

Transport Impact Assessment

Proposed Residential Development

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Trackside Gardens

110 Wilson Street, Moonee Ponds

ratio:

Project
Trackside Gardens, 110 Wilson Street,
Moonee Ponds

Prepared for
Hamton JV (Moonee Ponds) Pty Ltd

Our reference
22520T

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1. Introduction

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1.1. Introduction and Background

Ratio Consultants has been engaged by Hamton Hostplus JVMV Pty Ltd (the Applicant), to assess the transport implications of the proposed residential development on land at 110 Wilson Street in Moonee Ponds. The development is named as 'Trackside Gardens' and forms the 'North-East Precinct' of the wider Moonee Valley Park (MVP) masterplan development.

In March 2015, a planning scheme amendment was introduced into the Moonee Valley Planning Scheme to rezone part of the Moonee Valley Racing Club (MVRC) land to an Activity Centre Zone (ACZ). The amendment was primarily intended to enable the broader redevelopment of the MVRC site.

Under Schedule 1 to the ACZ, an Integrated Transport Plan (ITP) and a Transport Assessment and Management Plan (TAMP) are required to be prepared to assess and manage the transport impacts associated with the full build-out of the MVRC redevelopment.

The ITP has considered the following key transport matters:

- The adequacy of the proposed site access arrangements for the proposed future development
- The acceptability of the traffic impacts of the proposed rezoning and development of the land on the surrounding road network
- The adequacy of the proposed pedestrian, bicycle and public transport access arrangements to the site and intended internal connectivity.

The Trackside Gardens subject site (the NE Precinct) does not technically form part of the ACZ that was the subject of the 2015 Planning Scheme Amendment. However, the NE precinct is referenced in parts of the ITP and TAMP documents given its proximity and being part of the greater MVP land holdings. As such, the content of the ITP and TAMP documents is not specifically applicable to the subject site in this instance, but nonetheless is considered as a key reference tool when assessing this application and ensuring consistency with the wider MVP precinct.

This report has been completed based on the plans prepared by DKO Architects for each building (TP Issue, Revision -).

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2. Existing Conditions

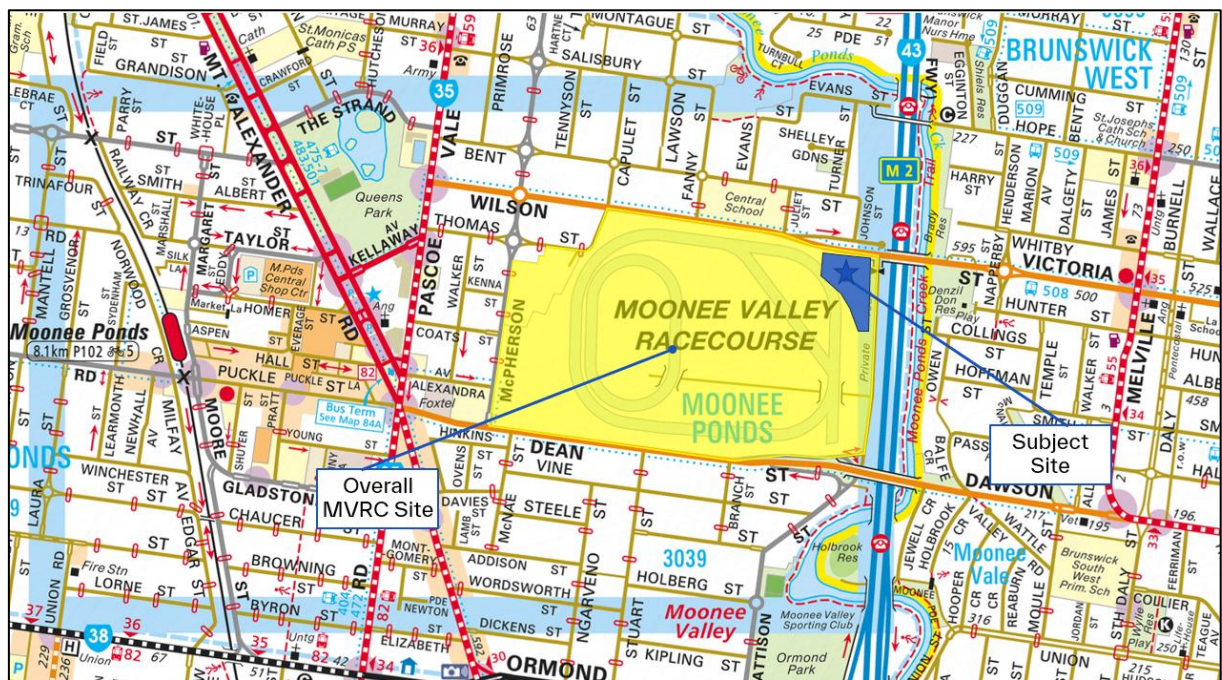
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2.1. Site Location and Context

Moonee Valley Racecourse (MVRC) and is located approximately 6.0km northwest of the Melbourne CBD. MVRC site has frontages of approximately 840 metres to Dean Street, 600 metres to Wilson Street, 235 metres to Thomas Street, 360 metres to McPherson's Street and 460 metres to Citylink. The MVRC site covers an area of approximately 39.0 hectares.

The subject site is located at the northern eastern corner of the Moonee Valley Racecourse and is situated on the southern side of Wilson Street. The location of the subject site is shown in Figure 2.1 with an aerial context also provided in Figure 2.2.

Figure 2.1: Site Locality



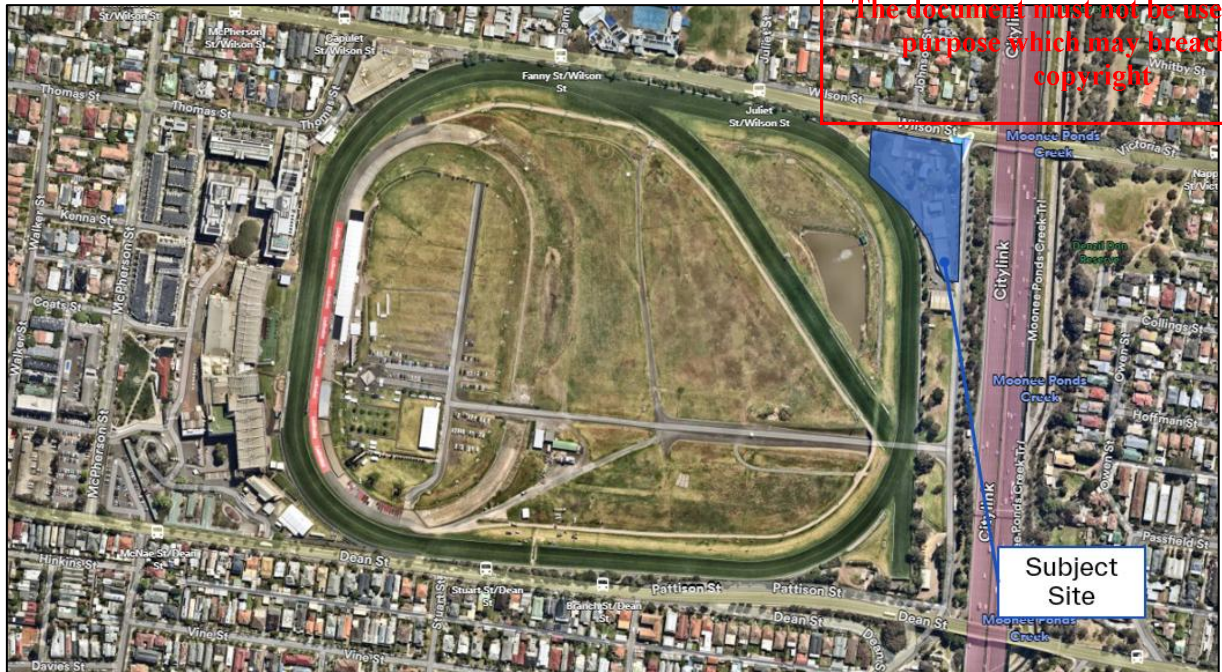
(Source: Melway)

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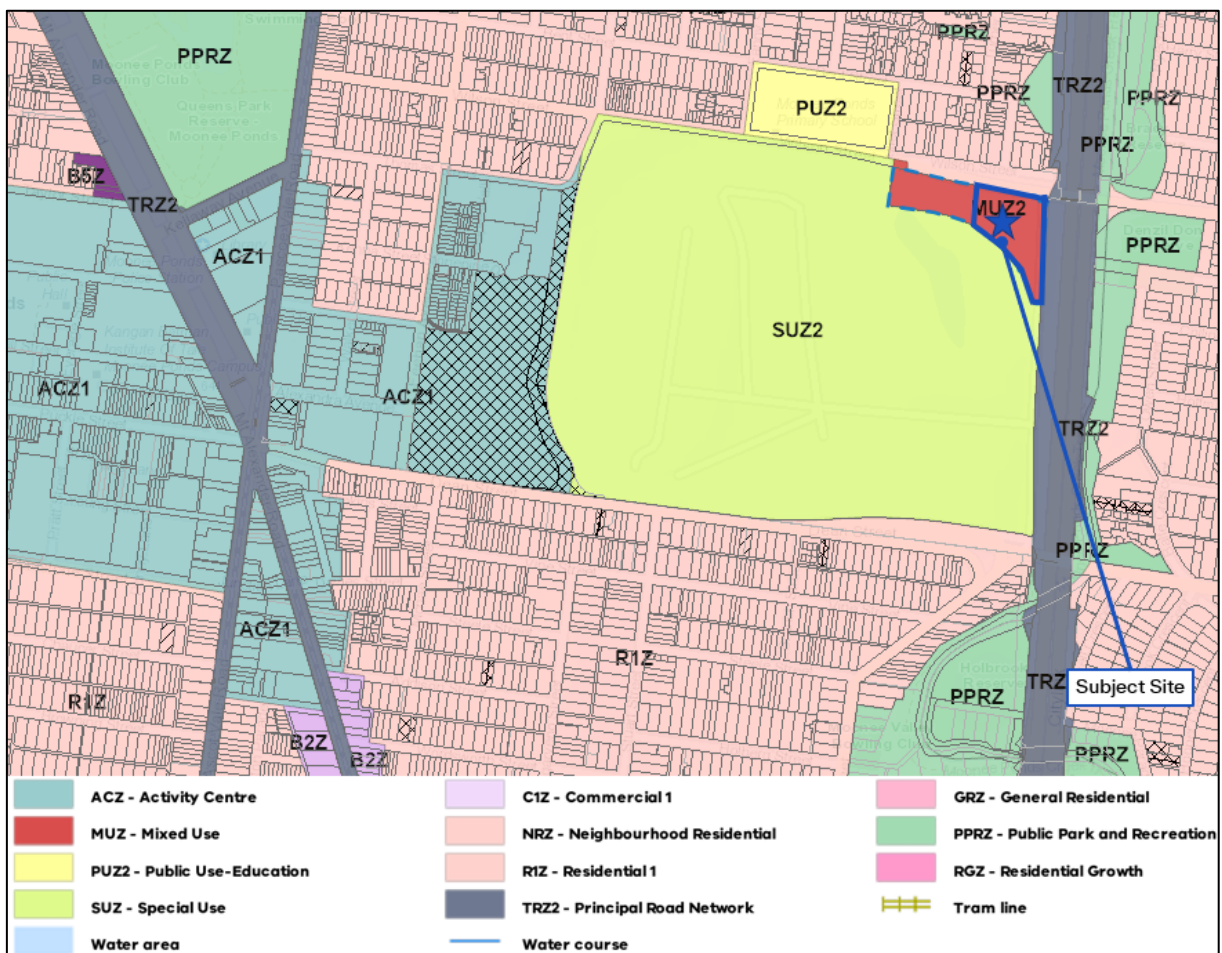
Figure 2.2: Site Location & Its Surrounds



(Source: Nearmap, image dated 15 October 2025)

The subject site location and relevant planning zones are shown in Figure 2.3.

Figure 2.3: Site Location & Planning Zones



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(Source: VicPlan)

The subject site within the NE Precinct has been rezoned to Mixed Use Zone – Schedule 2 (MUZ2). As previously noted, this land does not form part of ACZ1 which the ITP and TAMP were originally prepared to support. However, the microsimulation traffic modelling undertaken for the TAMP did include an allowance for 300 residential dwellings across Lots 1 and 2 in the NE Precinct, based on known future development assumptions at the time.

As the site lies outside ACZ1, the ITP and TAMP are not technically controlling documents for the assessment of development on this land. However, given that the microsimulation modelling incorporated the NE Precinct in its background assumptions, it is expected that the assumptions and limitations from those documents are generally applicable to the site.

2.2. Surrounding Road Network

Wilson Street

The site has frontage to Wilson Street, which is classified as a major Council road (collector street). Wilson Street provides a single traffic lane in each direction, with footpaths on both sides. In the vicinity of the subject site, Wilson Street rises toward the overpass that spans CityLink, resulting in a noticeable grade separation between the site and the road level, increasing toward the eastern end of the frontage.

As outlined earlier, CityLink forms the eastern boundary of the site; however, there is no direct access to CityLink from Wilson Street. The closest entry points to CityLink are via Moreland Road and Brunswick Road.

2.3. Traffic Volumes

Turning Movement Count Survey

Ratio Consultants commissioned turning movement count surveys between 7:30am – 9:00am and 3:00pm – 6:00pm on Wednesday 30 May 2025 at the intersection of Wilson Street, and Juliet Street, fronting the subject site as illustrated in Figure 2.4.

Figure 2.4: Turning Movement Count Survey



The peak-hour traffic volumes running pas the site frontage have been extracted from the survey results and are presented in Table 2.1.

Table 2.1: Wilson Street Peak Hour Traffic Volumes

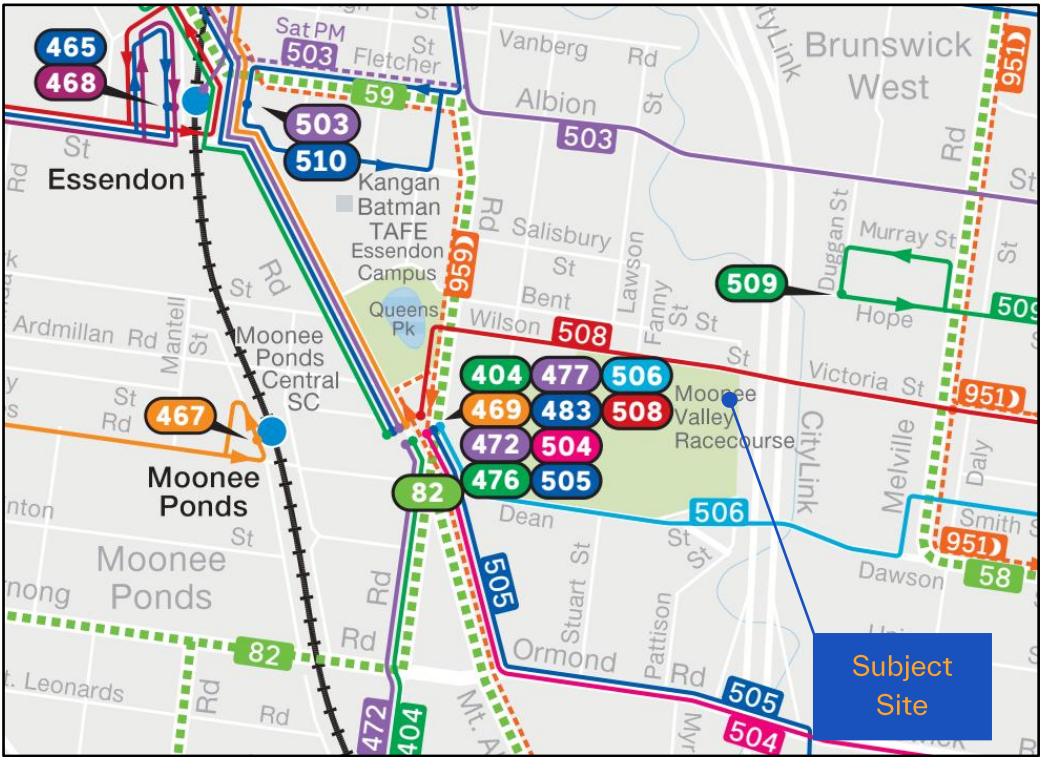
Time Period	Eastbound Movements (to Node 2)	Westbound Movements (from Node 2)
AM Peak (8:00-9:00am)	312 vph	249 vph
PM Peak (4:45-5:45pm)	260 vph	389 vph

2.4. Sustainable Transport

Public Transport

The subject site has good access to public transport as shown in Figure 2.5, albeit with a walking distance of just over a 1km to the key node of the Moonee Ponds Junction. Moreover, based on the available public transport services, an isochrone drawing of the area accessible from the subject site location in a 30-minute public transport journey is presented in Figure 2.6.

Figure 2.5: Public Transport Services in the Vicinity of the Site

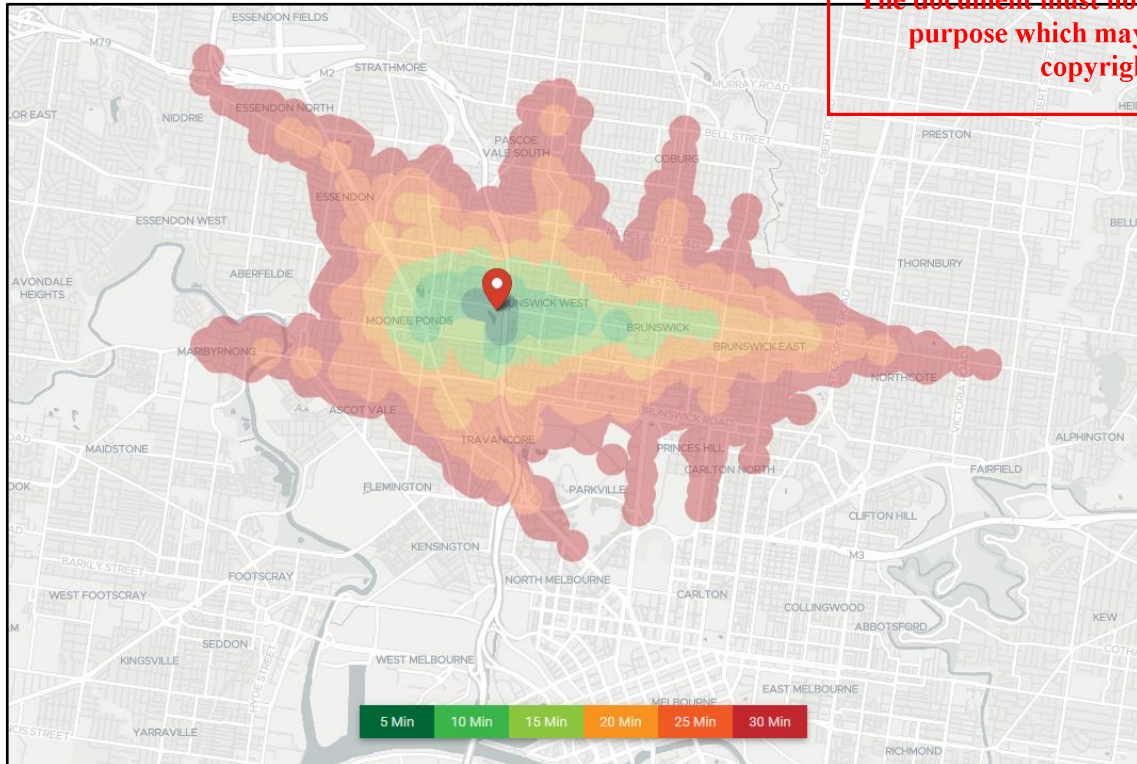


(Source: Public Transport Victoria)

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Figure 2.6: Public Transport Catchment Area (from subject site)



(Source: Targomo)

Figure 2.6 indicates that all adjoining suburbs can be accessed in a 30-minute public transport journey, including the Moonee Ponds Activity Centre which can be accessed within 10 minutes.

Bicycle Network

The site has excellent access to the surrounding bicycle network, with the following bicycle routes located in close proximity of the subject site location:

- Off-road shared paths along Moonee Ponds Creek Trail;
- On-road bicycle lanes on Wilson Street, Victoria Street, Dawson Street, Alexander Road, Melville Road; and
- Multiple other informal linking bicycle routes in close proximity to the site.

The above cycling infrastructure provides the connection to the wider bicycle network, thereby providing further connections across Moonee Ponds and nearby suburbs

The bicycle infrastructure in the vicinity of the site is shown in Figure 2.7 and the 30-minute cycling catchment area from the subject site is shown in Figure 2.8.

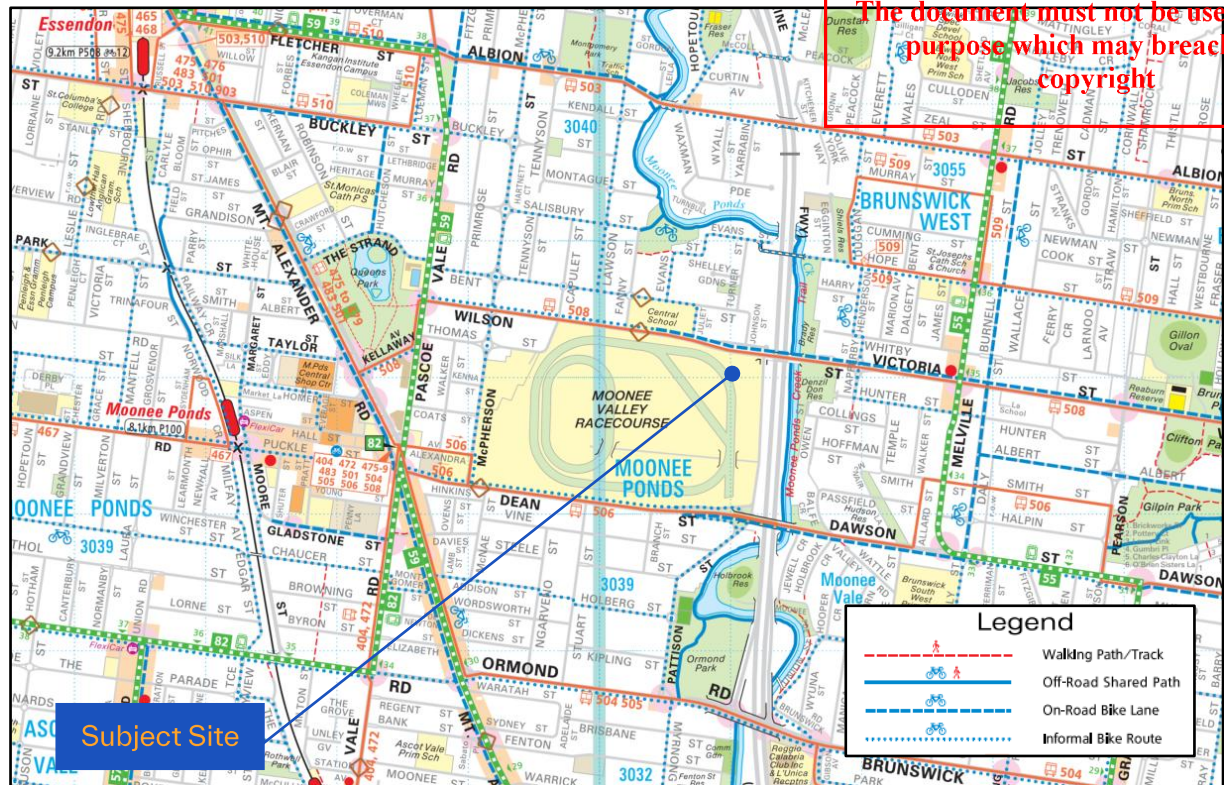
It should also be noted that the wider ACZ development will also deliver numerous new cyclist links and infrastructure, consistent with the requirements outlined in the ITP document.

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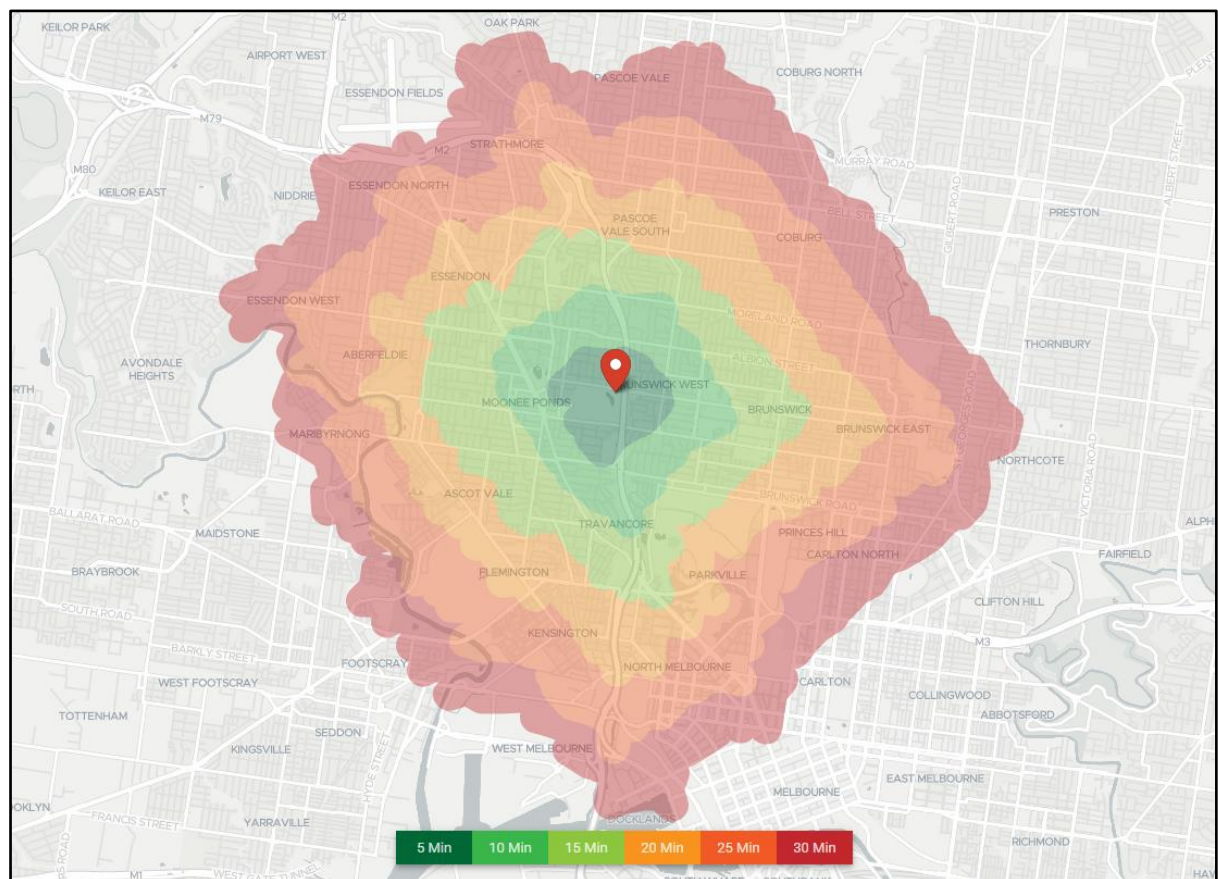
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Figure 2.7: Bicycle Infrastructure in the Vicinity of the Site



(Source: City of Moonee Valley Travelsmart Map)

Figure 2.8: Cycling Catchment Area (from subject site)



(SOURCE: TARGOMO)

Walking

Constructed footpaths are provided along both sides of the majority of streets in the nearby vicinity of the site. The site location achieves a walk score of '60 out of 100' (on [walkscore.com](https://www.walkscore.com)), indicating that the surrounding area is '*somewhat walkable*' and that '*some errands can be accomplished on foot*'.

As such, the site location is considered to exhibit the characteristics to support walking as a primary mode of travel for those residing within or visiting the site.

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3. Development Overview

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3.1. Proposed Development Summary

It is proposed to construct a multi-storey residential development on land at 110 Wilson Street in Moonee Ponds. The initial development will consist of three buildings, which have been nominally named as follows:

- Track Central
- Track East
- Wilson East (affordable housing).

The development mix for each building is summarised in Table 3.1 and the key elements related to transport matters are outlined in Table 3.2.

Table 3.1: Development Summary

Land Use		
Wilson East		Size / Number
Dwellings (Affordable Housing)	1 bedroom	93 dwellings
	2 bedroom	64 dwellings
	3+ bedroom	1 dwelling
	Total	158 dwellings
Track East		Size / Number
Dwellings	1 bedroom	40 dwellings
	2 bedroom	112 dwellings
	3+ bedroom	37 dwellings
	Total	189 dwellings
Track Central		Size / Number
Dwellings	1 bedroom	28 dwellings
	2 bedroom	104 dwellings
	3+ bedroom	33 dwellings
	Total	165 dwellings
Grand Total		512 dwellings

Table 3.2: Transport Infrastructure

Transport Infrastructure	
Description	Development Details
Vehicular Access	One vehicle crossovers to Wilson Street located generally in the same location as the existing racetrack access point for Track Central, Wilson East and Track East buildings.
On-Site Car Parking	Total of 511 car parking spaces across all lower ground and basement car parking levels.
On-Site Bicycle Parking	Total of 512 bicycle parking spaces in secure storage rooms within lower ground and basement car parking levels.
Pedestrian Access	There are various pedestrian access points to the separate buildings, both from the external footpaths fronting the site along Wilson Street and interconnecting footpaths to/from Lifts and Lobby Areas.
Loading	An on-site loading area is provided for residential use by vehicles up to a 6.4m Small Rigid Vehicle (SRV).
Waste	Private collection from waste rooms within each car park, by a 6.4m mini-rear loader.

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4. Car Parking Assessment

4.1. Clause 52.06-5 – Planning Scheme Assessment

Parking requirements for new developments are set out under Clause 52.06 of the Moonee Valley Planning Scheme.

A Planning Scheme Amendment was recently gazetted in late December 2025, which made changes to the way statutory car parking requirements are calculated across Victoria under Clause 52.06. Car parking requirement maps have been introduced which determine the car parking category of any given site and the relevant parking rates that apply to the site.

In this case the subject site is located in a Category 2 area and therefore the following car parking rates apply as a minimum requirement, as outlined in Table 4.1 for each building within the proposed development.

Table 4.1: Statutory Car Parking Requirements

Land Use	Size/Number	Statutory Car Parking Rate (Category 2)	Statutory Requirement
Wilson East			
Residential (Dwelling)	158 dwellings	1 space to each dwelling	158 spaces
Track East			
Residential (Dwelling)	189 dwellings	1 space to each dwelling	189 spaces
Track Central			
Residential (Dwelling)	165 dwellings	1 space to each dwelling	165 spaces
Total Statutory Car Parking Requirement			512 spaces

Accordingly, the proposal has a statutory requirement to provide a total minimum of 512 car parking spaces on-site.

Each building includes the proposed allocation of car parking spaces as listed in Table 4.2.

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Table 4.2: Car Parking Allocation

Building	Car Parking Requirement	Car Parking Provision	Net Difference
Wilson East	158 spaces	87 spaces	-71 spaces
Track East	189 spaces	226 spaces	+37 spaces
Track Central	165 spaces	198 spaces	+33 spaces
Total	512 spaces	511 spaces	-1 spaces

The overall development seeks to provide a total of 512 car parking spaces. Both Track East and Track Central exceed their minimum parking requirements, while Wilson East is seeking a reduction of 71 spaces.

Under the provisions of Clause 52.06, the responsible authority is able to reduce the parking requirements, provided the applicant satisfies the responsible authority that the provision of car parking is justified.

An assessment of the expected parking demand and the appropriateness of allowing a reduction to on-site parking requirements for the proposed development is discussed in the following sections.

It should be noted that in this case the only building seeking a reduced resident car parking provision is Wilson East, which will accommodate the affordable housing component of the development and therefore expected to generate a reduced demand for car parking. All other buildings will meet their respective minimum statutory car parking requirements for residents.

This is addressed within the following sections.

4.2. Car Parking Demand Assessment

Clause 52.06-7 of the Moonee Valley Planning Scheme states that an application to reduce the number of car parking spaces required under Clause 52.06-5 must be accompanied by a Car Parking Demand Assessment which must address the following matters where relevant:

- 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.

The relevant Car Park Demand Assessment criteria are discussed in the following sections.

Empirical Car Parking Demands

Wilson East will be an affordable housing development whereas the other buildings will all be built-to-sell (BTS) developments. As Wilson East is the only building seeking a car parking

reduction for residents, the following empirical assessment considers the demand rates only for the affordable housing component.

Affordable Housing Car Ownership Rates in Moonee Ponds

To understand the existing car ownership of affordable housing developments within the suburb of Moonee Ponds, reference is made to the ABS car ownership statistics. The car ownership rates are outlined below, based on filtering out the census data to include only the households with total incomes that would qualify for affordable housing:

- One-bedroom apartments: 0.68 vehicles per dwelling;
- Two-bedroom apartments: 1.0 vehicles per dwelling; and
- Three-bedroom apartments: 1.5 vehicles per dwelling.

The above results indicate that the vehicle ownership rates for affordable housing in Moonee Ponds is lower than the statutory requirements of Clause 52.06-5 of the Moonee Valley Planning Scheme, depending on the mix of apartment sizes.

For reference, the recommended reduced car parking rates in the ITP are generally consistent with the above affordable housing rates. While the ITP is not technically applicable to the subject site, the principles captured within the ITP are still considered relevant to the NE precinct, given its proximity and association to the main ACZ development area.

Empirical Car Parking Demand Summary

A summary of the expected car parking demand for Wilson East is provided in Table 4.3, based on application of the ABS car ownership rates to the dwelling mix.

Table 4.3: Empirical Car Parking Demand

Building	Source	Empirical Demand	Car Parking Provision	Net Difference
Wilson East	ABS	131 spaces	87 spaces	-44 spaces

Based on the assessment above, the proposed parking provision for Wilson East will be 44 spaces short of the anticipated demands based on car ownership data for affordable housing in the area.

The availability of public transport in the locality

The subject site is provided with good access to public transport services. Of particular note, Bus Route 508 runs along the subject site frontage and just over 1km walking distance provides access to a diverse range of other public transport services at the Moonee Ponds Junction, as shown within Section 2.4.

Given the access to sustainable transport options, users of the development are able to travel to and from the site without relying on the use of a private motor vehicle which will reduce the demand for car parking.

The convenience of pedestrian and cyclist access

Pedestrian footpaths are provided on both sides of roads in the vicinity of the site which are generally in good condition. The proposed main pedestrian access to the site will provide a

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clear, safe and direct link to and from the surrounding pedestrian network, nearby public transport services and local shops and services.

Additionally, the site has excellent access to the surrounding bicycle network, with several on and off-road bicycle facilities provided in close proximity to the subject site, as detailed in Section 2.4.

The ITP also outlines a high-quality internal pedestrian and cycling network for the MVRC site which will further facilitate pedestrian and cyclist movements.

These facilities are expected to provide a viable means of alternative active transport that will reduce future reliance on private motor vehicles for users of the development.

The Provision of Bicycle Parking and End of Trip Facilities for Cyclists

The proposal includes a generous provision of 512 bicycle parking spaces, including 158 spaces in the Wilson East building, well in excess of the statutory requirements.

These facilities will help to encourage cycling as a mode of transport to/from the site and is expected to help reduce the reliance on private motor vehicle use.

Pick-up/Drop-off Opportunities

A dedicated Porte Cochere area is included with the design that can accommodate short term pick-up/drop-off activity. By providing a convenient space for short-term stopping, the development enables greater use of shared trips, carpooling and rideshare/taxi, which in turn reduces the need to own a car and the subsequent need for on-site car parking.

4.3. Allowing for Fewer Spaces to be Provided

Clause 52.06-7 sets out a range of factors to be considered when determining the appropriateness of allowing fewer parking spaces to be provided than the car parking demand assessment indicates. In this case, the most important and relevant factors that have been addressed in the following sections are:

- Alternative transport modes.
- Local traffic management in the locality of the land.
- Any other relevant considerations.

Alternative Transport Modes

As discussed throughout the report, the subject site is readily accessible by alternative transport options, including public transport and bicycle infrastructure. The site is also within walking distance of numerous shops and services within the Moonee Ponds Activity Centre (MPAC) and the MVP development precinct.

Local Traffic Management in the Locality of the Land

The reduction of car parking for the development can result in a slightly reduced level of traffic in comparison to what would have been generated if more on-site car parking was freely provided. This will improve local traffic conditions in the locality of the land.

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Strategic Policy Considerations

As previously outlined, the ITP document that informs development of the neighbouring ACZ precinct strongly encourages less car parking provision in the interest of reducing car ownership and increasing the use of more sustainable transport modes.

The proposed reduced car parking provision for Wilson East seeks to align with that overarching objective by limiting car parking supply for residents, in particular those within an affordable housing project that typically have lower car ownership demands.

Open Information on Parking Allocation

Residents seeking to purchase an apartment in these buildings will be purchasing 'with eyes wide open', knowing up front whether they have a parking space allocation or not. This information does not come as a surprise for owners after they purchase the apartment.

This will therefore mean that these prospective buyers will already be naturally inclined towards sustainable transport modes, given that they are openly looking to purchase a dwelling without an allocated parking space. This is a more effective method of creating mode shift away from car travel, than providing an unrestricted car parking supply and then seeking to encourage mode shift via other methods.

4.4. Adequacy of Car Parking Provision Summary

In summary, the proposed reduction to resident car parking for Wilson East is considered to be acceptable, with reference to the following key factors:

- The empirical car parking demands identified in the approved ITP, and as supported by relevant ABS data, form the basis for estimating the expected parking demand for the proposed development. While there is a shortfall from these empirical demand estimates for Wilson East, the supply is considered sufficient to meet the anticipated needs of future occupants given the context in proximity to the MVAC.
- It is understood that Council is generally supportive of the proposed reduced parking rates for the affordable housing component, based on preliminary discussions to date.
- The site is located within walking distance of several sustainable transport alternatives such as tram, bus, bicycle and pedestrian facilities. This will enable residents to travel to and from the site using sustainable modes of transport and reduce the demand for car parking.
- The provision of bicycle parking will encourage residents to cycle to and from the site.
- The pick-up/drop-off spaces provided for the development will encourage carpooling and shared trips, which will reduce reliance on private motor vehicles.
- The suppressed provision of car parking will help to force reduced motor vehicle travel to and from the site, resulting in a lessened impact to traffic congestion and pedestrian amenity in the vicinity of the site, compared to a scenario with unconstrained car parking supply.

On the basis of the reasons discussed above, the proposed car parking supply is considered to be suitable for the nature, location and scale of the proposed development.

5. Bicycle Parking Assessment

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5.1. Clause 52.34 Requirements

Requirements for bicycle facilities are set out within Clause 52.34 of the Moonee Valley Planning Scheme. The purpose of Clause 52.34 is defined in the scheme as follows:

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

Bicycle Parking Spaces

The statutory bicycle parking requirements for the application are set out in Table 5.1.

Table 5.1: Statutory Bicycle Parking Requirements

Use	Size/No.	User	Parking Rate	Parking Requirement
Wilson East				
Residential	158 dwellings	Resident	1 space to each 5 dwellings	32 spaces
		Visitor	1 space to each 10 dwellings	16 spaces
		Total		48 spaces
Track East				
Residential	189 dwellings	Resident	1 space to each 5 dwellings	38 spaces
		Visitor	1 space to each 10 dwellings	19 spaces
		Total		57 spaces
Track Central				
Residential	165 dwellings	Resident	1 space to each 5 dwellings	33 spaces
		Visitor	1 space to each 10 dwellings	17 spaces
		Total		50 spaces
TOTALS			103 resident spaces	
			52 visitor spaces	
			155 total spaces	

In accordance with Clause 52.34 of the Moonee Valley Planning Scheme, the overall development is required to provide a total of 155 bicycle parking spaces.

The proposal provides a total of 512 bicycle spaces across the development within the Lower Ground and Basement Level car parks, with each building significantly exceeding its respective statutory bicycle-parking requirement. On average this total rate of provision calculates to 1 space per dwelling.

This approach is consistent with all other MVP precincts to date, where bicycle parking has significantly exceeded the minimum statutory rates.

5.2. Bicycle Parking Layout

All bicycle spaces are provided on Upper Ground Floor or Lower Ground Floor within secure storage rooms for each respective building.

It is recommended for approximately 3 hoops (6 spaces) to be added externally near each of the main building entrances to act as publicly accessible visitor parking spaces. The balance of any visitors cycling to the site will require residents to give them access to park their bicycle in a safe and secure area. To provide the entire visitor parking requirement externally at the building entrances would be excessive and a poor amenity outcome.

The design of bicycle parking spaces are in accordance with the requirements of AS2890.3:2015. This includes all vertical wall mounted racks with an envelope of 0.5m wide x 1.2m off the wall, and horizontal ground level spaces at 0.5m wide x 1.8m long, both with an access aisle at least 1.5m wide.

A high proportion of the bicycle parking is provided in a dynamic double-tier parking system. Due to the dynamic nature of the system, the static spacing is reduced to 0.4m wide x 2.0m long and with a 2.0m wide access aisle, in accordance with Australian Standards.

The requirement for 20% of bicycle parking provisions to be provided in horizontal floor-mounted rails is also met.

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6. Access Arrangements & Car Park Layout

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6.1. Proposed Vehicle Access Arrangements

The vehicle access is located generally in line with the existing racetrack entry at the northeastern corner of the site and is configured as a standard T-intersection. A channelised right turn lane is not proposed at this access due to insufficient verge width and the infeasibility of widening the bridge deck that this access is located off.

Noting these constraints, the access is still proposed to operate with full turning movements available. To ensure this arrangement can operate safely and satisfactorily, on-site sight distance assessment has been undertaken and confirms that the required minimum clear sight distances for movements in and out of the site are provided at this access point, accounting for the crest of the bridge over Citylink. Additionally, as detailed in Section 8, SIDRA modelling of the site access confirms that there will not be any significant queuing to turn right into the site access and eastbound traffic flow on Wilson Street will be relatively unaffected.

6.2. Internal Circulation

Within the site, the main internal circulation routes have been designed with widened aisle widths where possible to facilitate simultaneous two-way vehicle movements at key internal junctions along main circulation routes that will experience higher traffic volumes. This includes the main access to each of the Lower Ground Levels, the primary circulation routes throughout Basement Levels 1 and 2, and the key internal junction between Track Central and Track East.

The configuration of the main aisles and ramp locations is intended to provide efficient, legible circulation for residents accessing the deeper basement levels.

Anywhere that simultaneous two-way movement could not be allowed for in the structural design, vehicles will need to prop and wait for one vehicle to pass through the junction/bend. This is a relatively common informal arrangement within basement car parks and it is recommended that convex mirrors are provided to assist with visibility to conflicting cars, on the outside corner of any bends along the primary internal circulation route between basement levels and ramps.

6.3. Porte Cochere Drop-Off / Pick-Up Facility

An internal porte cochere area is included that caters for short-term pick-up/drop-off activities for the development. From the Porte cochere area residents and visitors will be able to access the lobby areas of their respective building via the connecting pedestrian footpaths.

The Porte cochere area will function like a roundabout with a central island. The design enables two-way movement into/out of the car park and the ability for vehicles to turnaround to exit the site if they are not travelling down into a basement. Given the lack of kerbside

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parking fronting the site, this arrangement is important to cater for package deliveries and other types of short term drop-off/pick-up activity.

The internal driveway includes a loading bay area as well as four parallel parking bays to cater for visitor and short term parking. The porte cochere / roundabout design itself does not specifically allow for parallel parking independent of vehicles circulating around the roundabout. However, with the anticipated traffic volumes from each site, informal short-term propping within the porte cochere for drop-off/pick-up activity is not expected to cause any notable internal congestion.

It is recommended that the parking areas and circulation lanes are clearly delineated, through line-marking or by using a contrasting surface treatment to improve visual clarity and distinguish the circulation driveway from the short-term parking areas. Linemarking and signage will also be required at the roundabout treatment to define the direction of travel and order of priority for certain movements.

6.4. Pedestrian Access & Connectivity

The site has been designed to allow excellent pedestrian permeability. There will be access options to the buildings from the external footpath frontages which provide connections between the Porte cochere, short term car spaces and Wilson Street.

For reference, the key pedestrian links through the site and the building entrance points have been marked in Figure 6.1:

Figure 6.1: Pedestrian Connectivity



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6.5. Clause 52.06-9 – Design Standard Assessment

Design Standard 1 – Accessways

Design Standard 1 within Clause 52.06-9 of the Moonee Valley Planning Scheme relates to the design of accessways. The development proposal has been assessed against the requirements of Design Standard 1 in Table 6.1.

Table 6.1: Design Standard 1 - Accessways

Requirement	Comments
Must be at least 3 metres wide.	<u>Satisfied</u> – All accessways are designed to be two-way movement at 6.4m or more. The circulation aisle for the Porte cochere exceeds 3 metres in width.
Have an internal radius of at least 4 metres at changes of direction or intersection or be at least 4.2 metres wide.	<u>Satisfied</u> – All accessways have been designed to be at least 4.2 metres wide at all changes of direction.
Allow vehicles parked in the last space of a dead-end accessway in public car parks to exit in a forward direction with one manoeuvre.	<u>Not Applicable</u> – The proposed car park will not be publicly accessible. Notwithstanding, the proposed car park has been designed to enable all vehicles to exit the site in a forward direction.
Provide at least 2.1 metres headroom beneath overhead obstructions, calculated for a vehicle with a wheelbase of 2.8 metres.	<u>Satisfied</u> – A minimum headroom clearance in excess of 2.1 metres has been provided throughout the car park.
If the accessway serves four or more car spaces or connects to a road in a Transport Zone 2 or Transport Zone 3, the accessway must be designed so that cars can exit the site in a forward direction.	<u>Not Applicable</u> – The access points do not connect to a road in a Transport Zone 2 or Transport Zone 3. Notwithstanding, all vehicles can exit the site in a forwards direction.
Provide a passing area at the entrance at least 6.1m wide and 7m long if the accessway serves ten or more car parking spaces and is either more than 50m long or connects to a road in a Transport Zone 2 or Transport Zone 3.	<u>Satisfied</u> – Both access points are double width allowing two-way movement.
Have a corner splay or area at least 50% clear of visual obstructions extending at least 2m along the frontage road from the edge of an exit lane and 2.5m along the exit lane from the frontage, to provide a clear view of	<u>Satisfied</u> – The vehicle entry/exit point provides pedestrian sight splay triangles on the departure lane measuring 2.0 x 2.5 metres. It is noted that a sight splay triangle is not required on the inbound side, as the

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pedestrians on the footpath of the frontage road. The area clear of visual obstructions may include an adjacent entry or exit lane where more than one lane is provided.	inbound traffic lane allows clear sightlines on a double width accessway.
If an accessway to four or more car parking spaces is from land in a Transport Zone 2 or Transport Zone 3, the access to the car spaces must be at least 6 metres from the road carriageway.	<u>Not Applicable</u> – Access to the car spaces is not from a road in a Transport Zone 2 or Transport Zone 3. Notwithstanding this, all car spaces are located at least 6 metres from the road carriageway.
If entry to a car space is from a road, the width of the accessway may include the road.	<u>Not Applicable</u> – Car parking spaces are accessed from internal accessways and not directly to/from an adjacent road.

Design Standard 2 – Car Parking Spaces

Design Standard 2 within Clause 52.06-9 of the Moonee Valley Planning Scheme relates to the design of car parking spaces. The development proposal has been assessed against the requirements of Design Standard 2 in Table 6.2.

Table 6.2: Design Standard 2 – Car Parking Spaces

Requirement	Comments
Car parking spaces and accessways must have the minimum dimensions as outlined in Table 2 of Design Standard 2.	<u>Satisfied</u> – All car parking spaces meet the dimensional requirements set out in Table 2 within Design Standard 2. Car parking spaces have been designed as: – 2.6 metres wide by 4.9 metres long, accessed via a minimum 6.4-metre-wide aisle.
A wall, fence, column, tree, tree guard or any other structure that abuts a car space must not encroach into the area marked 'clearance required' on Diagram 1 of Design Standard 2, other than: A column, tree or tree guard, which may project into a space if it is within the area marked 'tree or column permitted' on Diagram 1. A structure, which may project into the space if it is at least 2.1 metres above the space.	<u>Satisfied</u> – All car parking spaces adjacent to a wall have been provided within a minimum 300mm clearance to that structure. All obstructions are located outside of the area marked 'clearance required' within Diagram 1 within Design Standard 2.

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Car spaces in garages must be at least 6 metres long and 3.5 metres wide for a single space and 5.5 metres wide for a double space measured inside the garage.	<u>Not Applicable</u> – No garages are proposed.
Where parking spaces are provided in tandem (one space behind the other) an additional 500mm in length must be provided between each space.	<u>Satisfied</u> – The select few tandem spaces include the additional 0.5m in length.
Where two or more car parking spaces are provided for a dwelling, at least one space must be under cover.	<u>Satisfied</u> – All residents car parking spaces are undercover.

Design Standard 3 – Gradients

Design Standard 3 within Clause 52.06-9 of the Moonee Valley Planning Scheme relates to the design of gradients. The development proposal has been assessed against the requirements of Design Standard 3 in Table 6.3.

Table 6.3: Design Standard 3 - Gradients

Requirement	Comments
Accessway grades must not be steeper than 1:10 (10%) within 5 metres of the frontage to ensure safety for pedestrians and vehicles. The design must have regard to the wheelbase of the vehicle being designed for; pedestrian and vehicular traffic volumes; the nature of the car park; and the slope and configuration of the vehicle crossover at the site frontage. This does not apply to accessways serving three dwellings or less.	<u>Satisfied</u> – Accessway grades are not steeper than 1:10 within 5m from the site frontage.
Ramps (except within 5 metres of the frontage) must have the maximum grades as outlined in Table 3 of Design Standard 3 and be designed for vehicles travelling in a forward direction.	<u>Satisfied</u> – The proposed maximum gradient along the ramps between basement levels of 1:5 is in accordance with the requirements of Design Standard 3 within Clause 52.06-9 of the Moonee Valley Planning Scheme.
Where the difference in grade between two sections of ramp or floor is greater than 1:8 (12.5%) for a summit grade change, or greater than 1:6.7 (15%) for a sag grade change, the ramp must include a transition section of at least 2 metres to prevent vehicles scraping or bottoming.	<u>Satisfied</u> – Appropriate transition sections have been provided to prevent vehicles from scraping or bottoming out.

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Plans must include an assessment of grade changes of greater than 1:5.6 (18%) or less than 3 metres apart for clearances, to the satisfaction of the responsible authority.	
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6.6. Swept Path Assessment

In addition to the above, an assessment of site access and circulation has been undertaken using the 'Autodesk Vehicle Tracking' software program (refer to Appendix A). The includes the following key movements:

- Simultaneous two-way movement between a 99th and 85th percentile vehicles (B99 and B85) through the site access point to Wilson Street.
- Simultaneous two-way movement between B99 and B85 through the critical internal aisle junctions that connect with the main circulation aisles through the car park levels and at the top and bottom of the ramps between parking levels. As previously noted, any locations where simultaneous two-way movement could not be accommodated around structural requirements, an informal propping and give-way arrangement will be adopted, as is common practice among low turnover basement car parks. It is recommended that convex mirrors are placed on the outside corner of bends / junctions in these instances, to improve sightlines to conflicting vehicle movements and provide advance warning for one vehicle to give-way.
- B99 vehicle manoeuvres through the porte cochere area.
- B85 movements into the spaces in the porte cochere area and any non-standard parking spaces.

The assessment indicates that all of the above movements can be completed with adequate clearances to all structures and passing vehicles.

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7. Loading & Waste Collection Arrangements

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7.1. Statutory Requirement

Clause 65.01 'Decision Guidelines' of the Moonee Valley Planning Scheme outlines the provision of loading requirements and states the following:

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

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

7.2. Loading Arrangements

Loading demands for the residential apartments will be limited to when residents are either moving in or out of apartments at the start/end of their tenancy. With the exception of the initial building occupation, these loading demands will be fairly infrequent.

Some of the indented parking bays in between the three eastern buildings will be used to double as loading bays that can be booked for use through building management. This location provides convenient short distance access to all three buildings and will be open-air so has no issues with height restriction.

The majority of residential loading activities for apartments is completed by vans, cars with trailers or vehicles up to a 6.4m Small Rigid Vehicle (SRV) in size. Market research confirms that the most common vehicle size used by removalists for apartment dwellings is a 6.4m SRV, based on the typical volume of furniture that apartments can hold. Accordingly, circulation movements through the porte cocheres and into the nominated loading bay areas has been designed for a 6.4m SRV.

The site is also expected to generate activities associated with deliveries to residents (meal delivery services, postal deliveries etc.). Noting the proposed number of dwellings, these could be expected to occur daily. However, they would typically be completed by a standard passenger vehicle or van, courier vehicle or via scooter/bicycle. It is expected that these types of deliveries will be undertaken via the Porte cochere and short-term car spaces central to the buildings.

7.3. Waste Collection Arrangements

It is understood that waste will be collected on-site from the proposed waste storage areas within the carparks by a private contractor using a 6.4m mini-rear loader waste truck.

The swept path assessment demonstrates the ability of a mini rear loader waste truck to access the site from Wilson Street, access each of the car parks, collect waste and use the

circulation aisles to turnaround and depart the site in a forward direction. It is recommended that waste be collected outside of the commuter peak hour periods.

7.4. Adequacy of Loading & Waste Collection Arrangements

Based on the preceding discussion, the proposed loading and waste collection arrangements are considered to be acceptable. For reference, each of the abovementioned swept paths are provided at Appendix A of this report.

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8. Traffic Assessment

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8.1. TAMP Traffic Assessment Considerations

The Transport Assessment and Management Plan (TAMP) provides an assessment of transport impacts associated with the development of the MVRC ACZ precinct and involves comprehensive microsimulation traffic modelling of the surrounding road network.

While the subject site is located outside of the ACZ that the TAMP was prepared for, an allowance of 300 dwellings was made at the time for this precinct to consider its anticipated future development (at the time). The current development scheme for the first stage of the NE Precinct is now 512 dwellings. The anticipated yield for the future stage and buildings is approximately 254 dwellings, for a combined total yield of 766 dwellings for the NE precinct which is greater than this original allowance in the TAMP modelling.

In this regard, the TAMP modelling for the wider Moonee Valley precinct provided traffic allowances based on the originally anticipated mix of commercial, retail, and residential development. A detailed review has since been completed of the now realised development yields across the precinct including completed, under-construction, approved, lodged, and anticipated yields for remaining future precincts, including the subject site (NE precinct). Based on this review, a comparison has been undertaken between the original TAMP development yield allowances and what has been realised across the precinct to date.

This assessment indicates that there is notably less commercial and retail floor space than initially assumed, however, the number of dwellings is significantly higher. Given that these land uses have disproportionate traffic generation rates, the TAMP traffic generation rates have been applied to the realised development yield, to instead compare the original and realised total traffic generation estimates for the precinct.

As a result, weekday AM peak traffic volumes are marginally higher than originally modelled (+20vph), while the more critical PM and weekend peak volumes show a minor reduction comparatively. This assessment demonstrates that the precinct can accommodate the increased development yield of the NE precinct with no notable net difference in the total traffic generation that has previously been contemplated.

A summary table of the TAMP traffic generation allowance, realised development yield and realised traffic generation allowances has been provided in Appendix B.

8.2. Localised Traffic Assessment

As previously stated, the proposed first stage of development of Trackside Gardens comprises 512 dwellings, with an anticipated future yield of 254 dwellings from the other two planned buildings. This equates to a total planned yield of 766 dwellings, representing an increase over the 300 dwellings previously allowed for within the ITP and TAMP traffic study.

In light of this increase, a supplementary traffic assessment has been undertaken to evaluate the additional traffic likely to be generated by the development and to confirm that the

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localised road network around the site and the site access point intersection will operate satisfactorily.

At this stage, the localised assessment of site access points has been focused on the access to Trackside Central and East and Wilson East buildings. The future access to Trackside West and Wilson West buildings will be considered as part of its own separate future application.

8.2.1 Traffic Generation

The traffic generation rates, inbound/outbound proportions, and directional distribution patterns applied in this assessment remain consistent with those adopted in the original TAMP modelling.

Specifically, a peak-hour traffic generation rate of 0.28 vehicle movements per dwelling has been utilised, together with weekday AM peak directional splits of 20% inbound and 80% outbound, and PM peak splits of 60% inbound and 40% outbound.

A 50/50 east-west directional distribution has also been applied for movements in/out of the site, as the site location is expected to lend itself to a split of movements using Sydney Road to the east and Mount Alexander Road to the west.

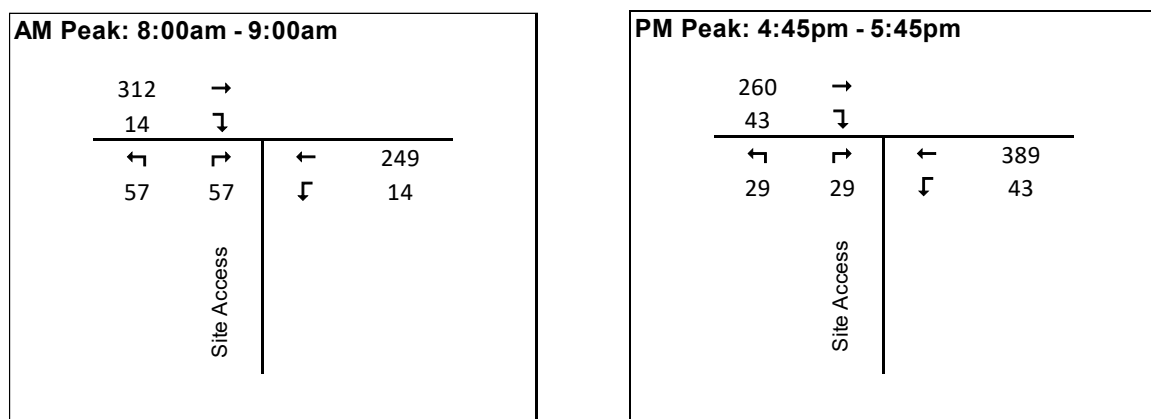
Application of the above rates to the proposed development is summarised in Table 8.1.

Table 8.1: Residential Traffic Generation

	AM Peak Hour (vph)	PM Peak Hour (vph)
Inbound	29	86
Outbound	115	57
Total	143	143

By combining the site generated movements with the existing surveyed movements, the resultant anticipated post development peak hour traffic volumes are shown in Figure 8.1.

Figure 8.1: Post Development Peak Hour Traffic Volumes



8.2.2 Post Development Conditions

A summary of the SIDRA results for the post development conditions is summarised below and shown in full in Appendix C.

Table 8.2: Wilson Street / Site Access – Post Development

Approach	Movement	DOS	AM Peak		DOS	PM Peak	
			Avg Delay (s)	95%ile Queue (m)		Avg Delay (s)	95%ile Queue (m)
Site Access (South)	Left	0.13	6	3	0.08	7	2
	Right	0.13	9	3	0.08	10	2
Wilson Street (East)	Left	0.14	5	0	0.23	5	0
	Through	0.14	0	0	0.23	0	0
Wilson Street (West)	Through	0.18	0	1	0.18	1	3
	Right	0.18	7	1	0.18	7	3
Intersection		0.18			0.234		

The results indicate that the site access intersection is expected to operate under ‘excellent’ conditions during both the AM and PM peak periods in the post development scenario. Queues and delays at the proposed access point are expected to be minimal on all approaches, less than 10 seconds and 1 vehicle for any movement.

Critically, the right turn entry into the access will have only 7 second average delays and queuing of less than 1 vehicle at any time. The eastbound through movement consequently has an average delay of only 1 second, indicating that there is minimal disruption as a result of the right turn entry movement.

As a result, the proposal is not expected to adversely affect the operation of Wilson Street or the surrounding road network.

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9. Conclusion

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It is proposed to construct a multi-storey residential development across three main buildings on land at 110 Wilson Street in Moonee Ponds.

Based on the assessments within this report, the development is considered appropriate on transport ground based on the following key summary items:

- It is proposed to provide a total of 511 car parking spaces on-site. This provision exceeds the statutory requirements of the Track Central and East buildings, but the Wilson East building is short by 71 spaces. The proposed reduction for Wilson East is considered to be an acceptable outcome noting the following key considerations:
 - The empirical car parking demands established in the approved ITP, and supported by relevant ABS data, provide the foundation for estimating the expected parking demand associated with the proposed development. While Wilson East's supply is less than the empirical rates suggest, the supply is considered to be adequate to accommodate the anticipated needs of future residents, particularly given the site's proximity to the MVAC and strategic focus on reducing car ownership and encouraging sustainable transport mode shift.
 - The Wilson East building which will be built as affordable housing stock and it is understood that Council is generally supportive of the proposed reduced parking rates, based on preliminary discussions to date.
 - The site is within walking distance to multiple sustainable transport options, including tram and bus services, as well as high-quality walking and cycling infrastructure. These facilities and services will enable residents to travel to and from the site without reliance on private vehicles, thereby reducing overall demand for car parking.
 - The provision of bicycle parking well above statutory rates within the development will further support active and sustainable travel by encouraging residents to cycle for local and medium-distance trips.
 - The inclusion of designated pick-up and drop-off spaces will facilitate carpooling and shared travel, reducing the need for single-occupant vehicle trips and supporting more efficient use of the road network.
 - The moderated level of car parking provision will help to suppress unnecessary vehicle travel generated by the development, thereby minimising traffic impacts and supporting improved pedestrian amenity in the surrounding area compared to a scenario with unconstrained supply of parking. This is a more effective method of forcing mode-shift than strategies that encourage change while still providing standard parking supply rates.
- The proposed car park and access arrangements have been suitably designed and are in general accordance with the requirements of the Moonee Valley Planning Scheme and/or AS/NZS 2890.1:2004.

- The Porte Cochere arrangement has been designed appropriately to accommodate 6.4m SRV movements as the critical design vehicle. These facilities will be able to accommodate drop-off / pick-up via informal propping within the roundabout circulation areas.
 - A swept path assessment has been conducted that demonstrates sufficient site access, circulation within the car park as well as access to/from the critical car parking spaces. Where simultaneous two-way vehicle movement is not completely possible around corners, convex mirrors are recommended to be provided to improve sightlines to conflicting vehicles to allow drivers to prop and give-way where necessary.
- The car parking layout and access arrangements have been designed in accordance with the requirements of Clause 52.06-9 of the Moonee Valley Planning Scheme and/or the AS/NZS2890.1:2004.
 - The proposed bicycle parking provision significantly exceeds the statutory requirements set out in Clause 52.34-5 of the Moonee Valley Planning Scheme. The bicycle parking is designed in accordance with AS/NZS2890.3:2015. Notwithstanding, it is recommended for approximately 3 hoops (6 spaces) to be added externally near each of the main building entrances to act as publicly accessible visitor parking spaces.
 - The infrequent residential loading will be completed using the upper/lower ground parking bays attached to the porte cochere treatments, able to be booked out by residents through building management. This operation is not expected to require anything larger than a 6.4m SRV design vehicle.
 - Waste collection will be undertaken using a mini-rear loader truck that informally props within the parking aisles and collects from the individual waste bin rooms within the Lower Ground and Basement Levels.
 - The traffic impacts of the development have been previously assessed as part of the ITP and TAMP reporting. A comparison has been undertaken between the original TAMP development yield allowances and the realised development potential across the broader precinct. While there is a higher residential yield than originally anticipated, there is significantly less commercial and retail yield. This assessment therefore confirms that there is negligible difference in the total traffic generation that has been allowed for within the MRVC precinct, even with the increased dwelling yield being proposed in the NE precinct.
 - Localised traffic modelling has also been undertaken for the site access point to confirm that the proposed development will operate with excellent conditions under the post-development scenario.

On the basis of the assessments summarised above, the development proposal is considered to be acceptable from a transport engineering perspective.

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Appendix A - Swept Path Assessment

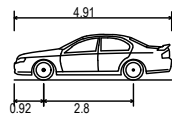
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B85 Vehicle (AS/NZS2890.1:2004)

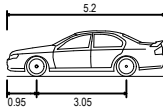


Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to Lock Time
Curb to Curb Turning Radius

VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

4.910m
1.870m
1.421m
0.159m
1.770m
4.00 sec
5.80m

B99 Vehicle (AS/NZS2890.1:2004)



Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to Lock Time
Curb to Curb Turning Radius

VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

5.200m
1.940m
2.200m
0.312m
1.840m
4.00 sec
6.30m

Proposed Residential Development
110 Wilson Street, Moonee Ponds VIC 3039
Swept Path Assessment - Upper Ground Circulation

NOTE:
1) Base Plan Supplied By DKO Architecture
2) Maximum Design Speed 10km/h

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RATIO REFERENCE
22520T-SK001-E

SHEET No.
1 of 7

PREPARED BY
A.H.

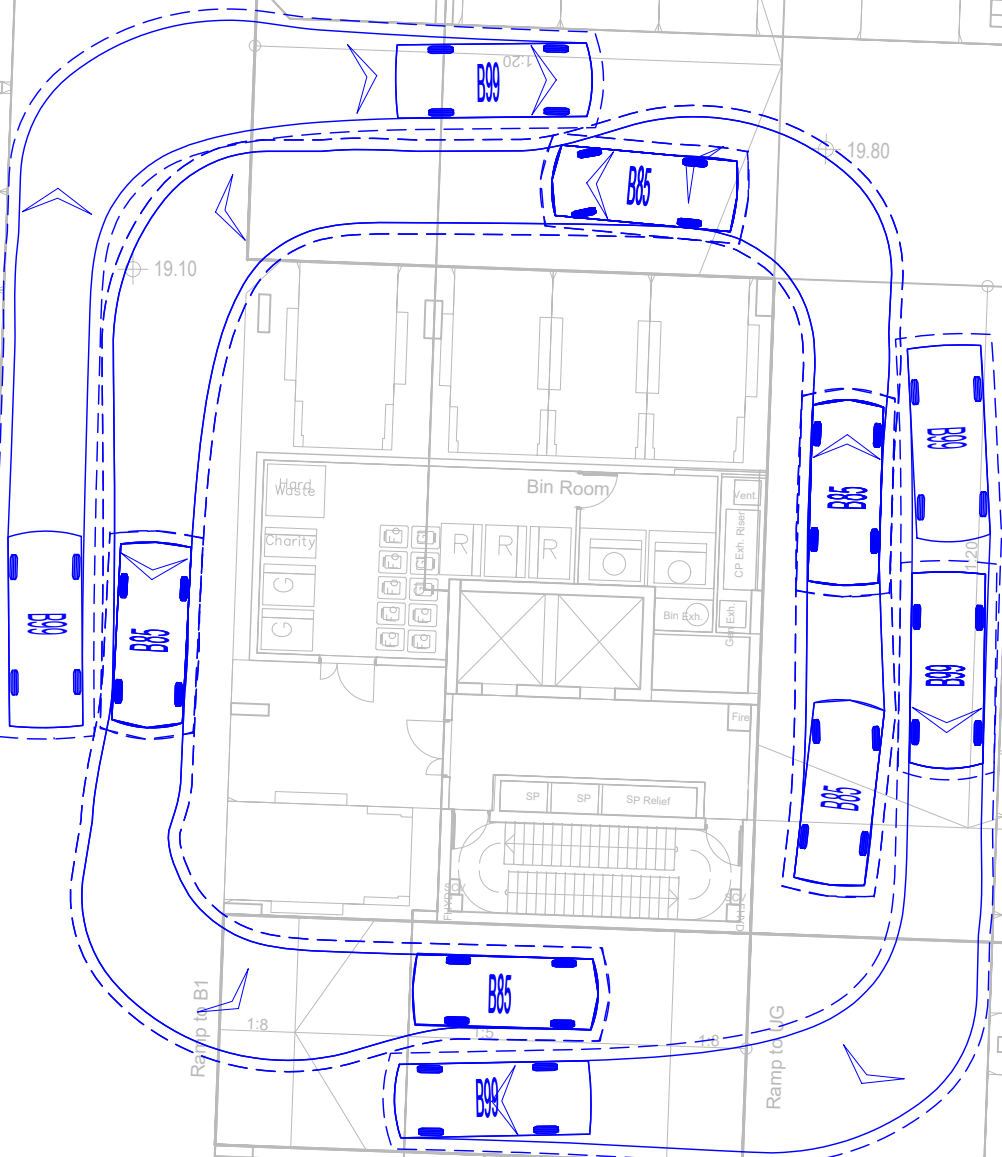
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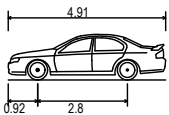
WILSON EAST - LG

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WILSON EAST
42 Cars
1,755.2 m²

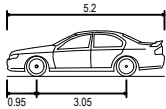


B85 Vehicle (AS/NZS2890.1:2004)



VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

B99 Vehicle (AS/NZS2890.1:2004)



Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to Lock Time
Curb to Curb Turning Radius

VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Proposed Residential Development
110 Wilson Street, Moonee Ponds VIC 3039
Swept Path Assessment - Wilson East Circulation

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NOTE:
1) Base Plan Supplied By DKO Architecture
2) Maximum Design Speed 10km/h

RATIO REFERENCE
22520T-SK001-E

SHEET No.
2 of 7

PREPARED BY
A.H.

SCALE
1:200 @A3

DATE
20/02/2026

ratio:

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ABN 005 422 104
8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

TRACK EAST - LG

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B85 Vehicle (AS/NZS2890.1:2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	5.80m

VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

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B99 Vehicle (AS/NZS2890.1:2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

Proposed Residential Development
110 Wilson Street, Moonee Ponds VIC 3039
Swept Path Assessment - Track Central & East Circulation

NOTE:
1) Base Plan Supplied By DKO Architecture
2) Maximum Design Speed 10km/h

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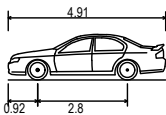
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22520T-SK001-E	3 of 7	A.H.	1:250 @A3	20/02/2026

TRACK CENTRAL - B1

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B85 Vehicle (AS/NZS2890.1:2004)



VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

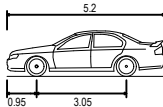
VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to Lock Time
Curb to Curb Turning Radius

4.910m
1.870m
1.421m
0.159m
1.770m
4.00 sec
5.80m

B99 Vehicle (AS/NZS2890.1:2004)



VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to Lock Time
Curb to Curb Turning Radius

5.200m
1.940m
2.200m
0.312m
1.840m
4.00 sec
6.30m

Proposed Residential Development
110 Wilson Street, Moonee Ponds VIC 3039
Swept Path Assessment - Track Central Circulation

NOTE:
1) Base Plan Supplied By DKO Architecture
2) Maximum Design Speed 10km/h

RATIO REFERENCE
22520T-SK001-E

SHEET No.
4 of 7

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1:250 @ A3

DATE
20/02/2026



0 2.5 5

TPZ 7

TPZ 8

TPZ 9

TPZ 10

TPZ 1

TPZ 12

Staging line

TPZ 9

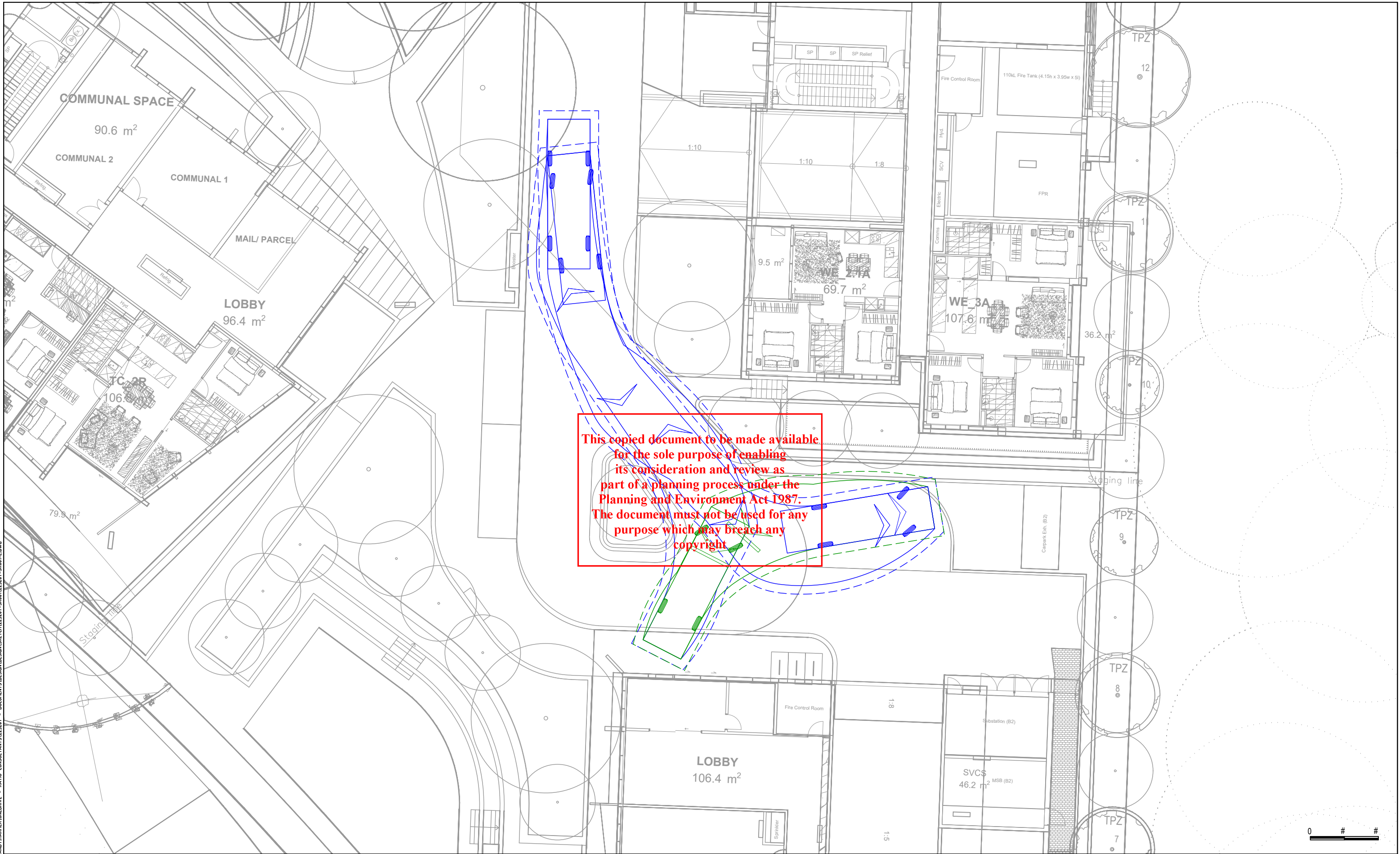
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TPZ 7

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RATIO CONSULTANTS PTY LTD

ABN 005 422 104

8 GWYNNE STREET

CREMORNE, VICTORIA 3121

TELEPHONE (03)9429 3111

FACSIMILE (03)9429 3011

MRV - Medium Rigid Vehicle (AS/NZS2890.2:2002)

VEHICLE ENVELOPE (FORWARD)

500mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

500mm CLEARANCE (REVERSE)

Proposed Residential Development

110 Wilson Street, Moonee Ponds VIC 3039

Swept Path Assessment - MRV Turnaround

NOTE:

1) Base Plan Supplied By DKO Architecture

2) Maximum Design Speed 10km/h

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RATIO REFERENCE

22520T-SK001-E

SHEET No.

6 of 7

PREPARED BY

A.H.

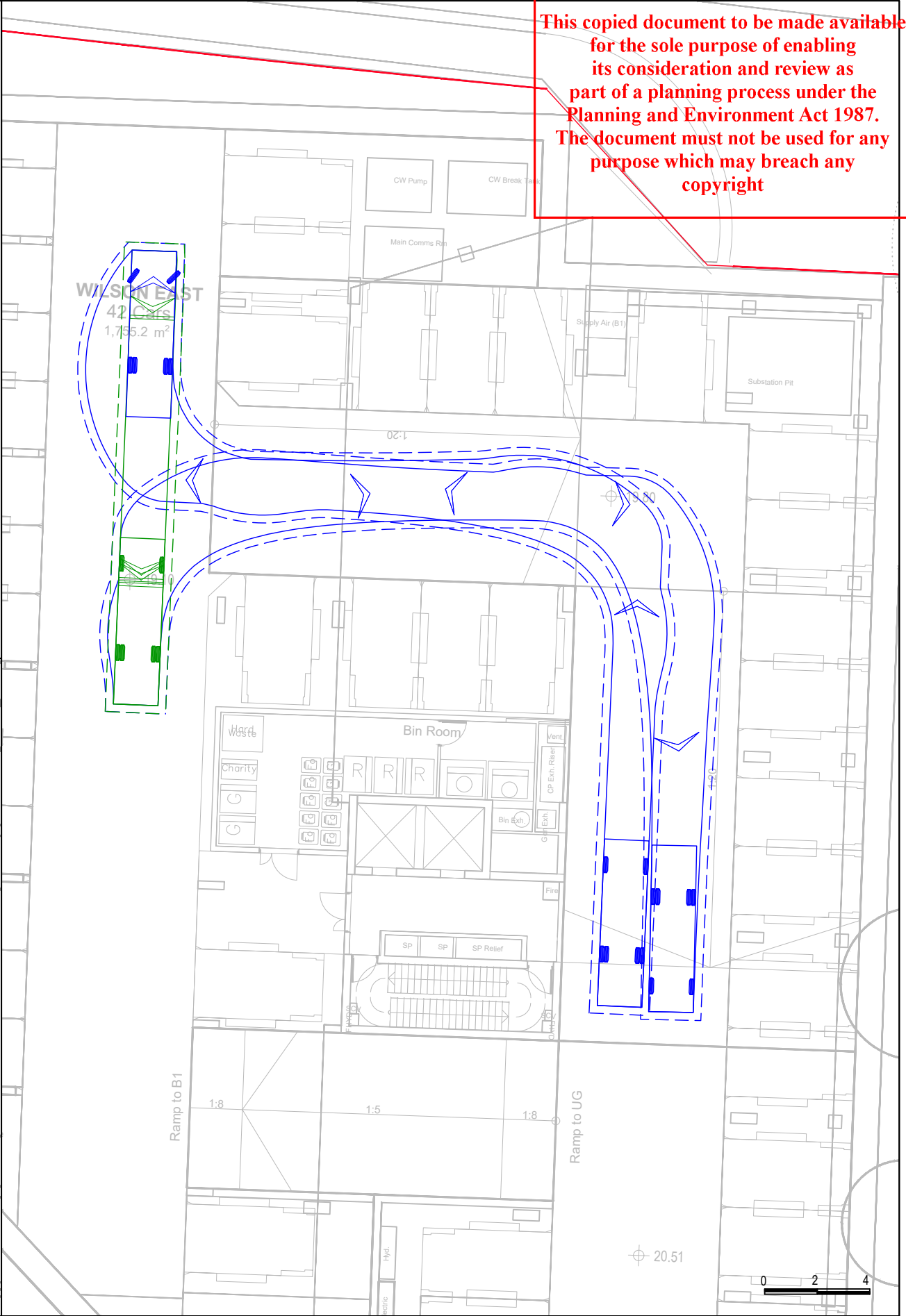
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20/02/2026

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CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

Mini-Rear Loader Waste Collection Vehicle

6345

980

3400

VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

Overall Length
Body Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to Lock Time
Curb to Curb Turning Radius

6.345m
1.700m
2.080m
0.205m
1.670m
4.00 sec
6.450m

Proposed Residential Development
110 Wilson Street, Moonee Ponds VIC 3039
Swept Path Assessment - Lower Ground Waste Collection

NOTE:
1) Base Plan Supplied By DKO Architecture
2) Maximum Design Speed 10km/h

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RATIO REFERENCE 22520T-SK001-E	SHEET No. 7 of 7	PREPARED BY A.H.	SCALE 1:200@A3	DATE 20/02/2026
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Appendix B - TAMP Traffic Generation Comparison

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TAMP TRAFFIC GENERATION ALLOWANCE

		Traffic Generation Rate			Source	In / Out Ratio						Vehicle Movements								
Land Use	Size/No.	AM	PM	SAT		AM		PM		SAT		AM			PM			SAT		
						In	Out	In	Out	In	Out	In	Out	Total	In	Out	Total	In	Out	Total
Dwellings (West Precinct)	2000 dwellings	0.28 vph/dwellings	0.28 vph/dwellings	0.28 vph/dwellings	TAMP	20%	80%	60%	40%	50%	50%	112 vph	448 vph	560 vph	336 vph	224 vph	560 vph	280 vph	280 vph	560 vph
Dwellings (NE Precinct)	300 dwellings	0.28 vph/dwellings	0.28 vph/dwellings	0.28 vph/dwellings	TAMP	20%	80%	60%	40%	50%	50%	17 vph	67 vph	84 vph	50 vph	34 vph	84 vph	42 vph	42 vph	84 vph
Office	18000 sqm	1.20 vph/100sqm NFA	1.00 vph/100sqm NFA	0.00 vph/100sqm NFA	TAMP	90%	10%	10%	90%	N/A	N/A	194 vph	22 vph	216 vph	18 vph	162 vph	180 vph	N/A	N/A	N/A
Shop	2880 sqm	1.20 vph/100sqm NFA	5.00 vph/100sqm NFA	10.00 vph/100sqm NFA	TAMP	50%	50%	50%	50%	50%	50%	17 vph	17 vph	35 vph	72 vph	72 vph	144 vph	144 vph	144 vph	288 vph
Supermarket	3400 sqm	1.20 vph/100sqm NFA	6.02 vph/100sqm NFA	6.79 vph/100sqm NFA	TAMP	50%	50%	50%	50%	50%	50%	20 vph	20 vph	41 vph	102 vph	102 vph	205 vph	115 vph	115 vph	231 vph
												361 vph	574 vph	935 vph	579 vph	594 vph	1173 vph	581 vph	581 vph	1163 vph

REALISED DEVELOPMENT YIELD

Western Precincts	Dwellings	Office / Commercial	Shop	Supermarket
Feehan Row South	44 dwellings			
Feehan Row North	36 dwellings			
Thomas Street Apatments	69 dwellings			
Stonepine House	122 dwellings			
Trackside House	208 dwellings			
Evaline West	151 dwellings			
Evaline East	243 dwellings	131 sqm		
Cox Place North	262 dwellings		357 sqm	
Grandstand North	216 dwellings	3576 sqm	221 sqm	790 sqm
Cox Place South	273 dwellings		600 sqm	
Grandstand South	366 dwellings	295 sqm	949 sqm	
Stables West	88 dwellings	266 sqm	122 sqm	
Stables East	50 dwellings			
Dean West	150 dwellings			
Dean East	55 dwellings			
TOTALS	2333 dwellings	4268 sqm	2249 sqm	790 sqm
NE Precinct	760 dwellings			

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REALISED TRAFFIC GENERATION ALLOWANCE

(based on known development yields above - mix of completed, under construction, approved, submitted and future stages)

		Traffic Generation Rate			Source	In / Out Ratio						Vehicle Movements								
Land Use	Size/No.	AM	PM	SAT		AM		PM		SAT		AM			PM			SAT		
						In	Out	In	Out	In	Out	In	Out	Total	In	Out	Total	In	Out	Total
Dwellings (West Precinct)	2333 dwellings	0.28 vph/dwellings	0.28 vph/dwellings	0.28 vph/dwellings	TAMP	20%	80%	60%	40%	50%	50%	131 vph	523 vph	653 vph	392 vph	261 vph	653 vph	327 vph	327 vph	653 vph
Dwellings (East Precinct)	760 dwellings	0.28 vph/dwellings	0.28 vph/dwellings	0.28 vph/dwellings	TAMP	20%	80%	60%	40%	50%	50%	43 vph	170 vph	213 vph	128 vph	85 vph	213 vph	106 vph	106 vph	213 vph
Office / Commercial	4268 sqm	1.20 vph/100sqm NFA	1.00 vph/100sqm NFA	0.00 vph/100sqm NFA	TAMP	90%	10%	10%	90%	N/A	N/A	46 vph	5 vph	51 vph	4 vph	38 vph	43 vph	N/A	N/A	N/A
Shop	2249 sqm	1.20 vph/100sqm NFA	5.00 vph/100sqm NFA	10.00 vph/100sqm NFA	TAMP	50%	50%	50%	50%	50%	50%	13 vph	13 vph	27 vph	56 vph	56 vph	112 vph	112 vph	112 vph	225 vph
Supermarket	790 sqm	1.20 vph/100sqm NFA	6.02 vph/100sqm NFA	6.79 vph/100sqm NFA	TAMP	50%	50%	50%	50%	50%	50%	5 vph	5 vph	9 vph	24 vph	24 vph	48 vph	27 vph	27 vph	54 vph
												238 vph	716 vph	954 vph	604 vph	465 vph	1069 vph	572 vph	572 vph	1145 vph
Net Differences to TAMP Allowance												-123 vph	142 vph	18 vph	25 vph	-129 vph	-104 vph	-9 vph	-9 vph	-18 vph

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Appendix C - SIDRA Assessment

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USER REPORT FOR NETWORK SITE

Default Site User Report

 **Site:** [1] West Site Access / Wilson St - AM (Post-Dev - NE Precinct)

Network: [1] Post-Dev AM (Post-Dev)

Output produced by SIDRA INTERSECTION Version: 10.0.3.210

New Site

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	[Total HV]						[Veh. veh	Dist] m				km/h
			veh/h	%	veh/h	%	v/c	sec		veh	m				
South: West Site Access															
1	L2	All MCs	61	0.0	61	0.0	0.047	6.4	LOS A	0.2	1.3	0.34	0.58	0.34	51.0
Approach			61	0.0	61	0.0	0.047	6.4	LOS A	0.2	1.3	0.34	0.58	0.34	51.0
East: Wilson St															
4	L2	All MCs	16	0.0	16	0.0	0.146	4.6	LOS A	0.0	0.0	0.00	0.04	0.00	48.3
5	T1	All MCs	262	3.2	262	3.2	0.146	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	50.1
Approach			278	3.0	278	3.0	0.146	0.3	NA	0.0	0.0	0.00	0.04	0.00	50.0
West: Wilson St															
11	T1	All MCs	328	0.0	328	0.0	0.168	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach			328	0.0	328	0.0	0.168	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
All Vehicles			667	1.3	667	1.3	0.168	0.7	NA	0.2	1.3	0.03	0.07	0.03	50.1

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Default Site User Report

▽ Site: [4] East Site Access / Wilson St - AM (Post-Dev - NE Precinct)
Network: [1] Post-Dev AM (Post-Dev)
Output produced by SIDRA INTERSECTION Version: 10.0.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)
Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand		Arrival		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			Flows		Flows					[Veh. veh	Dist] m				
			[Total HV] veh/h	[Total HV] %	[Total HV] veh/h	[Total HV] %									
South: East Site Access															
1	L2	All MCs	60	0.0	60	0.0	0.131	6.4	LOS A	0.5	3.3	0.43	0.67	0.43	45.1
2	R2	All MCs	60	0.0	60	0.0	0.131	8.6	LOS A	0.5	3.3	0.43	0.67	0.43	49.4
Approach			120	0.0	120	0.0	0.131	7.5	LOS A	0.5	3.3	0.43	0.67	0.43	47.9
East: Wilson St															
3	L2	All MCs	15	0.0	15	0.0	0.142	4.6	LOS A	0.0	0.0	0.00	0.04	0.00	48.9
4	T1	All MCs	262	0.0	262	0.0	0.142	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	50.0
Approach			277	0.0	277	0.0	0.142	0.3	NA	0.0	0.0	0.00	0.04	0.00	49.9
West: Wilson St															
5	T1	All MCs	328	0.0	328	0.0	0.179	0.1	LOS A	0.1	0.9	0.04	0.05	0.04	47.5
6	R2	All MCs	15	0.0	15	0.0	0.179	6.5	LOS A	0.1	0.9	0.04	0.05	0.04	50.3
Approach			343	0.0	343	0.0	0.179	0.3	NA	0.1	0.9	0.04	0.05	0.04	47.6
All Vehicles			740	0.0	740	0.0	0.179	1.5	NA	0.5	3.3	0.09	0.15	0.09	48.3

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USER REPORT FOR NETWORK SITE

Default Site User Report

▽ Site: [5] West Site Access / Wilson St - PM (Post-Dev - NE Precinct)

Network: [1 (2)] Post-Dev PM (Post-Dev)

Output produced by SIDRA INTERSECTION Version: 10.0.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)
Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance														
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Aver. Speed
			[Total HV]		[Total HV]					[Veh.]	[Dist]			
			veh/h	%	veh/h	%	v/c	sec		veh	m			km/h
South: West Site Access														
1	L2	All MCs	31	0.0	31	0.0	0.028	7.0	LOS A	0.1	0.7	0.42	0.62	50.4
Approach			31	0.0	31	0.0	0.028	7.0	LOS A	0.1	0.7	0.42	0.62	50.4
East: Wilson St														
2	L2	All MCs	46	0.0	46	0.0	0.235	4.7	LOS A	0.0	0.0	0.00	0.07	48.4
3	T1	All MCs	409	0.0	409	0.0	0.235	0.1	LOS A	0.0	0.0	0.00	0.07	50.2
Approach			456	0.0	456	0.0	0.235	0.6	NA	0.0	0.0	0.00	0.07	50.0
West: Wilson St														
4	T1	All MCs	274	0.0	274	0.0	0.140	0.0	LOS A	0.0	0.0	0.00	0.00	49.9
Approach			274	0.0	274	0.0	0.140	0.0	NA	0.0	0.0	0.00	0.00	49.9
All Vehicles			760	0.0	760	0.0	0.235	0.6	NA	0.1	0.7	0.02	0.07	50.0

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Default Site User Report

Site: [3 (3)] East Site Access / Wilson St - PM (Post-Dev - NE Precinct)

Network: [1 (2)] Post-Dev PM (Post-Dev)

Output produced by SIDRA INTERSECTION Version: 10.0.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)
Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]		[Total HV]					[Veh. veh	Dist] m				
			veh/h	%	veh/h	%									
South: East Site Access															
1	L2	All MCs	29	0.0	29	0.0	0.076	7.0	LOS A	0.3	1.8	0.50	0.72	0.50	44.2
2	R2	All MCs	29	0.0	29	0.0	0.076	9.5	LOS A	0.3	1.8	0.50	0.72	0.50	48.8
Approach			59	0.0	59	0.0	0.076	8.2	LOS A	0.3	1.8	0.50	0.72	0.50	47.1
East: Wilson St															
3	L2	All MCs	45	0.0	45	0.0	0.234	4.7	LOS A	0.0	0.0	0.00	0.07	0.00	49.1
4	T1	All MCs	409	0.0	409	0.0	0.234	0.2	LOS A	0.0	0.0	0.00	0.07	0.00	50.0
Approach			455	0.0	455	0.0	0.234	0.6	NA	0.0	0.0	0.00	0.07	0.00	49.8
West: Wilson St															
5	T1	All MCs	274	0.0	274	0.0	0.181	0.5	LOS A	0.4	3.1	0.18	0.22	0.18	46.2
6	R2	All MCs	45	0.0	45	0.0	0.181	7.4	LOS A	0.4	3.1	0.18	0.22	0.18	48.9
Approach			319	0.0	319	0.0	0.181	1.5	NA	0.4	3.1	0.18	0.22	0.18	46.6
All Vehicles			833	0.0	833	0.0	0.234	1.5	NA	0.4	3.1	0.10	0.17	0.10	48.2

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16 July 2026

Simon Lewin & Sam Raunik
Hamton
C/- Hugh Smyth & Holly McFall
Upco

ADVERTISED PLAN

DTP & Council Comments – Transport Assessment Responses Trackside Gardens – 110 Wilson Street, Moonee Ponds (NE Precinct)

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1. Introduction

A planning permit application was recently submitted for the proposed development of the initial stage of the Trackside Gardens project at 110 Wilson Street, Moonee Ponds. The submission included development of 512 dwellings within three buildings (Wilson East, Track East and Track Central buildings).

Following review of the submission package, comments have since been received from DTP (letter dated 20/05/26) as well as separate referral comments received from Council (letter received 23/04/26).

Ratio Consultants prepared the Transport Impact Assessment report that accompanied the planning permit submission. Ratio have now been engaged to assess and respond to the transport related comments received from both DTP & Council.

Updated plans have been prepared by DKO in response to the RFI comments, which form the basis of this transport response letter. Relevant updated plans are attached as Appendix A for reference and it should be noted for the purposes of this letter and assessments that the apartment yield for Wilson East has been reduced by 6 dwellings.

The following sections reproduce the transport related comments received from DTP and Council, with the Ratio responses provided thereafter.

2. DTP Comments & Responses

In addition, while it is acknowledged that the Traffic Impact Assessment has considered how the proposal compares to the modelling/traffic generation of the approved TAMP, there is only a clearly stated comparison of overall peak traffic volumes anticipated by the TAMP and the actual realised development/future development. A more detailed comparison of the peak traffic volumes anticipated by the TAMP and the realised/proposed traffic volumes more specifically along Wilson Street and other routes/intersections where the increased traffic generation specifically from the NE precinct is mostly likely to be distributed, is not provided. In including this information, the TIA should also include discussion of whether the traffic mitigation measures of the approved ITP (which informed the traffic infrastructure contributions required by AQ5694425F) still remain appropriate.

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As acknowledged in DTP's above comment, the TIA report addresses the overall traffic generation of the MVP precinct, allowing for the increased development yield for the NE precinct. This analysis indicated that the overall traffic generation would be generally consistent with the traffic allowance made in the TAMP modelling.

The concerns regarding operations of the more localised intersections to/from Wilson Street where the Trackside Gardens increased traffic will be travelling are considered to be a low risk item. The relative net increase in traffic movements from the increased dwelling yield will not make a material difference at these down stream local intersections. Notwithstanding, to respond to the DTP comments and provide comfort on this matter, an assessment has been completed in the following sections to consider the net increase in traffic from the Trackside Gardens precinct.

Baseline Traffic Volumes – TAMP Modelling Outputs

In this case, the base case scenario is the post development volumes from the previously completed modelling that informed the TAMP report, which allowed for 300 dwellings in the NE precinct.

These post development turning movement volumes at key intersections have been extracted from the TAMP microsimulation modelling and provided in Appendix B.

It should be noted that the use of these traffic volumes as a base case is conservative on the high side, as the TAMP modelling extracts do not account for the reduced total traffic generation from the MVP precinct, as analysed within the TIA report for Trackside Gardens.

Net Increased Site Generated Traffic Volumes – Trackside Gardens (NE Precinct)

To establish the net increase in traffic volumes from the increased dwelling yield in the Trackside Gardens precinct, the same traffic generation rate used in the TAMP (0.28 vph/dwelling) has been applied to the net increase of 206 dwellings.

This is based on the 506 total dwellings across the initial stage of development (Wilson East, Track East and Track Central). The future development of the western portion of the NE precinct land parcel will be separately assessed via its own application in the future.

The resultant net increase in traffic movements to/from Trackside Gardens (compared to the original 300 dwelling allowance) is **58 vph** (an average of 1 additional vehicle movement per minute).

Traffic distribution has been amended slightly from that adopted in the original TIA to more closely reflect the distributions adopted in the original TAMP assessments. While arguably a higher percentage of vehicles could indeed choose to travel to/from the east, a rounded directional split of 70:30 has been adopted to/from the west/east of the Trackside Gardens site. Distribution through the local intersections further west of the site is based on the adopted distributions in the TAMP assessments (rounded figures).

The additional site generated vehicle movements through the relevant local intersections to the west have been produced in traffic movement diagrams provided in Appendix B.

Updated Post Development Traffic Volumes

By combining the base case volumes (TAMP post development volumes) with the above net increased traffic volumes from the Trackside Gardens 506 dwelling yield, the updated post development traffic volumes are determined (refer to Appendix B).

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SIDRA Modelling Results

The net increase in traffic movements at the downstream local intersections to the west of the site are marginal in the context of the base case post development volumes. The net increase in movements also continues to get watered down the further away intersections are from the Trackside Gardens precinct. Notwithstanding, for completeness the following intersections have been modelled in SIDRA to understand the net impacts of the increased NE precinct yields:

- Wilson Street / Thomas Street / Capulet Street
- Future North-South Road / Thomas Street
- Dean Street / Future North-South Road

Given that these modelling scenarios are both ultimate conditions, these intersections have been modelled based on their future design formats following completion of the MVP works. This includes signals at two of the intersections listed above.

The SIDRA modelling results for these intersections under the updated post development conditions with increased yield of 506 dwellings in Trackside Gardens precinct, is summarised in Table 1 and provided in full in Appendix C. The results also include the +/- difference for each result compared with the TAMP modelling base case scenario, that is based on a 300 dwelling yield, in order to understand the net impacts that the increased traffic generation has on these intersections.

It should be noted that the TAMP modelling was undertaken using advanced microsimulation modelling for the entire road network surrounding the MVP precinct. The following SIDRA modelling has been undertaken just with the intent of understanding the net impacts of the increased dwelling yield to the Trackside Gardens precinct and may not necessarily be completely consistent with the TAMP modelling results.

**Table 1: Post Development Intersection Operations
(With Increased 506 Dwelling Yield for Trackside Gardens)**

Approach	PM Peak Hour			PM Peak Hour		
	DOS	Avg Delay (s)	95%ile Queue (m)	DOS	Avg Delay (s)	95%ile Queue (m)
<u>Wilson Street / Thomas Street / Capulet Street</u>						
Thomas St (S)	0.58 (+0.08)	48 sec (+6 sec)	34 m (+5 m)	0.53 (+0.01)	32 sec (+1 sec)	40 m (+0 m)
Wilson St (E)	0.86 (-0.01)	78 sec (+4 sec)	192 m (+25 m)	0.9 (+0.03)	53 sec (+3 sec)	162 m (+13 m)
Capulet St (N)	0.26 (+0.02)	32 sec (+5 sec)	18 m (+2 m)	0.05 (+0.00)	16 sec (+0 sec)	2 m (+0 m)
Wilson St (W)	0.86 (-0.01)	56 sec (+3 sec)	139 m (+9 m)	0.42 (+0.01)	25 sec (+0 sec)	51 m (+2 m)
<u>North-South Road / Thomas Street</u>						

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N-S Road (N)	0.07 (+0.00)	2 sec (+0 sec)	0 m (+0 m)	0.15 (+0.02)	1 sec (+0 sec)	0 m (+0 m)
N-S Road (S)	0.31 (+0.01)	1 sec (+0 sec)	6 m (+1 m)	0.23 (+0.01)	2 sec (+0 sec)	5 m (+0 m)
Thomas St (W)	0.22 (+0.01)	8 sec (+1 sec)	6 m (+0 m)	0.02 (+0.00)	6 sec (+0 sec)	1 m (+1 m)
Dean Street / North-South Road						
Dean St (E)	0.47 (+0.00)	14 sec (+0 sec)	27 m (+0 m)	0.82 (+0.02)	21 sec (+1 sec)	42 m (+0 m)
Dean St (W)	0.49 (+0.02)	12 sec (+0 sec)	37 m (+2 m)	0.22 (+0.03)	15 sec (+1 sec)	11 m (+1 m)
N-S Rd (N)	0.24 (+0.01)	5 sec (+0 sec)	17 m (+1 m)	0.52 (+0.01)	8 sec (+0 sec)	44 m (+1 m)

The key takeaway from the results summarised in Table 2, are the (+/-) results showing the net changes in approach performances between the TAMP modelling base case scenario and the increased traffic resulting from increased dwelling yield to the Trackside Gardens precinct.

As expected based on the small increase in traffic volumes, across all three of the intersections contemplated, the changes in performance are marginal compared with operations with the original traffic volumes based on the 300 dwelling yield.

Accordingly the increased yield to 506 dwellings for the initial development of Trackside Gardens is considered to be acceptable from a traffic impacts perspective. The small amount of additional traffic is not considered to justify any further infrastructure improvement works or contributions, compared to what has already been agreed to under the approved TAMP and ITP documents.

3. Council Referral Comments & Responses

The Council referral comments are provided as a detailed assessment for each item. Therefore, for efficiency the key Comments from Council have been paraphrased below to provide context to Ratio's respective responses.

1. Car Parking:

There is disparity on the basement level 3 parking supply that was referred to in reports and listed on development summary but not shown on plans.

The updated development plans now correctly show the additional basement car parking level and the car parking supply now matches that detailed in the TIA report and development schedules.

Comments flagging that some buildings have an oversupply of parking above minimum rates while others have a shortfall. Suggestion that the basements could be interconnected to balance out the supply more between buildings.

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Notwithstanding, Council's general support is provided to accept a shortfall of parking in line with various strategic objectives.

Due to the way the site is to be developed and ultimately managed, interconnection of the basement levels between Wilson East and the other two precincts will not be an option.

As detailed in the TIA, Wilson East building intentionally has a reduced parking supply based on the affordable housing component being allocated to this building. It should be noted that recent updates to the development schedule have resulted in a reduction to 152 apartments for Wilson East (-6 apartments) with no net change in parking supply, partially reducing the proposed reduction from the statutory requirement for this building.

2. Traffic Generation:

Suggestion that traffic generation figures in report could be updated due to proposed oversupply of car parking.

Increased traffic generation rates in response to a small oversupply of car parking for Track Central and East buildings is not considered appropriate. Residential traffic generation is based on a per dwelling basis and typically only a severely reduced car parking supply results in notable changes to traffic generation rates per dwelling.

Comments from the stat planning team raise the matter of the difference in the proposed dwelling yield for the NE precinct compared to what was allowed for in the TAMP modelling (300).

It is requested to revisit and update TAMP/ITP, S173 agreement etc, in response to the additional dwellings.

This matter has been addressed in detail in Section 2 of this letter. In summary, the small amount of additional movements generated by increased dwelling yield in the NE Precinct, will have marginal net impacts and not considered to justify any further infrastructure upgrade works or contributions.

3. Car Parking Design:

Request for extra dimensions of typical aisles, parking spaces, accessways, porte cochere area to be added to plans. Height clearance to be noted on plans.

Pedestrian site triangles to be shown on plans.

Request to add dimensions of ramp section lengths to plans.

These additional details have now been included on the updated plans prepared by DKO and the relevant sheets attached to this letter in Appendix A.

Suggestion to provide some accessible parking spaces.

There is no requirement to provide accessible parking for a residential land use.

Request for swept paths of last space in dead-end aisles.

Additional swept path assessment has been completed for the more critical non-standard dead-end parking spaces, provided in Appendix D to this letter.

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The TIAR states that informal short-term propping within these porte-cocheres for drop-off/pick-up activity is not expected to cause notable internal congestions. This is not supported by Traffic and Transport, as it would be expected that any use of the loading area would not stop circulating traffic.

Council accept the use of the ground level parallel spaces to double as occasional loading bays, but require swept paths to show access into them as well as their sizes to be increased to comply with a service bay dimensions.

The eastern buildings' roundabout and parallel parking design allows for loading vehicles to use selected parallel parking bays to double as a loading bay area. These parallel parking bays can also be used for short-term pick-up/drop-off activity.

Additional swept path assessment provided in Appendix D demonstrates an SRV reverse manoeuvring into the nominated parallel spaces to double as loading bays. In this case, it is proposed for the loading bays to remain at 2.3m wide given that the swept paths demonstrate an SRV can manoeuvre into the parking bay in a position that will not disrupt circulating vehicle movement on the driveway. This arrangement is generally consistent with any kerbside loading arrangement in a residential setting for move-in/move-out loading activities.

Council do not accept the SRV is required to complete a 3-point turn to turnaround at the roundabout.

Being a residential land use, the demand for a 6.4m SRV needing to access the site for the very occasional move-in/move-out activities will be highly infrequent. To design the roundabout large enough to accommodate independent SRV movement for a facility that will only be catering to regular cars the vast majority of the time is overly conservative.

The design allows for a generous area for the SRV to undertake a 3-point manoeuvre, and comfortably allows for regular car circulation. The allow for the SRV to circulate the roundabout in a single movement would result in an unnecessary increase to pavement area, pinching the footpath on the western side of the roundabout which results in a reduction to the meaningful landscaped area.

The need for an SRV to complete a 3-point manoeuvre for the highly infrequent occasions a vehicle this size will visit the site, is not considered to introduce any unreasonable safety or congestion concerns to the project. Accordingly maintaining the current roundabout design is considered to be a suitable arrangement.

4. Bicycle Parking:

Council accept the provision of bicycle parking but request some more visitor spaces are provided externally near the building entrances.

As recommended in the TIA report, there are either 4 or 6 bicycle spaces (2 or 3 hoops) provided for visitor use near each of the building entrances. The balance of parking will continue to be provided in the secure car park levels and any demands beyond these upper ground level visitor spaces per building will need to be given access to the secure parking by the resident.

Request bicycle parking dimensions are shown on plans.

Bicycle parking dimensions were detailed in the TIA but have been added to plans as requested.

5. Vehicle Crossings:

Dimensions requested for the crossover designs

Driveway widths nominated on plans. Crossover splays to be constructed in accordance with Council Standard Drawings.

Council accept the LLO restriction at the western access, once the Julient St intersection is signalised. Council requests a physical intervention to restrict right turn movements.

Noted. The Wilson West and Track West buildings have since been removed from this application and will be submitted under their own future separate application. The access strategy and design for these buildings will be addressed in detail at this point in time.

4. Conclusion

With consideration to the additional assessments completed and addressed within this letter, the proposed development scheme continues to be considered satisfactory on transport grounds.

Should you require any further information please do not hesitate to contact me on 9429 3111.

Regards



Andy Harmer
Senior Associate: Transport

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Appendix A – Amended Development Plans

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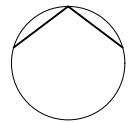
- All works to be in accordance with authority & statutory approvals.
- Refer to site survey for all information relating to existing site conditions.
- All Boundary information to be confirmed by registered surveyor before commencing works on site.
- Refer to Arborist Report and Landscape Documentation for all information relating to trees and their retention/removal, and all landscape works.
- Drawings to be read in conjunction with all Specifications and Schedules; all specialist consultant documentation; NAIHERS, Section 3 Certificates.
- Minor changes to building form & configuration may be required after Development Consent.
- Do not scale from drawing; figured dimensions only to be used.
- Building Contractor to verify all dimensions before commencing work.

Rev	Date	By	Chk	Description
A	23/03/2026	JC	JC	Town Planning Submission
B	9/07/2026	JC	JC	RFI Response

ESD & WSUD COMMITMENT NOTE:
All drawings are to be read in conjunction with the endorsed SMP report (which forms part of the town planning permit submission), and all ESD & WSUD initiatives contained within shall be required to be installed throughout the development to achieve GBCA 5 star Green Star compliance and must be implemented to the satisfaction of the responsible authority.

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DKO

Project Name 110 Wilson Street
Project Number 00013261
Project Address 110 Wilson Street
Moonee Ponds VIC 3039

Drawing Name
SITE SERIES
Basement 3 Plan

Drawing Scale
Drawing No.
TP-SIT-096

1:400 @ A1
Revision
B



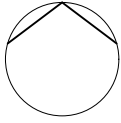
- All works to be in accordance with authority & statutory approvals.
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- All Boundary information to be confirmed by registered surveyor before commencing works on site.
- Refer to Advertis Report and Landscape Documentation for all information relating to trees and their retention/removal, and all landscape works.
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- Minor changes to building form & configuration may be required after Development Consent.
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Rev	Date	By	Chk	Description
A	23/03/2026	JC/WY	JC	Town Planning Submission
B	9/07/2026	JC/WY	JC	RFI Response

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DKO

Project Name 110 Wilson Street
Project Number 00013261
Project Address 110 Wilson Street
Moonee Ponds VIC 3039

Drawing Name
SITE SERIES
Basement 2 Plan

Drawing Scale
Drawing No.
TP-SIT-097

1:400 @ A1
Revision
B



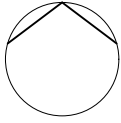
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Rev	Date	By	Chk	Description
A	23/03/2026	JC/WY	JC	Town Planning Submission
B	9/07/2026	JC/WY	JC	RPI Response

ESD & WSUD COMMITMENT NOTE:
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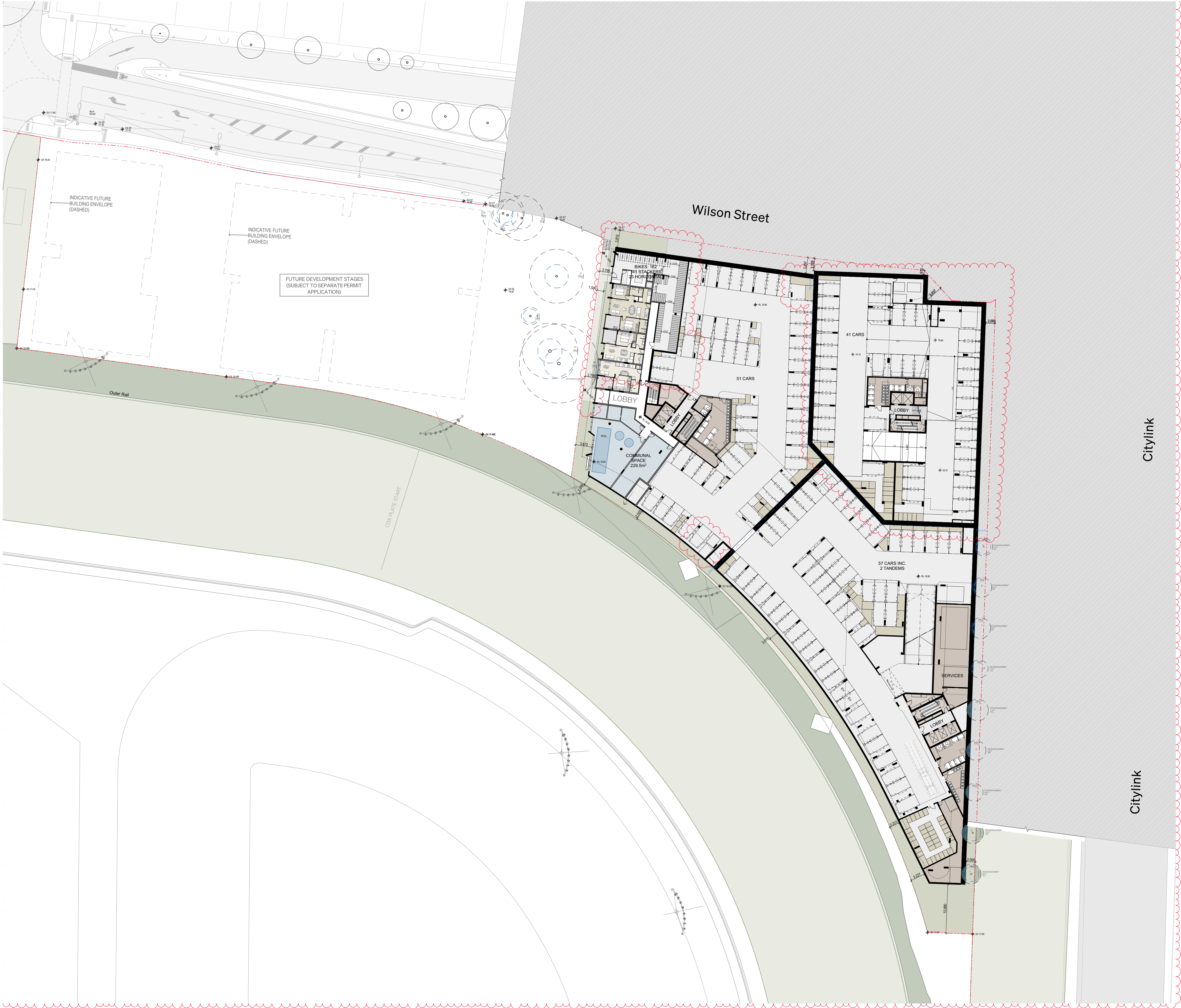
DKO

Project Name 110 Wilson Street
Project Number 00013261
Project Address 110 Wilson Street
Moonee Ponds VIC 3039

Drawing Name
SITE SERIES
Basement 1 Plan

Drawing Scale
Drawing No.
TP-SIT-098

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Revision
B



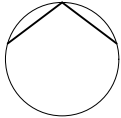
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- Building Contractor to verify all dimensions before commencing work.

Rev	Date	By	Ck	Description
A	23/03/2026	JC/WY	JC	Town Planning Submission
B	9/07/2026	JC/WY	JC	RPI Response

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Project Name 110 Wilson Street
Project Number 00013261
Project Address 110 Wilson Street
Moonee Ponds VIC 3039

Drawing Name
SITE SERIES
Lower Ground Plan

Drawing Scale
Drawing No.
TP-SIT-099

1:400 @ A1
Revision
B



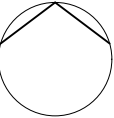
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B	9/07/2026	JC/WY	JC	RPI Response

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Drawing Name
SITE SERIES
Upper Ground Plan

Drawing Scale
Drawing No.
TP-SIT-100

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Revision
B

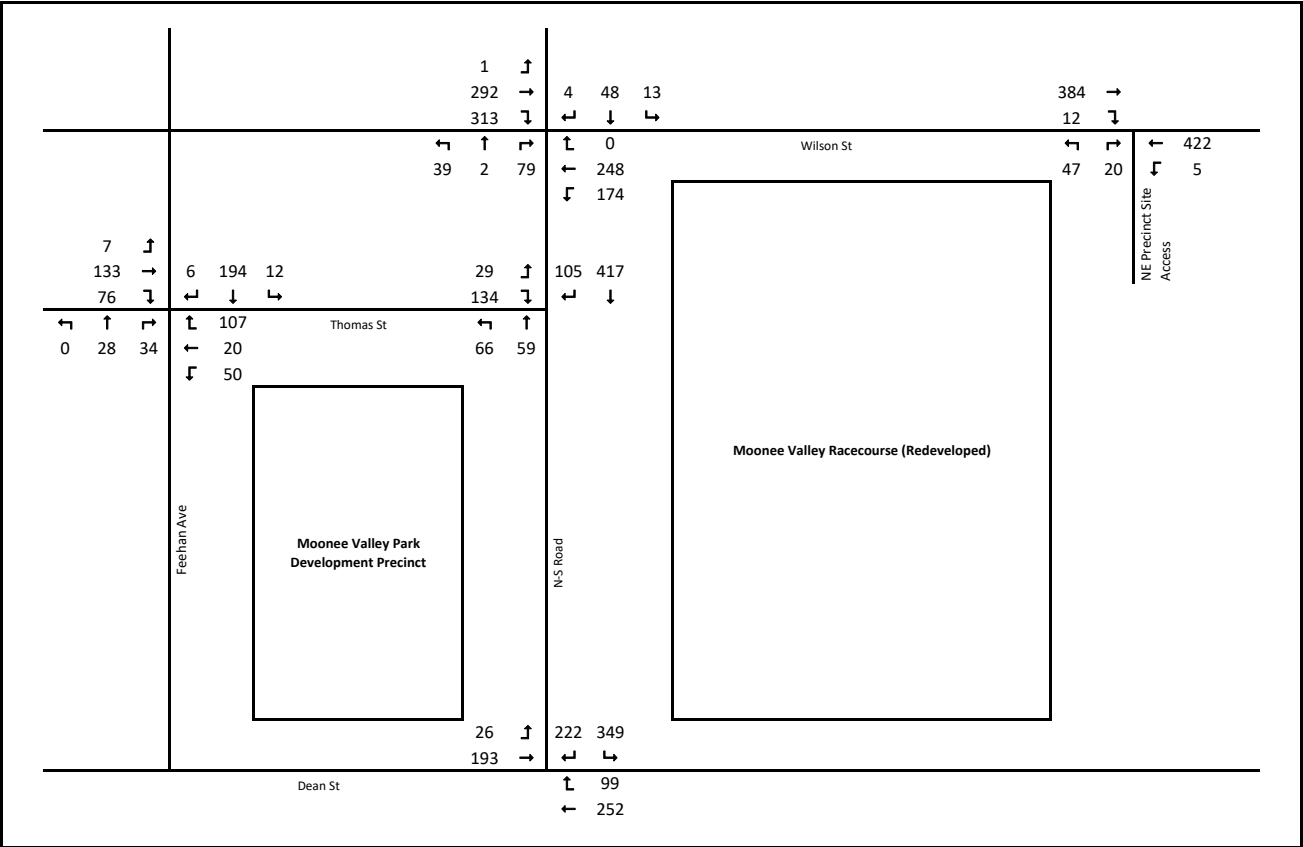
Appendix B – Post Development Traffic Movement Diagrams

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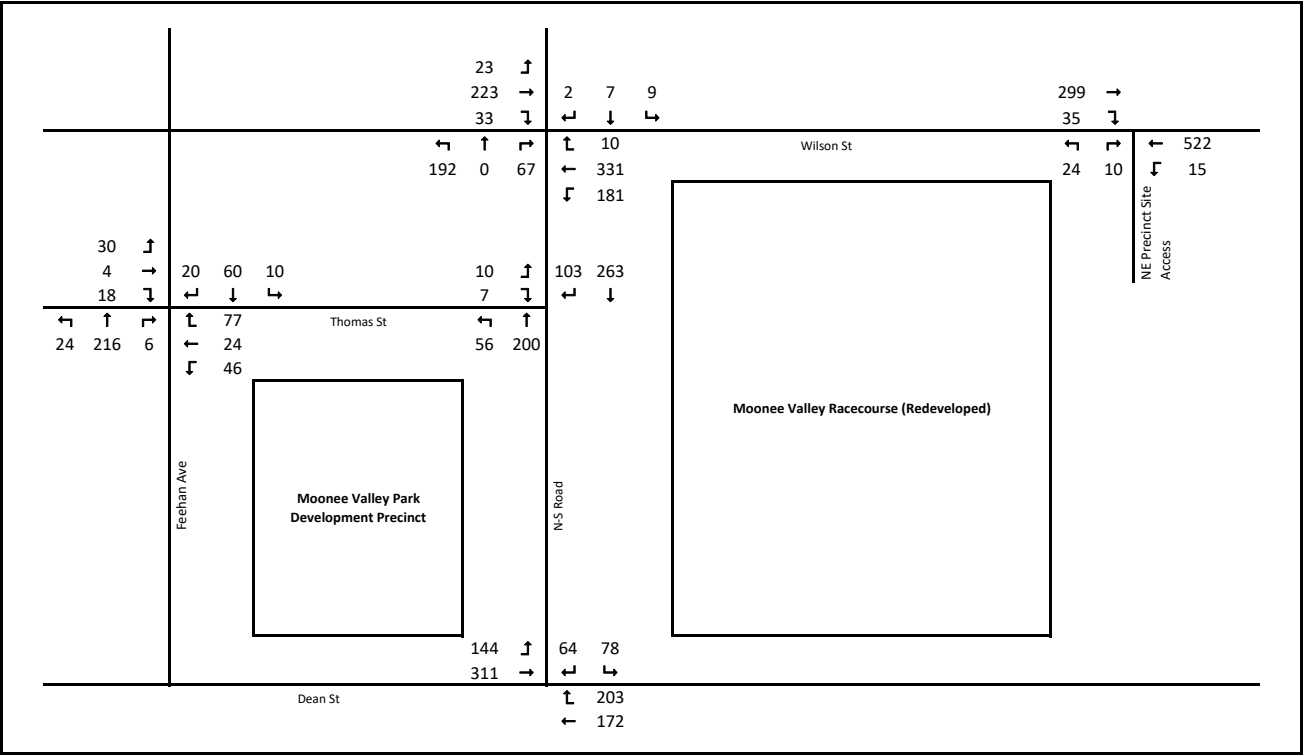
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TAMP Modelling Post Development Volumes Extract (Baseline Volumes)

AM



PM

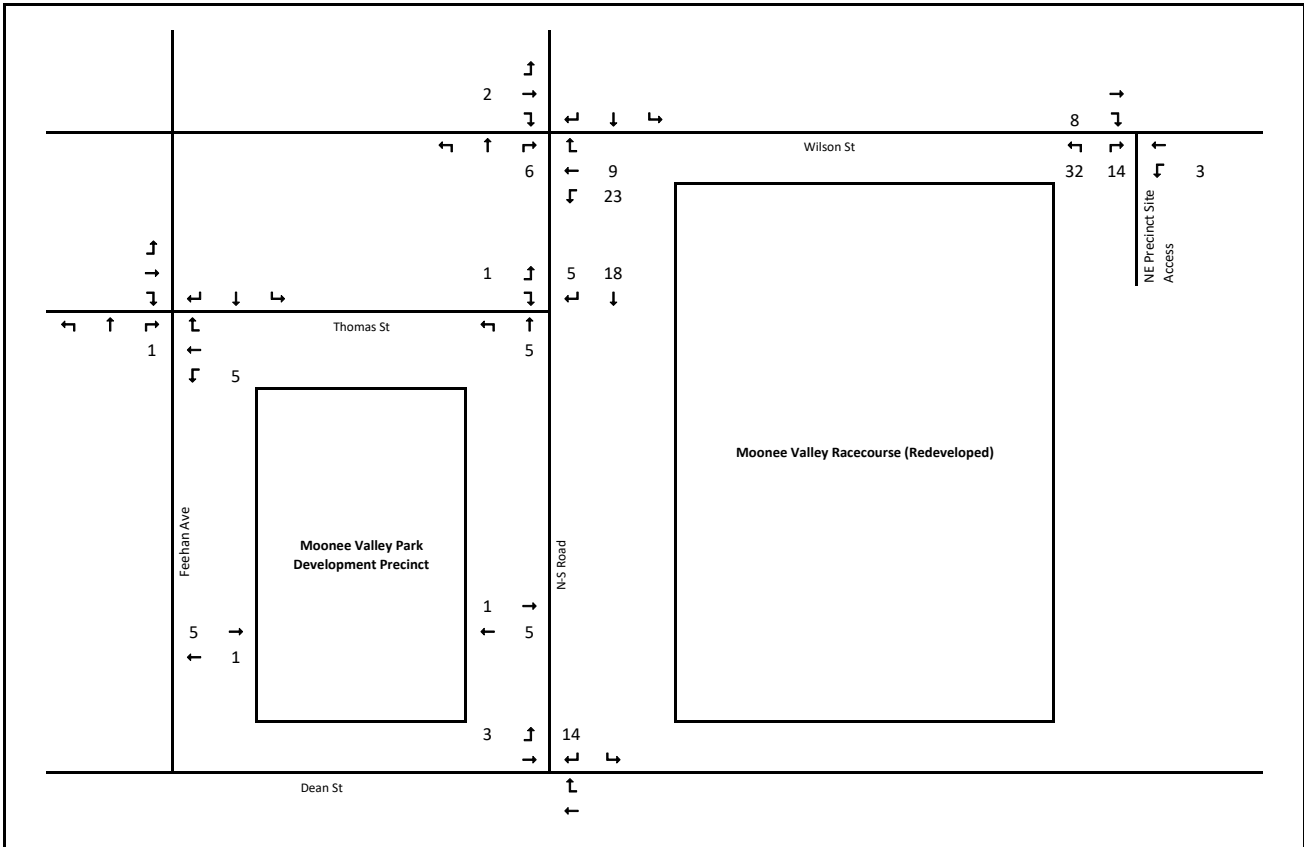


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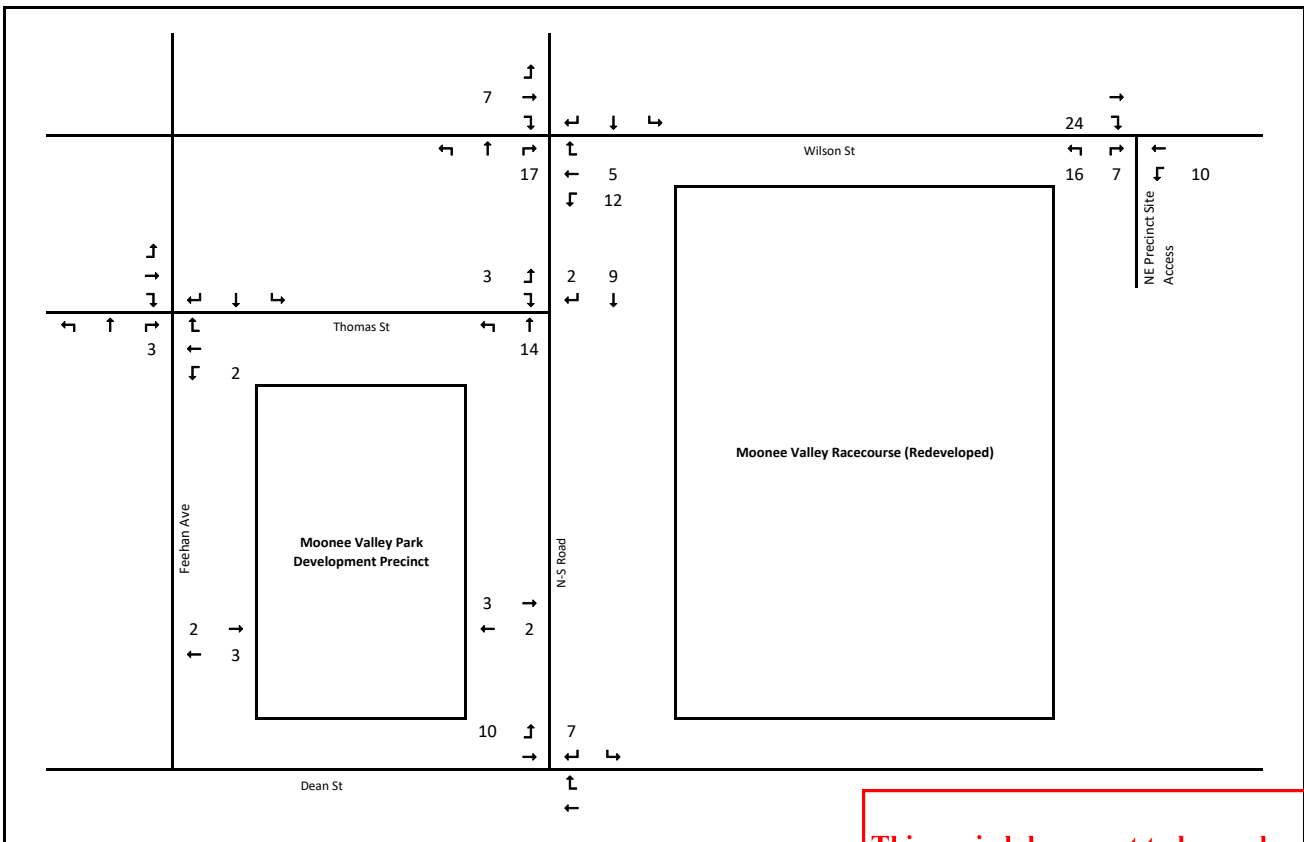
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NE Precinct Net Increased Traffic Volumes (+206 Dwellings)

AM



PM

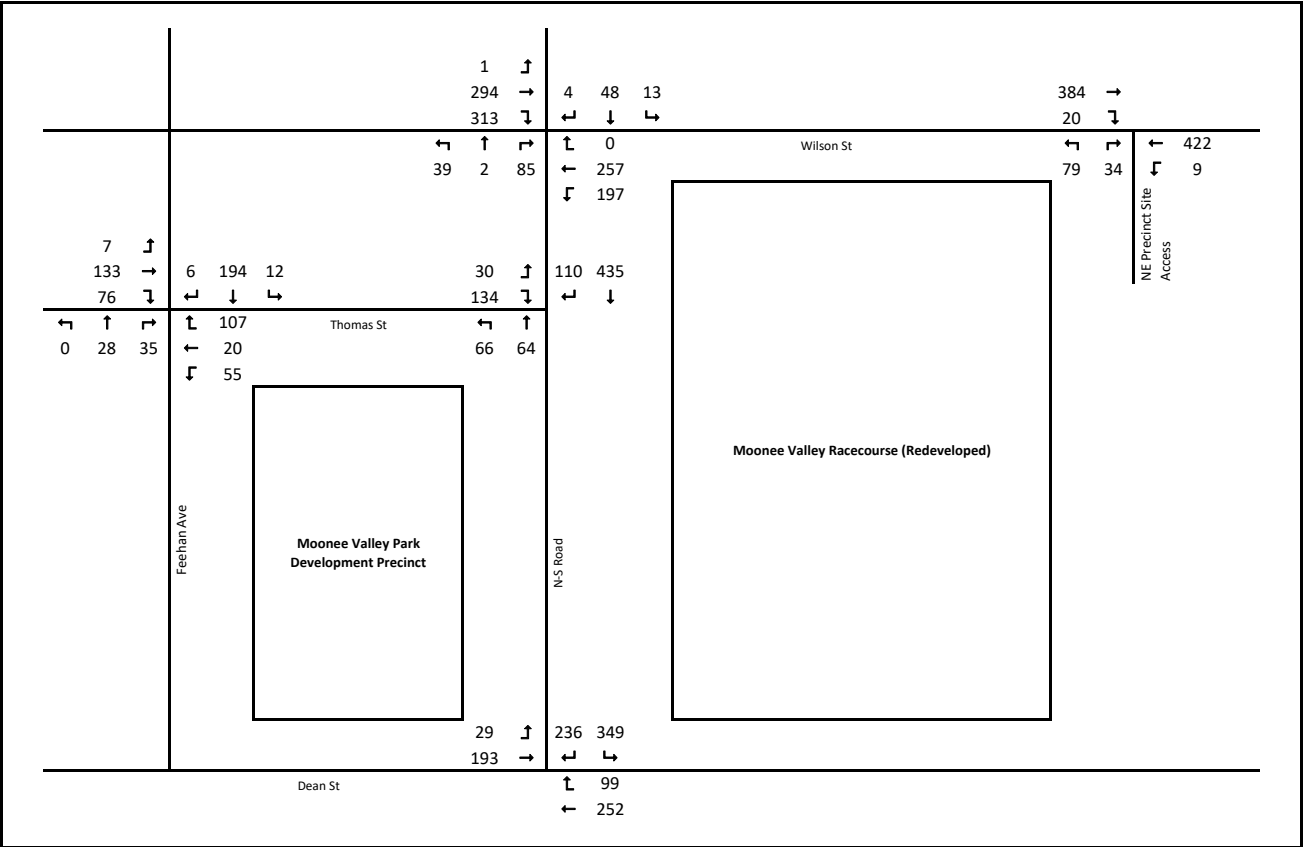


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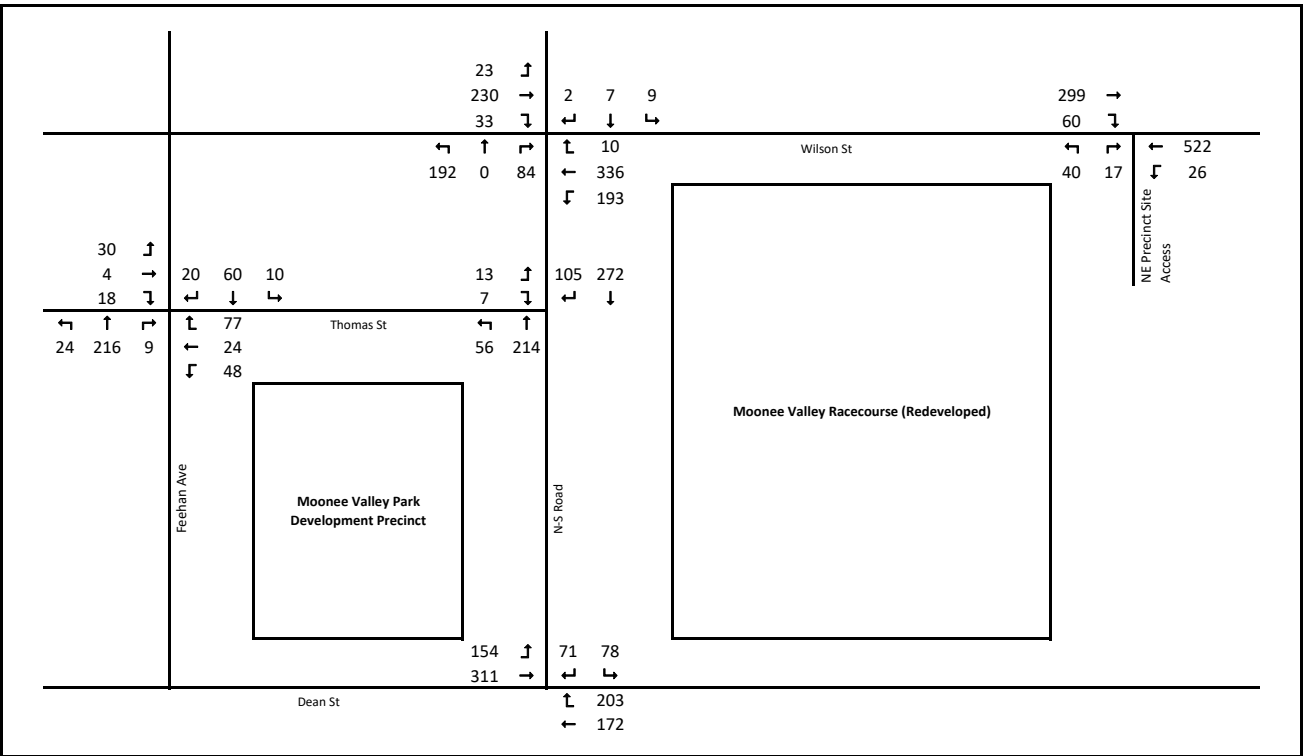
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TAMP Post Development Volumes + Net Increased Traffic From NE Precinct (+206 Dwellings)

AM



PM



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Appendix C - SIDRA Modelling Results

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USER REPORT FOR SITE

Default Site User Report

 **Site: [1 (3)] Wilson St / Thomas St / Capulet St - AM** (TAMP Post Development - 300 Dwellings NE Precinct)

Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Wilson St / Thomas St / Capulet St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100.0 seconds (Site Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Four-Phase Leading Right Turns

Input Phase Sequence: A, B, C, D, D2*

Output Phase Sequence: A, B, C, D, D2*

Reference Phase: Phase A

(* Variable Phase)

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Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh]	[Dist m]				km/h
South: Thomas St															
1	L2	All MCs	41	0.0	41	0.0	0.058	19.1	LOS B	1.1	8.0	0.64	0.97	0.64	33.5
2	T1	All MCs	2	0.0	2	0.0	0.058	41.3	LOS D	1.1	8.0	0.64	0.97	0.64	32.5
3	R2	All MCs	83	0.0	83	0.0	* 0.500	53.9	LOS D	4.1	28.6	0.99	0.77	0.99	29.5
Approach			126	0.0	126	0.0	0.500	42.4	LOS D	4.1	28.6	0.87	0.84	0.87	30.7
East: Wilson St															
4	L2	All MCs	183	0.0	183	0.0	0.873	77.1	LOS E	23.9	167.4	1.00	1.02	1.21	30.9
5	T1	All MCs	261	0.0	261	0.0	* 0.873	71.6	LOS E	23.9	167.4	1.00	1.02	1.21	33.1
6	R2	All MCs	1	0.0	1	0.0	0.009	78.8	LOS E	0.0	0.3	0.96	0.59	0.96	29.5
Approach			445	0.0	445	0.0	0.873	73.9	LOS E	23.9	167.4	1.00	1.02	1.21	26.5
North: Capulet St															
7	L2	All MCs	14	0.0	14	0.0	0.241	20.2	LOS C	2.3	15.9	0.92	1.01	0.92	27.8
8	T1	All MCs	51	0.0	51	0.0	* 0.241	28.6	LOS C	2.3	15.9	0.92	1.01	0.92	27.1
9	R2	All MCs	4	0.0	4	0.0	0.241	33.1	LOS C	2.3	15.9	0.92	1.01	0.92	27.8
Approach			68	0.0	68	0.0	0.241	27.2	LOS C	2.3	15.9	0.92	1.01	0.92	27.3
West: Wilson St															
10	L2	All MCs	1	0.0	1	0.0	0.432	38.7	LOS D	9.3	65.2	0.66	0.57	0.66	43.1
11	T1	All MCs	307	0.0	307	0.0	0.432	33.2	LOS C	9.3	65.2	0.66	0.57	0.66	47.5
12	R2	All MCs	329	0.0	329	0.0	* 0.873	71.6	LOS E	18.6	130.3	1.00	0.97	1.28	29.6
Approach			638	0.0	638	0.0	0.873	53.0	LOS D	18.6	130.3	0.84	0.78	0.98	30.9
All Vehicles			1278	0.0	1278	0.0	0.873	57.8	LOS E	23.9	167.4	0.90	0.88	1.05	29.0

Phase Timing Summary

Phase	A	B	C	D	D2
Phase Change Time (sec)	0.0	32.7	47.6	62.6	74.6
Green Time (sec)	26.7	8.9	8.9	6.0	19.4
Phase Time (sec)	32.7	14.9	14.9	12.0	25.4
Phase Split	33%	15%	15%	12%	25%

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Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0
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Default Site User Report

▽ Site: [2 (3)] N-S Rd / Thomas St - AM (TAMP Post Development - 300 Dwellings NE Precinct)
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

N-S Road / Thomas St
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	[Total HV]						[Veh.]	[Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: N-S Rd															
1	L2	All MCs	69	0.0	69	0.0	0.069	4.6	LOS A	0.0	0.0	0.00	0.28	0.00	47.2
2	T1	All MCs	62	0.0	62	0.0	0.069	0.0	LOS A	0.0	0.0	0.00	0.28	0.00	48.4
Approach			132	0.0	132	0.0	0.069	2.4	NA	0.0	0.0	0.00	0.28	0.00	47.8
North: N-S Rd															
8	T1	All MCs	439	0.0	439	0.0	0.296	0.2	LOS A	0.7	5.2	0.10	0.15	0.10	49.1
9	R2	All MCs	111	0.0	111	0.0	0.296	5.1	LOS A	0.7	5.2	0.10	0.15	0.10	47.7
Approach			549	0.0	549	0.0	0.296	1.2	NA	0.7	5.2	0.10	0.15	0.10	48.8
West: Thomas St															
10	L2	All MCs	31	0.0	31	0.0	0.214	4.8	LOS A	0.9	6.0	0.43	0.60	0.43	44.3
12	R2	All MCs	141	0.0	141	0.0	0.214	8.0	LOS A	0.9	6.0	0.43	0.60	0.43	44.2
Approach			172	0.0	172	0.0	0.214	7.4	LOS A	0.9	6.0	0.43	0.60	0.43	44.2
All Vehicles			853	0.0	853	0.0	0.296	2.6	NA	0.9	6.0	0.15	0.26	0.15	47.7

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Default Site User Report

 **Site: [3 (3)] Dean St / N-S Rd - AM** (TAMP Post Development - 300 Dwellings NE Precinct)
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Dean St / N-S Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50.0 seconds (Site Practical Cycle Time)

Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Four-Phase Leading Right Turns

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Reference Phase: Phase A

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh.]	Dist]				km/h
East: Dean St															
5	T1	All MCs	265	0.0	265	0.0	0.276	8.1	LOS A	3.8	26.9	0.62	0.52	0.62	52.9
6	R2	All MCs	104	0.0	104	0.0	* 0.468	29.5	LOS C	2.6	18.0	0.97	0.77	0.97	37.2
Approach			369	0.0	369	0.0	0.468	14.2	LOS B	3.8	26.9	0.72	0.59	0.72	47.3
North: N-S Rd															
7	L2	All MCs	367	0.0	367	0.0	0.270	5.5	LOS A	2.1	14.4	0.25	0.73	0.25	42.2
9	R2	All MCs	234	0.0	234	0.0	* 0.471	21.8	LOS C	5.0	34.9	0.89	0.79	0.89	39.9
Approach			601	0.0	601	0.0	0.471	11.8	LOS B	5.0	34.9	0.49	0.75	0.49	41.2
West: Dean St															
10	L2	All MCs	27	0.0	27	0.0	0.234	6.8	LOS A	2.3	16.3	0.58	0.73	0.58	40.1
11	T1	All MCs	203	0.0	203	0.0	* 0.234	4.9	LOS A	2.3	16.3	0.58	0.73	0.58	43.9
Approach			231	0.0	231	0.0	0.234	5.1	LOS A	2.3	16.3	0.58	0.73	0.58	43.4
All Vehicles			1201	0.0	1201	0.0	0.471	11.3	LOS B	5.0	34.9	0.58	0.70	0.58	43.4

Phase Timing Summary			
Phase	A	B	C
Phase Change Time (sec)	0.0	18.6	38.0
Green Time (sec)	12.6	13.4	6.0
Phase Time (sec)	18.6	19.4	12.0
Phase Split	37%	39%	24%
Phase Frequency (%)	100.0	100.0	100.0

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Default Site User Report

Site: [1 (4)] Wilson St / Thomas St / Capulet St - PM (TAMP Post Development - 300 Dwellings NE Precinct)

Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Wilson St / Thomas St / Capulet St
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70.0 seconds (Site Practical Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D, D2*
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A
(* Variable Phase)

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Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh.]	Dist]				km/h
South: Thomas St															
1	L2	All MCs	202	0.0	202	0.0	0.519	28.2	LOS C	5.7	39.7	0.93	1.03	0.93	29.1
2	T1	All MCs	1	0.0	1	0.0	* 0.519	35.2	LOS D	5.7	39.7	0.93	1.03	0.93	28.3
3	R2	All MCs	71	0.0	71	0.0	0.295	37.7	LOS D	2.3	16.1	0.94	0.75	0.94	34.5
Approach			274	0.0	274	0.0	0.519	30.7	LOS C	5.7	39.7	0.94	0.96	0.94	29.8
East: Wilson St															
4	L2	All MCs	191	0.0	191	0.0	0.874	53.2	LOS D	21.3	148.8	1.00	1.06	1.27	35.0
5	T1	All MCs	348	0.0	348	0.0	* 0.874	47.7	LOS D	21.3	148.8	1.00	1.06	1.27	37.9
6	R2	All MCs	11	0.0	11	0.0	0.066	53.0	LOS D	0.3	2.4	0.95	0.67	0.95	33.8
Approach			549	0.0	549	0.0	0.874	49.7	LOS D	21.3	148.8	1.00	1.06	1.27	32.2
North: Capulet St															
7	L2	All MCs	9	0.0	9	0.0	0.050	12.4	LOS B	0.3	2.3	0.83	1.06	0.83	30.8
8	T1	All MCs	7	0.0	7	0.0	* 0.050	18.2	LOS B	0.3	2.3	0.83	1.06	0.83	30.0
9	R2	All MCs	2	0.0	2	0.0	0.050	22.8	LOS C	0.3	2.3	0.83	1.06	0.83	30.8
Approach			19	0.0	19	0.0	0.050	15.8	LOS B	0.3	2.3	0.83	1.06	0.83	30.5
West: Wilson St															
10	L2	All MCs	24	0.0	24	0.0	0.414	27.3	LOS C	7.0	49.0	0.83	0.70	0.83	40.9
11	T1	All MCs	235	0.0	235	0.0	0.414	21.7	LOS C	7.0	49.0	0.83	0.70	0.83	44.8
12	R2	All MCs	35	0.0	35	0.0	* 0.218	41.5	LOS D	1.2	8.3	0.96	0.72	0.96	33.6
Approach			294	0.0	294	0.0	0.414	24.5	LOS C	7.0	49.0	0.84	0.70	0.84	42.0
All Vehicles			1136	0.0	1136	0.0	0.874	38.1	LOS D	21.3	148.8	0.94	0.94	1.07	33.5

Phase Timing Summary				
Phase	A	B	C	D
Phase Change Time (sec)	0.0	28.8	43.0	58.0
Green Time (sec)	22.8	8.2	9.0	6.0
Phase Time (sec)	28.8	14.2	15.0	12.0
Phase Split	41%	20%	21%	17%
Phase Frequency (%)	100.0	100.0	100.0	100.0

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Default Site User Report

▽ Site: [2 (4)] N-S Rd / Thomas St - PM (TAMP Post Development - 300 Dwellings NE Precinct)
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

N-S Road / Thomas St
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	[Total HV]						[Veh.]	[Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: N-S Rd															
1	L2	All MCs	48	0.0	48	0.0	0.134	4.6	LOS A	0.0	0.0	0.00	0.10	0.00	48.2
2	T1	All MCs	211	0.0	211	0.0	0.134	0.0	LOS A	0.0	0.0	0.00	0.10	0.00	49.4
Approach			259	0.0	259	0.0	0.134	0.9	NA	0.0	0.0	0.00	0.10	0.00	49.1
North: N-S Rd															
8	T1	All MCs	277	0.0	277	0.0	0.220	0.4	LOS A	0.7	4.9	0.18	0.25	0.18	48.7
9	R2	All MCs	108	0.0	108	0.0	0.220	5.6	LOS A	0.7	4.9	0.18	0.25	0.18	47.3
Approach			385	0.0	385	0.0	0.220	1.9	NA	0.7	4.9	0.18	0.25	0.18	48.3
West: Thomas St															
10	L2	All MCs	11	0.0	11	0.0	0.018	5.2	LOS A	0.1	0.4	0.36	0.55	0.36	45.1
12	R2	All MCs	7	0.0	7	0.0	0.018	7.0	LOS A	0.1	0.4	0.36	0.55	0.36	45.0
Approach			18	0.0	18	0.0	0.018	5.9	LOS A	0.1	0.4	0.36	0.55	0.36	45.1
All Vehicles			662	0.0	662	0.0	0.220	1.6	NA	0.7	4.9	0.11	0.20	0.11	48.5

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Default Site User Report

 **Site: [3 (4)] Dean St / N-S Rd - PM** (TAMP Post Development - 300 Dwellings NE Precinct)
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Dean St / N-S Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50.0 seconds (Site Practical Cycle Time)

Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Four-Phase Leading Right Turns

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Reference Phase: Phase A

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh.]	Dist]				km/h
East: Dean St															
5	T1	All MCs	181	0.0	181	0.0	0.162	5.4	LOS A	2.1	14.6	0.50	0.41	0.50	55.1
6	R2	All MCs	214	0.0	214	0.0	* 0.804	33.0	LOS C	5.9	41.6	1.00	0.97	1.36	35.9
Approach			395	0.0	395	0.0	0.804	20.3	LOS C	5.9	41.6	0.77	0.71	0.97	42.7
North: N-S Rd															
7	L2	All MCs	82	0.0	82	0.0	0.068	5.7	LOS A	0.4	3.1	0.23	0.72	0.23	43.6
9	R2	All MCs	67	0.0	67	0.0	* 0.194	24.0	LOS C	1.5	10.2	0.88	0.73	0.88	39.0
Approach			149	0.0	149	0.0	0.194	14.0	LOS B	1.5	10.2	0.53	0.73	0.53	41.4
West: Dean St															
10	L2	All MCs	152	0.0	152	0.0	0.508	8.1	LOS A	6.1	42.5	0.72	0.93	0.72	36.9
11	T1	All MCs	327	0.0	327	0.0	* 0.508	7.5	LOS A	6.1	42.5	0.72	0.93	0.72	40.1
Approach			479	0.0	479	0.0	0.508	7.6	LOS A	6.1	42.5	0.72	0.93	0.72	39.0
All Vehicles			1023	0.0	1023	0.0	0.804	13.5	LOS B	6.1	42.5	0.71	0.82	0.79	40.7

Phase Timing Summary			
Phase	A	B	C
Phase Change Time (sec)	0.0	21.5	36.8
Green Time (sec)	15.5	9.3	7.2
Phase Time (sec)	21.5	15.3	13.2
Phase Split	43%	31%	26%
Phase Frequency (%)	100.0	100.0	100.0

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Default Site User Report

Site: [1] Wilson St / Thomas St / Capulet St - AM (Post Development w Increased NE Precinct Yield - 512 dwellings)

Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Wilson St / Thomas St / Capulet St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110.0 seconds (Site Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Four-Phase Leading Right Turns

Input Phase Sequence: A, B, C, D, D2*

Output Phase Sequence: A, B, C, D, D2*

Reference Phase: Phase A

(* Variable Phase)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh.]	Dist]				km/h
South: Thomas St															
1	L2	All MCs	41	0.0	41	0.0	0.057	20.5	LOS C	1.3	8.8	0.63	0.97	0.63	33.1
2	T1	All MCs	2	0.0	2	0.0	0.057	45.8	LOS D	1.3	8.8	0.63	0.97	0.63	32.1
3	R2	All MCs	89	0.0	89	0.0	* 0.578	59.9	LOS E	4.9	34.3	1.00	0.79	1.02	28.1
Approach			133	0.0	133	0.0	0.578	47.5	LOS D	4.9	34.3	0.88	0.85	0.90	29.6
East: Wilson St															
4	L2	All MCs	208	0.0	208	0.0	0.864	80.9	LOS F	27.4	191.8	1.00	0.99	1.16	30.7
5	T1	All MCs	271	0.0	271	0.0	* 0.864	75.4	LOS E	27.4	191.8	1.00	0.99	1.16	32.8
6	R2	All MCs	1	0.0	1	0.0	0.010	87.4	LOS F	0.1	0.4	0.96	0.59	0.96	28.3
Approach			480	0.0	480	0.0	0.864	77.8	LOS E	27.4	191.8	1.00	0.99	1.16	25.7
North: Capulet St															
7	L2	All MCs	14	0.0	14	0.0	0.261	23.8	LOS C	2.6	18.3	0.93	1.01	0.93	26.8
8	T1	All MCs	51	0.0	51	0.0	* 0.261	33.3	LOS C	2.6	18.3	0.93	1.01	0.93	26.2
9	R2	All MCs	4	0.0	4	0.0	0.261	37.9	LOS D	2.6	18.3	0.93	1.01	0.93	26.8
Approach			68	0.0	68	0.0	0.261	31.7	LOS C	2.6	18.3	0.93	1.01	0.93	26.4
West: Wilson St															
10	L2	All MCs	1	0.0	1	0.0	0.409	40.1	LOS D	9.5	66.2	0.61	0.53	0.61	43.7
11	T1	All MCs	309	0.0	309	0.0	0.409	34.6	LOS C	9.5	66.2	0.61	0.53	0.61	48.3
12	R2	All MCs	329	0.0	329	0.0	* 0.864	76.0	LOS E	19.9	139.2	1.00	0.95	1.23	29.2
Approach			640	0.0	640	0.0	0.864	55.9	LOS E	19.9	139.2	0.81	0.75	0.93	30.2
All Vehicles			1321	0.0	1321	0.0	0.864	61.8	LOS E	27.4	191.8	0.89	0.86	1.01	28.1

Phase Timing Summary

Phase	A	B	C	D	D2
Phase Change Time (sec)	0.0	38.0	53.2	68.3	80.3
Green Time (sec)	32.0	9.2	9.2	6.0	23.7
Phase Time (sec)	38.0	15.2	15.2	12.0	29.7
Phase Split	35%	14%	14%	11%	27%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

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Default Site User Report

▽ Site: [2] N-S Rd / Thomas St - AM (Post Development w Increased NE Precinct Yield - 512 dwellings)

Output produced by SIDRA INTERSECTION Version: 10.0.5.217

N-S Road / Thomas St
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]		[Total HV]					[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				
South: N-S Rd															
1	L2	All MCs	69	0.0	69	0.0	0.072	4.6	LOS A	0.0	0.0	0.00	0.27	0.00	47.3
2	T1	All MCs	67	0.0	67	0.0	0.072	0.0	LOS A	0.0	0.0	0.00	0.27	0.00	48.4
Approach			137	0.0	137	0.0	0.072	2.3	NA	0.0	0.0	0.00	0.27	0.00	47.8
North: N-S Rd															
8	T1	All MCs	459	0.0	459	0.0	0.310	0.2	LOS A	0.8	5.6	0.10	0.15	0.10	49.1
9	R2	All MCs	116	0.0	116	0.0	0.310	5.1	LOS A	0.8	5.6	0.10	0.15	0.10	47.7
Approach			575	0.0	575	0.0	0.310	1.2	NA	0.8	5.6	0.10	0.15	0.10	48.8
West: Thomas St															
10	L2	All MCs	32	0.0	32	0.0	0.221	4.8	LOS A	0.9	6.2	0.45	0.61	0.45	44.2
12	R2	All MCs	141	0.0	141	0.0	0.221	8.3	LOS A	0.9	6.2	0.45	0.61	0.45	44.1
Approach			173	0.0	173	0.0	0.221	7.6	LOS A	0.9	6.2	0.45	0.61	0.45	44.1
All Vehicles			884	0.0	884	0.0	0.310	2.6	NA	0.9	6.2	0.15	0.26	0.15	47.7

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Default Site User Report

 **Site: [3] Dean St / N-S Rd - AM** (Post Development w Increased NE Precinct Yield - 512 dwellings)
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Dean St / N-S Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50.0 seconds (Site Practical Cycle Time)

Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Four-Phase Leading Right Turns

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Reference Phase: Phase A

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh.]	Dist]				km/h
East: Dean St															
5	T1	All MCs	265	0.0	265	0.0	0.279	8.3	LOS A	3.9	27.2	0.63	0.53	0.63	52.8
6	R2	All MCs	104	0.0	104	0.0	* 0.468	29.5	LOS C	2.6	18.0	0.97	0.77	0.97	37.2
Approach			369	0.0	369	0.0	0.468	14.3	LOS B	3.9	27.2	0.73	0.60	0.73	47.2
North: N-S Rd															
7	L2	All MCs	367	0.0	367	0.0	0.270	5.5	LOS A	2.1	14.4	0.25	0.73	0.25	42.0
9	R2	All MCs	248	0.0	248	0.0	* 0.490	21.7	LOS C	5.3	37.2	0.89	0.80	0.89	39.9
Approach			616	0.0	616	0.0	0.490	12.0	LOS B	5.3	37.2	0.50	0.76	0.50	41.2
West: Dean St															
10	L2	All MCs	32	0.0	32	0.0	0.238	6.8	LOS A	2.4	16.6	0.58	0.74	0.58	40.1
11	T1	All MCs	203	0.0	203	0.0	* 0.238	5.0	LOS A	2.4	16.6	0.58	0.74	0.58	43.8
Approach			235	0.0	235	0.0	0.238	5.2	LOS A	2.4	16.6	0.58	0.74	0.58	43.3
All Vehicles			1220	0.0	1220	0.0	0.490	11.4	LOS B	5.3	37.2	0.59	0.71	0.59	43.2

Phase Timing Summary			
Phase	A	B	C
Phase Change Time (sec)	0.0	18.4	38.0
Green Time (sec)	12.4	13.6	6.0
Phase Time (sec)	18.4	19.6	12.0
Phase Split	37%	39%	24%
Phase Frequency (%)	100.0	100.0	100.0

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Default Site User Report

 **Site: [1 (2)] Wilson St / Thomas St / Capulet St - PM** (Post Development w Increased NE Precinct Yield - 512 dwellings)

Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Wilson St / Thomas St / Capulet St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70.0 seconds (Site Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Four-Phase Leading Right Turns

Input Phase Sequence: A, B, C, D, D2*

Output Phase Sequence: A, B, C, D

Reference Phase: Phase A

(* Variable Phase)

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Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh.]	[Dist]				km/h
South: Thomas St															
1	L2	All MCs	202	0.0	202	0.0	0.527	28.5	LOS C	5.7	39.9	0.94	1.03	0.94	29.1
2	T1	All MCs	1	0.0	1	0.0	* 0.527	35.5	LOS D	5.7	39.9	0.94	1.03	0.94	28.3
3	R2	All MCs	89	0.0	89	0.0	0.381	38.4	LOS D	3.0	20.8	0.96	0.76	0.96	34.3
Approach			293	0.0	293	0.0	0.527	31.6	LOS C	5.7	39.9	0.94	0.95	0.94	30.0
East: Wilson St															
4	L2	All MCs	203	0.0	203	0.0	0.898	56.8	LOS E	23.1	161.8	1.00	1.11	1.33	34.0
5	T1	All MCs	354	0.0	354	0.0	* 0.898	51.2	LOS D	23.1	161.8	1.00	1.11	1.33	36.7
6	R2	All MCs	11	0.0	11	0.0	0.066	53.5	LOS D	0.3	2.4	0.95	0.67	0.95	33.8
Approach			567	0.0	567	0.0	0.898	53.2	LOS D	23.1	161.8	1.00	1.11	1.33	31.2
North: Capulet St															
7	L2	All MCs	9	0.0	9	0.0	0.050	12.5	LOS B	0.3	2.3	0.83	1.06	0.83	30.8
8	T1	All MCs	7	0.0	7	0.0	* 0.050	18.2	LOS B	0.3	2.3	0.83	1.06	0.83	30.0
9	R2	All MCs	2	0.0	2	0.0	0.050	22.8	LOS C	0.3	2.3	0.83	1.06	0.83	30.8
Approach			19	0.0	19	0.0	0.050	15.9	LOS B	0.3	2.3	0.83	1.06	0.83	30.5
West: Wilson St															
10	L2	All MCs	24	0.0	24	0.0	0.424	27.7	LOS C	7.2	50.5	0.83	0.70	0.83	40.9
11	T1	All MCs	242	0.0	242	0.0	0.424	22.2	LOS C	7.2	50.5	0.83	0.70	0.83	44.8
12	R2	All MCs	35	0.0	35	0.0	* 0.218	42.0	LOS D	1.2	8.3	0.96	0.72	0.96	33.6
Approach			301	0.0	301	0.0	0.424	24.9	LOS C	7.2	50.5	0.84	0.71	0.84	41.8
All Vehicles			1180	0.0	1180	0.0	0.898	40.0	LOS D	23.1	161.8	0.94	0.96	1.10	33.0

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0.0	29.0	43.1	58.0
Green Time (sec)	23.0	8.2	8.9	6.0
Phase Time (sec)	29.0	14.2	14.9	12.0
Phase Split	41%	20%	21%	17%
Phase Frequency (%)	100.0	100.0	100.0	100.0

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Default Site User Report

▽ Site: [2 (2)] N-S Rd / Thomas St - PM (Post Development w Increased NE Precinct Yield - 512 dwellings)

Output produced by SIDRA INTERSECTION Version: 10.0.5.217

N-S Road / Thomas St
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	[Total HV]	[Total HV]	[Total HV]				[Veh.]	[Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: N-S Rd															
1	L2	All MCs	59	0.0	59	0.0	0.147	4.6	LOS A	0.0	0.0	0.00	0.11	0.00	48.1
2	T1	All MCs	225	0.0	225	0.0	0.147	0.0	LOS A	0.0	0.0	0.00	0.11	0.00	49.3
Approach			284	0.0	284	0.0	0.147	1.0	NA	0.0	0.0	0.00	0.11	0.00	49.0
North: N-S Rd															
8	T1	All MCs	286	0.0	286	0.0	0.229	0.5	LOS A	0.7	5.1	0.19	0.26	0.19	48.6
9	R2	All MCs	111	0.0	111	0.0	0.229	5.7	LOS A	0.7	5.1	0.19	0.26	0.19	47.3
Approach			397	0.0	397	0.0	0.229	2.0	NA	0.7	5.1	0.19	0.26	0.19	48.2
West: Thomas St															
10	L2	All MCs	15	0.0	15	0.0	0.021	5.2	LOS A	0.1	0.5	0.36	0.55	0.36	45.1
12	R2	All MCs	7	0.0	7	0.0	0.021	7.3	LOS A	0.1	0.5	0.36	0.55	0.36	45.0
Approach			22	0.0	22	0.0	0.021	5.9	LOS A	0.1	0.5	0.36	0.55	0.36	45.1
All Vehicles			703	0.0	703	0.0	0.229	1.7	NA	0.7	5.1	0.12	0.21	0.12	48.5

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Default Site User Report

 **Site: [3 (2)] Dean St / N-S Rd - PM** (Post Development w Increased NE Precinct Yield - 512 dwellings)

Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Dean St / N-S Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50.0 seconds (Site Practical Cycle Time)
Site Scenario: 1 | Local Volumes

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

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh.]	Dist]				km/h
East: Dean St															
5	T1	All MCs	181	0.0	181	0.0	0.162	5.4	LOS A	2.1	14.6	0.50	0.41	0.50	55.1
6	R2	All MCs	214	0.0	214	0.0	* 0.818	33.6	LOS C	6.0	42.1	1.00	0.99	1.40	35.7
Approach			395	0.0	395	0.0	0.818	20.7	LOS C	6.0	42.1	0.77	0.72	0.99	42.6
North: N-S Rd															
7	L2	All MCs	82	0.0	82	0.0	0.068	5.7	LOS A	0.4	3.1	0.23	0.72	0.23	43.7
9	R2	All MCs	75	0.0	75	0.0	* 0.216	24.1	LOS C	1.6	11.4	0.88	0.74	0.88	38.9
Approach			157	0.0	157	0.0	0.216	14.5	LOS B	1.6	11.4	0.54	0.73	0.54	41.3
West: Dean St															
10	L2	All MCs	163	0.0	163	0.0	0.518	8.1	LOS A	6.2	43.6	0.72	0.94	0.72	36.8
11	T1	All MCs	327	0.0	327	0.0	* 0.518	7.5	LOS A	6.2	43.6	0.72	0.94	0.72	40.0
Approach			491	0.0	491	0.0	0.518	7.7	LOS A	6.2	43.6	0.72	0.94	0.72	38.9
All Vehicles			1042	0.0	1042	0.0	0.818	13.6	LOS B	6.2	43.6	0.71	0.83	0.79	40.6

Phase Timing Summary			
Phase	A	B	C
Phase Change Time (sec)	0.0	21.6	37.0
Green Time (sec)	15.6	9.3	7.0
Phase Time (sec)	21.6	15.3	13.0
Phase Split	43%	31%	26%
Phase Frequency (%)	100.0	100.0	100.0

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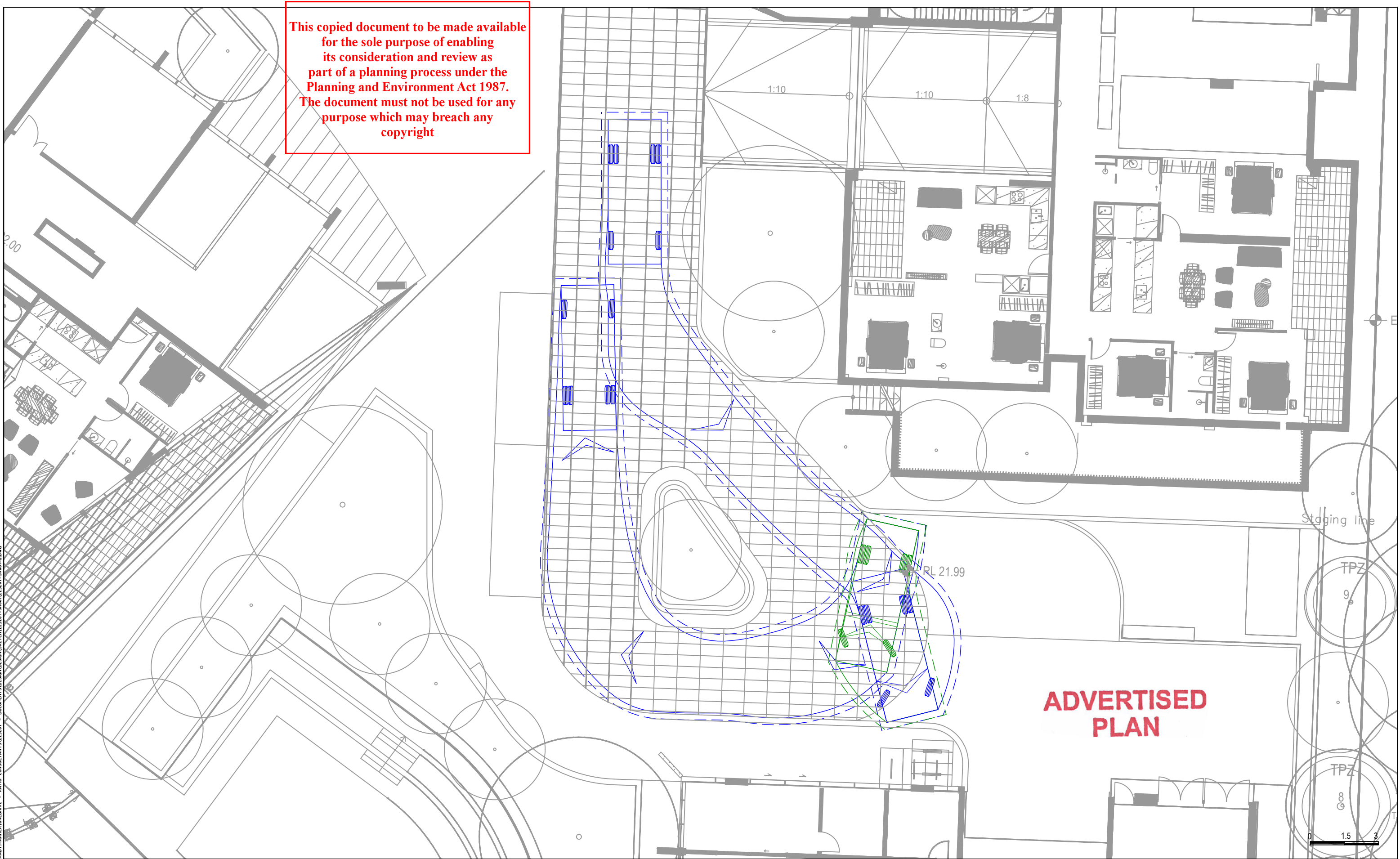
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Appendix D - Swept Path Assessment

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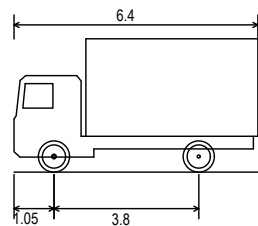


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ABN 005 422 104
8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

SRV - Small Rigid Vehicle (AS/NZS2890.2:2002)



VEHICLE ENVELOPE (FORWARD)
500mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
500mm CLEARANCE (REVERSE)

Overall Length
Overall Width
Track Width
Lock to Lock Time
Curb to Curb Turning Radius

6.400m
2.330m
2.330m
4.00 sec
7.100m

Proposed Residential Development 110 Wilson Street, Moonee Ponds VIC 3039 Swept Path Assessment - SRV Circulation

NOTE:
1) Base Plan Supplied By DKO Architecture
2) Maximum Design Speed 10km/h

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1 of 4

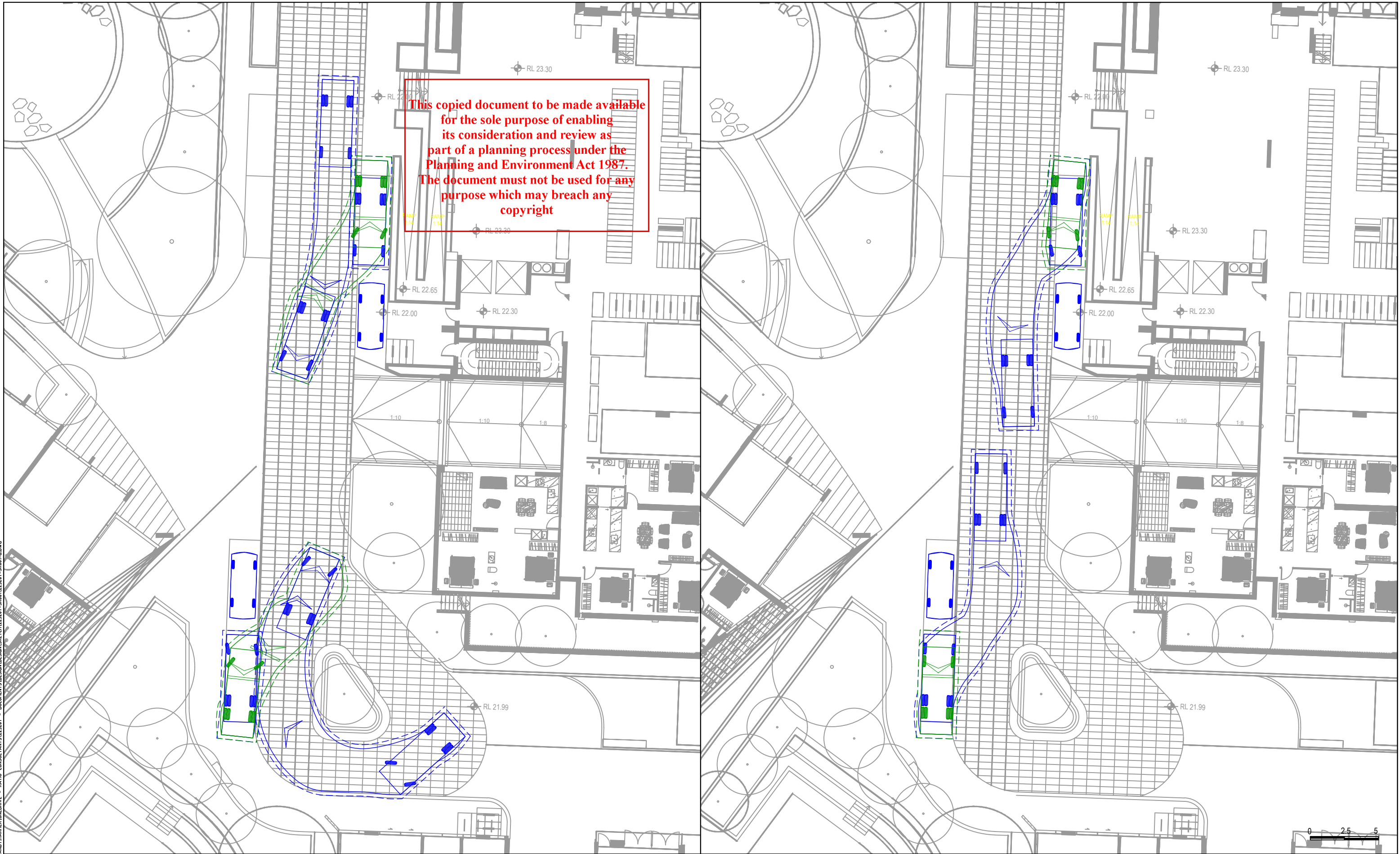
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A.H.

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16/07/2026



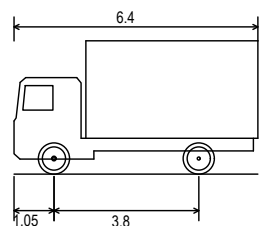
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ABN 005 422 104
8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

SRV - Small Rigid Vehicle (AS/NZS2890.2:2002)



VEHICLE ENVELOPE (FORWARD)
500mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
500mm CLEARANCE (REVERSE)

Overall Length
Overall Width
Track Width
Lock to Lock Time
Curb to Curb Turning Radius

6.400m
2.330m
2.330m
4.00 sec
7.100m

Proposed Residential Development
110 Wilson Street, Moonee Ponds VIC 3039
Swept Path Assessment - SRV Loading

NOTE:
1) Base Plan Supplied By DKO Architecture
2) Maximum Design Speed 10km/h

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2 of 4

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A.H.

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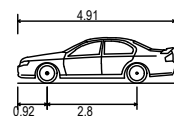
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4 TANDEM

71 CARS INC.
4 TANDEM

ratio:

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8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B85 Vehicle (AS/NZS2890.1:2004)



Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to Lock Time
Curb to Curb Turning Radius

VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

4.910m
1.870m
1.421m
0.159m
1.770m
4.00 sec
5.80m

Proposed Residential Development
110 Wilson Street, Moonee Ponds VIC 3039
Swept Path Assessment - Wilson East Critical Spaces

NOTE:
1) Base Plan Supplied By DKO Architecture
2) Maximum Design Speed 10km/h

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3 of 4

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A.H.

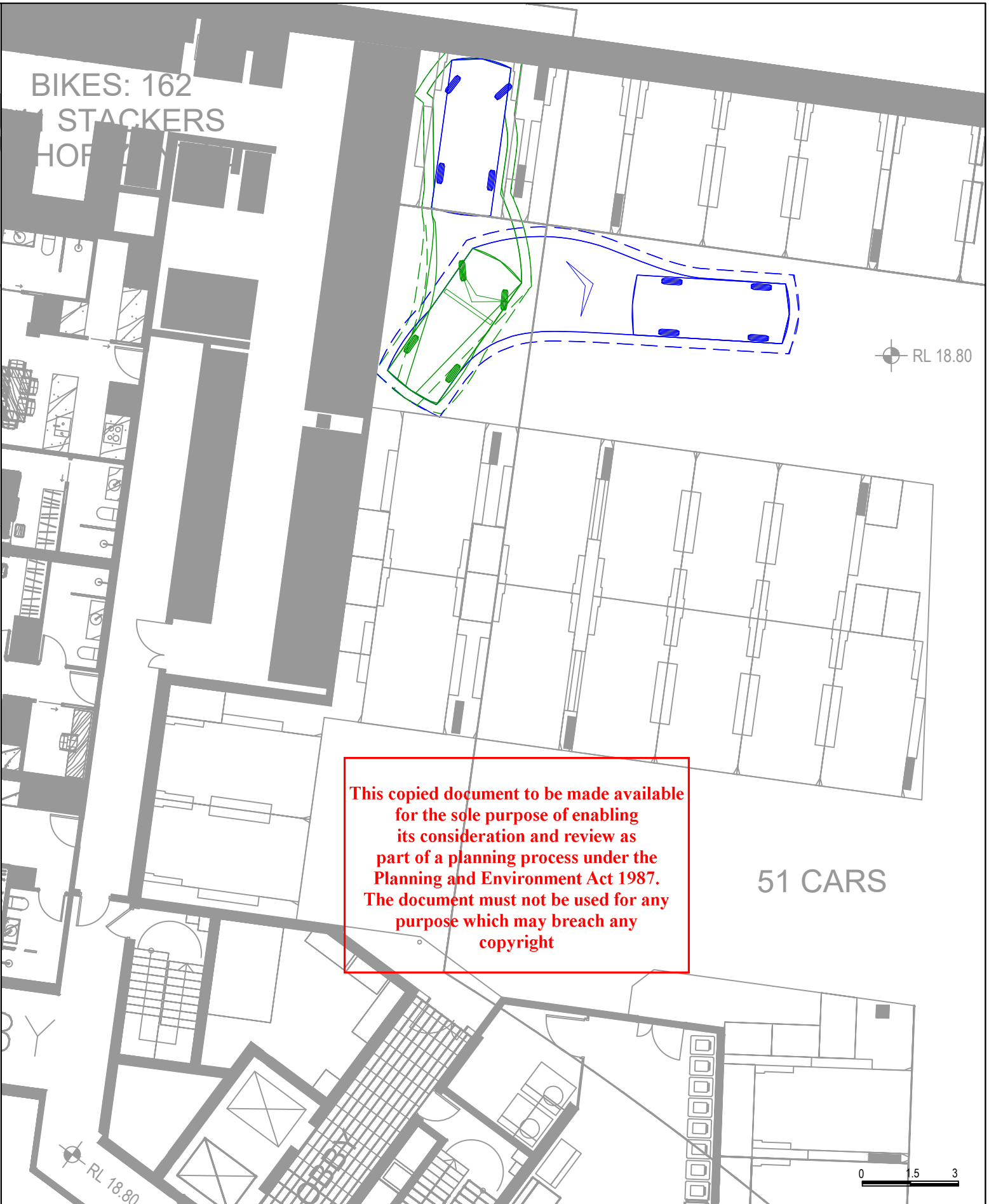
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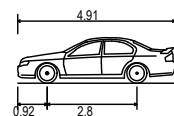
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ABN 005 422 104
8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B85 Vehicle (AS/NZS2890.1:2004)



Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to Lock Time
Curb to Curb Turning Radius

VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

4.910m
1.870m
1.421m
0.159m
1.770m
4.00 sec
5.80m

Proposed Residential Development
110 Wilson Street, Moonee Ponds VIC 3039
Swept Path Assessment - Track Central Critical Spaces

NOTE:
1) Base Plan Supplied By DKO Architecture
2) Maximum Design Speed 10km/h

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4 of 4

PREPARED BY
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