

To:	Lara Fiscalini (Yarra City Council)	From:	Leigh Furness (Traffix Group)
Our Ref:	G30499M-03A	Date:	Thursday, 27 October 2022
<b>Victoria Gardens, Doonside Precinct – Proposed Redevelopment</b>			

## Introduction

This review relates to a proposal by Salta to expand Victoria Gardens Shopping Centre in Richmond. The expansion is located on the north side of Doonside Street.

Further to your instructions, please find following our detailed review of the transport implications of this proposal. In undertaking this review, we have considered the following key documents:

- Transport Impact Assessment by Stantec, dated 15<sup>th</sup> July, 2022 (Issue C)
- Transport Review of the proposed Parking Overlay, letter by Stantec dated 15<sup>th</sup> July, 2022
- The proposed Parking Overlay
- Development plans and summary by Cox Architecture and NH Architecture, dated 28<sup>th</sup> April, 2022
- The Traffic Works Assessment report prepared by Traffix Group for the Harry the Hirer site (Ref: G30102R-01G), dated March, 2022
- The Panel Report for Amendment C223 (Harry the Hirer rezoning)

## Proposal

The proposal is for an expansion of Victoria Gardens Shopping Centre in Richmond. It affects the land to the south of the Shopping Centre, on the north-east corner of the Burnley Street/Doonside Street intersection. The proposal is for a mixed use expansion comprising 839 apartments and approximately 12,000m<sup>2</sup> of commercial and office space.

The proposal has several components:

- a Planning Permit application,
- an amendment to the Comprehensive Development Zone (CDZ1) that applies to the Victoria Gardens Precinct and apply the CDZ1 to existing MUZ land, and
- Application of a Parking Overlay to the site

A development summary extracted from the Stantec report is presented in the table below.

Table 1: Development Summary

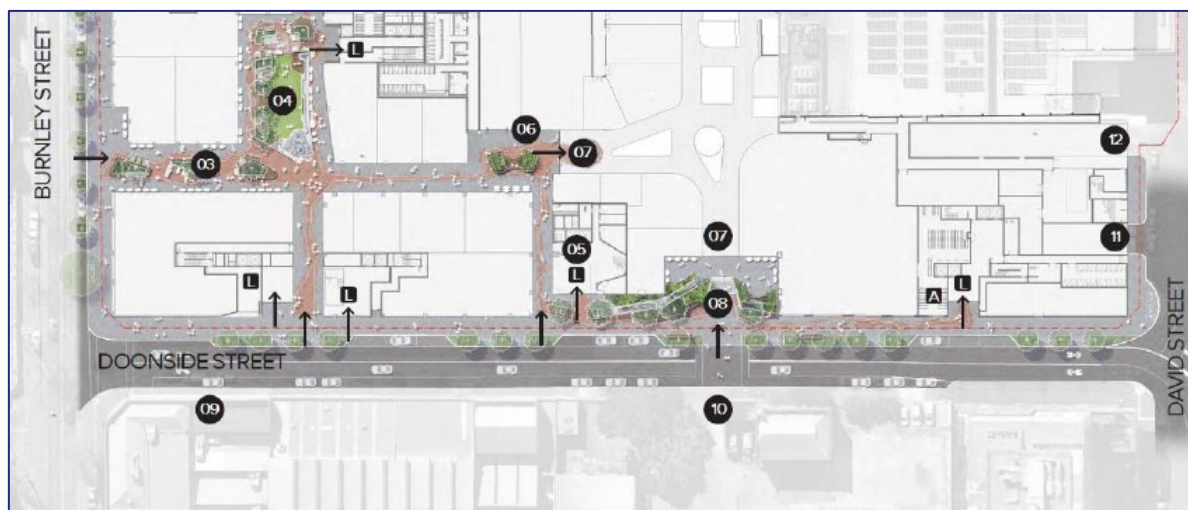
Characteristics	Description		
Uses	Size/No.	Car Parking	Notes
<b>Residential</b>			
Dwellings:			
One-bedroom Apt.	456	484, not specifically allocated	0.577 car spaces per dwelling overall
Two-bedroom Apt.	369		
Three-bedroom Apt.	14		
<i>Subtotal</i>	839	484	
<b>Retail</b>			
Shop	5,185m <sup>2</sup>	None	Public car parking at Victoria Gardens to be available
Food and Beverages	1,914m <sup>2</sup>		
Hotel	1,446m <sup>2</sup>		
<i>Subtotal</i>	8,545m <sup>2</sup>		
<b>Office</b>			
Office	3,485m <sup>2</sup>	34	1/100m <sup>2</sup>
<b>Transport Summary</b>			
Car Parking Provision	-	518 car spaces	Located in basement
Bicycle Parking Provision	-	972 bicycle spaces	844 resident 40 employee 88 visitor/customer
<b>Other</b>	<b>Notes</b>		
Vehicle Access	2 x two-way crossovers to David Street on east boundary.		
Changes to on-street parking	See Changes to Doonside Street section below table.		
Loading Provision	<u>Basement</u> Retail • 2 x Small Rigid Vehicle (SRV) and 2 x Medium Rigid Vehicle (MRV) Residential • 2 x Small Rigid Vehicle (SRV) and 2 x Medium Rigid Vehicle (MRV) <u>Ground</u> • One x Medium Rigid Vehicle (MRV)		
Waste Collection	Within basement using 10.7m long trucks and compactors behind the MRV bays		

## Changes to Doonside Street

The proposal includes modifications to Doonside Street, in particular the northern side. Figure 1 shows the Stantec plan of the proposed changes.

The key proposals are to:

- Widen the footpath along the north side of Doonside Street to 4.0m.
- Providing indented parking (9 spaces) on the north side of Doonside Street. There is a loss of on-street parking overall.
- Retaining the existing kerbline on the south side of Doonside Street, which allows a 2.3m wide parking lane on the south side and 6.2m for a traffic lane in each direction.
- A “potential future” raised pedestrian crossing, located mid-block along Doonside Street. This would connect the development to the Harry the Hirer site (the TIA assumes that this would be delivered by Harry the Hirer).
- Sharrow line marking for cyclists on Doonside Street.



*Figure 1. Extract of Figure 4.2 of the GTA/Stantec TIA illustrating proposed streetscape changes*

The proposed street configuration would be an acceptable outcome from a traffic engineering perspective.

There is the potential to improve the streetscape in Doonside Street and for Victoria Gardens and Harry the Hirer to work together with Council to deliver these works. Similar to our comments on the traffic impacts of this proposal (see below), we would recommend both parties in conjunction with Council come together to work out a plan to deliver a consistent streetscape for the benefit of all road users and nearby land uses.

## Traffic Impacts

### Previous History

The Planning Panel for C223 (Harry the Hirer) specifically considered the need for traffic signals at the Doonside St/Burnley St intersection. Regarding this upgrade, the Panel concluded that:

- *The redevelopment of the site will require signalisation of the Burnley Street and Doonside Street intersection at some stage to ensure safe and functional traffic and pedestrian movement.*
- *It is reasonable for the schedule to the Development Plan Overlay to require the Proponent as the agent of change to contribute to all uncollected costs of the upgrade to the extent required in the absence of any identified mechanism by which the costs of these works can be levied on surrounding landowners.*

### Traffic Generation of Victoria Gardens by Stantec

The Stantec report sets out the traffic generation expected by the proposal at Table 7.3, which is reproduced below.

Land Use	Spaces / Floor Area	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		Traffic Generation Rate	Traffic Generation	Traffic Generation Rate	Traffic Generation	Traffic Generation Rate	Traffic Generation
Residential <sup>[1]</sup>	484 spaces	0.16 movements per space	77	0.16 movements per space	77	0.16 movements per space	77
Office <sup>[2]</sup>	34 spaces <sup>4</sup>	0.44 movements per space	15	0.36 movements per space	12	-	0
<b>Sub Total</b>		-	92	-	89	-	77
Retail <sup>[3]</sup>	8,545sqm	0.46 movements per 100sqm	39	1.6 movements per 100sqm	137	2.6 movements per 100sqm	222
<b>Total</b>		-	131 vph	-	226 vph	-	299 vph

[1] Rates sourced from traffic surveys of residential developments in the Victoria Gardens precinct.

[2] Rates adopted from the RMS Guide to Traffic Generating Developments Guide (Technical Note dated August 2013).

[3] Rates based on the traffic surveys of the existing shopping centre and adopting a 25% reduction factor noting that data indicates that as centres grow, they generate traffic at a lower per sqm rate.

[4] The proposed additional extra parking spaces have been allocated to the office/medical centre use

We have three concerns with the traffic generation rates above:

- The residential traffic generation rate is approximately half of that adopted by Ratio and Traffix Group during the assessment of Harry the Hirer (which adopted 0.3 vehicle trips per dwelling with a car space in peak periods). This flows into the assessment of both this proposal, and the detailed assessment of all other projects in the nearby area. The data on which this rate is based is not provided.

We agree that traffic generation rates for inner areas of Melbourne have reduced over time and the 0.3 trips/resident car space rate is too conservative based on more recent data.

The Traffix Group report supporting the Development Plan application for Harry the Hirer adopted a traffic generation rate of 0.2 trip/resident car space. This was based on a review of case study data, ABS data and trip generation data.

In our view, the 0.16 trip/resident car space is not sufficiently conservative. Application of the 0.2 trip/resident car space rate is more appropriate and will allow for a direct comparison between the two projects.

The recommend office traffic generation rate in the cited RMS Technical Note is 1.6 and 1.2 vehicles trips per 100m<sup>2</sup> in the AM and PM peak hours, respectively. This is not a movement per car space rate, as was adopted by Stantec. It is not clear from the data in the RMS Technical Note how these rates were derived.

However, adoption of the recommended RMS rate results in unrealistic traffic generation rates given the low level of car parking provided<sup>1</sup>. The office parking rate adopted should be based on 50% turnover of office car spaces, which is the more common rate applied to office developments with low car parking provision.

- The retail rate should not be discounted by 25% as this is not conservative. The expansion represents a 13% increase in floor area at Victoria Gardens from circa 54,000m<sup>2</sup> to 62,000m<sup>2</sup>.

The RMS Technical note cited in this table include guidance on shopping centre traffic generation rates (see below). While there is a trend to lower traffic generation rates as shopping centre sizes increase, this does not materially reduce for larger centres over 30,000m<sup>2</sup>.

Range in Total Floor Area (GLFA – m <sup>2</sup> )	Peak Hour Generation Rate (vehicles per 100m <sup>2</sup> GLFA)			
	Thursday (V(P)/A)	Friday (V(P)/A)	Saturday PVT (A)	Sunday
0 – 10,000	12.3	12.5	16.3	
10,000 – 20,000	7.6 (6.2)	6.2 (6.7)	7.5 (7.5)	(6.6)
20,000 – 30,000	5.9 (6.0)	5.6 (5.9)	7.5 (7.0)	(6.3)
30,000 – 40,000	4.6	3.7	6.1	
40,000 – 70,000	(4.4)	(4.4)	(5.5)	(4.6)
70,000+	(3.1)	(4.0)	(3.6)	(3.2)

The traffic analysis is based on 2016 traffic data for the local road network. We appreciate the difficulty in obtaining accurate traffic data during the pandemic (when the modelling was initially completed). However, it is now late-2022 and there are no significant pandemic restrictions and more recent data should be sourced. The Stantec analysis also makes assumptions about the traffic impact of nearby developments completed since 2016. Sourcing more current data may allow these completed developments to be included by default in the base traffic data (rather than added on).

Burnley Street is part of the Principal Bicycle Network and a Strategic Cycling Corridor providing a bicycle lane in each direction. The number of cyclists on this link is not recorded or factored into the modelling. Incorporating cyclist volumes on Burnley Street would reduce the capacity of this intersection to accommodate additional traffic, compared to the Stantec

<sup>1</sup> Application of these rates results in 56 vehicle trips in the AM peak hour, compared to only 34 office car spaces on-site.

model. As cyclists are not included in the modelling, there is also no assessment of the trips generated by the 972 bicycle spaces proposed by Victoria Gardens.

To construct a base-case traffic volume scenario, Stantec include the expected traffic generation of other developments in the nearby area. The analysis of other developments uses the following traffic generation rates:

- the same residential traffic generation rate 0.16 movements per residential car space, which in our view is on the low side.
- a retail rate of 0.92 movements per car space, however the source is not cited.
- a commercial (office) rate of 0.36 movements per car space, which in our view is also low.

Finally, the traffic distribution contained at Appendix H illustrates a bias for traffic to arrive/depart from the south on a 40/60 basis North/South. Existing traffic using Doonside Street is biased towards the north under existing conditions with a 60/40 N/S split.

We were provided with the SIDRA modelling files created by Stantec for the Burnley St/Doonside St intersection (from June 2022). We were provided with the PM peak hour only. We have two concerns with the modelling:

- The gap acceptance values specified in the SIDRA have been manually adjusted to lower values than the SIDRA default values and there is no explanation in the Traffic Report. This has resulted in the modelling calculating movement capacities based on gap values that are substantially below the default values in SIDRA or in the Austroads Guidelines. In the case of the critical right turn out movement, the model is using values indicating that is as easy for drivers to turn right out of Doonside Street (across two lanes of opposing traffic) as it is to turn right into Doonside Street.

Model	Critical gap / Follow up gap		
	Right turn in	Right turn out	Left turn out
SIDRA default*	4.00 / 2.00	4.80 / 3.10	4.50 / 2.50
Stantec Model	4.00 / 2.00	3.80 / 2.30	4.59 / 1.53
*T-intersection, 2 lane major road, stop condition			

Adopting the default values in SIDRA indicates that the Burnley St/Doonside St intersection does not have adequate capacity to accommodate the development.

- The modelling of truck volumes has no trucks turning left or right into Doonside Street and none turning right out of Doonside Street. Given that Doonside Street will serve as truck access for both Victoria Gardens and Harry the Hirer, it does not appear reasonable to assume truck volumes would be zero on these movements.

The Stantec assessment does not include Harry the Hirer, it leaves this analysis to be completed at the application stage of Harry the Hirer.

The Stantec analysis concludes that:

- *The proposed development is expected to result in relatively minor increases in traffic volumes at surrounding intersections, particularly at the Victoria Street / Burnley Street and Victoria Street / River Boulevard intersections. Against the existing traffic volumes*

*in the vicinity of the site, the proposed development cannot be expected to materially worsen the performance of surrounding intersections.*

- *The Burnley Street / Doonside Street is expected to operate with a “good” level of service under post development conditions, noting that the DOS of 0.71 is well less than the ‘ideal’ limit of 0.9 typically adopted for unsignalised intersections. In the context and given there is no identifiable systemic road safety issue at this intersection (as outlined in Section 2.3), the completion of mitigating road works at the intersection as a result of the proposed development is not considered to be necessary.*

*It is noted that this latter conclusion is consistent with the analysis undertaken and conclusions reached by the transport experts for the Planning Scheme Amendment for the ‘Harry the Hirer’ site, which concluded the signalisation of the intersection was not required due to currently approved development nor the first stage of that development.*

Our view is that the Victoria Gardens development would likely trigger the need for traffic signals. The Stantec assessment has several shortcomings:

- It relies on 2016 traffic data and newer data should be collected to form the base case.
- The traffic generation rates adopted are not particularly conservative.
- The gap values adopted in the analysis are too low, resulting in a traffic model that over-represents the capacity of the intersection to accommodate additional traffic.
- The traffic distribution at Burnley Street is weighted to the south, whereas previous planning for Harry the Hirer and the current traffic volumes using Doonside Street are weighted to the north.
- It does not include cyclists or pedestrians in the analysis, which impacts the capacity of this intersection.
- Truck distribution assumptions do not appear realistic.

Addressing these shortcomings in our view is likely to result in an intersection model that would indicate that signalisation is required because of the Victoria Gardens expansion.

### ***Harry the Hirer***

A Traffic Works Assessment has been prepared by Traffix Group to support the Harry the Hirer Development Plan which has recently been submitted to Council. This assessment concluded that:

- Signalisation of Burnley St/Doonside St is required at full development of the Harry the Hirer site.
- Part of Harry the Hirer could be delivered before signalisation was required (at an intersection DoS of 0.9). This report proposes allowing the following yield before signalisation:
  - The existing Harry the Hirer business
  - 500 dwellings
  - 4,000m<sup>2</sup> of office space
  - 3,000m<sup>2</sup> of shop/retail space





The conclusion of the Traffic Works Assessment is similar Stantec conclusion – that a significant scale of development on Doonside Street can proceed before signalisation is required at the Burnley St/Doonside St intersection.

### ***Assessment***

The Planning Panel for Harry the Hirer concludes that the Doonside Street/Burnley Street intersection ultimately requires signalisation to accommodate the full development of Harry the Hirer. Traffic Works Assessment submitted as part of the development plan agrees with this finding and sets a development scale that can be accommodated before signalisation is required.

There is capacity in the existing intersection to accommodate some additional traffic, either by Victoria Gardens or Harry the Hirer. It is our view that the full development of either project would likely trigger the need for traffic signals. Both developments together mean that traffic signals are required earlier.

Whichever project proceeds first would use entire spare capacity of the existing intersection. Without certainty that both projects would be completed, it is not a realistic option to require by permit condition each development to pay for a certain proportion, in case the other never proceeds. As per the Planning Panel conclusion, in the absence of any other mechanism to deliver the traffic signals, the agent of change would need to provide them.

It is our view that the most logical and equitable outcome is that Victoria Gardens and the developer of Harry the Hirer meet and agree on an apportionment plan to split the cost of these traffic signals, as these developments trigger individually trigger the need for these traffic signals.

### ***Department of Transport Position***

We have reviewed the letter by the Department of Transport (DoT) dated 16<sup>th</sup> March, 2022, appended to the Stantec Traffic Report.

We agree with the overall view from the DoT that traffic signals are ultimately required to be installed in a reasonable timeframe. The simultaneous development of both sites brings this requirement forwards.

We disagree that the DoT's possible alternative option of prohibiting right turn movements out of Doonside Street being a possible interim solution (as does the Stantec Traffic Report).

Imposing this ban would severely limit travel options to the north and east for Victoria Gardens, Harry the Hirer and the nearby area. Doonside Street provides the only option in the immediate area for right turn movements into Burnley Street (which are banned at Appleton Street, North Street and Crown Street). It is important for the connectivity of the network that right turn movements out of Doonside Street are maintained, given the lack of reasonable alternative travel routes.



## Review of Changes to CDZ1 and Introduction of a Parking Overlay

This control was introduced in 2009 and predates the rewriting of Clause 52.06 (2012) and the introduction of Parking Overlays or the application of the Column B parking rates under the Principal Public Transport Network (2018).

Clause 18 of Schedule 1 to the Comprehensive Development Zone specifies car parking rates for a variety of uses. These are reproduced below.

*Table 2: Parking rates under CDZ1*

Use	No. of Spaces
Office	2.5 spaces per 100m <sup>2</sup>
Food and drink premises (other than Hotel, Tavern and Take Away food premises)	0.3 spaces per seat
Shop (other than Restricted retail premises)	4.5 spaces per 100m <sup>2</sup>
Place of assembly	0.3 per seat or square metre available to the public
Restricted retail premises	2.0 spaces per 100m <sup>2</sup>
Trade supplies	2.0 spaces per 100m <sup>2</sup>
Residential	1.5 spaces per dwelling

Some of these parking rates are not consistent with the current Column B parking rates of Clause 52.06.

The proposal by the applicant for a new Parking Overlay which would generally reduce the current parking rates and apply these as maximum parking rates, as per the following table.

*Table 3: Proposed parking rate changes*

Use	Current CDZ rate (minimum)	Proposed Parking Overlay rate (maximum)
<u>Existing Rates</u>		
Residential	1.5 spaces per dwelling	
Office	2.5 spaces per 100sqm	
Shop (other than Restricted Retail)	4.5 spaces per 100sqm	
Food & Drink Premises (other than Hotel, Tavern and Take Away food premises)	0.3 spaces per seat	
Restricted Retail	2 spaces per 100sqm	
Trade Supplies	2 spaces per 100sqm	
Place of Assembly	0.3 per seat or square metre available to the public	
<u>Proposed Rates</u>		
Residential		1 space per dwelling
Office		2 spaces per 100sqm NFA
Shop (including Restricted Retail)		3 spaces per 100sqm NLA
Food & Drink Premises		3 spaces per 100sqm NLA

The change to maximum car parking rates is significant. It means that:

- By default, zero car parking would be acceptable for any use with a maximum car parking rate. We do not believe zero car parking is likely to be provided for the dwellings and office uses in practice as the market will demand some level of car parking (indeed, the proposal includes a Planning Permit application with non-zero rates). While the application does propose 8,545m<sup>2</sup> of commercial space with no additional car parking, it is relying on existing parking resources that are underutilised.
- Any proposal to exceed these rates would trigger a planning permit requirement in relation to car parking.
- There is the potential for a development site that is subject to maximum rates to under-provide car parking and cause off-site car parking impacts. However, we think this is unlikely in this case given how highly controlled public parking is in the nearby area.

We do not have a concern with the principle of applying maximum car parking rates to Victoria Gardens. We are generally satisfied that there is adequate justification within the various Stantec reports to support the introduction of maximum parking rates.

In our view, the proposed Hotel would not fall under the maximum Food and drink premises parking rate specified in the Overlay. A Hotel has its own car parking requirement under

Clause 52.06-5 and it would default to this rate under the Overlay as currently drafted. It is suggested that legal advice is sought to confirm this viewpoint. We agree with the intent of the Overlay to specify maximum rates for all likely uses and recommend that a 'Hotel' use is included specifically into the Table of uses in the Parking Overlay.

Section 4.0 of the Parking Overlay includes new decision guidelines for applications to exceed the maximum car parking rates specified. It is good practice to include such requirements to give guidance on when granting a permit to exceed the maximum car parking rates may be appropriate.

Our comments on the proposed decision guidelines are set out in the following table.

Decision Guideline	Comment
The likely demand for car parking spaces.	This is reasonable to consider.  There should be a second point added the requires <i>consideration of the need for additional car parking</i> .
The extent to which the various uses of the land are likely to generate different levels of demand for car parking at different times.	This would require consideration of whether shared parking arrangements would make the current car parking more efficient, therefore leading to the question as to whether additional car parking was required in the first instance.
The possible multi-use of car spaces.	This point is either very similar to the point above or it is a reference to additional car parking being adaptable to other uses. It is suggested that this point is clarified or expanded.
The demand for car spaces generated by the uses established in previous stages of the development.	This would require an application for additional car parking was warranted be reviewing the actual demand and availability of car parking in previous stages. This is a reasonable point to consider.
The accessibility of the site to vehicle traffic.	This decision point is probably superfluous given the last dot point.
The proposed layout of parking areas.	Additional car parking areas are not difficult to remove from an application. The relevance of the layout of the parking areas to an application to over-provide car parking is unlikely to be important.
The capacity of the existing road system and any proposed modifications to accommodate any increase in traffic	This is a necessary decision point. Excess car parking should not jeopardise the road network.

In our view, the decision guidelines should be reviewed for clarity. Some of these appear to overlap. Other decision points should also be considered such as:

- A clear requirement for the applicant to demonstrate the need for the additional car parking.
- Requiring the excess car parking to be adaptable for other uses (i.e. a land use), so that excess car parking can be repurposed in the event that it is not longer required.
- Consideration of the impact of additional car parking on sustainable transport use.

The submitted traffic reports do not discuss these decision guidelines or justify why they were chosen. It would be beneficial if the applicant provided justification as to why these decision guidelines were selected.

The Parking Overlay can, but elects not to, include financial contribution requirements or additional carpark design standards. It is appropriate that it does not in the context of the proposal to apply the Parking Overlay to what is effectively a single site.

**Review of Car Parking Provision**

The development proposal is for 518 car spaces, 484 allocated to residents and 34 to the office space. The rate of parking equates to:

- 0.577 car spaces per dwelling overall.
- Approx. 1 space per 100m<sup>2</sup> of office space.
- No additional car parking is proposed for circa 8,500m<sup>2</sup> of retail (Food & Drink, Shop and Hotel (pub)). These uses would rely on the existing car parking resources of Victoria Gardens.

The statutory car parking requirements of the development are set out in the following table, including the Clause 52.06 rates and proposed Parking Overlay.

Table 4: Statutory Car Parking Assessment – Column B of Clause 52.06-5

Use	Size / No.	Car Parking Rate (Car Parking 52.06-5 Column B)	Minimum Parking Requirement <sup>(1)</sup>	Car Parking Rate (Parking Overlay)	Parking Requirement	Parking Provision	Shortfall / Surplus
Dwellings							
One-bed apt.	456	1 space per one/two-bedroom dwelling	456	Max. 1 per dwelling	Max 839	484	CI52.06 -369  Parking Overlay - Complies
Two-bed apt.	369		369				
Three-bed apt.	14	2 spaces per three or more bedroom dwelling	28				
Visitors	839	None required	0				0
Retail							
Shop	5,185m²	3.5 car spaces per 100m² LFA	181	Max. 2 car spaces per 100m² LFA	Max. 103	0  Within Victoria Gardens	CI52.06 -103 Parking Overlay - Complies
Food & Beverage	1,914m²	3.5 car spaces per 100m² LFA	66	Max. 3 car spaces per 100m² LFA	Max. 57		CI52.06 -66 Parking Overlay - Complies
Hotel	1,446m²	3.5 car spaces per 100m² LFA	50	Min. 3.5 car spaces per 100m² LFA <sup>(2)</sup>	Max. 50		CI52.06 -50 Parking Overlay - Complies
Office							
Office	3,485m²	3.0 car spaces per 100m² NFA	104	Max. 2.0 car spaces per 100m² NFA	Max. 69	34	CI52.06 -70 Parking Overlay - Complies
TOTAL			1,254		Max 1,118	512	Complies

Notes:

1. Clause 52.06-5 specifies that where a car parking calculation results in a requirement that is not a whole number, then number of spaces should be rounded down to the nearest whole number.
2. As currently worded, the default, minimum car parking rate of Clause 52.06-5 applies to a Hotel. However, the assessment assumes that the Parking Overlay is amended to apply a maximum rate to a Hotel as well, as intended.

The development has a statutory car parking requirement for a minimum of 1,254 car spaces under Clause 52.06-5 or a maximum of 1,118 car spaces under proposed Parking Overlay.

Both the Traffic Report and letter by Stantec provide justification for these rates and proposed car parking levels.

We are satisfied that the level of car parking proposed is appropriate for the following key reasons. These are the key reasons only, as there are multiple factors to consider when determining appropriate car parking levels:

- The residential parking rate, while on the low side, is acceptable in the context of this site. In particular the site's access to alternative transport modes and those everyday services required by residents is available at Victoria Gardens.
- The office parking rate of 1 space/100m<sup>2</sup> is consistent with current planning practice for offices within the City of Yarra (not just Cremorne) and consistent with Council's sustainable transport objectives. Although we would note that the Parking Overlay would allow car parking at 2 spaces/100m<sup>2</sup>, or twice the proposed office parking provision rate.

The retail car parking demand can be accommodated within the existing parking resources of Victoria Gardens. The Clause 52.06-5 requirement for these uses is 297 car spaces. The empirical demand forecast by Stantec is 256 car spaces. Surveys by Stantec in March, April and May of 2019 found that Victoria Gardens operates with a minimum of 420 vacancies (81% occupancy) at peak times.

### **Bicycle Parking Provision and Design**

Clause 52.34 of the Planning Scheme specifies bicycle parking requirements for new developments. The purpose of Clause 52.34 is to:

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

The development provides bicycle parking as follows:

- 844 resident spaces
- 40 employee spaces
- 88 retail/visitor spaces

The statutory bicycle parking requirement of the development under Clause 52.34 is set out in the table below.

Table 5: Statutory Bicycle Parking Assessment - Clause 52.34

Use	Size/No.	Statutory Bicycle Parking Requirement		No. Bicycle spaces required
		Residents or Employees	Visitors or Customers	
Dwelling	839	1 space to each 5 dwellings	1 space to each 10 dwellings	168 resident 84 visitor
Office	3,485m <sup>2</sup>	1 space to each 300m <sup>2</sup> NFA if the NFA exceeds 1,000m <sup>2</sup>	1 space to each 1,000m <sup>2</sup> NFA if the NFA exceeds 1,000m <sup>2</sup>	12 employee 3 visitor
Shop	5,185m <sup>2</sup>	1 space to each 600m <sup>2</sup> LFA if the LFA exceeds 1000m <sup>2</sup>	1 space to each 500m <sup>2</sup> LFA if the LFA exceeds 1000m <sup>2</sup>	9 employee 10 customer
Retail, other than specified (Food and Beverage)	1,914m <sup>2</sup>	1 space to each 300m <sup>2</sup> LFA	1 space to each 500m <sup>2</sup> LFA	6 employee 4 customer
Hotel	1,446m <sup>2</sup> (Assuming 400m <sup>2</sup> of bar and 400m <sup>2</sup> of lounge space, as per Stantec Report)	1 to each 25m <sup>2</sup> of bar floor area available to the public, plus 1 to each 100 m <sup>2</sup> of lounge floor area available to the public	1 to each 25m <sup>2</sup> of bar floor area available to the public, plus 1 to each 100m <sup>2</sup> of lounge floor area available to the public	20 employee 20 customer
<b>TOTAL</b>				<b>336 spaces</b>

Numerically, the provision of 972 bicycle spaces satisfies the bicycle parking provision requirements of Clause 52.34. However, the provision of 40 employee spaces is marginally below the 47 spaces statutorily required. It also does not satisfy the empirical bicycle parking demand assessment (Table 4.2 of the Traffic Report).

In our view, the level of employee bicycle spaces should be increased to reflect current practice to provide higher levels of bicycle parking than the statutory minimum, particularly where a low car parking rate is sought.

Clause 52.34 also requires consideration of end-of-trip facilities and the design of the bicycle parking spaces. The table below reviews the design and provision of these facilities.



*Table 6: Design of Bicycle Parking*

Requirement	Assessment	Design Response
<b>End of Trip Facilities - Table 2 &amp; 3 of Clause 52.34-5</b>		
If 5 or more employee bicycle spaces are required, 1 one shower for the first 5 employee bicycle spaces, plus 1 to each 10 employee bicycle spaces thereafter.	✓	Five showers are required for 47 employee bicycle spaces and eight are provided.
1 change room or direct access to a communal change room to each shower. The change room may be a combined shower and change room.	✓	The changeroom is combined with the shower.
<b>Design of Bicycle Parking</b>		
Does the design comply with the design requirements of Clause 52.34-6?	✓	
Does the design comply with the requirements of AS2890.3-2015?	✓	

Based on the above, we are satisfied that the provision of bicycle parking accords with the requirements of Clause 52.34.

## **Carpark Design and Layout**

The proposed car park layout has been assessed under the following guidelines:

- Clause 52.06-9 of the Planning Scheme (Design Standards for car parking),
- AS2890.1-2004 – Part 1: Off-Street Car Parking (where relevant), and
- AS2890.6-2009 – Part 6: Off-Street Car Parking for People with Disabilities.

We are generally satisfied that:

- The access location to the car parks via David Street is acceptable from a traffic engineering perspective.
- The internal access strategy is logical and workable.
- The general dimensions of the car spaces, aisles and general layout is generally satisfactory.

The plans do not include section drawings with dimensions that clearly demonstrate that there is adequate headroom clearance for trucks accessing the basement, including along the ramp. This should be requested.

Overall, we are generally satisfied that the plans propose a highly functional carpark arrangement.

## **Loading and Waste Collection**

The plans propose substantial areas for loading within the basement with 8 loading bays. These can accommodate a various of truck sizes up to the Medium Rigid Vehicle and large waste collection trucks.

We are satisfied that loading and waste is appropriately catered for, with two exceptions:

- There is a secondary loading area for the eastern building accessed directly via the ramp. This requires trucks accessing this area to reverse over the only vehicle access to the basement.
- The basement loading bays are appropriately separated from the other car parking areas, however it does require the largest waste trucks to reverse into these loading areas using the main vehicle accessway, which is not ideal from a safety or operational perspective.

Confirmation should be sought as to whether the 'island' shown along the central accessway leading out of the basement carpark is a physical or line marked island. A physical island appears as though it would impede truck exit movements by the 10.8m long waste truck.

## **Green Travel Plan**

We have reviewed the Green Travel Plan contained at Appendix D of the Traffic Report and have no comments to make. We find it satisfactory.



## Conclusions

On completing our review of the proposed expansion at Victoria Gardens, we are of the opinion that:

- a) It is proposed to alter the Doonside streetscape significantly, however we are generally satisfied that what is proposed is reasonable from a transport engineering perspective. This should be coordinated by Yarra City Council and in conjunction with Salta and the developer of the Harry the Hirer site to deliver an appropriate streetscape that benefits all road users and abutting land uses.
- b) The traffic analysis provided is not detailed enough for a comprehensive review and further information/justification is required regarding:
  - It relies on 2016 traffic data.
  - The traffic generation rates adopted are not particularly conservative.
  - The traffic distribution at Burnley Street is weighted to the south, where as previous planning for Harry the Hirer and the current traffic volumes using Doonside Street are weighted more evenly between north and south.
  - The gap analysis values adopted in the model are below recommended SIDRA and Austroads values and the modelling over represents the capacity of the intersection.
  - It does not include cyclists in the analysis, which impacts the capacity of Burnley St/Doonside Street intersection.
  - Truck distribution assumptions do not appear realistic.
- c) It is likely that the Victoria Gardens expansion would trigger the need for traffic signals at Doonside Street.
- d) Logically, Salta and the developer of the Harry the Hirer site should come to an agreement about how to deliver the future traffic signals required at Burnley Street/Doonside Street. Both developments are of a significant size and key drivers of traffic through this intersection.
- e) The proposed Parking Overlay is generally acceptable. The application of maximum car parking rates means that:
  - By default, zero car parking would be acceptable for any use with a maximum car parking rate. We do not believe zero car parking is likely to be provided for the dwellings and office uses in practice as the market will demand some level of car parking.
  - Any proposal to exceed these rates would trigger a planning permit requirement in relation to car parking.
- f) We support the maximum parking rates proposed for Dwellings, Offices and Shops on this site and the various reports provided by GTA/Stantec adequately support this change.
- g) The proposed maximum rate for Food and drink premises is acceptable, however it does not extend to a Hotel, which has its own car parking rate even though it is nested under another use. It is recommended that Hotel is specified separately in Table 1 of the Parking Overlay.

- h) The decision guidelines of the Parking Overlay should be reviewed for clarity. The applicant should also provide some justification as to why these guidelines were chosen. The following decision guidelines should also be considered:
- An assessment of the need for the additional car parking.
  - Requiring the excess car parking to be adaptable for other uses (i.e. a land use), so that excess car parking can be repurposed in the event that it is no longer required.
  - Consideration of the impact of additional car parking on sustainable transport use.
- i) The level of car parking proposed is acceptable and is adequately justified. The following is a summary of the key reasons why we find the car parking acceptable:
- The residential parking rate, while on the low side, is acceptable in the context of this site. In particular the site's access to alternative transport modes and those everyday services required by residents is available at Victoria Gardens.
  - The office parking rate of 1 space/100m<sup>2</sup> is consistent with current planning practice for offices within the City of Yarra (not just Cremorne) and consistent with Council's sustainable transport objectives.
  - The retail car parking demand can be accommodated within the existing parking resources of Victoria Gardens.
- j) The provision of bicycle parking is well in excess of the requirements of Clause 52.34 and generally acceptable, subject to an increase in the number of employee bicycle spaces.
- k) The vehicle access arrangements and carpark areas are generally compliant with the relevant standards and will provide a functional carpark layout. However, it is recommended updated section drawings are sought that clearly detail the headroom clearance available to the loading bays and along the basement ramps.
- l) The vehicle access arrangements and carpark areas appear logical and functional.
- m) Vehicle loading and waste collection are generally acceptable, although:
- It is not ideal that the secondary loading bay conflicts with the main vehicle ramp (trucks need to stop and reverse across the carpark entrance ramp).
  - It would be preferable that waste truck reversing movements did not need to occur across the main vehicle accessway
- These shortcomings are in the context that the accessway services a 518 space carpark generating up to 92 vehicle trips in a peak hour.
- n) The proposed Green Travel Plan is satisfactory.