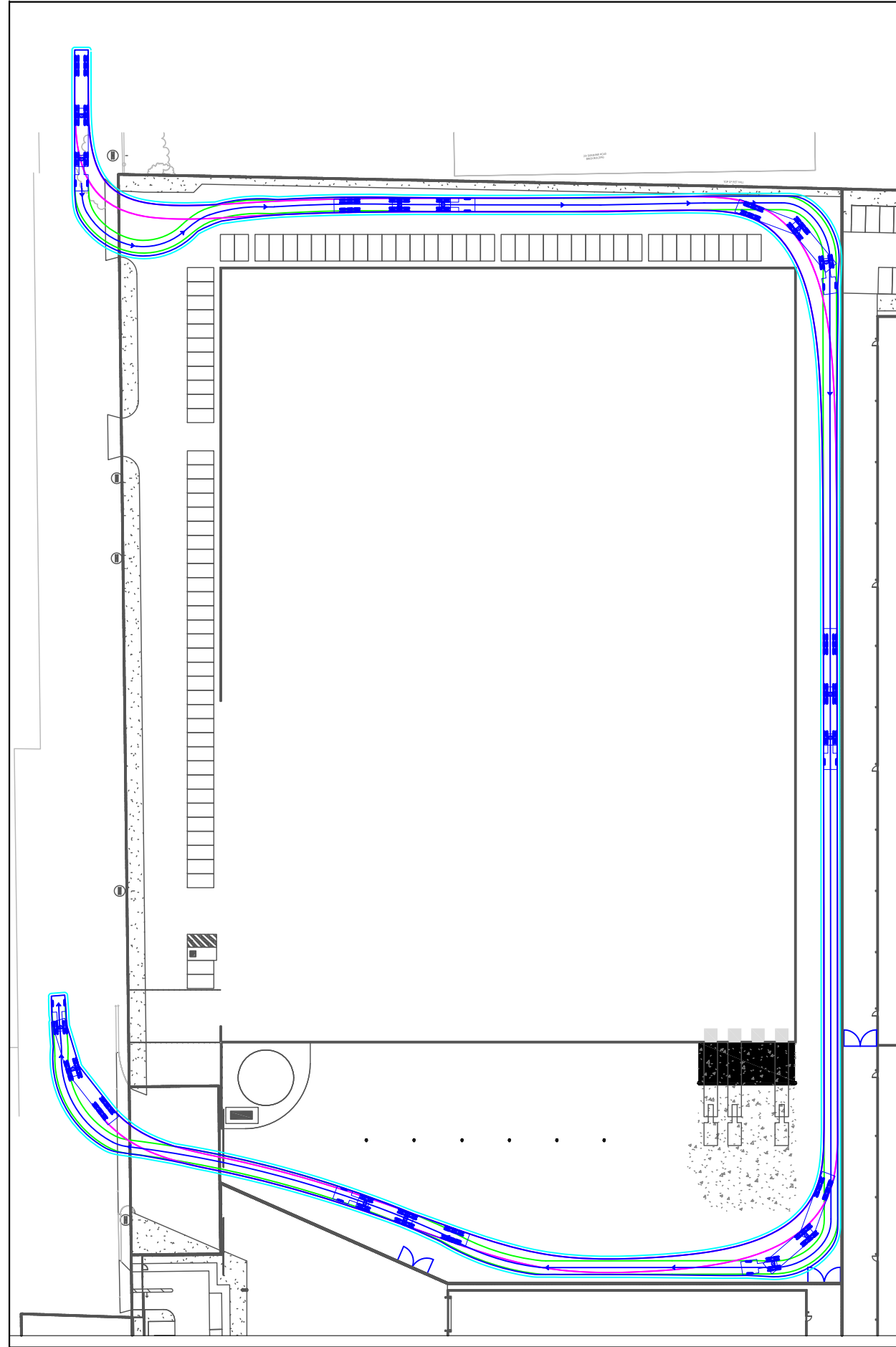


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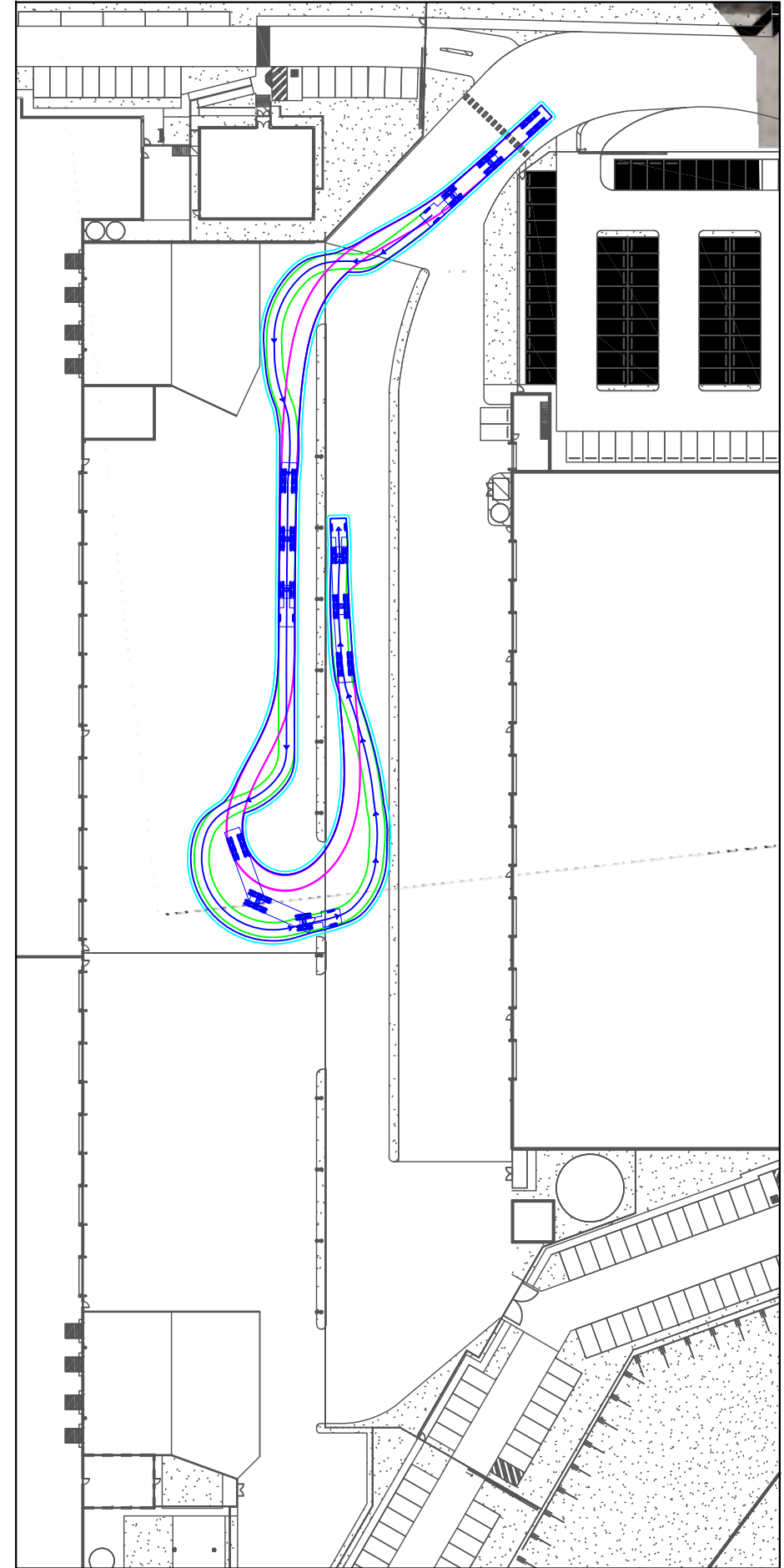
VEHICLE PROFILE



WAREHOUSE A - B-DOUBLE CIRCULATION



WAREHOUSE B1 - B-DOUBLE CIRCULATION



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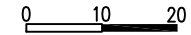
35-65 PARAMOUNT ROAD, TOTTENHAM
PROPOSED WAREHOUSE DEVELOPMENT

GENERAL NOTES:
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FILE NAME: G27111-02A
SHEET NO.: 02/06



SCALE: 1:1000 (A3)

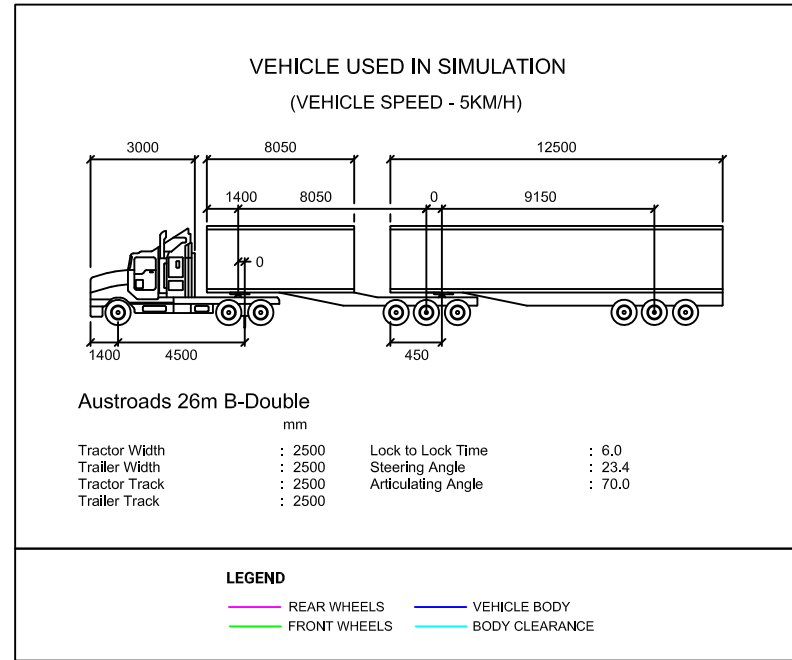


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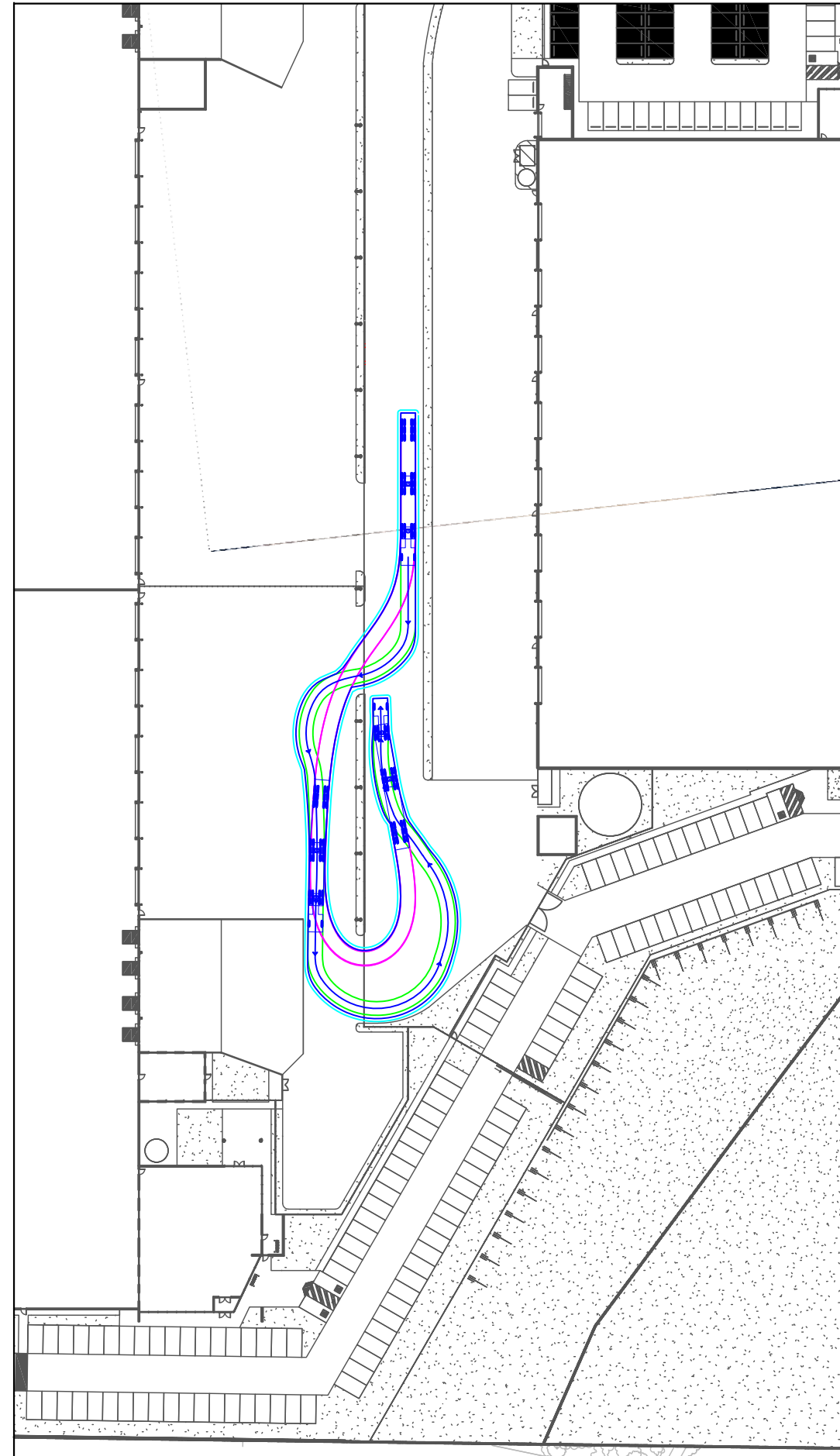
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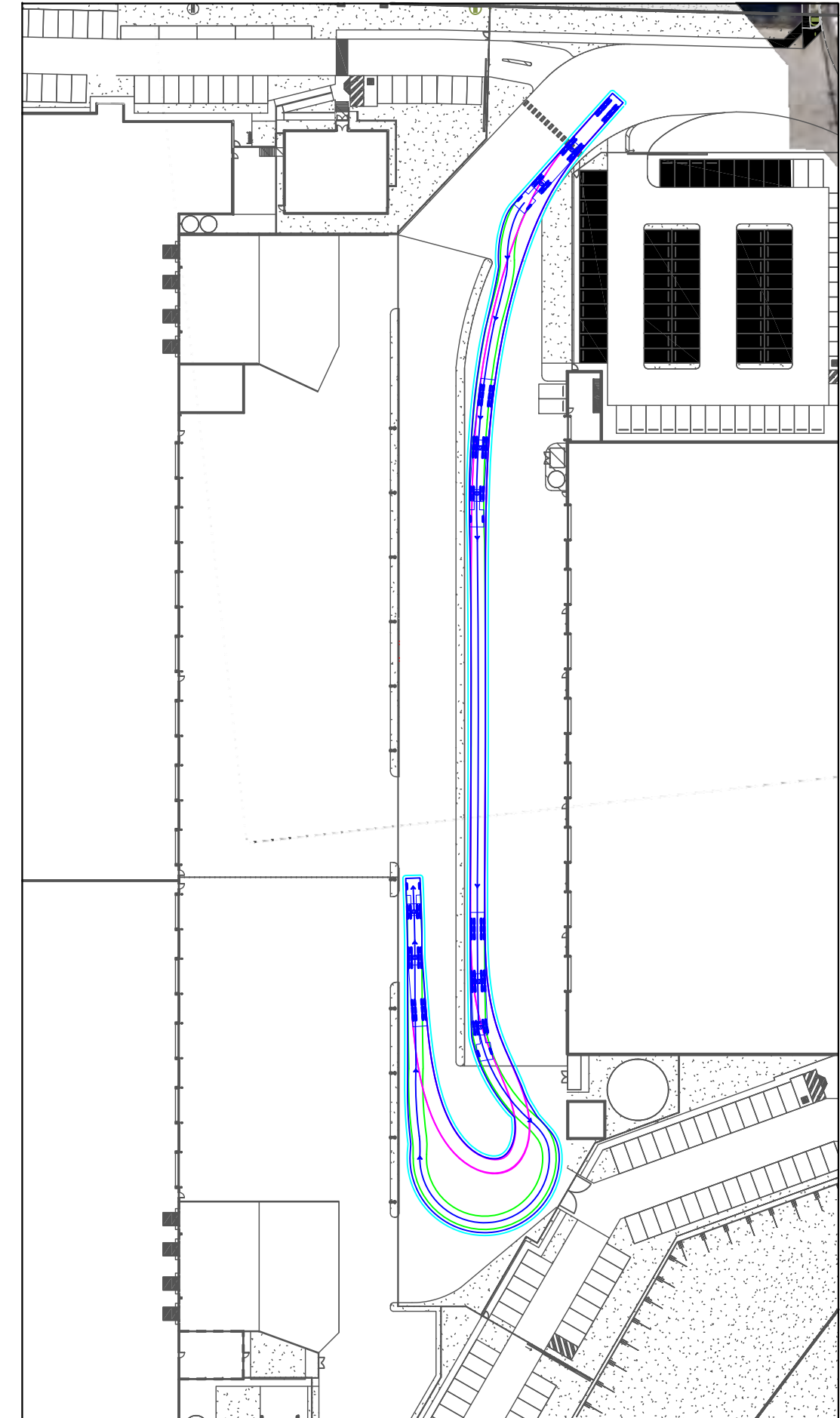
VEHICLE PROFILE



WAREHOUSE B2 - B-DOUBLE CIRCULATION



WAREHOUSE C - B-DOUBLE CIRCULATION



REV	DATE	NOTES	DESIGNED BY	CHECKED BY
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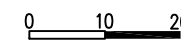
35-65 PARAMOUNT ROAD, TOTTENHAM
PROPOSED WAREHOUSE DEVELOPMENT

- GENERAL NOTES:**
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FILE NAME: G27111-02A
SHEET NO.: 03/06



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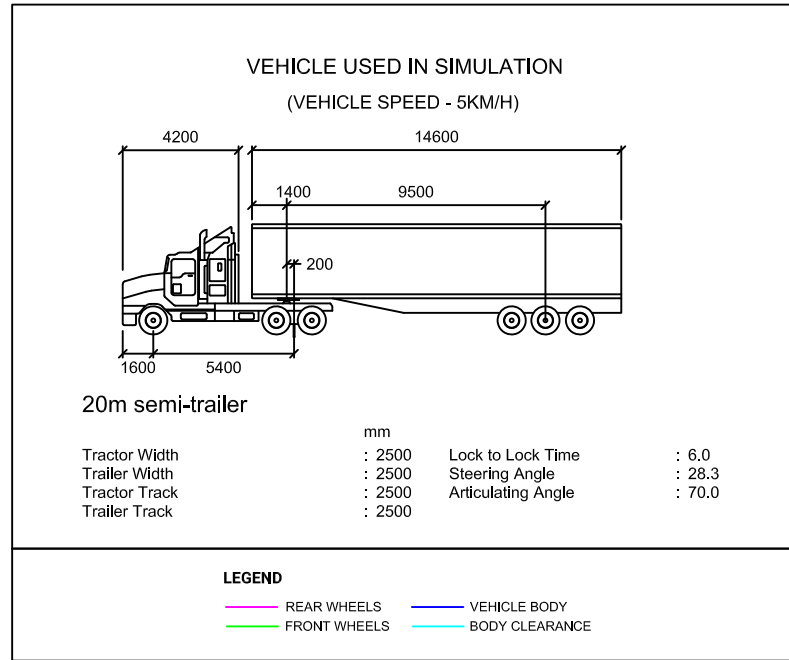


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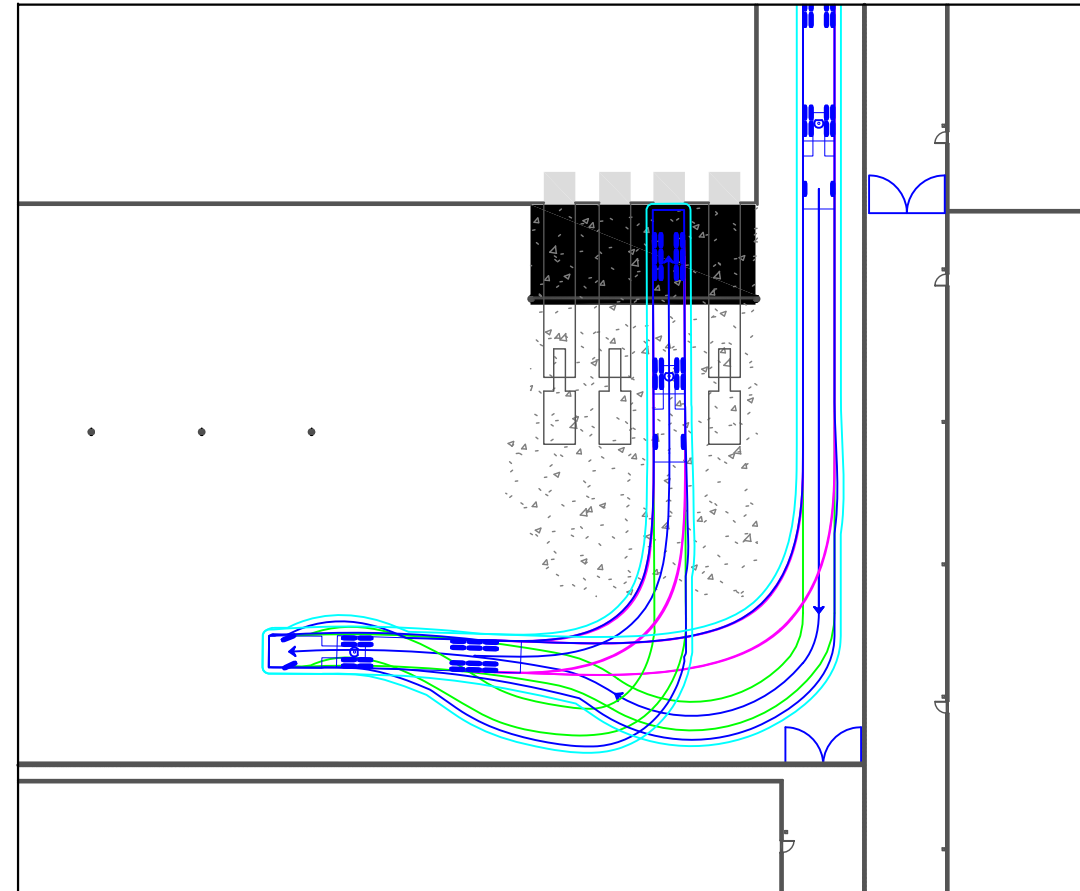
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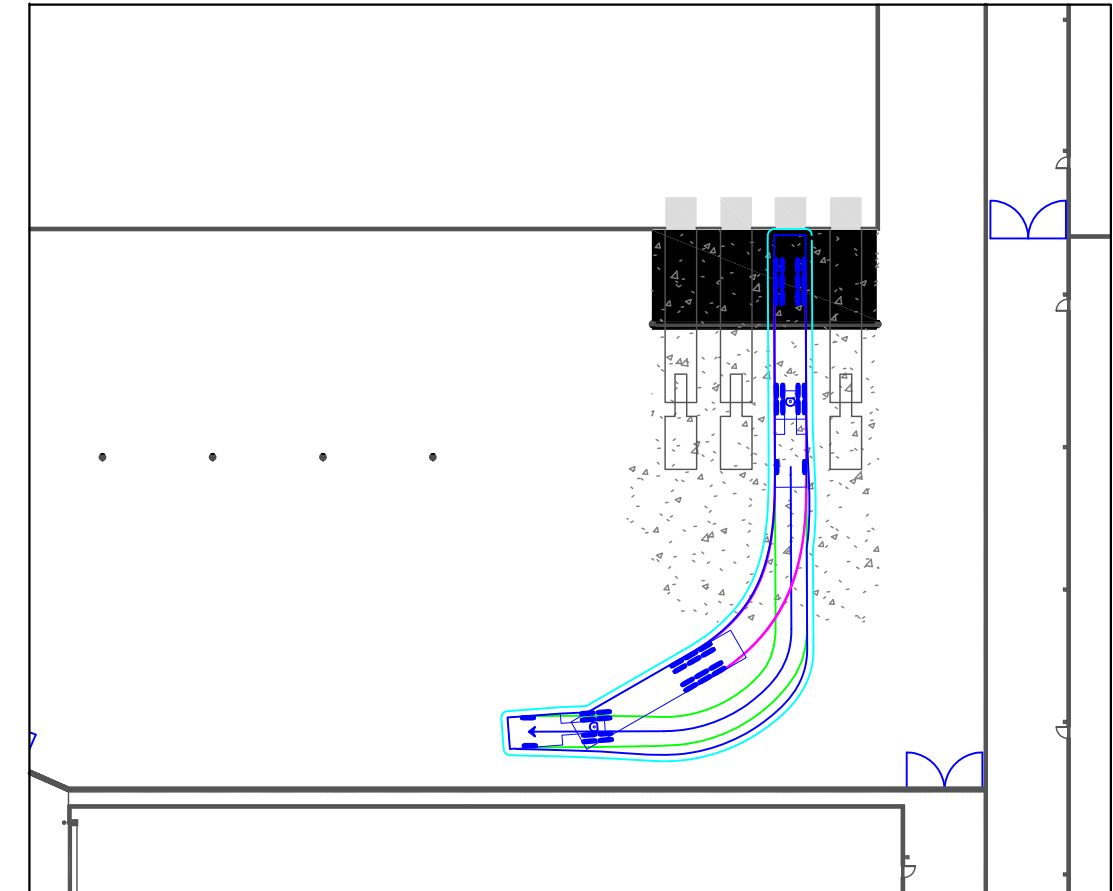
VEHICLE PROFILE



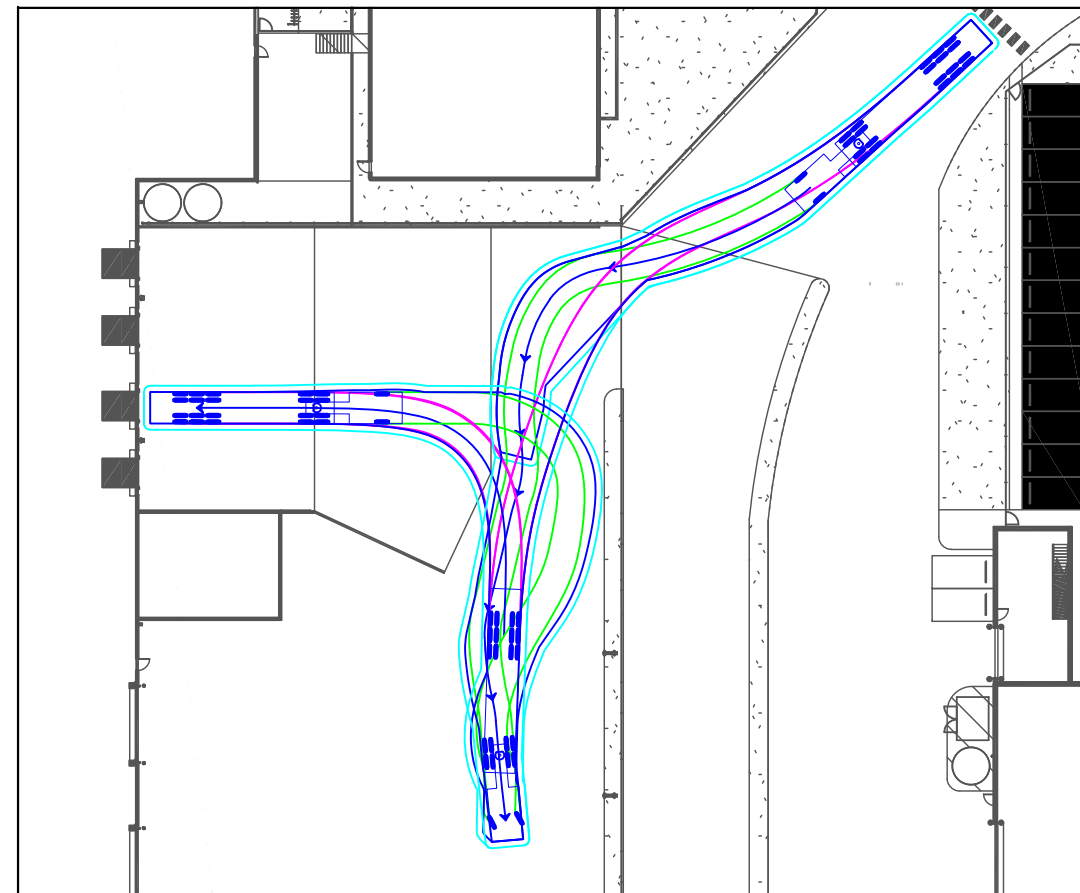
WAREHOUSE A LOADING DOCK - SEMI INGRESS



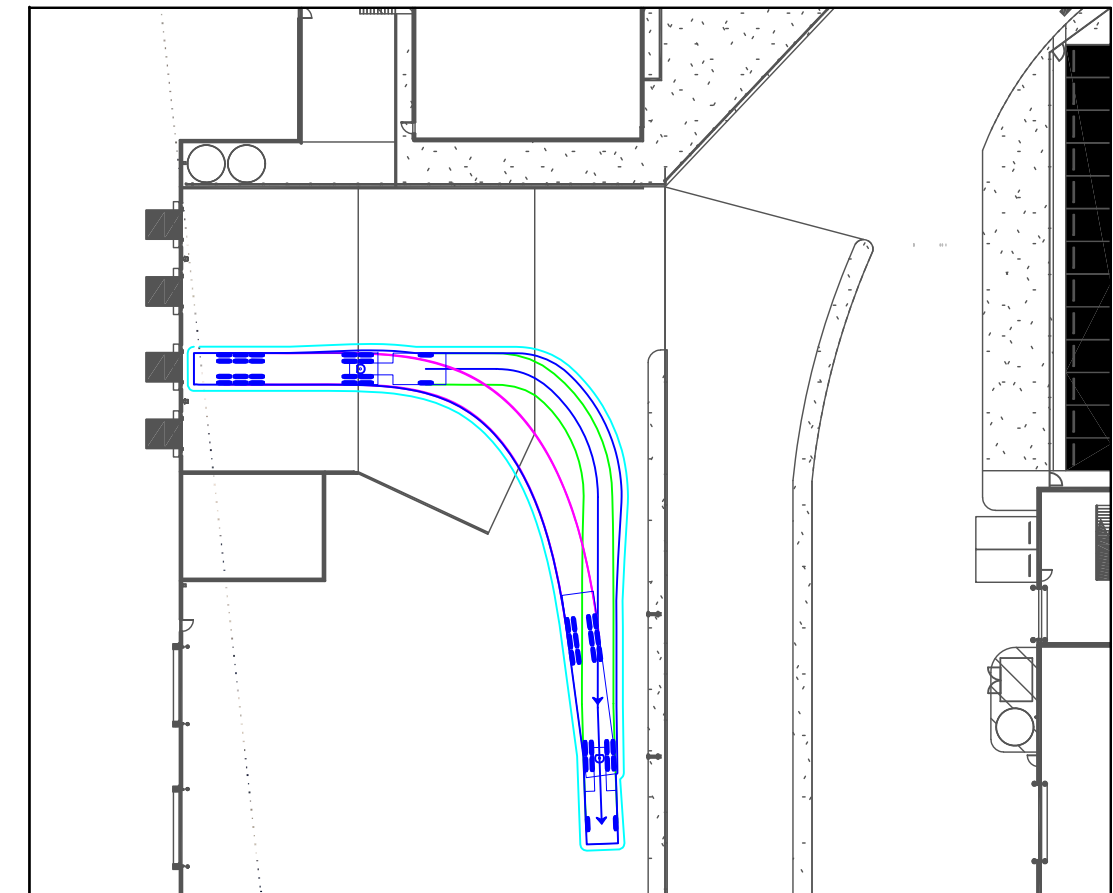
WAREHOUSE A LOADING DOCK - SEMI EGRESS



WAREHOUSE B1 LOADING DOCK - SEMI INGRESS



WAREHOUSE B1 LOADING DOCK - SEMI EGRESS



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35-65 PARAMOUNT ROAD, TOTTENHAM
PROPOSED WAREHOUSE DEVELOPMENT

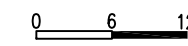
GENERAL NOTES:

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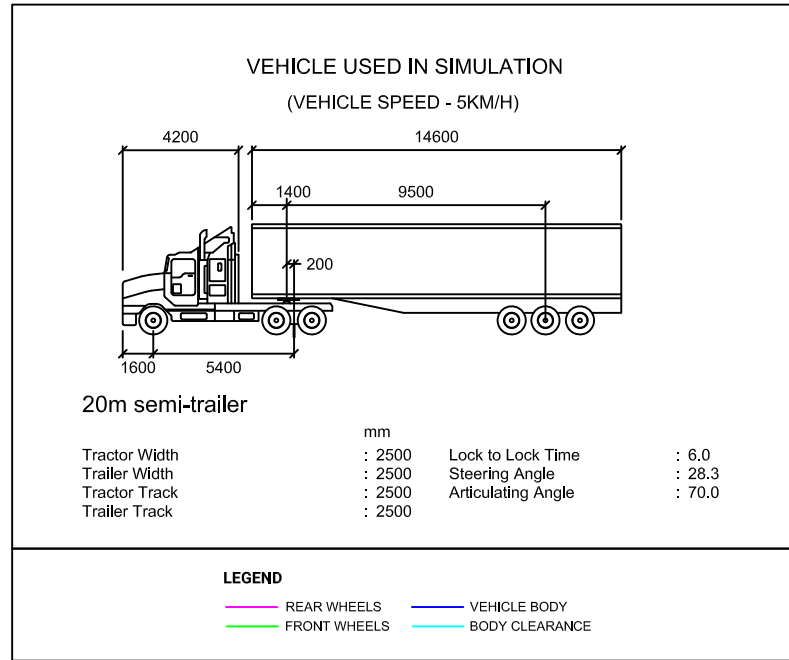


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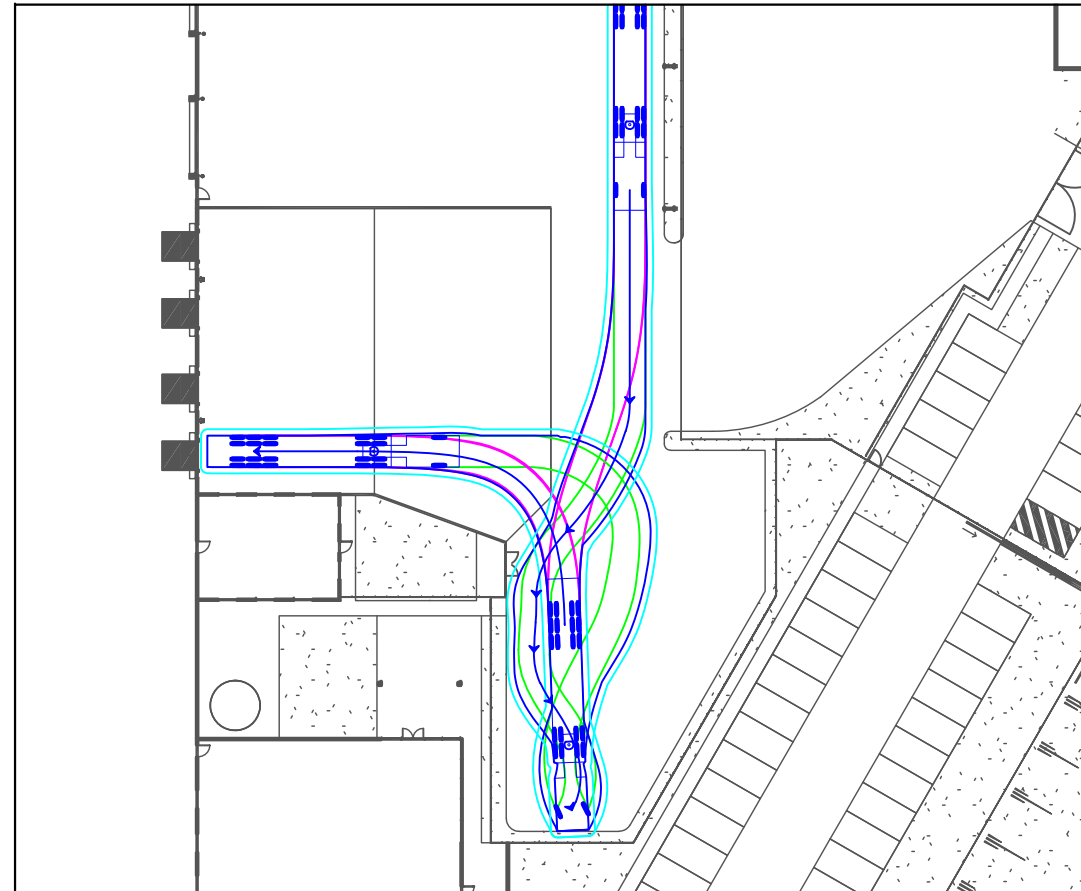
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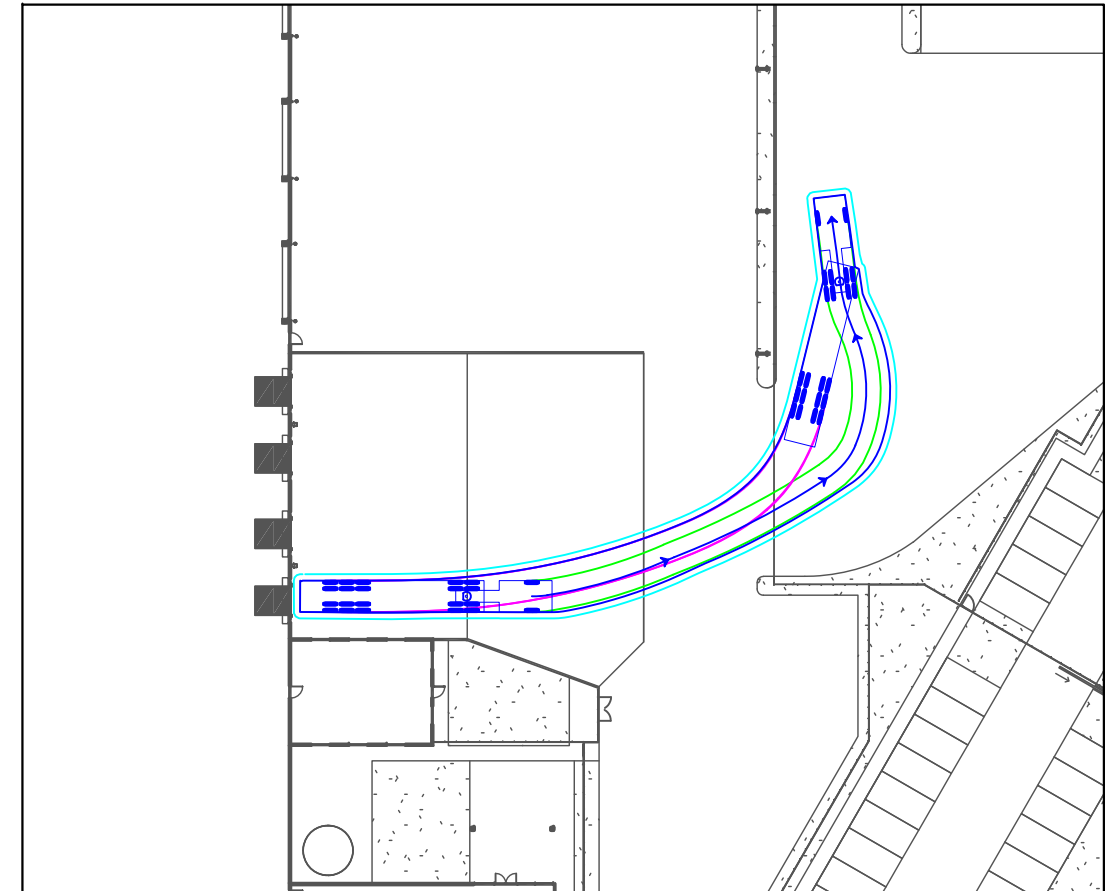
VEHICLE PROFILE



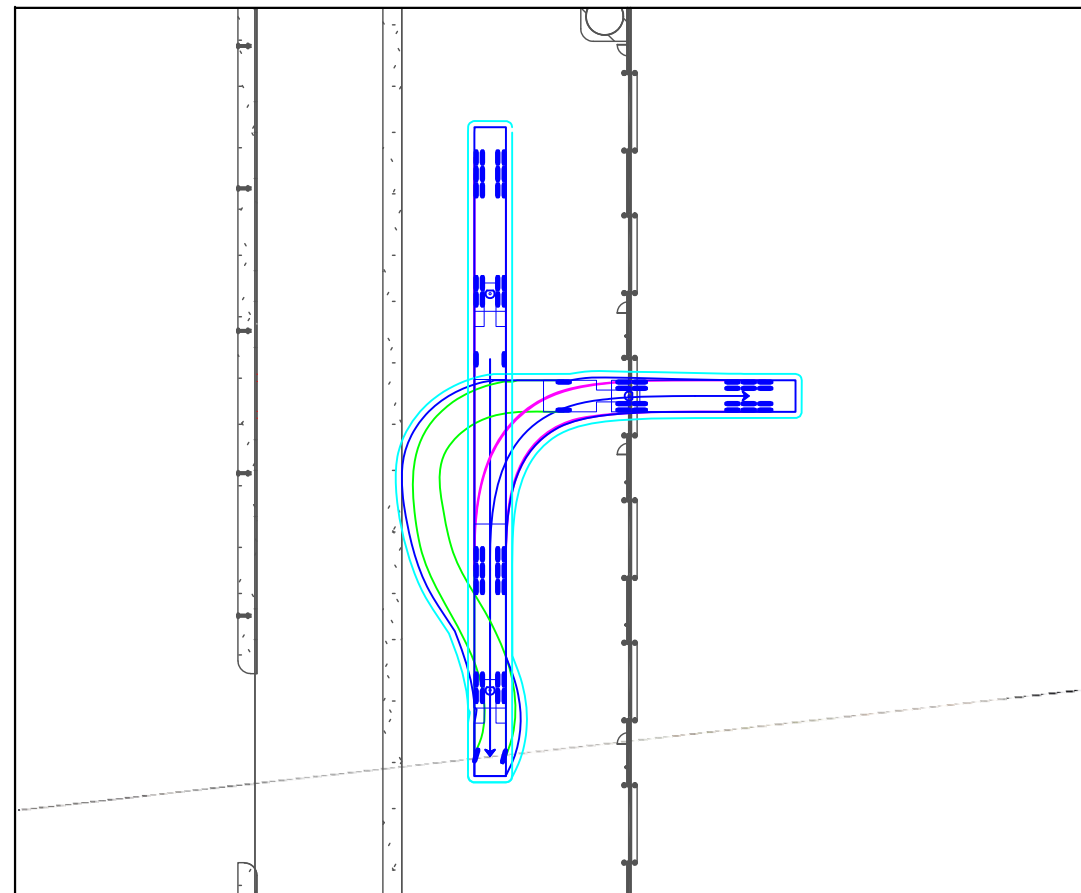
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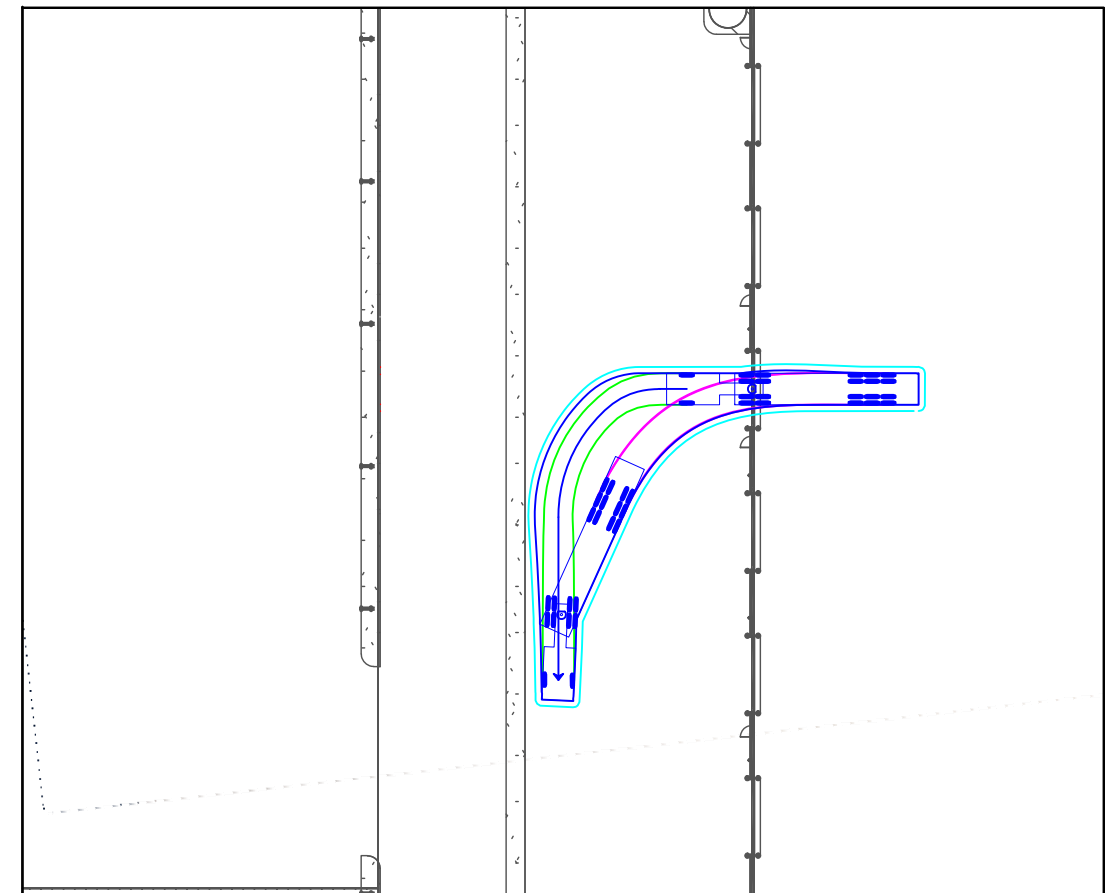
WAREHOUSE B2 LOADING DOCK - SEMI EGRESS



WAREHOUSE C LOADING DOCK - SEMI INGRESS



WAREHOUSE C LOADING DOCK - SEMI EGRESS



REV	DATE	NOTES	DESIGNED BY	CHECKED BY
A	14/10/2022		M. KOORN	H. TURNBULL

35-65 PARAMOUNT ROAD, TOTTENHAM
PROPOSED WAREHOUSE DEVELOPMENT

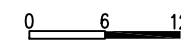
GENERAL NOTES:

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FILE NAME: G27111-02A
SHEET NO.: 05/06



SCALE:
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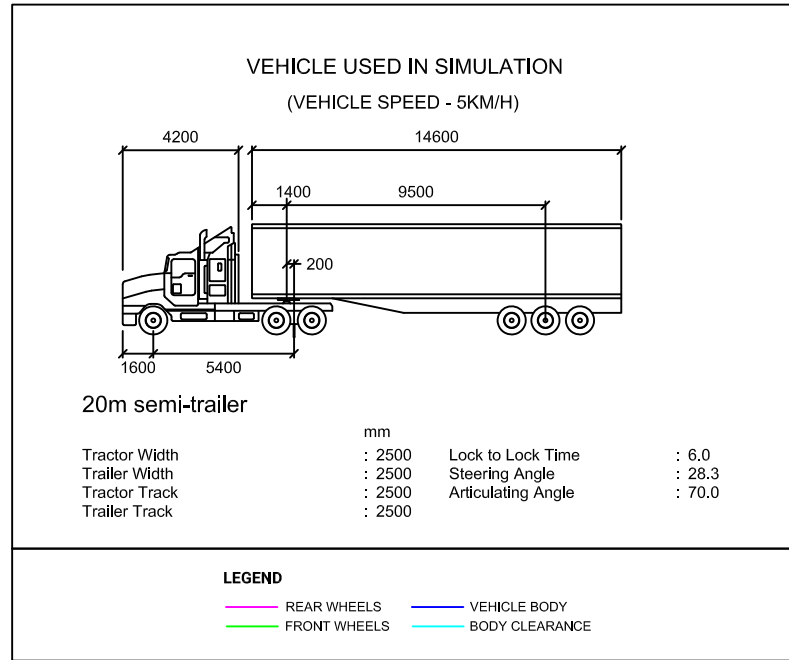


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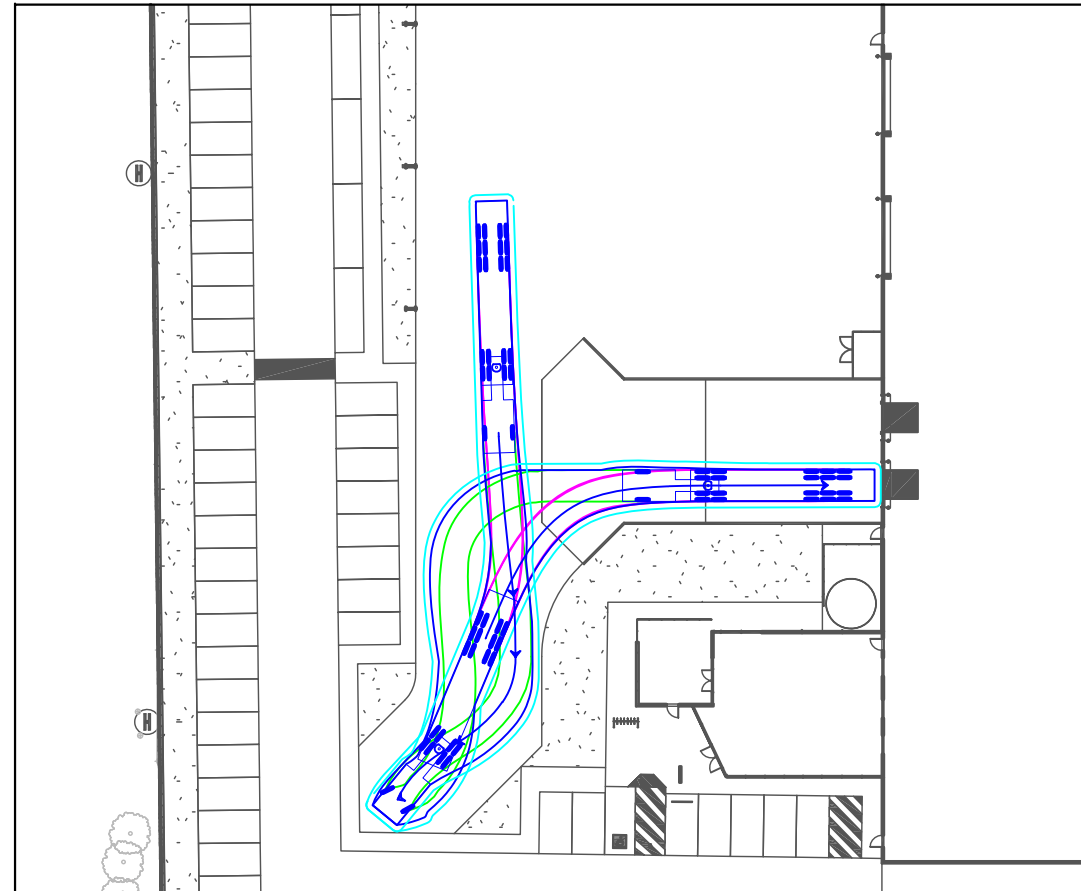
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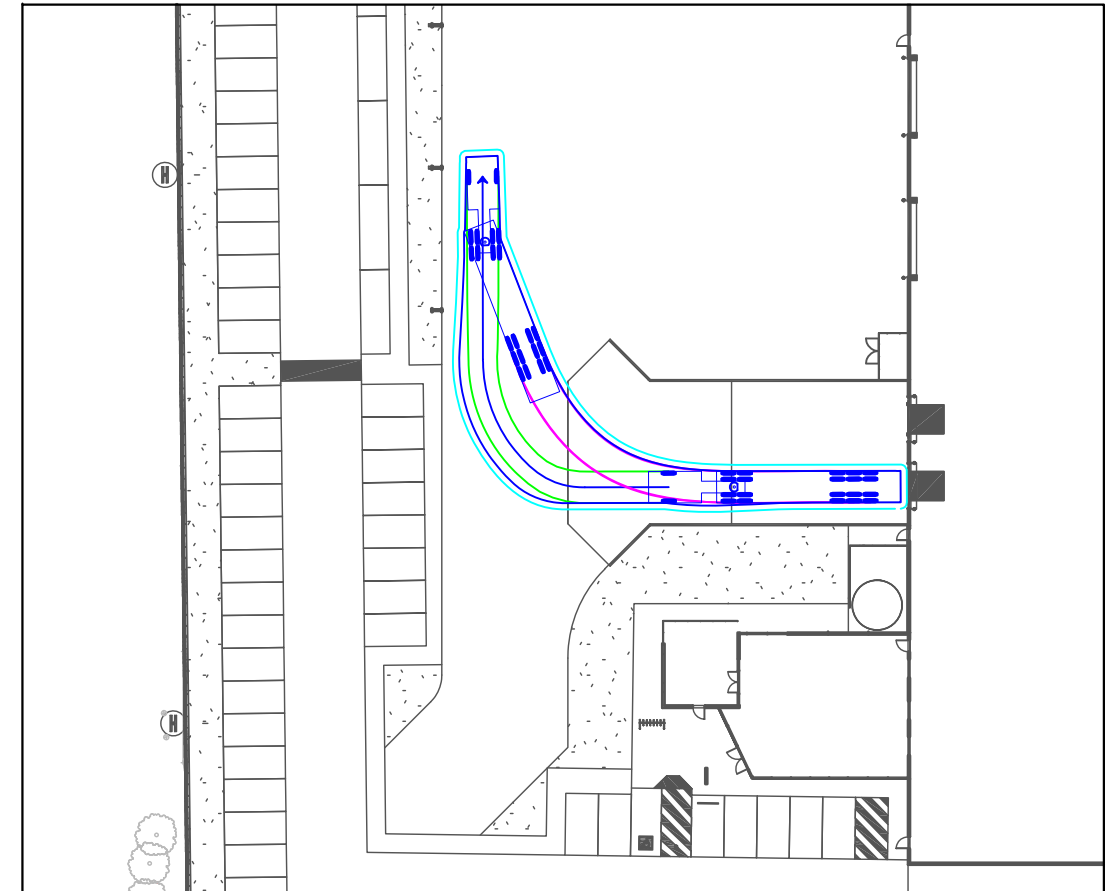
VEHICLE PROFILE



WAREHOUSE D LOADING DOCK - SEMI INGRESS



WAREHOUSE D LOADING DOCK - SEMI EGRESS



REV	DATE	NOTES	DESIGNED BY	CHECKED BY
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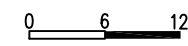
35-65 PARAMOUNT ROAD, TOTTENHAM
PROPOSED WAREHOUSE DEVELOPMENT

- GENERAL NOTES:**
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FILE NAME: G27111-02A
SHEET NO.: 06/06



SCALE:
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