

Traffix Group

Traffic Engineering Assessment

Proposed Place of Assembly

119-125 Durham Road, Sunshine

Prepared for
Brimbank City Council

November 2023

GRP33960R-02B

Document Control

Our Reference: GRP33960R-02B

Issue No.	Type	Date	Prepared By	Approved By
A	Draft	24/11/2023	L. Green	L. Furness
B	Draft	28/11/2023	L. Green	L. Furness

COPYRIGHT: The ideas and material contained in this document are the property of Traffix Group (Traffix Group Pty Ltd – ABN 32 100 481 570). Use or copying of this document in whole or in part without the written permission of Traffix Group constitutes an infringement of copyright.

LIMITATION: This report has been prepared on behalf of and for the exclusive use of Traffix Group's client and is subject to and issued in connection with the provisions of the agreement between Traffix Group and its client. Traffix Group accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report by any third party.

Table of Contents

1.	Introduction.....	5
2.	Proposal.....	6
2.1.	<i>Scope of the Review</i>	<i>7</i>
3.	Existing Conditions	8
3.1.	<i>Subject Site.....</i>	<i>8</i>
3.2.	<i>Transport Network</i>	<i>12</i>
3.2.1.	<i>Road Network</i>	<i>12</i>
3.2.2.	<i>Public Transport</i>	<i>14</i>
3.3.	<i>Future Transport Conditions.....</i>	<i>16</i>
3.3.1.	<i>Sunshine Station Precinct Masterplan.....</i>	<i>16</i>
3.3.2.	<i>Sunshine Activity Centre – Car Parking Management Plan</i>	<i>17</i>
3.3.3.	<i>Sunshine Metropolitan Activity Centre – Car Parking Plan</i>	<i>18</i>
3.3.4.	<i>Melbourne Airport Rail</i>	<i>18</i>
3.4.	<i>Car Parking Conditions</i>	<i>19</i>
4.	Traffic Engineering Assessment	22
4.1.	<i>Statutory Car Parking Assessment.....</i>	<i>22</i>
4.1.1.	<i>Assessment of likely car parking demand to be generated</i>	<i>23</i>
4.1.2.	<i>Appropriateness of Providing Fewer Car Spaces than the Demand Assessment</i>	<i>25</i>
4.2.	<i>Site Specific Analysis</i>	<i>27</i>
4.3.	<i>Loading and Waste Collection Considerations</i>	<i>32</i>
4.3.1.	<i>Loading.....</i>	<i>32</i>
4.3.2.	<i>Waste Collection.....</i>	<i>32</i>
5.	Conclusions.....	33

List of Figures

Figure 1: Durham Road Concept Layout	6
Figure 2: Locality Plan (Source: Melway)	9
Figure 3: 119-125 Durham Road, Sunshine - Aerial Photograph (Source: Nearmap)	10
Figure 4: Land Use Zoning Map (Source: Planning Schemes Online)	11
Figure 5: Durham Road – view east	13
Figure 6: Durham Road – view west	13
Figure 7: Watt Street – view north	13
Figure 8: Watt Street – view south	13
Figure 9: ROW – view east	13
Figure 10: ROW – view west	13
Figure 11: Public Transport Map (Source: PTV)	14
Figure 12: Principal Public Transport Network Area (Source: Vicplan)	15
Figure 13: Sunshine Station Masterplan Summary	17
Figure 14: Parking Survey Inventory (Source: Melway)	19
Figure 15: Profile of Durham Road Carpark Parking Demand	20
Figure 16: Profile of On-Street Parking Demand around Durham Road site	21
Figure 17: Durham Road Concept Layout	27
Figure 18: Alternative car parking layout	30
Figure 19: Durham Road Site – Future Parking Demand	31

List of Tables

Table 1: Subject Site Description	8
Table 2: Local Road Network	12
Table 3: Statutory Car Parking Assessment – Column B of Clause 52.06-5	23
Table 4: Review of Car Parking Reduction Factors	25
Table 5: Review of traffic considerations	28

List of Appendices

Appendix A Concept Plans

Appendix B Parking Surveys

1. Introduction

Traffix Group has been engaged by Brimbank City Council to undertake due diligence traffic engineering review for a proposed place of assembly (Vietnamese Museum Australia) at 119-125 Durham Road, Sunshine.

The proposed development is for a new Vietnamese Museum on the site, which is an existing Council carpark within the Sunshine Activity Centre. As such, development on the site would result in a loss of public car parking.

This report assesses the potential traffic and parking implications of the proposal.

2. Proposal

The proposed development is for a new Vietnamese Museum which will become the sixth Multicultural Museum of Victoria, site as set out in the following table. The museum is expected to become a prominent landmark and attract 25,000-30,000 visitors annually.

The proposal designates a portion of the site for the proposed Museum and retains a portion of the existing public parking on the balance of the site.

To understand the proposal, we have also been provided with a traffic report completed by Ratio Consultants (dated November 2021) for a proposed site in Footscray, which never progressed due to access conflicts with a neighbouring site.

A copy of the concept plans prepared by Genton Architecture (dated 6th November, 2023) are attached at Appendix A. A plan extract is provided below.



Figure 1: Durham Road Concept Layout

The proposal would construct a Vietnamese Museum on the site with the following characteristics:

- A Museum with a patron limit of 450 people on-site.
- The Museum would be capable of hosting functions of 250 people; however these would not coincide with the Museum (i.e. Museum during the day, possible functions to be held at night).
- The Museum may include an internal, ancillary café.
- 6 at-grade car spaces will be provided, accessed directly from the rear ROW.
- An on-site loading bay, also accessible from the rear ROW.

The balance of the site will remain as Council carpark and provide 25 public car spaces, which is a net loss of 57 car spaces. Our instructions are that the 8 car spaces on the eastern part of the current carpark will be converted into a public plaza.

Access to the carpark will be relocated from the eastern side of the site to the western side. This will result in the need to marginally relocate two public bus stops on Durham Road (although these remain along the site's frontage). The ROW along the site's southern boundary would be widened to approximately 6m wide to allow for two-way traffic movements and direct access to on-site car parking.

2.1. Scope of the Review

The key traffic related considerations of the proposed development include (in no particular order):

- Vehicular access from the local road network to any on-site parking spaces proposed.
- Pedestrian access to the entrance of the site from the street. This is important for general access by also for patrons arriving by bus. An issue that was never addressed in the original application in Footscray is that buses transporting school children are likely to access the site on a frequent basis. Where these buses unload and how children access the VMA is important design considerations.
- Potential for larger vehicles to access the site for waste collection or loading.
- Impacts on existing vehicle access and parking on the balance of the site (the remaining part of the Council carpark that is not used for the Museum).
- Loss of public parking resources on the Council site (given the site is currently a public carpark).
- The acceptability of a car parking reduction for the Museum, including:
 - an assessment of likely car parking demand to be generated.
 - the impacts on public parking resources.
 - high-level advice on whether the car parking reduction sought is likely acceptable.

The traffic engineering assessment will have regard to the concept plan and above traffic considerations.

3. Existing Conditions

3.1. Subject Site

The subject site is 119-125 Durham Road, Sunshine. The table below summarises the key characteristics of the subject site.

Table 1: Subject Site Description

Characteristic	Description
Address	119-125 Durham Road, Sunshine
Area	2,659m ²
Frontages	Approx. 66m to Durham Road Approx. 66m to ROW along southern boundary
Zoning	Activity Centre Zone – Schedule 1 (ACZ1)
Activity Centre	Sunshine Activity Centre
Current use of site	Public Council Car park – providing 82 car spaces
Vehicle access	Two-way crossover to Durham Road at the site's north-eastern corner Exit only Right-of-way (ROW) to Watt Street The ROW also provides rear vehicle access to properties immediately east of the site along Durham Road.
On-street parking along site frontage	No on-street parking due to Bus Zone restrictions

A locality plan, aerial photograph and land use zoning map is provided at Figure 2 to Figure 4.



Figure 2: Locality Plan (Source: Melway)



Figure 3: 119-125 Durham Road, Sunshine - Aerial Photograph (Source: Nearmap)

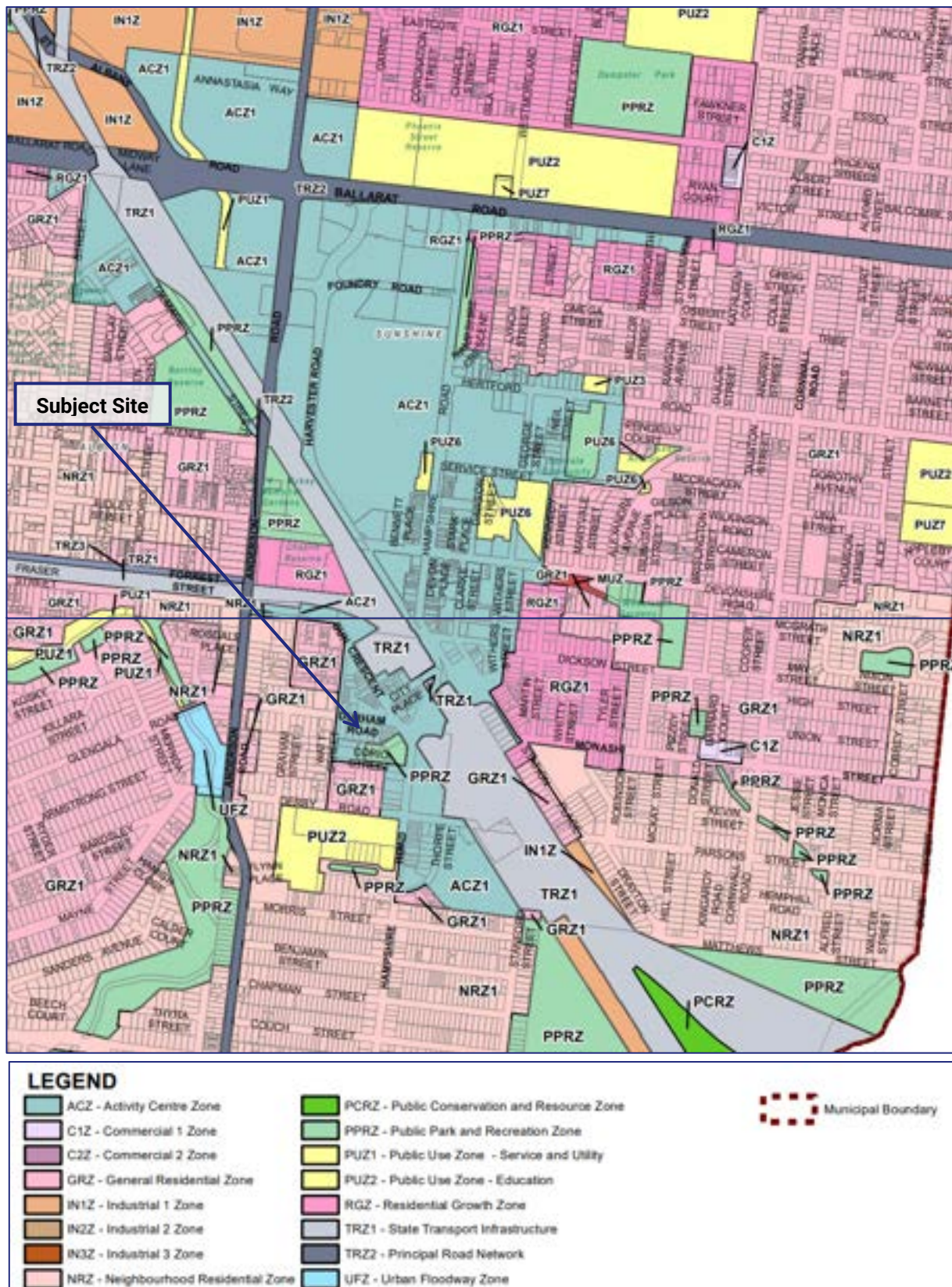


Figure 4: Land Use Zoning Map (Source: Planning Schemes Online)

3.2. Transport Network

3.2.1. Road Network

Sunshine Activity Centre is well served by an extensive road network. The Activity Centre is bound by key Department of Transport and Planning (DTP) Arterial Roads, with Anderson Road to the east and Ballarat Road to the north. These Arterial Roads are internally linked through a variety of Council Distributor and Collector Roads within the Centre.

This network provides good connection to the Melbourne CBD along Sunshine Road, and Metropolitan Ring Road to the east along Ballarat Road.

A summary of the local road network is provided in the table below.

Photos of the surrounding road network are presented following the table.

Table 2: Local Road Network

Road Name	Agency	Classification	Transport Zone	Configuration	Speed Limit	On-Street Parking
Durham Road	Council	Collector Road	No	2 traffic lanes ¹ Undivided carriageway Line marked bus stops on both sides Footpath on both sides	40km/h	Various short term, unrestricted parking and bus zones on both sides
Watt Street	Council	Local Access	No	2 traffic lanes ² Undivided carriageway Footpath on both sides	50km/h default urban	Various short term and unrestricted parking on both sides
Right-of-way (ROW) at rear of Durham Road site	Council	Local Access (Lane or ROW)	No	Single width and constructed of concrete. Angle of parking along ROW, line marking and 'No Entry' sign on Watt Street indicates that the laneway operates one-way westbound.	-	Parking on north side as part of Durham Road carpark. These spaces are 'No Standing' 7-8:30am Mon-Fri.

¹ Due to carriageway width, parking can occur on both sides of the road and continue to permit two-way traffic flow.

² Due to carriageway width, if parking occurs on both sides of the road, this will leave one traffic lane for two-way traffic flow.



Figure 5: Durham Road – view east



Figure 6: Durham Road – view west



Figure 7: Watt Street – view north



Figure 8: Watt Street – view south



Figure 9: ROW – view east



Figure 10: ROW – view west

3.2.2. Public Transport

Sunshine activity centre provides an important hub for public transport, with metropolitan and regional train services, as well as an extensive bus interchange. As such, the site is located within the Principal Public Transport Network (PPTN).

A map of the broader services provided at Figure 11. The PPTN network map is provided at Figure 12.

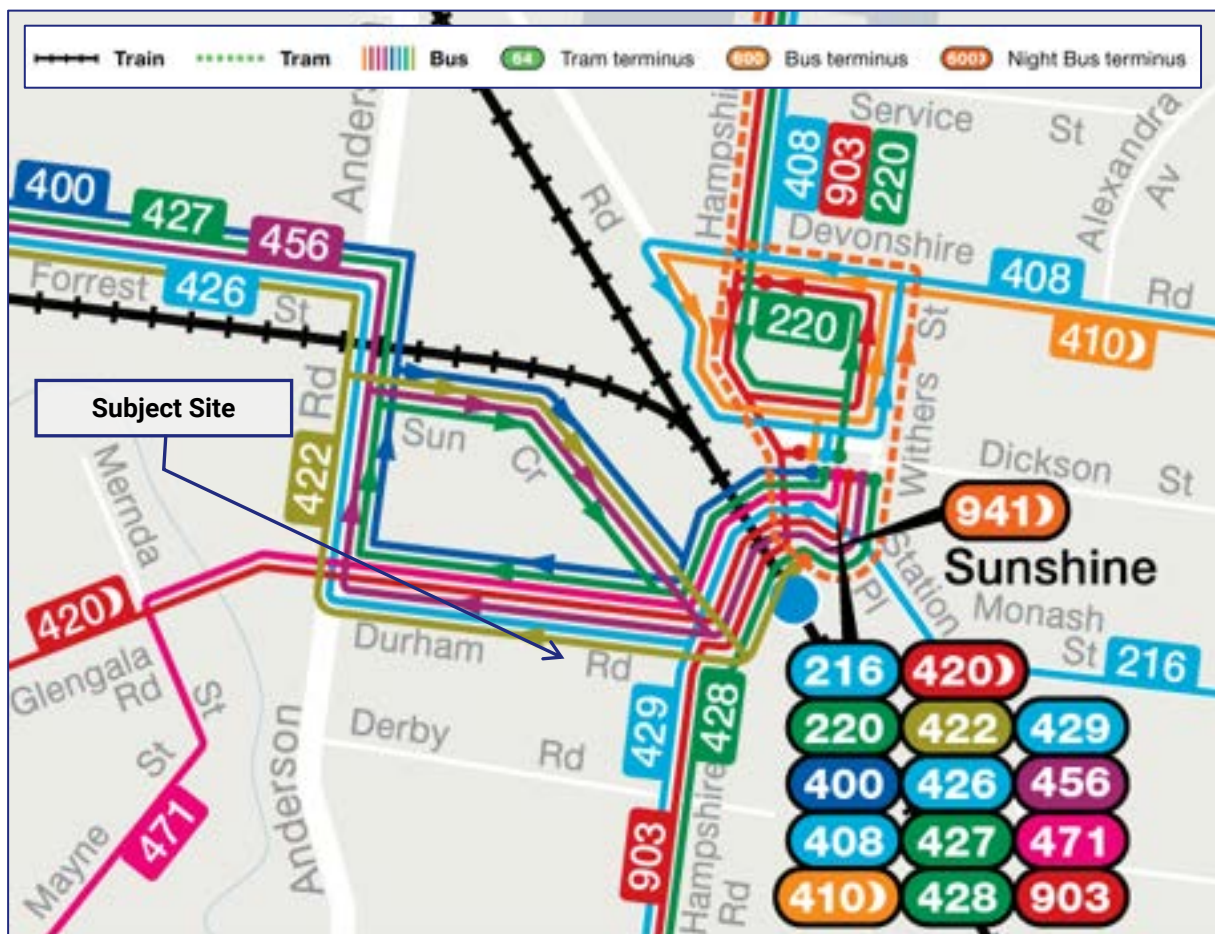


Figure 11: Public Transport Map (Source: PTV)

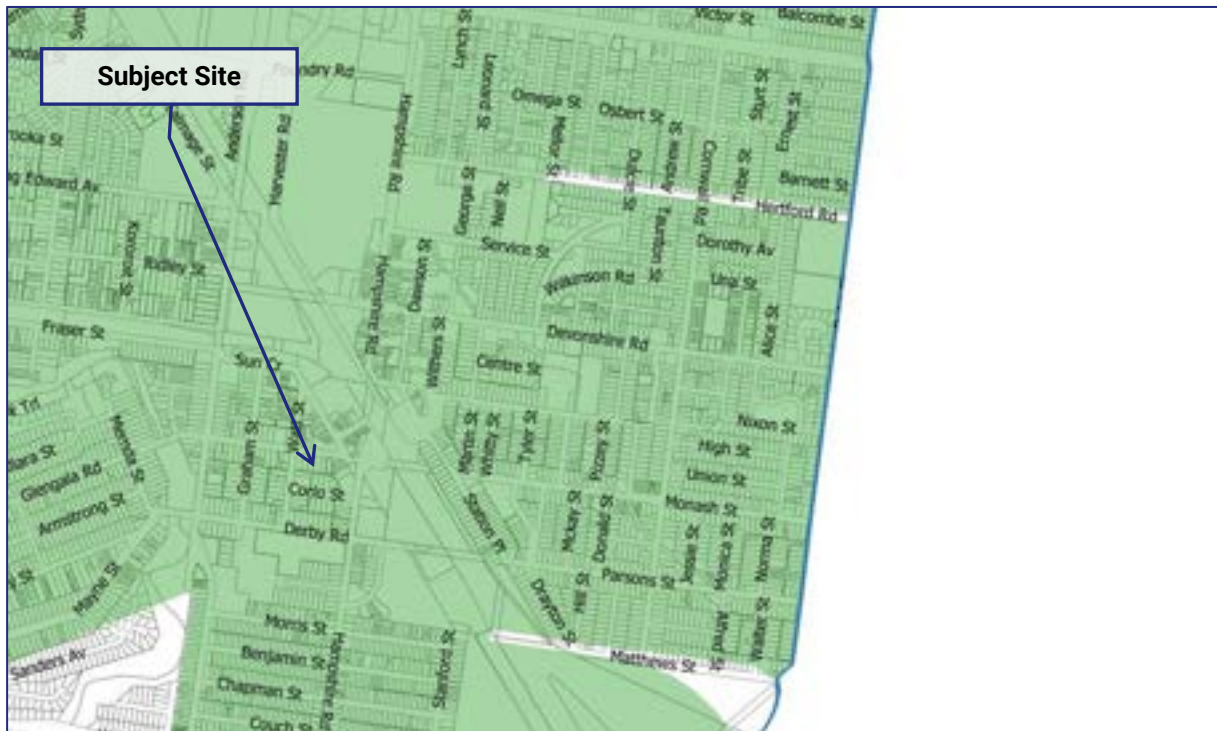


Figure 12: Principal Public Transport Network Area (Source: Vicplan)

Sunshine Railway Station

Sunshine Railway Station is located south of the Hampshire Road bridge within the Sunshine Activity Centre.

The station is an interchange station that provides metropolitan services between Sunbury and the Melbourne CBD, as well as regional V/Line services to Echuca, Swan Hill, Bendigo, Ararat, Maryborough, Ballarat and Warrnambool.

Pedestrian access to the station is provided on City Place and Station Place with a pedestrian concourse over the rail line to the south of Hampshire Road. There is no pedestrian connection over the rail line to the immediate north of Hampshire Road.

There are three carparks provided for commuter parking located on Sun Crescent (north of Hampshire Road), City Place (south of Hampshire Road) and Station Place (southwest of Hampshire Road).

Bus Interchange

The bus interchange is located on the south side of Dickson Street, bounded by the Hampshire Road Overpass and Station Place. Dickson Street operates as a one-way street running from Hampshire Road to Withers Street (eastbound) for public traffic. However, buses are able to access the street from either Hampshire Road (in the same direction as general traffic) and Withers Street (running against general traffic) via a dedicated bus lane.

The facility provides 13 static bus stops. Currently, the interchange services 14 bus routes with 12 of these services terminating at the interchange and returning from the same direction.

3.3. Future Transport Conditions

3.3.1. Sunshine Station Precinct Masterplan

In October 2022, The State Government endorsed a key strategic document relevant to the Sunshine Activity Centre, The Sunshine Station Masterplan.

Under Chapter 7 of the Masterplan, the following 6 key projects were identified:

1. **Sunshine Spurline** – which involves transforming the northern traffic lane of Hampshire Road Bridge into a new route for walking and cycling.
2. **New integrated bus interchange** – developing a new bus interchange to the east of the train station.
3. **People-focused streets and junctions** – helping to make walking and cycling safer, easier and more attractive with direct routes to the superhub.
4. **New station entrances** – helping to ensure a more accessible and attractive superhub and improve wayfinding, with clear sight lines from surrounding streets.
5. **Trees and greening** – helping green Sunshine with more tree canopy cover, improving biodiversity and helping create shaded streets and spaces.
6. **New public open space** – a new, spacious green public open space helping link the superhub with the centre of Sunshine, activated and made safe by new development on the current interchange site.

The above proposals are projected onto the figure below.

Notably, this masterplan also redevelops the larger at-grade commuter carparks on the south side of the railway line.

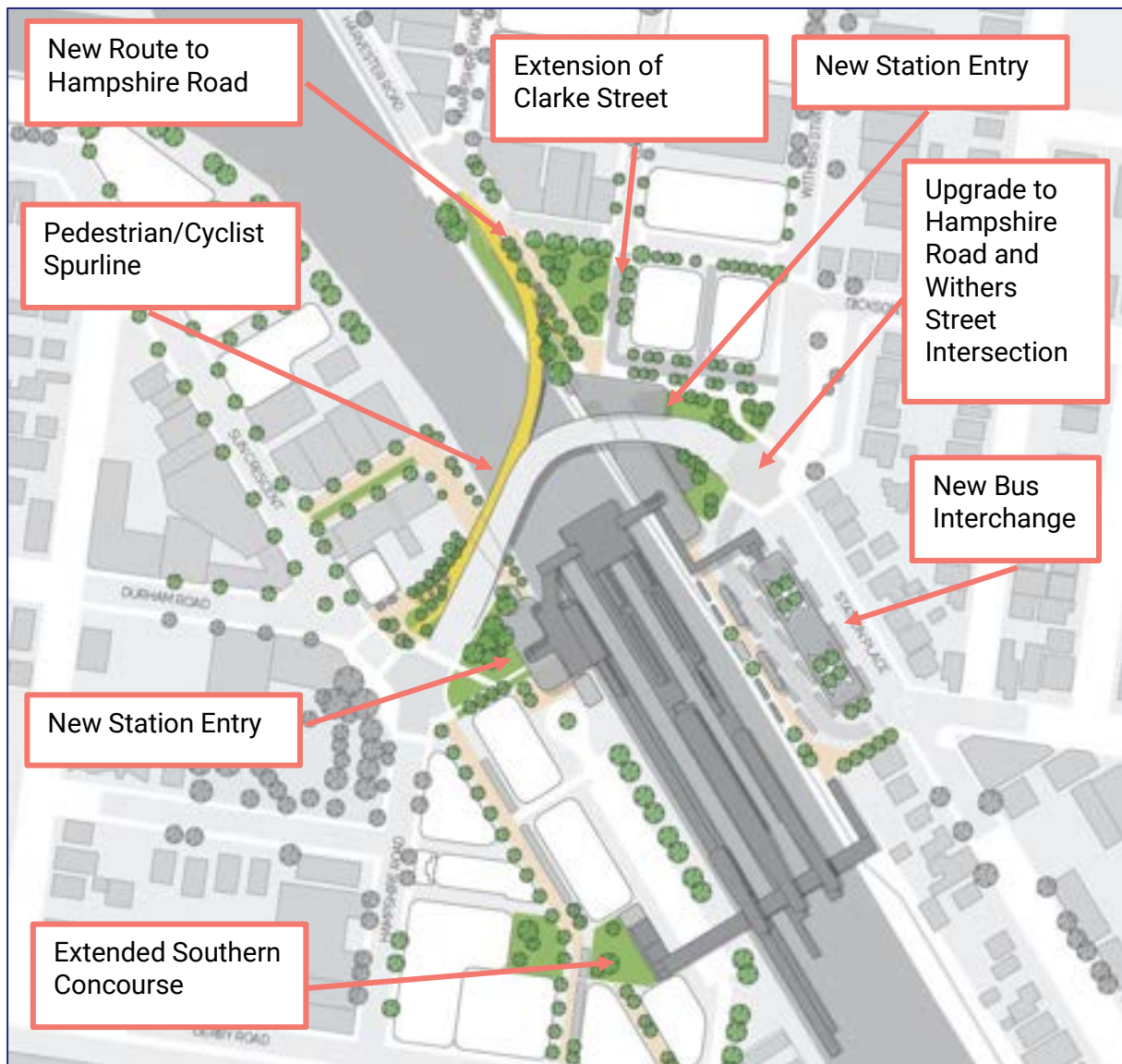


Figure 13: Sunshine Station Masterplan Summary

3.3.2. Sunshine Activity Centre – Car Parking Management Plan

A car parking management plan was prepared by Trafficworks in April 2020 for the Sunshine Activity Centre.

The plan was developed to provide guidance to Council in management of their existing public car parking across the activity centre to improve car parking efficiency before increasing provision of additional car parking spaces.

The analysis assigned areas within the Activity Centre a priority score. The priority score provides a ranking for which car parking areas require action, in relation to 48 on and off-street parking areas.

Importantly, the Durham Road Carpark is of very high priority, with the following conclusion in relation to its current use:

"a very high parking demand with major overstaying and very low vehicle turnover. Frequent complaints within the area and many issues relating to car parking".

3.3.3. Sunshine Metropolitan Activity Centre – Car Parking Plan

A car parking plan was prepared by Stantec (formally GTA) in August 2021 for the Sunshine Activity Centre.

This document provides a response to how parking associated with new use and development should occur and provides the opportunity to reset the expectations of Council, developers and the community in the context of the evolution of the Sunshine Activity Centre.

It acknowledges increasing levels of public transport accessibility in future years and increasing management of on-street parking (as identified within the Sunshine Parking Management Plan) to limit overspill occurring into more sensitive residential areas.

3.3.4. Melbourne Airport Rail

Melbourne Airport Rail will connect Melbourne Airport to Victoria's regional and metropolitan train network.

Trains will run from Melbourne Airport through to Sunshine Station, then into the CBD as part of the Suburban Rail Loop (SRL) project. As such, Sunshine Station will form an important link between airport users requiring regional and metropolitan connections.

At the time of writing, this project has been paused pending further review³.

³ The Federal Government recently renewed its funding commitment to the project - [Melbourne's airport rail line greenlit after federal funding review - ABC News](#).

3.4. Car Parking Conditions

Traffic Group has completed parking surveys of on and off-street parking in the vicinity of the subject site. The purpose of the surveys was to assess the supply, management and demand for public parking resources in the nearby area. The surveys were completed at the following days and times:

- 12noon and 7pm on Thursday 14th September, 2023,
- 12noon and 7pm on Friday 6th October, 2023, and
- 12noon and 7pm on Saturday 7th October, 2023.

These times correspond to the peak demand times for the proposed uses on the site and the nearby area.

The detailed parking survey is presented at Appendix B.

The survey area is presented in the figure below, which comprises an area of approximately 200m around the subject site.

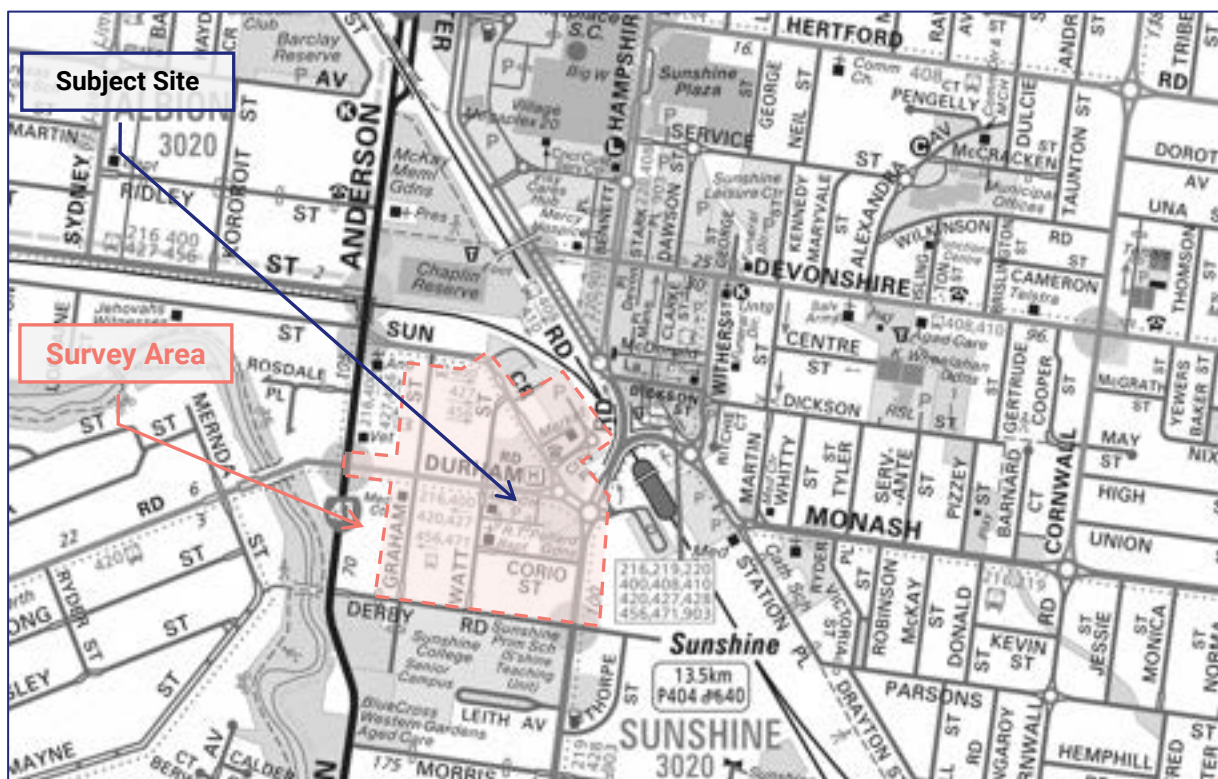


Figure 14: Parking Survey Inventory (Source: Melway)

Durham Road Carpark

The off-street carpark that forms the subject site provides 82 car spaces, restricted to 2P and 4P parking during the weekdays and Saturdays. The southern rows (29 spaces) are unrestricted outside of ‘No Stopping’ restrictions 7am-8:30am Mon-Fri.

The figure below outlines the profile of demand within this carpark.

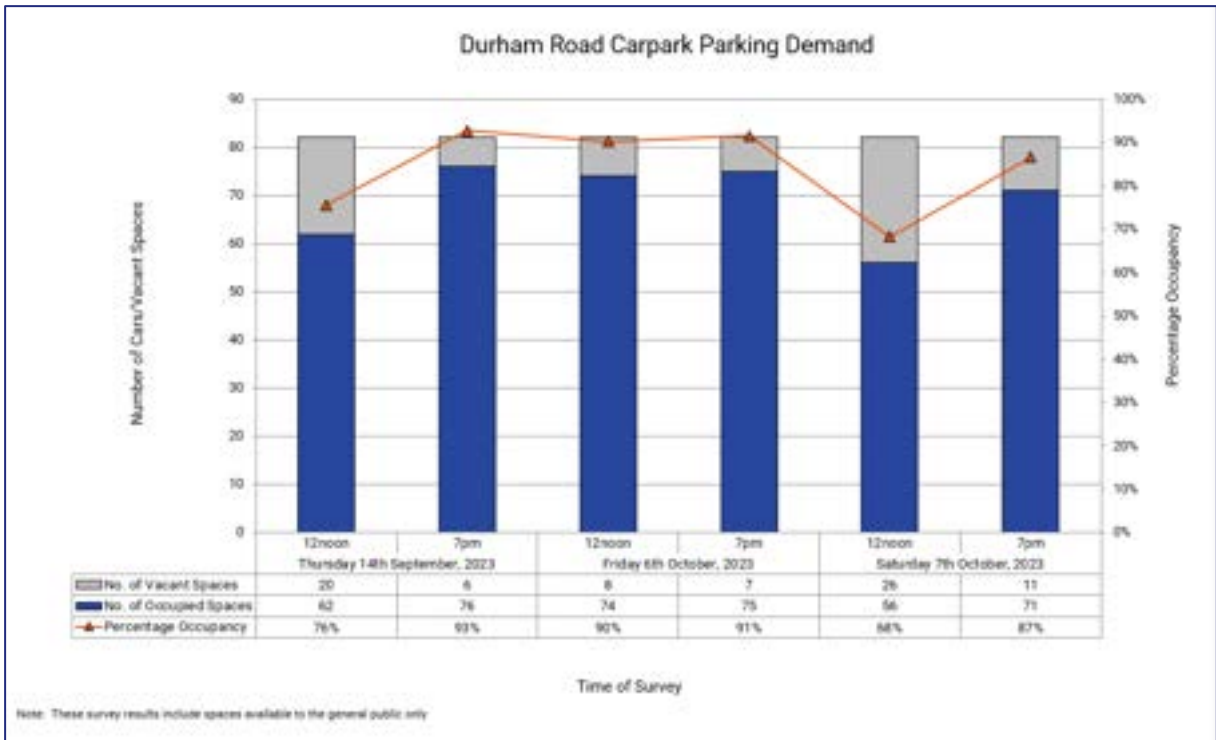


Figure 15: Profile of Durham Road Carpark Parking Demand

Overall demand at the site carpark was moderate to high over the surveyed period. A minimum of 6 vacant spaces were recorded over the survey period (93% occupancy), which occurred at 7pm on Thursday 14th September, 2023.

High demand during the evenings indicates there are evening uses (i.e. restaurants, Derrimut Hotel, TAB Sunshine) within proximity to the site that rely on the onsite car park.

On-Street Parking around Durham Road Carpark

The car parking surveys identified between 199-200 on-street car spaces available for use by the general public in the nearby area⁴. Car parking was generally a mixture of unrestricted, short term (1P and 2P) and Bus Zone restrictions during weekdays and on Saturdays.

The figure below outlines the profile of demand for on-street parking near the Durham Road carpark.

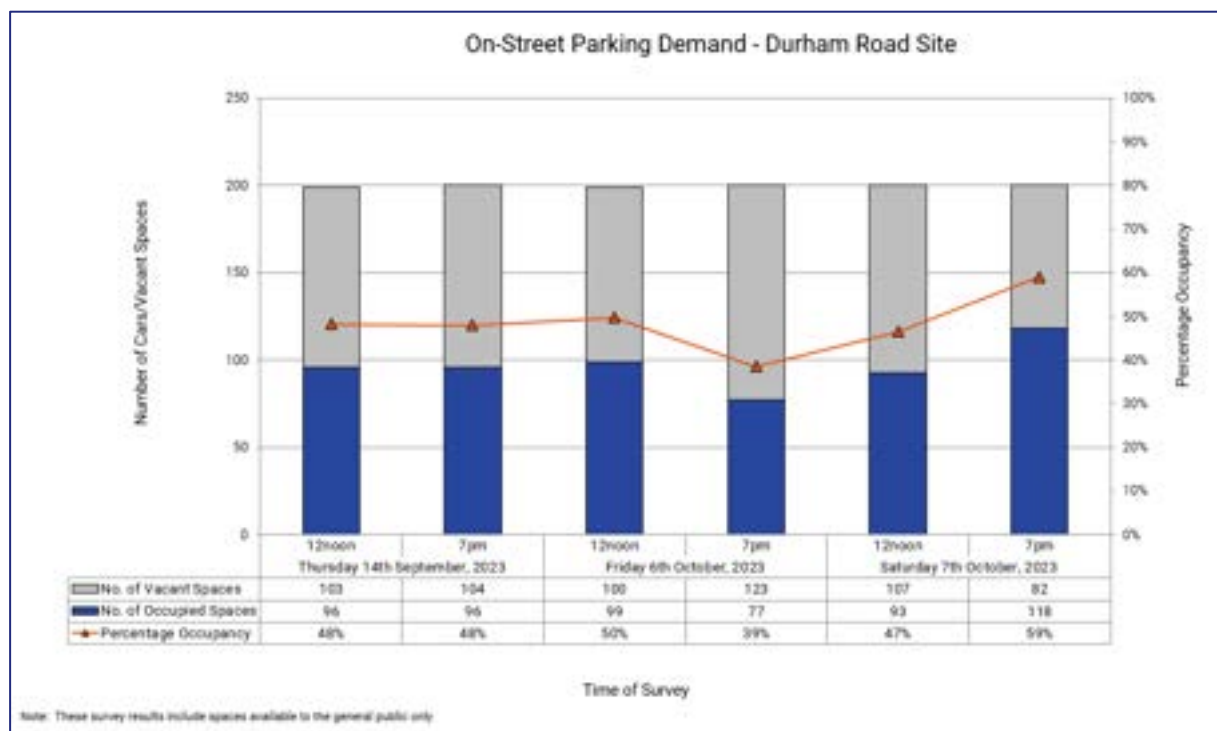


Figure 16: Profile of On-Street Parking Demand around Durham Road site

Overall demand for on-street parking was low-moderate over the surveyed period. A minimum of 82 vacant spaces were recorded over the survey period (59% occupancy), which occurred at 7pm on Saturday 7th October, 2023.

⁴ Includes all car spaces available to the general public, excluding those subject to 'No Stopping', 'Loading Zone', 'Clearway' and 'Bus Zone' restrictions during the relevant enforcement period.

4. Traffic Engineering Assessment

4.1. Statutory Car Parking Assessment

The proposed development falls under the land-use category of 'museum' under Clause 73.03 of the Planning Scheme. In our view, the 'function centre' use could be considered ancillary to the main use as a museum.

Both Museum and Function Centre are nested under 'place of assembly' under Clause 73.04-9.

It is assumed that the Café will operate ancillary to the Museum/Function centre and will not generate its own parking demand.

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

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

The statutory parking requirements are set out at Clause 52.06-5 of the Planning Scheme. Clause 52.06-5 states:

Column A applies unless Column B applies.

Column B applies if:

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

The site is subject to a Parking Overlay, PO1. This specifies different car parking rates for a variety of uses but not for 'place of assembly', which is subject to the Column B parking requirements of Clause 52.06-5.

The statutory car parking assessment of the development is set out in Table 3 below.

Table 3: Statutory Car Parking Assessment – Column B of Clause 52.06-5

Use	Size / No.	Statutory Parking Rate (Column B)	Parking Requirement
Place of assembly (Museum)	Max 450 patrons	0.3 spaces per patron	135
Place of assembly (Function Centre)	Max 250 Patrons		75
Notes: 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.			

The development proposes a maximum on-site patron capacity of 450 patrons for the Museum use and 250 patrons for the Function Centre use. We have been instructed that the Museum and Function Centre hours would not overlap.

As such, the proposed development is statutorily required to provide 135 car spaces under the Planning Scheme.

The previous concept designs provide a small area for on-site at-grade parking, in the order of 6 car spaces. This parking likely to accommodate staff only. Accordingly, the proposal would have a statutory car parking shortfall of 129 car spaces as a museum and 69 as a function centre.

4.1.1. Assessment of likely car parking demand to be generated

The place of assembly use covers a wide range of land use terms including museum, function centre, cinema, exhibition centre, hall, library, nightclub and place of worship. The statutory car parking requirement of 0.3 car spaces per patron for a place of assembly use is generally appropriate for most of these uses. However, it also generally represents the upper end of the range of car parking rates for these many of these uses.

For the proposed development, lower car parking rates can be expected. This is due to the following factors:

- The context within the Sunshine Activity Centre, with patrons visiting more than one land use.
- The proximity to various public transport options, including a train station and bus interchange.
- The nature of a museum or function centre, which encourage group travel.
- The type of visitors expected to visit the site, including school groups that would not access the site by car. School groups would visit by bus, and effectively not generate any demand for car parking.

- The likelihood of consistently having 450 patrons on the site at any one time is limited. It would be unlikely that museum would accommodate 450 patrons for all of its operating hours (i.e. 9am-5pm, 5 or more days per week). We expect visitation rates to be much lower in practice and the 450 patron limit is more inline with events, rather than an everyday occurrence.

By example, the business case expects up to 33,000 visitations per year. If the Museum was open 300 days per year (around 6 days a week), this equates to an average of around 100 people per day. Not all of these would be on-site at once.

Accordingly, aside from school groups and key museum events, the number of people on-site at any one time is likely to be 30 or less. The demand for these patrons is in the order of 9-10 car spaces, adopting the statutory requirement of 0.3 car spaces per patron as the likely demand. School events in particular would generate no car parking demand, only a space to drop-off/pick up children via bus.

We are satisfied that the 6 car spaces provided on-site are adequate to accommodate the likely staff parking demand. The overflow parking for the museum is therefore limited to short-term parking only.

The business case expects to host 100 functions per year, averaging two per week. These events also may not accommodate 250 patrons at any individual event. Accordingly, a peak demand for 69 off-site car spaces is likely to be exception, rather than normal.

Summary:

- During the day, normal Museum use is unlikely to regularly generate more 10 car spaces at any one time. The Museum is unlikely to accommodate 450 patrons on a regular basis, with most instances of larger number associated with school groups that will not generate a significant parking demand (i.e. arriving by bus).
- Function Centre use for up to 250 patrons may generate a demand for 69 car spaces. This demand is likely to be during the evening.

4.1.2. Appropriateness of Providing Fewer Car Spaces than the Demand Assessment

The Parking Overlay and Clause 52.06-7 of the Planning Scheme sets out a series of car parking provision factors that should be considered when assessing the appropriateness of providing fewer car spaces on the site than are likely to be generated by the use.

The most relevant factors to this application are discussed below.

Table 4: Review of Car Parking Reduction Factors

Decision factors	Durham Road Response
- The availability of alternative car parking in the locality of the land, including: - Efficiencies gained from the consolidation of shared car parking spaces. - Public car parks intended to serve the land. - On street parking in non residential zones. - Streets in residential zones specifically managed for non-residential parking.	The detailed review of car parking impacts at the Durham Road is provided in Section 4.2. We are satisfied that the regular museum demand for 10 car spaces is not significant. The demand for up to 69 spaces during evening, twice per week associated with functions will result in a higher parking demand in the nearby area, including residential streets.
Any adverse economic impact a shortfall of parking may have on the economic viability of any nearby activity centre.	An increase in business and activity would increase the overall viability of the Sunshine Activity Centre, and the reduced number of car trips would have a positive impact.
The future growth and development of any nearby activity centre.	The Vietnamese Museum Australia will become the sixth Multicultural Museum of Victoria. The museum is expected to become a prominent landmark and attract 25,000-30,000 visitors annually. Locating the VMA within Sunshine, which harbors a significant Vietnamese community, a would be an asset to the growth of the Activity Centre.
Local traffic management in the locality of the land.	The lower provision of car parking assists in reducing the traffic impacts of the development on the local and broader road network and encourages sustainable transport choices. If provided with the full place of assembly requirement, traffic generation by the development would be higher than what is proposed at either site.
The impact of fewer car parking spaces on local amenity, including pedestrian amenity and the amenity of nearby residential areas.	Providing fewer car spaces on the site allows for greater public open space/landscaping and more prioritisation on pedestrian amenity to be achieved.

Decision factors	Durham Road Response
Access to or provision of alternative transport modes to and from the land.	The site is well served by efficient public transport services, being located within close proximity to the Sunshine Train Station and bus interchange, providing metropolitan and regional connections. We expect these services to become further accessible action of the Sunshine Station Precinct Masterplan. Given the above, the development site represents an excellent location to support the reduced rate of car parking.
<i>From the Parking Overlay</i> Whether the overall benefits of the development would outweigh the need to provide the full number of on-site parking spaces and make a more efficient use of the land.	The proposal for a Museum and community facility, which is not the same as a private development. While not for traffic engineers to decide, it is possible that Council may consider the benefits of the use outweigh car parking considerations.

We are satisfied that there are multiple reasons why a car parking reduction for the VMA would be granted under the decision making framework of the Parking Overlay and Brimbank Planning Scheme.

4.2. Site Specific Analysis

An excerpt of the key concept design by KPMG is provided below. The eastern portion of the Council site to be developed for the proposed Museum and the western portion of the existing public parking to remain on the balance of the site.



Figure 17: Durham Road Concept Layout

The Durham Road Carpark currently provides 82 car spaces subject to 2P or 4P parking restrictions. It is the only public council carpark south of the rail line. The other large at-grade carparks are commuter parking associated with Sunshine Station. These are signed for commuters and not available to the general public. In addition, the Station Masterplan shows these carparks are being development sites and it is not certain that commuter parking would continue to be provided long-term.

After construction of the VMA, with the balance of the site to remain as a Council carpark, we expect a loss of approximately 57 car spaces, with 25 car spaces to remaining available to the public.

The table below provides a response to the traffic related considerations for the proposal outlined in Section 2.1.

Table 5: Review of traffic considerations

Considerations	Response
Proposed Vehicle Access <i>Vehicular access from the local road network to any on-site parking spaces proposed</i>	This concept proposes to use the rear ROW for direct vehicle access to the on-site car parking and loading arrangements. The ROW would be widened to approximately 6m wide to facilitate carpark access and two-way traffic movements. The purpose of this decision is to create an open space with landscaping near the pedestrian entrance to the VMA, whilst retaining a good pedestrian connection to the R T Pollard Park. The setback along the laneway shown in the concept plans helps to provide passing opportunities to the other properties that abut the ROW east of the subject site. Relocation of the public carpark access from the eastern to western side of the site result in the relocation of two public bus stops at the sites frontage to Durham Road. However, both bus stops will still remain at the site's frontage to Durham Road. The distance involved is not significant. Whilst subject to DTP approval, this change is relatively minor in our view. We are therefore satisfied with the proposed vehicle access arrangements to the site.
Pedestrian Access <i>Pedestrian access to the entrance of the site from the street.</i>	The north-south footpath along the east of the site's boundary provides a good pedestrian link to the site from the park and should be maintained in any further development of the plans.
Provision of on-site parking	Access to on-site parking and loading at the VMA will take place via the rear right of way (ROW). The ROW is the most appropriate place to provide any onsite car spaces or loading areas to avoid conflicts with pedestrian access to the building. Accordingly, this outcome is acceptable.
Loading and waste considerations	Direct vehicle access to the loading bay via the ROW is supported. This is the most appropriate location for these activities.
Bus access to the site	As school buses cannot use the public bus bays along Durham Road, the best location for this activity is along the streets abutting the park to the south-east. Accordingly, a good pedestrian connection to and through the R T Pollard Gardens is an important consideration.

Considerations	Response
Impacts on vehicle access and parking on the balance of the site	<u>Vehicle Access</u> Under existing conditions, the Durham Road access to the site is the only entrance point to the site (as the rear ROW currently operates one-way westbound for exiting the carpark) and services the apartment building east of the site and a small number of commercial properties on Hampshire Road. Whilst we understand that legal access to these properties is not through the council carpark, it is the only way to access them currently. Relocating the access point to the western side of the site and providing a setback along the laneway will still enable full access to these other properties. <u>Parking</u> We understand the concept plan aims to retain the general existing layout of the western side of the Durham Road carpark. However, in our view, there is a more efficient/user friendly parking layout that may provide 1-2 more car spaces as well as additional open space/landscaping opportunities against the VMA building. A sketch of this layout is provided below in Figure 18.
Loss of public parking resources on the site	The parking surveys presented in Section 2.4.1 indicate the Durham Road carpark is heavily relied upon, particularly in the evenings where occupancy rates reached greater than 90%. Figure 19 illustrates the impacts of displacing users of the Durham Road carpark into the nearby area, and the impact of the VMA car parking dispensation. Losing a portion of the public carpark (approximately 57/82 spaces), would require users to find other parking resources within proximity. The parking surveys identified in the order of 200 public on-street car spaces within approximately a 200m radius of the subject site, with vacancies averaging 103 car spaces during the daytime and evening survey periods. Displacing the existing demand from this carpark into the nearby area can be accommodated, however demand for on-street parking would go from moderate (circa 50% occupancy) to very high (circa 90% occupancy) in the evenings. The graphs show that the VMA demand during the day is modest compared to the displaced demand from the carpark. At night, assuming a function at the VMA, car parking demand would exceed supply in the area. If this option is pursued, Council will need to consider: i) Further on-street parking restrictions in areas not currently restricted. ii) Shorter parking durations (2P down to 1P).

Considerations	Response
	iii) Extending parking restrictions into the evening, as most restrictions cease by 6pm. iv) Greater enforcement to ensure parking turnover (already identified in other Council parking strategies as an issue). v) Whether additional public parking can be provided in any way.



Figure 18: Alternative car parking layout

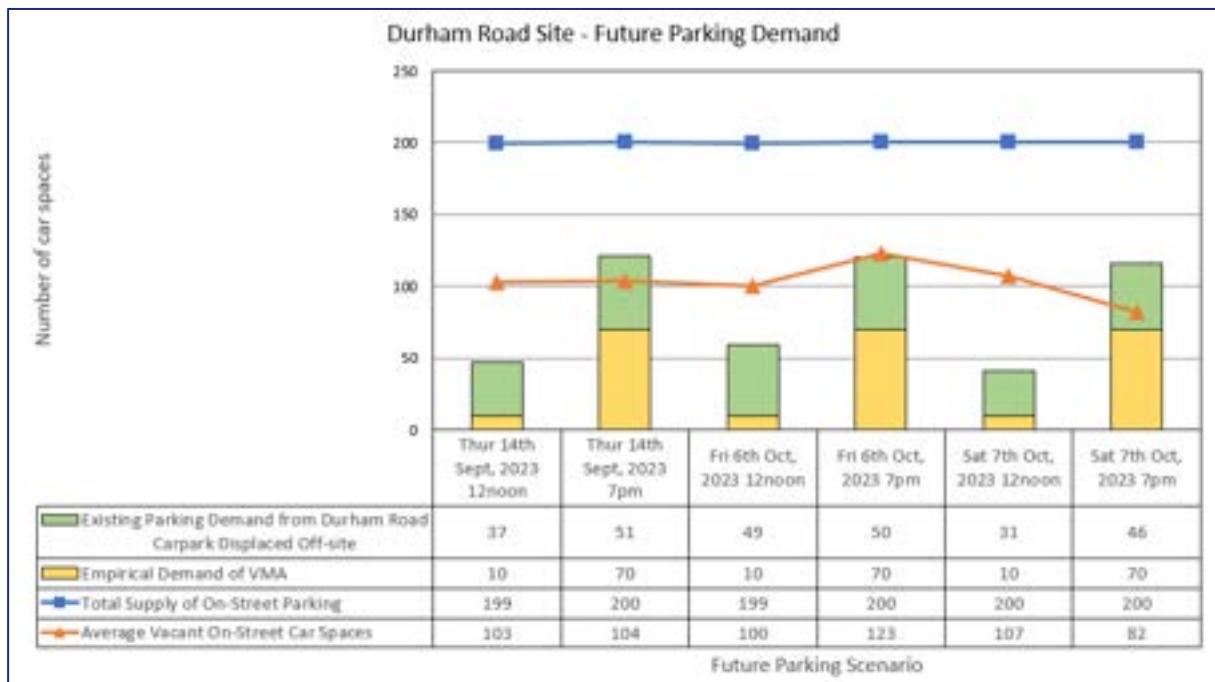


Figure 19: Durham Road Site – Future Parking Demand

Based on the above, we are satisfied that the Durham Road site can appropriately accommodate the VMA and provide adequate on-site parking/loading opportunities. During the day, impacts on car parking conditions are likely to be negligible.

However, there is an issue with availability of alternative car parking in the area to accommodate the proposal when functions are held at night. Council would need to investigate a range of mitigating measures to manage the impacts of the displaced car parking from the Durham Road carpark at this time.

4.3. Loading and Waste Collection Considerations

Clause 65.01 of the Planning Scheme states that the Responsible Authority must consider a number of matters as appropriate including:

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

4.3.1. Loading

Loading and unloading activities associated with the development will primarily be related to the delivery of goods to the food and drink premises (café) and delivery of goods to the museum, using small vans and trucks.

Earlier revisions of the Footscray site plans included the provision of a loading area, which underwent several iterations before the Ratio Traffic Report was drafted. The traffic report and subsequent plans did not include an on-site loading bay, with all loading activities will occur on-street.

In our view, it is preferable to accommodate any expected loading the site through the provision of a dedicated loading area, which is provided in the concept plans. However, the truck required to be accommodated could be small, the 6.4m long Small Rigid Vehicle (SRV).

4.3.2. Waste Collection

The Footscray traffic report proposed waste collection in an on-site car space outside of the Museum operating hours via private collection. This could be replicated in the current proposal or achieved through the dedicated loading area.

5. Conclusions

Having undertaken a high-level traffic engineering assessment of the proposed place of assembly at 119-125 Durham Road, Sunshine, we are of the opinion that:

Car Parking Required by VMA

- a) the proposed museum has statutory car parking requirement of 135 car spaces under Clause 52.06-5 based on a maximum 450 patrons,
- b) the proposed function centre has statutory car parking requirement of 75 car spaces under Clause 52.06-5 based on a maximum 250 patrons,
- c) the proposal is likely to provide a limited number of car spaces for staff (concept plans show 6), which is appropriate,
- d) the anticipated demand for car parking would be significantly lower than the statutory requirements for the following reasons:
 - i) The context within the Sunshine Activity Centre.
 - ii) The proximity to various public transport options, including a train station and bus interchange facilitating access to the site without reliance on private cars.
 - iii) The likelihood of consistently having 450 patrons or 250 patrons on the site at any one time is low and this will not be the 'normal' operating condition of the VMA.
 - iv) The nature of a museum or function centre, which encourages group travel.
 - v) The type of visitors expected to visit the site, including school groups that would not access the site by car.
- e) The likely parking demands for the VMA are as follows:
 - i) During the day, normal Museum use is unlikely to regularly generate more 10 car spaces on average at any one time.
 - ii) The Museum is unlikely to accommodate 450 patrons on a regular basis, with most instances of larger number associated with school groups that will not generate a significant parking demand (i.e. arriving by bus). Occasional events with 450 non-school patrons are likely to be the exception.
 - iii) Function Centre use for up to 250 patrons may generate a demand for up to 69 car spaces, two times per week. This demand is likely to be during the evening.
- f) The decision guidelines of the Parking Overlay and Clause 52.06 strongly support the car parking reduction sought.

Site Assessment

- g) The site has good access to public transport services via Sunshine Station and bus interchange. The access to these services supports the car parking reduction sought.
- h) The loss of the Durham Road carpark will displace existing users into on-street parking areas, including residential streets in the nearby area. Displacing the existing demand for the Durham Road carpark into nearby streets will impact public parking availability. We are satisfied that the VMA reliance on off-site parking is acceptable during the day, given that parking demand will be modest at most times. However, the regular function centre events will result in a higher demand for parking than available spaces within close proximity to the site.

If the site is pursued, Council will need to consider the following:

- i) Further on-street parking restrictions in areas not currently restricted.
- ii) Shorter parking durations (2P down to 1P) to encourage greater turnover.
- iii) Extending parking restrictions into the evening, as most restrictions in the area cease by 6pm.
- iv) Greater enforcement to ensure parking turnover.
- v) Whether any additional public parking can be provided in any way.

Other Matters

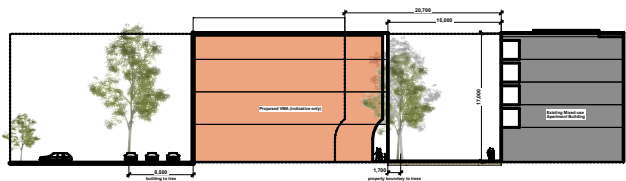
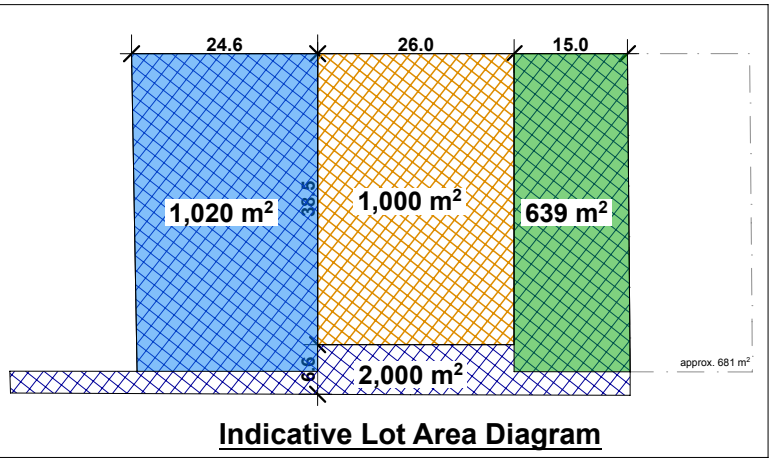
- i) Access to a location where buses can unload school children is an important consideration, as is the connection between the bus stop and the VMA. There is an option to provide this via a Bus Zone adjacent to RT Pollard Gardens

The concept design allows for appropriate loading access and limited on-site car parking. The concept design illustrates acceptable traffic access outcomes for the VMA and balance of the land.

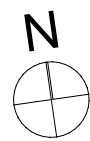


Appendix A

Concept Plans



- Notes**
- Total 31 Car Spaces + Loading proposed on site. (includes VMA spaces; excludes 8 spaces (existing) in proposed pedestrian plaza).
 - Tree locations and dimensions shown are approximate only, subject to detailed survey, final design and approval processes.



**PRELIMINARY
for information only**

Proposed Vietnamese Museum Australia, Sunshine
VMA - Durham Rd - Recommended Site Layout



Appendix B

Parking Surveys

Supervised By: Lily Green
Surveyed By: Frank Feller

Survey Dates & Times: See below

Location			Restriction	Capacity Min - Max	Thursday 14th September, 2023		Friday 6th October, 2023		Saturday 7th October, 2023	
					12noon	7pm	12noon	7pm	12noon	7pm
ON-STREET CARPARKING										
Map Ref.	Durham Road									
	North Side									
A	Anderson Road to Graham Street	No Stopping	-	0	0	0	0	0	0	0
		Bus Zone	-	0	0	0	0	0	0	0
		No Stopping	-	0	0	0	0	0	0	0
B	Graham Street to Watt Street	No Stopping	-	0	0	0	0	0	0	0
		2P 9am-6pm Mon-Sat, Resident Permit Area	5	0	0	0	0	0	0	0
		No Stopping	-	0	0	0	0	0	0	0
C	Watt Street to Sun Crescent	No Stopping	-	0	0	0	0	0	0	0
		2P 9am-6pm Mon-Sat	3	3	3	3	2	3	3	3
		Bus Zone	-	0	0	0	0	0	0	0
		1/4P	2	1	2	2	2	2	2	2
		Loading Zone	1	0	0	1	0	0	0	1
		No Stopping (10m)	-	0	0	0	0	0	0	0
	South Side									
D	Sun Crescent to Watt Street	No Stopping	-	0	0	0	0	0	0	0
		Bus Zone	-	0	0	0	0	0	0	0
		No Stopping	-	0	0	0	0	0	0	0
		Bus Zone	-	0	0	0	0	0	0	0
		No Stopping	-	0	0	0	0	0	0	0
E	Watt Street to Graham Street	No Stopping	-	0	0	0	0	0	0	0
		Bus Zone	-	0	0	0	0	0	0	0
		No Stopping	-	0	0	0	0	0	0	0
		No Stopping 4-6pm Mon-Fri	2	0	0	0	0	0	0	0
		Bus Zone	-	0	0	0	0	0	0	0
		No Stopping (10m)	-	0	0	0	0	0	0	0
F	Graham Street to Anderson Road	No Stopping	-	0	0	0	0	0	0	0
		No Stopping 4-6pm Mon-Fri	4	0	0	0	0	0	0	0
		No Stopping	-	0	0	0	0	0	0	0
Durham Road		Capacity	14 - 14	14	14	14	14	14	14	14
		Total Number of Cars Parked		3	3	3	2	3	3	
		Total Number of Vacant Spaces		11	11	11	12	11	11	
		Percentage Occupancy		21%	21%	21%	14%	21%	21%	

Supervised By: Lily Green
Surveyed By: Frank Feller

Survey Dates & Times: See below

Location			Restriction	Capacity Min - Max	Thursday 14th September, 2023		Friday 6th October, 2023		Saturday 7th October, 2023	
					12noon	7pm	12noon	7pm	12noon	7pm
Map Ref.	Corio Street									
	North Side									
G	Watt Street to Hampshire Road	No Stopping	-	0	0	0	0	0	0	
		2P 9am-6pm Mon-Fri, 9am-12noon Sat	20	8	11	7	10	7	16	
		No Stopping	-	0	0	0	0	0	0	
	South Side									
H	Hampshire Road to Watt Street	No Stopping	-	0	0	0	0	0	0	
		2P 9am-6pm Mon-Fri, 9am-12noon Sat	19	5	13	5	3	9	18	
		No Stopping	-	0	0	0	0	0	0	
Corio Street		Capacity	39 - 39	39	39	39	39	39	39	
		Total Number of Cars Parked		13	24	12	13	16	34	
		Total Number of Vacant Spaces		26	15	27	26	23	5	
		Percentage Occupancy		33%	62%	31%	33%	41%	87%	
Map Ref.	Graham Street									
	East Side									
I	Sun Crescent to Durham Road	No Stopping	-	0	0	0	0	0	0	
		2P 9am-6pm Mon-Fri	15	4	4	2	2	5	4	
		No Stopping	-	0	0	0	0	0	0	
J	Durham Road to Derby Road	No Stopping	-	0	0	0	0	0	0	
		2P 9am-6pm Mon-Fri	2	0	1	1	0	2	1	
		Unrestricted	1	1	1	1	1	1	1	
		No Stopping	-	0	0	0	0	0	0	
		Unrestricted	13	2	2	2	3	5	5	
		No Stopping (10m)	-	0	0	0	0	0	0	
	West Side									
K	Derby Road to Durham Road	No Stopping	-	0	0	0	0	0	0	
		2P 9am-6pm Mon-Fri	9	7	7	7	7	2	9	
		2min 9am-6pm Mon-Fri	1	0	0	0	0	0	0	
		2P 9am-6pm Mon-Fri	3	0	0	2	0	0	0	
		No Stopping	-	0	0	0	0	0	0	
L	Durham Road to Sun Crescent	No Stopping	-	0	0	0	0	0	0	
		2P 9am-6pm Mon-Fri	19	1	3	6	5	4	5	
		No Stopping (10m)	-	0	0	0	0	0	0	
Graham Street		Capacity	62 - 63	62	63	62	63	63	63	
		Total Number of Cars Parked		15	18	21	18	19	25	
		Total Number of Vacant Spaces		47	45	41	45	44	38	
		Percentage Occupancy		24%	29%	34%	29%	30%	40%	

Supervised By: Lily Green
Surveyed By: Frank Feller

Survey Dates & Times: See below

Location			Restriction	Capacity Min - Max	Thursday 14th September, 2023		Friday 6th October, 2023		Saturday 7th October, 2023	
					12noon	7pm	12noon	7pm	12noon	7pm
Map Ref.	Watt Street									
	East Side									
M	Sun Crescent to Durham Road	No Stopping	-	0	0	0	0	0	0	
		2P 9am-6pm Mon-Sat	5	6	5	4	4	4	0	
		2P disabled only	2	2	0	2	0	1	0	
		2P 9am-6pm Mon-Sat	4	4	3	4	2	4	2	
		No Stopping	-	0	0	0	0	0	0	
N	Durham Road to Corio Street	No Stopping	-	0	0	0	0	0	0	
		1P 9am-6pm Mon-Sat	7	5	3	4	1	2	6	
		No Stopping	-	0	0	0	0	0	0	
O	Corio Street to Derby Road	No Stopping	-	0	0	0	0	0	0	
		1P 9am-6pm Mon-Sat	7	6	4	1	0	2	7	
		No Stopping (10m)	-	0	0	0	0	0	0	
	West Side									
P	Derby Road to Durham Road	No Stopping	-	0	0	0	0	0	0	
		2P 9am-6pm Mon-Sat, Resident Permit Area	14	1	5	9	3	8	11	
		No Stopping	-	0	0	0	0	0	0	
Q	Durham Road to Sun Crescent	No Stopping	-	0	0	0	0	0	0	
		2P 9am-6pm Mon-Sat, Resident Permit Area	3	3	3	3	0	3	1	
		No Stopping	-	0	0	0	0	0	0	
		2P 9am-6pm Mon-Sat, Resident Permit Area	8	7	3	4	8	3	4	
		No Stopping	-	0	0	0	0	0	0	
Watt Street		Capacity	50 - 50	50	50	50	50	50	50	
		Total Number of Cars Parked		34	26	31	18	27	31	
		Total Number of Vacant Spaces		16	24	19	32	23	19	
		Percentage Occupancy		68%	52%	62%	36%	54%	62%	

Supervised By: Lily Green
Surveyed By: Frank Feller

Survey Dates & Times: See below

Location		Restriction	Capacity Min - Max	Thursday 14th September, 2023		Friday 6th October, 2023		Saturday 7th October, 2023	
				12noon	7pm	12noon	7pm	12noon	7pm
Map Ref.	Hampshire Road								
	East Side								
R	Sun Crescent to Derby Road	No Stopping	-	0	0	0	0	0	0
	West Side								
S	Derby Road to Corio Street	No Stopping (10m)	-	0	0	0	0	0	0
		No Stopping 6:30am-10am and 3-7pm,1P all other times	4	3	0	4	0	3	0
		Bus Zone	-	0	0	0	0	0	0
		No Stopping (10m)	-	0	0	0	0	0	0
T	Corio Street to Sun Crescent	No Stopping	-	0	0	0	0	0	0
Hampshire Road		Capacity	4 - 4	4	4	4	4	4	4
		Total Number of Cars Parked		3	0	4	0	3	0
		Total Number of Vacant Spaces		1	4	0	4	1	4
		Percentage Occupancy		75%	0%	100%	0%	75%	0%
Map Ref.	Sun Crescent								
	North/ East Side								
U	Opposite Watt Street to City Place	No Stopping	-	0	0	0	0	0	0
		1P 9am-6pm Mon-Fri, 9am-12noon Sat	6	5	6	6	5	3	6
		Bus Zone	-	0	0	0	0	0	0
		No Stopping	-	0	0	0	0	0	0
		Bus Zone	-	0	0	0	0	0	0
		No Stopping	-	0	0	0	0	0	0
V	City Place to Hampshire Road	No Stopping	-	0	0	0	0	0	0
	South/West Side								
W	Hampshire Road to Watt Street	No Stopping	-	0	0	0	0	0	0
		1P 9am-6pm Mon-Fri, 9am-12noon Sat	7	7	6	6	7	6	5
		4P disabled only	2	1	0	1	1	2	0
		1P 9am-6pm Mon-Fri, 9am-12noon Sat	5	5	3	5	3	4	4
		No Stopping	-	0	0	0	0	0	0
Sun Crescent		Capacity	20 - 20	20	20	20	20	20	20
		Total Number of Cars Parked		18	15	18	16	15	15
		Total Number of Vacant Spaces		2	5	2	4	5	5
		Percentage Occupancy		90%	75%	90%	80%	75%	75%

Supervised By: Lily Green
Surveyed By: Frank Feller

Survey Dates & Times: See below

Location		Restriction	Capacity Min - Max	Thursday 14th September, 2023		Friday 6th October, 2023		Saturday 7th October, 2023	
				12noon	7pm	12noon	7pm	12noon	7pm
Map Ref.	City Place								
	North/West Side								
X	Hampshire Road to Roundabout	No Stopping	-	0	0	0	0	0	0
		1P 9am-6pm Mon-Fri, 9am-12noon Sat	4	4	4	4	4	4	4
		No Stopping	-	0	0	0	0	0	0
		1P 9am-6pm Mon-Fri, 9am-12noon Sat	2	2	2	2	2	2	2
		No Stopping	-	0	0	0	0	0	0
	South Side								
Y	Roundabout to Hampshire Road	No Stopping	-	0	0	0	0	0	0
		P5 min	2	2	1	2	2	1	1
		No Stopping	-	0	0	0	0	0	0
		1P 9am-6pm Mon-Fri, 9am-12noon Sat	4	4	4	4	4	4	4
		No Stopping	-	0	0	0	0	0	0
City Place	Capacity	10 - 10	10	10	10	10	10	10	10
	Total Number of Cars Parked		10	10	10	10	10	10	10
	Total Number of Vacant Spaces		0	0	0	0	0	0	0
	Percentage Occupancy		100%	100%	100%	100%	100%	100%	100%
SUMMARY => ON-STREET CARPARKING									
Car Parking Supply			199 - 200	199	200	199	200	200	200
Total Number of Cars Parked				96	96	99	77	93	118
Total Number of Vacant Spaces				103	104	100	123	107	82
Percentage Occupancy				48%	48%	50%	39%	47%	59%
SUBJECT SITE									
Map Ref.	Durham Road Carpark								
1	Northern Row	2P 9am-6pm Mon-Fri, 9am-12noon Sat	15	12	14	15	15	12	15
	Eastern Row	2P disabled only	2	2	1	2	2	1	2
		2P 9am-6pm Mon-Fri, 9am-12noon Sat	6	6	6	6	6	5	6
	Western Row	4P 9am-6pm Mon-Fri	8	6	6	8	7	8	7
	Middle Rows	2P 9am-6pm Mon-Fri, 9am-12noon Sat	22	13	21	21	21	16	19
	Southern Row	No Stopping 7-8:30am Mon-Fri	16	15	16	16	15	8	14
	Accessed Off Right-of-way	No Stopping 7-8:30am Mon-Fri	13	8	12	6	9	6	8
SUMMARY => OFF-STREET CARPARKING									
Car Parking Supply			82 - 82	82	82	82	82	82	82
Total Number of Cars Parked				62	76	74	75	56	71
Total Number of Vacant Spaces				20	6	8	7	26	11
Percentage Occupancy				76%	93%	90%	91%	68%	87%
Note: Public parking includes spaces that are available to the general public and excludes 'No Stopping', 'Loading Zones' and 'No Parking' areas, etc., during the relevant enforcement periods									
LEGEND: Public Parking									
Not available to the general public									
Not Available, illegally parked cars included in analysis									
No Stopping/ Other No Parking									

