

**To:** Lara Fiscalini  
**From:** Civil Engineering unit; Mark Pisani  
**Date:** 3 June 2020  
**Subject:** Application No: PLN19/0931  
 Description: AMCOR; Precinct 5  
 Site Address: 1 Latrobe Avenue, Alphington

I refer to the above Planning Application received on 3 April 2020 in relation to the proposed development at 1 Latrobe Avenue, Alphington. Council's Civil Engineering unit provides the following information:

### Drawings and Documents Reviewed

	Drawing No. or Document	Revision	Dated
Techne Architects	TP01 Site Plan	E	12 March 2020
	TP10 Proposed Basement / Lower Ground Plan	D	12 March 2020
	TP20 Proposed Elevations (Sheet 01)	G	16 March 2020
	TP21 Proposed Elevations (Sheet 02)	E	13 March 2020
	TP22 Proposed Elevations (Sheet 03)	E	12 March 2020
	TP23 Proposed Elevations (Sheet 04)	E	13 March 2020
	TP30 Site Sections	E	16 March 2020
	TP31 Site Sections	E	16 March 2020
GTA Consultants	Transport Impact Assessment report	A	16 December 2019
GTA Consultants	Alphington Paper Mill Site Development Plan - Traffic Management Plan	G	19 August 2015
		Endorsed	27 May 2016

### CAR PARKING PROVISION

#### Proposed Development

Under the provisions of Clause 52.06-5 of the Yarra Planning Scheme, the development's parking requirements are as follows:

Proposed Use	Quantity/ Size	Statutory Parking Rate	No. of Spaces Required	No. of Spaces Allocated
One-bedroom dwelling	13	1 space per dwelling	12	12
Two-bedroom dwelling	54	1 space per dwelling	54	54
Three-bedroom dwelling	12	2 spaces per dwelling	24	24
Visitors	79 dwellings	1 space for every five dwellings	15	6
<b>Total</b>			<b>106 Spaces</b>	<b>97 Spaces</b>

To reduce the number of car parking spaces required under Clause 52.06-5 (including to reduce to zero spaces), the application for the car parking reduction must be accompanied by a Car Parking Demand Assessment.

### Car Parking Demand Assessment

In reducing the number of parking spaces required for the proposed development, the Car Parking Demand Assessment would assess the following:

- *Parking Demand for the Dwellings.* The on-site car parking for the dwellings meets the minimum statutory parking requirement.
- *Parking Demand for Residential Visitors.* To assess the likely parking demand for the residential visitors, GTA Consultants have adopted the visitor parking rate for high density residential use of 0.12 spaces per dwelling, taken from the endorsed *Traffic Management Plan*. Applying this rate to the 79 dwellings yields a visitor parking demand of 10 spaces. With six on-site visitor spaces provided, the shortfall of four spaces in the peak visitor parking demand could be accommodated on-street.

### Adequacy of Car Parking Provision

From a traffic engineering perspective, the proposed on-site parking provision is considered appropriate in the context of the development and the surrounding area. The residential parking demand is consistent with the statutory and recommended rates. The shortfall of four spaces in the residential visitor parking demand should not have a detrimental impact on parking conditions in the surrounding area.

The Civil Engineering unit has no objection to the car parking provision for this site.

## TRAFFIC IMPACT

### Trip Generation

The trip generation for the site adopted by GTA Consultants is as follows:

Proposed Use	Adopted Traffic Generation Rate	Daily Traffic	Peak Hour	
			AM	PM
Residential – Medium density (15 dwellings)	0.44 trips per dwelling in each peak hour Peak hour volumes are 10% of daily volume	70	7	7
Residential – High density (64 dwellings)	0.35 trips per dwelling in each peak hour Peak hour volumes are 10% of daily volume	220	22	22
<b>Total</b>		<b>290</b>	<b>29</b>	<b>29</b>

The GTA report indicates that the traffic generated by this site is considered acceptable, based on the previously conducted micro-simulation modelling for the *Traffic Management Plan*.

What assumptions/traffic volumes of other adjoining developments were used to analyse the Chandler Highway/Mills Boulevard intersection and the Heidelberg Road/Latrobe Avenue intersection?

To date, it appears that no attempt has been made by the applicant to provide a compilation of peak hour traffic volumes of approved individual sites and to test whether these volumes are in line with those contemplated in the *Traffic Management Plan*.

Whilst the peak hour volumes from this site do not appear to be unduly high, the report does not demonstrate how volumes generated from this site would be accommodated within the broader road network.

**DEVELOPMENT LAYOUT DESIGN**  
**Layout Design Assessment**

Item	Assessment
<b>Access Arrangements</b>	
Development Entrance – Joel Terrace Main Entry	The proposed 6.145 metre wide entrance satisfies the Australian/New Zealand Standard AS/NZS 2890.1:2004.
Visibility	A pedestrian sight triangle measuring 2.0 metres by 2.5 metres has been provided for the exit lane of the Main Entry and satisfies <i>Design standard 1 – Accessways</i> of Clause 52.06-9.
Headroom Clearance	The headroom clearances of individual garage doors and within the basement car park have not been dimensioned.
<b>Car Parking Modules</b>	
At-grade Parking Spaces	The dimension of the car parking spaces (2.4 to 2.6 metres by 4.9 to 5.4 metres) satisfy <i>Design standard 2 – Car parking spaces</i> of Clause 52.06-9 and AS/NZS 2890.1:2004 (where applicable).
Aisles	The aisle widths range from 5.8 metres to 7.0 metres and satisfy <i>Table 2: Minimum dimensions of car parking spaces and accessways</i> of Clause 52.06-9 and AS/NZS 2890.1:2004 (where applicable).
Single Garages	The dimensions of the single garages (4.065 metres by 6.145 metres) satisfy <i>Design standard 2</i> .
Double garages	The dimensions of the double garages (5.53 metres by 6.1 metres) satisfy <i>Design standard 2</i> .
Column Depths and Setbacks	Not dimensioned on the drawings.
Clearances to Walls	Not dimensioned on the drawings.
Blind Aisle Extensions	Not dimensioned on the drawings.
<b>Gradients</b>	
Ramp Grade for First 5.0 metres inside Property	The first 5.0 metres inside the property has a grade of 1 in 22 and satisfies <i>Design standard 2: Gradients</i> .
Longitudinal Grade along Aisles	The maximum longitudinal grade of 1 in 20 (in front of the visitor spaces) satisfies AS/NZS 2890.1:2004.
Ramp Grades and Changes of Grade	The ramp grades and changes of grade satisfy <i>Table 3 Ramp Gradients</i> of Clause 52.06-9.
<b>Swept Path Analysis</b>	
Vehicle Turning Movements – Main Entry via Joel Terrace V158400-AT03-01 Issue P4*	The swept path diagrams for a B99 design vehicle and an oncoming B85 design vehicle entering and exiting the Main Entry via Joel Terrace are considered satisfactory.
Ingress Movement - East Space Double Garage - Townhouse TH7 V158400-AT03-01 Issue P4	The ingress movement for a B85 design vehicle into the east space of Townhouse TH7 is considered satisfactory. A correctional movement is permissible under AS/NZS 2890.1:2004.
Access into Townhouse TH1 V158400-AT03-02 Issue P4	The ingress movement for a B85 design vehicle into t Townhouse TH1 is considered satisfactory.

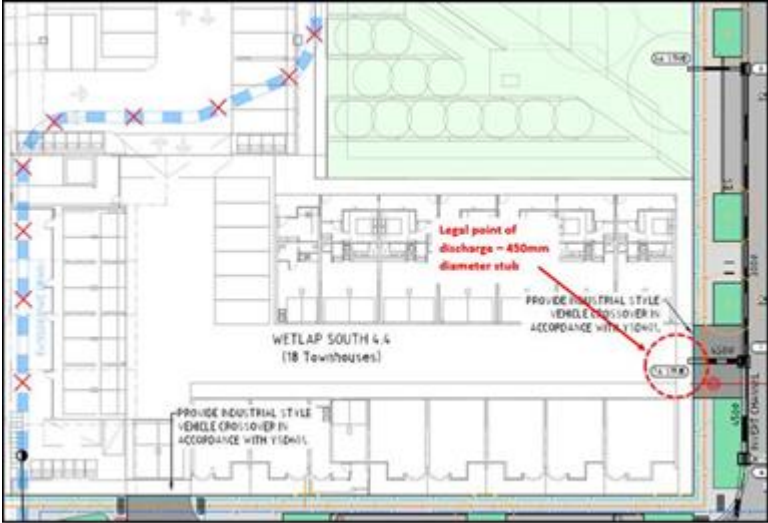
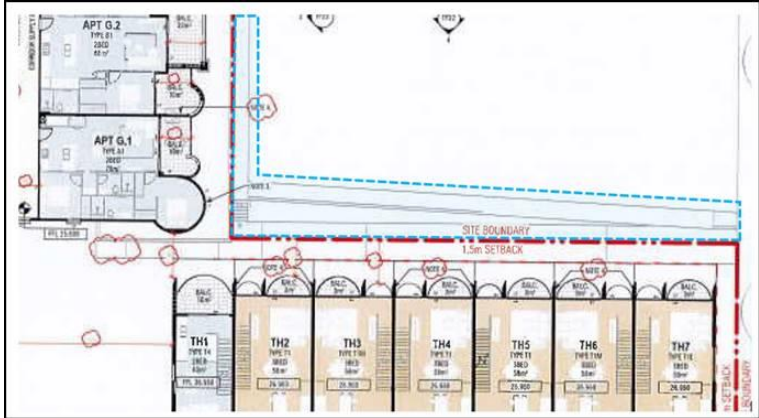
\* GTA Consultants swept path diagram drawing number.

Item	Assessment
Ingress Movement - West Space Double Garage - Townhouse TH7 V158400-AT03-02 Issue P4	The swept path diagram for a B85 design vehicle accessing the west space of Townhouse TH7 is considered satisfactory.
Vehicle Passing Movements V158400-AT03-03 Issue P4	The swept path diagrams for a B99 design vehicle and an oncoming B85 design vehicle at the doorway servicing the on-site car park are considered satisfactory.
Egress Movement – Townhouse TH1 V158400-AT03-03 Issue P4	The B85 swept path diagram for the egress movement out of Townhouse TH1 is considered satisfactory.
Egress Movement - West Space Double Garage - Townhouse TH7 V158400-AT03-03 Issue P4	The B85 swept path diagram for the egress movement out of the west space of Townhouse TH7 is considered satisfactory.
Ingress Movement – Space 59 V158400-AT03-04 Issue P4	The swept path diagram for a B85 design vehicle entering Space 59 is considered satisfactory.
Waste Collection Vehicle – Entry Movement via Joel Terrace V158400-AT03-04 Issue P4	The swept path diagram for a 6.34 metre long waste collection vehicle entering the development via Joel Terrace is considered satisfactory.
Egress Movement - East Space Double Garage - Townhouse TH7 V158400-AT03-04 Issue P4	The swept path diagram for a B85 design vehicle accessing the east space of Townhouse TH7 is considered satisfactory.
Egress Movement – Space 59 V158400-AT03-05 Issue P4	The reversing movement for a B85 design vehicle out of end space 59 is considered satisfactory.
Waste Collection Vehicle – Manoeuvring V158400-AT03-05 Issue P4	The swept path diagrams for a 6.34 metre long waste collection vehicle manoeuvring to collect refuse and exiting the site in a forward direction are considered satisfactory.

### Design Items to be Addressed

Item	Details
Headroom Clearance	To be dimensioned on the drawings for the Main Entry doorway, the individual townhouse garage doorways and within the on-site car parking area.
Column Depths and Setbacks	To be dimensioned on the drawings. Column positions are to be located outside of the parking space clearance envelope as required in <i>Diagram 1 Clearance to car parking spaces</i> of Clause 52.06-9 or Figure 5.2 of AS/NZS 2890.1:2004 (where applicable).
Clearances to Walls	Clearances of no less than 300 mm are to be provided to spaces abutting walls as required by <i>Design standard 2</i> and to be dimensioned on the drawings.
Blind Aisle Extensions	To be dimensioned on the drawings.

## INFRASTRUCTURE ITEMS AND CONSTRUCTION ACTIVITIES

Item	Details
<b>General</b>	
Finished Surface Levels along Boundary with Warsons Place and Joel Terrace	Written confirmation is to be provided for the finished surface levels along the boundary with Warsons Place and Joel Terrace road reserve have been designed in accordance with the Council approved Road and Drainage plans titled: Yarrabend, Alphington – Workshop Precinct Stage 4, TGM Dwg No 18499-204.
Legal Point of Discharge	<p>In accordance with a Legal Point of Discharge application under Regulation 133 – Stormwater Drainage of the Building Regulations 2018, a 450 mm diameter property stub has been installed at the south eastern corner of the site (see Figure 1). Any storm water drainage within the property must be provided, connected and discharged to the allocated property stub.</p>  <p>Figure 1 - Legal point of discharge location</p>
Prohibited Access	There should be no access to any areas of the development from Paper Square Park.
Details of Area outside of Site Boundary	<p>The applicant is to provide further detail of what is shown in the outlined blue area in Figure 2. The area is located within Council owned area outside the site boundary. There should be no private property infrastructure positioned within publicly owned land.</p>  <p>Figure 2 - Paper Square park area</p>

Item	Details
Access Point	The access point located along the southern boundary of the property must be aligned and designed in accordance with the Council approved civil and landscape plans for Workshop Precinct.

## GENERAL ENGINEERING CONDITIONS

### Road Asset Protection

- Any damaged roads, footpaths and other road related infrastructure adjacent to the development site as a result of the construction works, including trenching and excavation for utility service connections, must be reconstructed to Council's satisfaction and at the developer's expense.

### Construction Management Plan

- A Construction Management Plan must be prepared and submitted to Council. The Plan must be approved by Council prior to the commencement of works. A detailed dilapidation report should detail and document the existing and post construction conditions of surrounding road infrastructure and adjoining private properties.

### Impact of Assets on Proposed Development

- Any services poles, structures or pits that interfere with the proposal must be adjusted, removed or relocated at the owner's expense after seeking approval from the relevant authority.
- Areas must be provided inside the property line and adjacent to the footpath to accommodate pits and meters. No private pits, valves or meters on Council property will be accepted.

### Discharge of Water from Development

- Only roof runoff, surface water and clean groundwater seepage from above the water table can be discharged into Council drains.
- Council will not permit clean groundwater from below the groundwater table to be discharged into Council's drainage system. Basements that extend into the groundwater table must be waterproofed/tanked.

## ADDITIONAL ENGINEERING ADVICE FOR THE APPLICANT

Item	Details
Legal Point of Discharge	The applicant must apply for a Legal Point of Discharge under Regulation 133 – Stormwater Drainage of the <i>Building Regulations</i> 2018 from Yarra Building Services unit. Any storm water drainage within the property must be provided and be connected to the nearest Council pit of adequate depth and capacity (legal point of discharge), or to Council's satisfaction under Section 200 of the <i>Local Government Act</i> 1989 and Regulation 133.
Detailed Engineering Design	Detailed engineering design drawings of the road infrastructure surrounding the site are to be submitted to Council for assessment and approval.

Item	Details
Proving of Underground Services	The proving of underground services is to be conducted prior to works commencing on site to ensure that all services surrounding the site have been identified. Permission from the relevant service authorities must be obtained if works will impact the service authorities' assets.