

## **ATTACHMENT 9**



December 2023

Final

167 & 169 Bank Street, East Victoria Park

Prepared For:

Goldblaze Nominees Pty Ltd

Revised Transport Impact  
Assessment Report



TOWN OF VICTORIA PARK  
Received: 15/02/2024

## DOCUMENT ISSUE AUTHORISATION

Issue	Rev	Date	Description	Prepared By	Checked By	Approved By
0	0	06/12/2023	Draft Report	SGY	DNV	DNV
1	0	07/12/2023	Final Report	SGY	KL	DNV

*The information contained in this document is solely for the use of the client identified for the purpose for which it has been prepared. It is not to be used by any third party and no responsibility is undertaken to any third party. All photographs remain the copyright of Donald Veal Consultants and are included for illustration only.*

**Donald Veal Consultants Pty Ltd**

TABLE OF CONTENTS

TOWN OF VICTORIA PARK  
 Received: 15/02/2024

	PAGE
1 INTRODUCTION .....	4
1.1 BACKGROUND .....	4
1.2 SCOPE OF ASSESSMENT .....	4
2 EXISTING SITE CONDITIONS .....	5
2.1 SITE LOCATION .....	5
2.2 CURRENT LAND USES .....	5
2.3 ADJACENT ROAD NETWORK .....	6
2.4 ROAD HIERARCHY CLASSIFICATION .....	7
2.5 TRAFFIC VOLUMES .....	8
2.6 CRASH HISTORY .....	8
2.7 FUTURE ROAD NETWORK PROPOSALS .....	9
3 DEVELOPMENT PROPOSAL .....	12
3.1 LAND USES .....	12
3.2 DEVELOPMENT LAYOUT PLANS .....	12
3.3 PROPOSED SITE ACCESS .....	14
3.4 VISIBILITY AT THE CROSSOVER .....	14
4 CAR PARKING .....	15
4.1 PARKING REQUIREMENTS .....	15
4.2 PARKING PROVISION .....	16
5 TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT .....	18
5.1 TRIP GENERATION .....	18
5.2 DISTRIBUTION & ASIGNMENT .....	19
6 ANALYSIS OF TRANSPORT IMPACT .....	20
6.1 SCOPE OF THE ANALYSIS .....	20
6.2 BANK STREET .....	20
6.3 OATS STREET .....	21
6.4 BANK STREET / OATS STREET INTERSECTION .....	21
6.5 SITE ACCESS .....	22
6.6 PARKING AREA ASSESSMENT .....	25
7 SUSTAINABLE TRANSPORT .....	26
7.1 PUBLIC TRANSPORT .....	26
7.2 ELECTRIC VEHICLES .....	26
7.3 PEDESTRIANS AND CYCLISTS .....	27
7.4 GREEN TRAVEL PLAN .....	28
7.5 OTHER ISSUES .....	28
8 SUMMARY AND CONCLUSION .....	30
8.1 SUMMARY .....	30

8.2 CONCLUSION .....	30
APPENDIX A: OATS STREET FACT SHEET .....	31
APPENDIX B: DEVELOPMENT PLANS.....	34



# 1 INTRODUCTION

## 1.1 BACKGROUND

Donald Veal Consultants (DVC) has been commissioned by Goldblaze Nominees Pty Ltd to prepare a revised Transport Impact assessment (TIA) Report regarding the proposed development of 167 & 169 Bank Street, East Victoria Park.

The development will consist of a 15-storey building that will include 85 residential apartments over 14 floors, a ground floor commercial opportunity and three levels of basement parking.

## 1.2 SCOPE OF ASSESSMENT

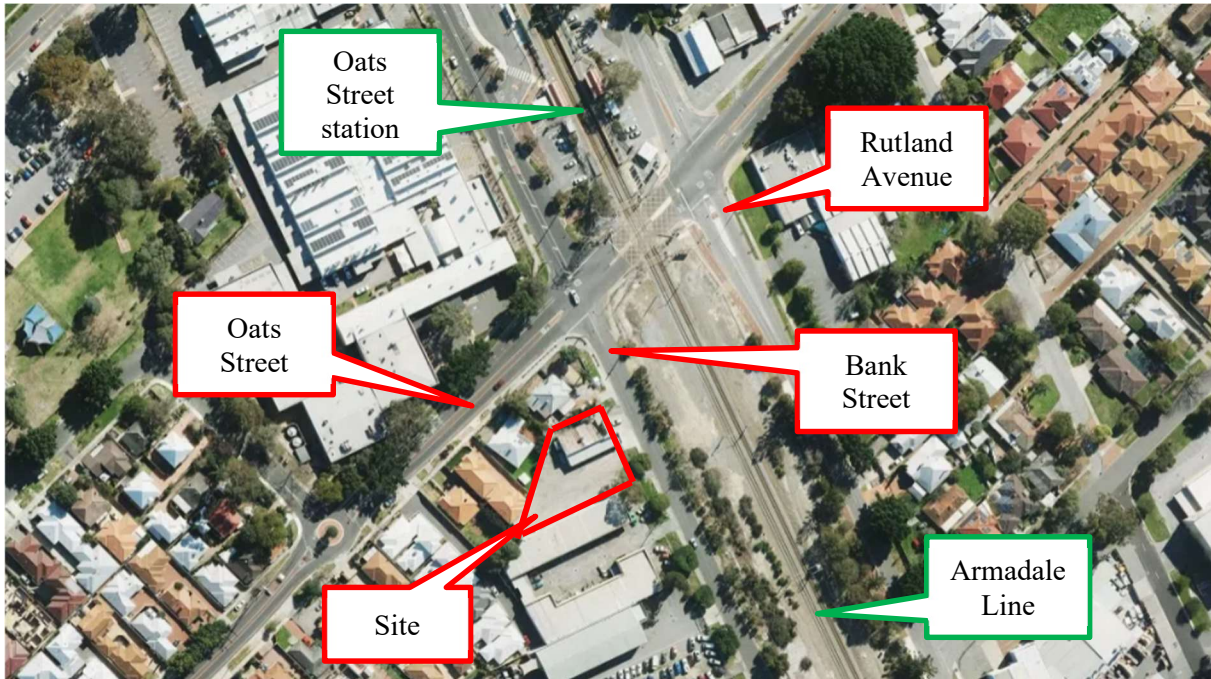
This Transport Impact Assessment (TIA) has been prepared in accordance with the Western Australian Planning Commission's (WAPC's) *Transport Assessment Guidelines for Developments Volume 4 Individual Developments* (August 2016). Its intent is to provide the approving authority with sufficient traffic information to confirm that the proponent has adequately considered the traffic aspects of the development and that it would not have an adverse traffic impact on the surrounding area.

## 2 EXISTING SITE CONDITIONS

TOWN OF VICTORIA PARK  
Received: 15/02/2024

### 2.1 SITE LOCATION

The site is located as shown in **Figure 2.1**.



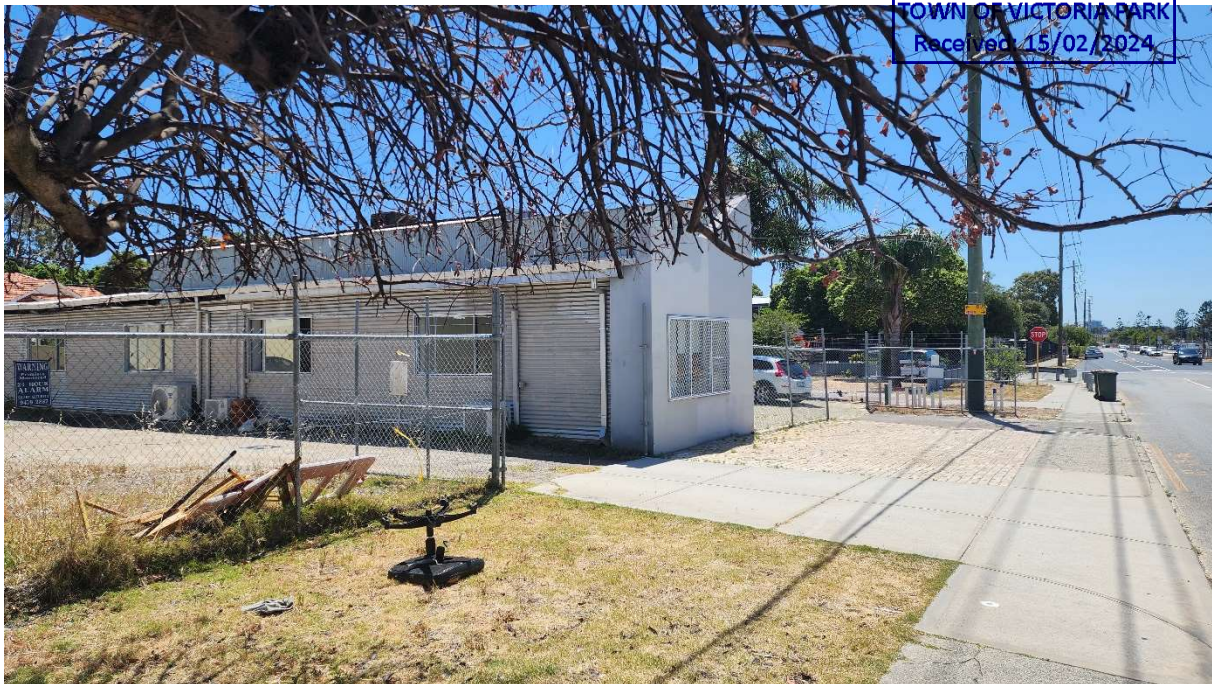
**Figure 2.1: General site location**

### 2.2 CURRENT LAND USES

A single storey building currently occupies #167, whilst 169 is largely vacant. See **Photos 1 & 2**.



**Photo 1: Single storey commercial building on #167 Bank Street.**

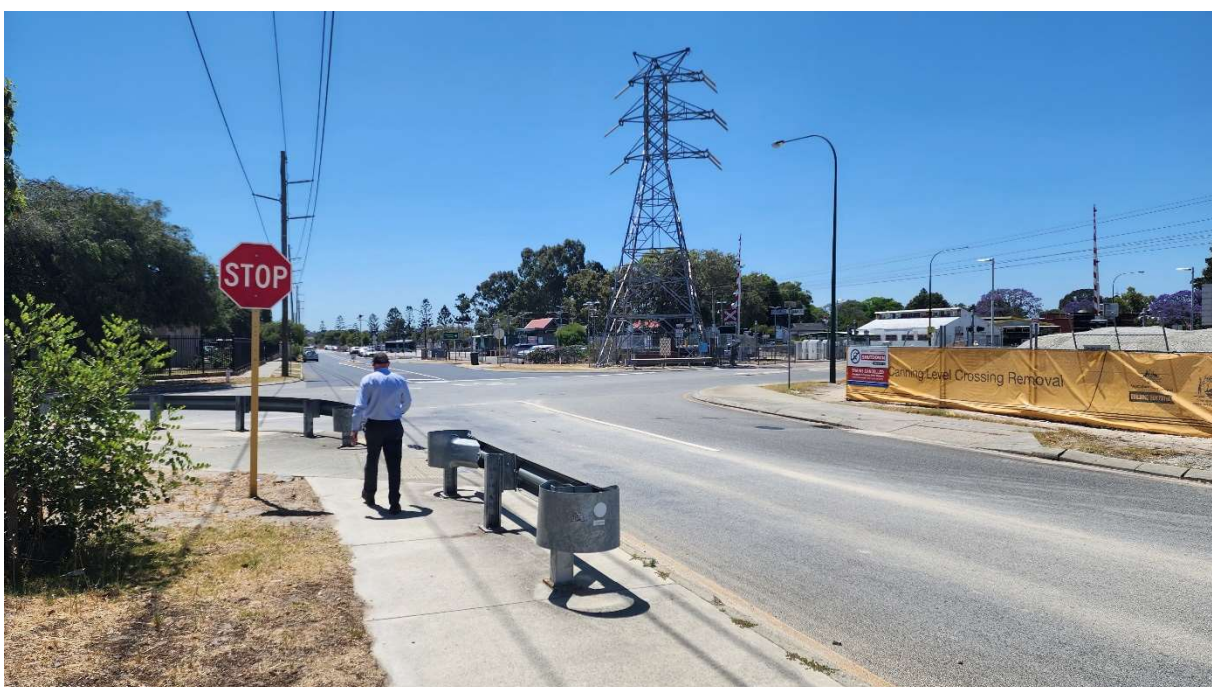


**Photo 2:** #169 Bank Street is largely vacant.

### 2.3 ADJACENT ROAD NETWORK

The existing road layout in the vicinity of the site consists primarily of Bank Street and Oats Street.

Bank Street runs parallel to the Armadale railway line and is constructed as a single 7.0m carriageway, with one lane in each direction. Near the site, it is kerbed on both sides, and has no edge or centreline markings, except at the intersection. North of Oats Street, it has a painted median, with parallel parking bays provided along one side. See **Photo 3**.



**Photo 3:** Intersection of Bank Street with Oats Street.



TOWN OF VICTORIA PARK  
Received: 15/02/2024

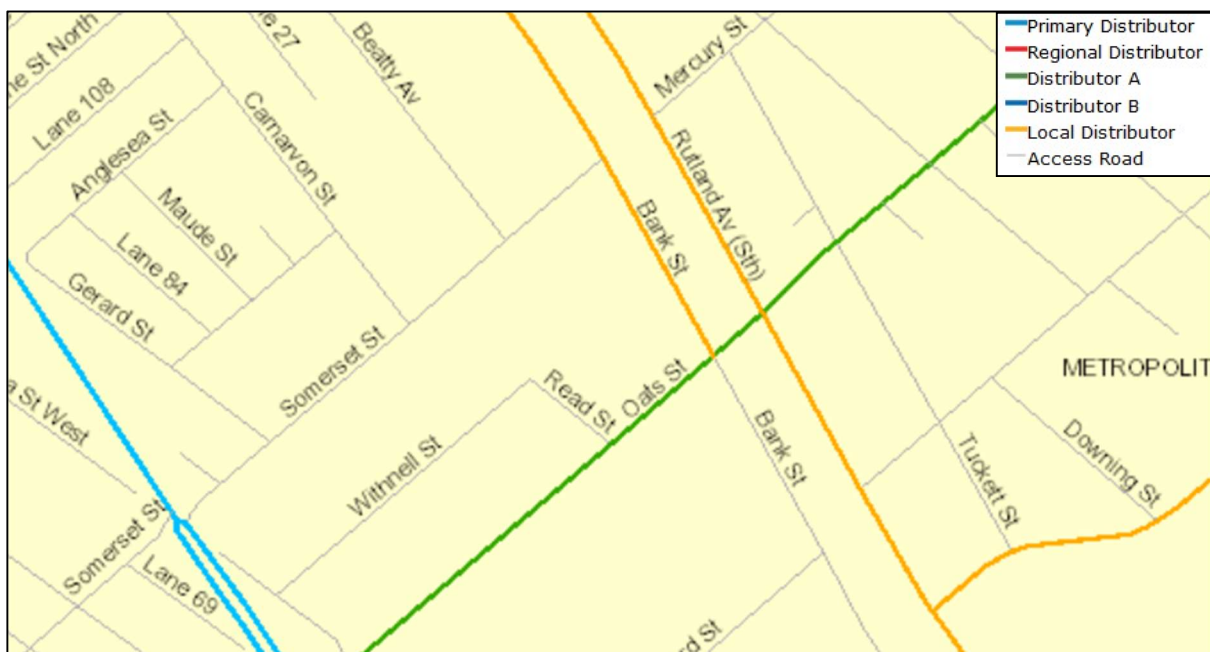
Oats Street has one lane in each direction, and is generally kerbed, with edge lines and a red asphalt median, which is raised and kerbed on intersection approaches. See **Photo 4**.



**Photo 4: Oats Street, looking south west from the Bank Street intersection.**

## 2.4 ROAD HIERARCHY CLASSIFICATION

As can be seen in **Figure 2.2**, Bank Street is classified as an Access Road, under MRWA’s Road Hierarchy, near the site, south of Oats Street, but as a Local Distributor road to the north. Oats Street is classified as Distributor A road.



**Figure 2.2: Road Hierarchy**

*Source: MRWA*

## 2.5 TRAFFIC VOLUMES

TOWN OF VICTORIA PARK  
Received: 15/02/2024

The only traffic count found in the immediate vicinity of the site for the original TIA was a 2016/17 count from MRWA’s Traffic Map site. This indicated that AADT for Oats Street, on the level crossing was just over 12,500 vehicles per day (vpd), with a little over 6% being heavy vehicles. See **Figure 2.3**.

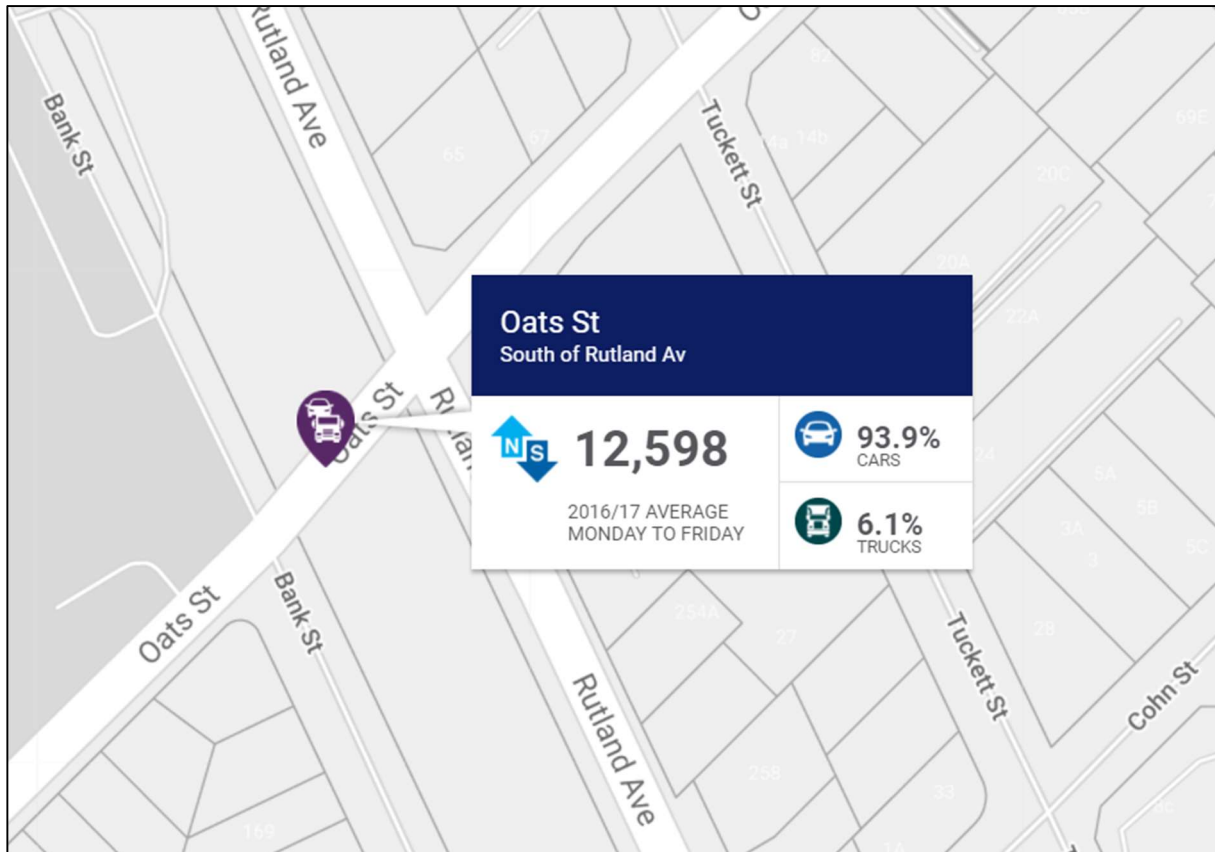


Figure 2.3: Traffic count taken on the Oats Street level crossing

Source: Traffic Map

Currently, however, there are no counts shown in this area, possibly due to the changes in flow patterns resulting from the ongoing Metronet works throughout this area.

The Town of Victoria Park provided additional traffic data, including 2015 counts on Bank Street, showing just under 3,100 vpd using the section south of Oats Street.

No turning movement data is currently available for the existing intersections either side of the level crossing. However, given that the Metronet project will have a significant effect on the road network in this area, such data would be of little value for assessing the impact of the development.

## 2.6 CRASH HISTORY

MRWA’s CrashMap tool shows 43 recorded crashes on Oats Street, between the intersections of Bank Street and Rutland Avenue in the last 5 year period, from January 2018 to December 2022.

Of these, two required a hospital visit, 8 needed medical attention, and the rest incurred Property Damage Only (20 major, 13 minor).

Some 42% of the crashes were right angles, with a further 37% rear enders. Fifteen of the crashes occurred at the Bank Street / Oats Street intersection.

TOWN OF VICTORIA PARK  
Received: 15/02/2024

It should be noted that the proposed removal of the level crossing, as part of the Metronet works in this area, is also likely to involve changes to the two intersections at either end, and in any case, negates the relevance of the past crash history to a greater extent. The layout of any intersection upgrades will of course need to be audited through the design and construction stages.

## 2.7 FUTURE ROAD NETWORK PROPOSALS

As part of the Metronet rail upgrades, the Armadale rail line will be elevated to provide a new Oats Street station, thus removing the Oats Street level crossing. See **Photo 5**.

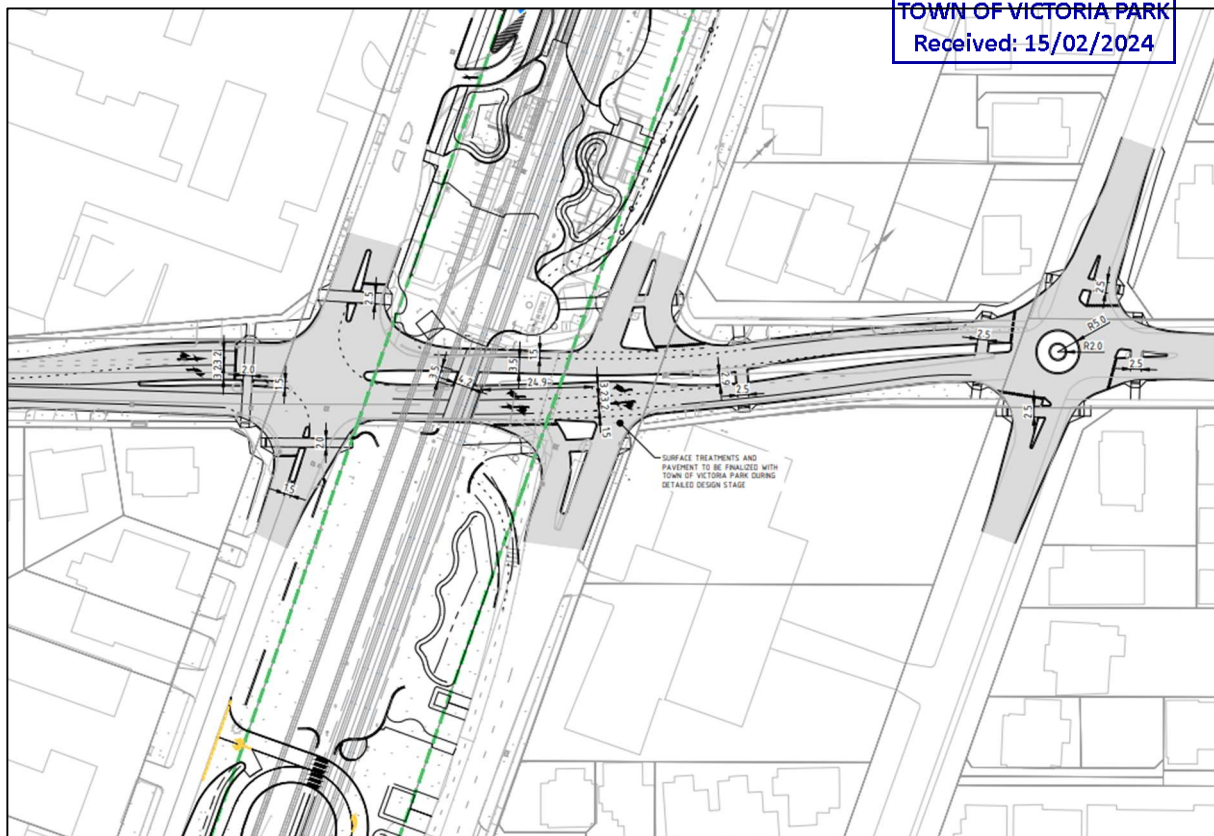


**Photo 5: The level crossing is scheduled for removal as part of the upcoming Metronet projects.**

Whilst this project is still under construction, the eventual removal of the level crossing will also provide both operational and safety improvements, which will surely lead to changes in traffic patterns and volumes through the Oats Street / Bank Street intersection.

This junction, as with the Rutland Avenue intersection on the other side of the level crossing, is currently a four-way Stop sign controlled intersection, with priority given to the Oats Street legs. The latest information regarding the upgrade works, found on the WA Government website, indicates a number of changes to the intersection controls and the permitted movements.

These include the signalisation of the Oats Street / Bank Street intersection and the introduction of a central median, effectively limiting the Rutland Avenue / Oats Street intersections to Left in Left out only movements either side of Oats Street. The Oats Street / Tuckett Street intersection will be controlled by a roundabout in order to facilitate the banned right turn movements. See **Figure 2.4**.



**Figure 2.4: Concept layout included in DA documentation.**

*Source: ALUA*

Consultation with Metronet has confirmed that under current estimations, the boom gate and station will be removed and demolished by the end of November 2023. The trains are then expected to recommence by mid-2025, with the intersection works completed by the end of 2025.

In addition, preliminary layout drawings on the Metronet website appear to indicate that there will be a new bus interchange to the south of Oats Street, with a single access onto Bank Street. The elevated station and transit hub are slated to have a 100 car bay park and ride area, with a drop off and pick up zone, as well as space for 100 bicycles. However, the location of these facilities is not shown on the currently available concepts.

See Metronet’s *New Elevated Oats Street Station fact sheet* in **Appendix A**. It is noted that the information on the Metronet website, including the fact sheet, does not appear to have been updated since 2021.

The recent site visit did however reveal that the bus interchange area is currently a construction site, see **Photo 6**.



**Photo 6: This area is earmarked for a relocated bus interchange.**

### 3 DEVELOPMENT PROPOSAL

#### 3.1 LAND USES

The development will consist of a 15-storey tower block, housing a total of 85 one and two bedroom residential apartments, with a commercial unit on the ground floor.

Resident parking will be provided on three basement levels, with visitor and ACROD parking on the ground floor. The various elements of the development are summarised in **Tables 3.1 & 3.2**.

**Table 3.1: Development summary**

DEVELOPMENT SUMMARY	
Site Address	Lot 2 & 3 (167 & 169) BANK STREET, EAST VICTORIA PARK
TPS NO.1	INDUSTRIAL AREA
PRECINCT	WELSHPOOL P9
Site Area	1226 m <sup>2</sup>
Proposed Site Area	1,226 m <sup>2</sup>
Residential Site	85 Apartments
Commercial Site	1 Tenancy ( 98m <sup>2</sup> )

**Table 3.2: Residential summary**

RESIDENTIAL APARTMENTS				
Apartment Type	Apartment Configuration	Quantity	Unit Area (m <sup>2</sup> )	Level of Livable Housing Design
1A	1x1	9	60	Silver
1B	1x1	9	57	-
1C	1x1	5	59	-
2A	2x1	9	75	-
2B	2x1	13	73	Silver
2C	2x2	14	79	-
2D	2x2	13	82	Silver
2E	2x2	13	79	Silver
<b>Total</b>		<b>85</b>		<b>48 Units (56.47%)</b>

#### 3.2 DEVELOPMENT LAYOUT PLANS

The latest development plans are attached in **Appendix B**.

**Figure 3.1** below shows the ground floor layout, including the access to the site.

TOWN OF VICTORIA PARK  
Received: 15/02/2024

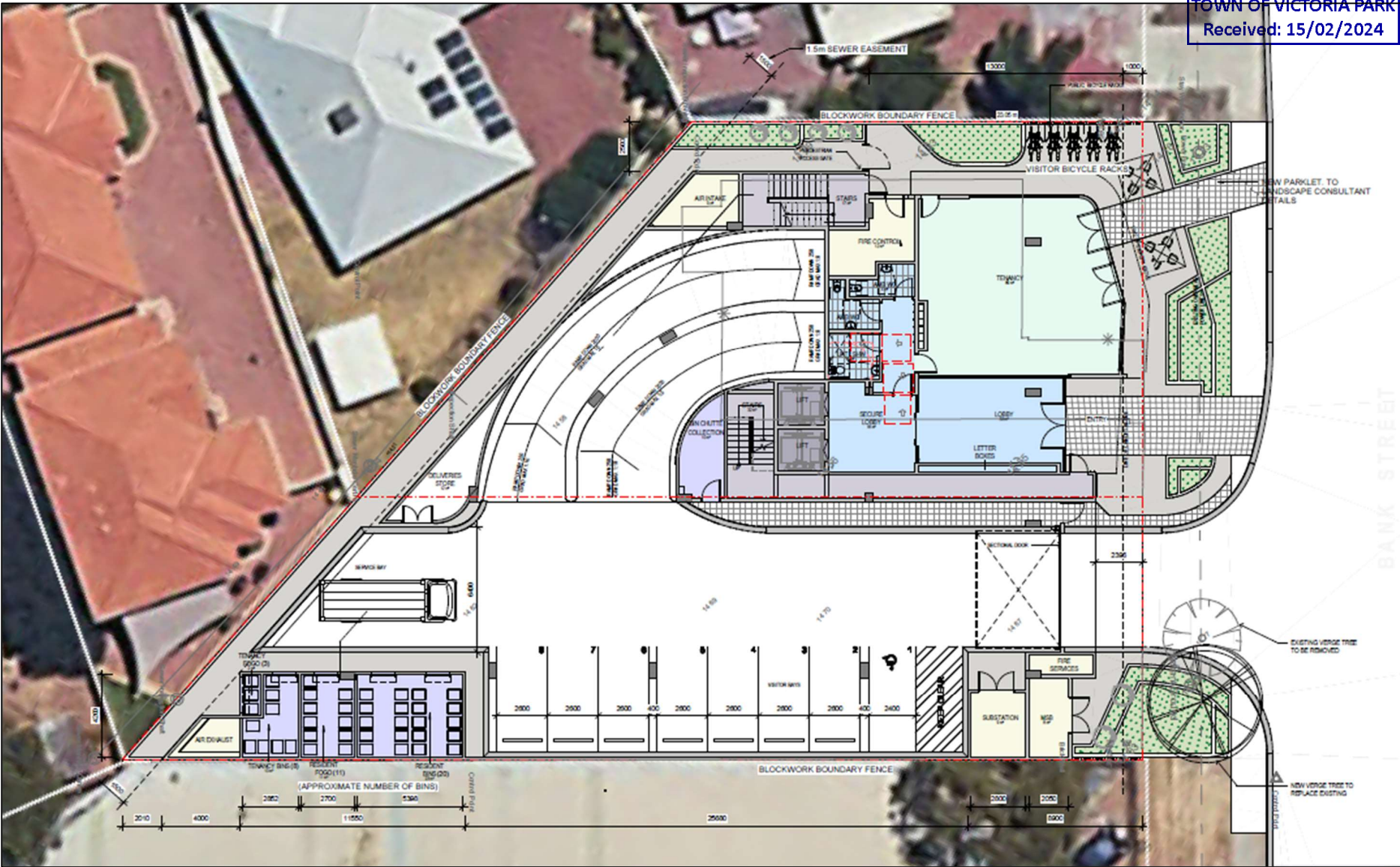


Figure 3.1: Proposed Ground Floor Layout

### 3.3 PROPOSED SITE ACCESS

TOWN OF VICTORIA PARK  
Received: 15/02/2024

Vehicular access to the building will be via a single crossover to Bank Street, allowing access to the basement parking levels, as well as for service vehicles to the delivery and waste areas to the rear of the building.

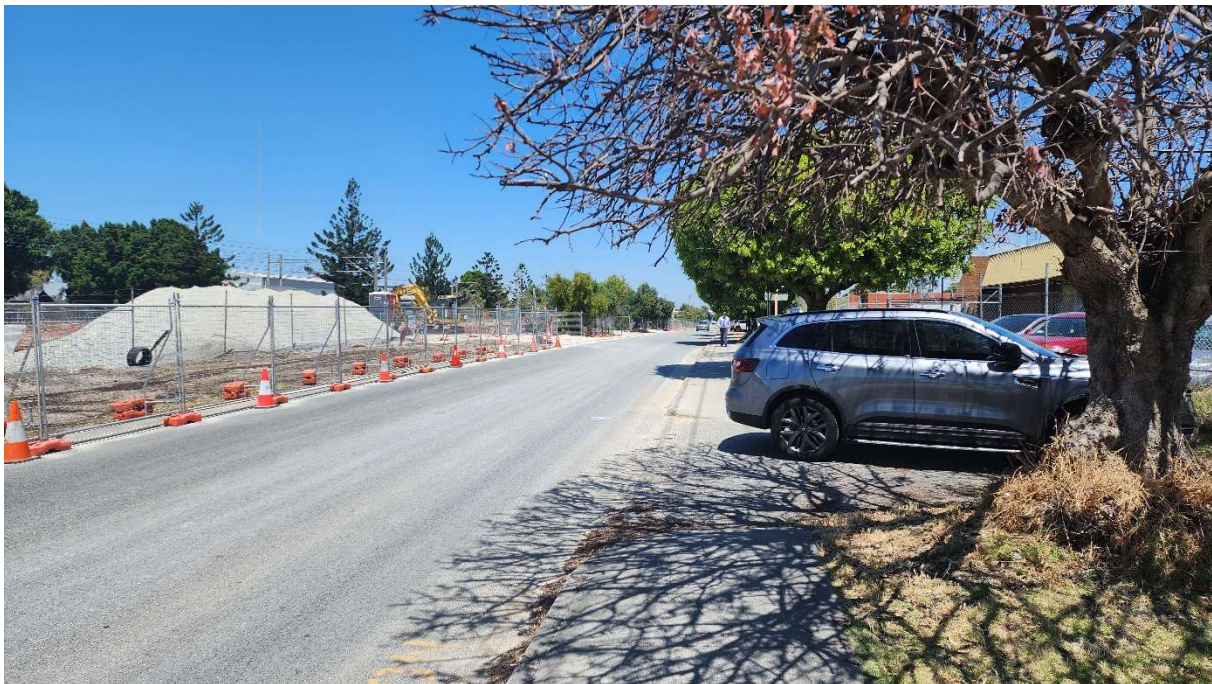
The main pedestrian accesses to the lobby and shops on the ground floor will also be off Bank Street, with a separate walkway leading to a rear pedestrian access.

Public bicycle parking will be located on the ground floor.

### 3.4 VISIBILITY AT THE CROSSOVER

Visibility from the proposed crossover should be similar to that at the existing locations.

As can be seen in **Photo 7**, visibility is currently good along Bank Street, which is quite straight in this vicinity.



**Photo 7: Visibility along Bank Street from the existing site access points.**

It is noted that the existing verge tree is to be removed and a new one planted. The location and potential size of this tree should be given due consideration so as not to restrict visibility.



TOWN OF VICTORIA PARK  
 Received: 15/02/2024

## 4 CAR PARKING

### 4.1 PARKING REQUIREMENTS

The parking requirements for the development have been assessed based on the Town of Victoria Park’s relevant local planning policy, *LPP23 – Parking Policy*.

In terms of Residential parking, LPP23 refers users to the Residential Design Codes (R-Codes), and notes that any visitor parking bays provided should be marked.

As seen in **Figure 4.1**, as the development is within the requisite distance of both a high frequency Rail and Bus route, Volume 2 of SPP 7.3 (the R-Codes) indicate that each 1-bedroom dwelling will need to have 0.75 parking bay, whilst each 2-bedroom dwelling will need 1 bay. Visitor bays are to be provided as indicated. With 85 apartments (23 x 1-bed, 62 x 2-bed), this equates to a total of 80 residential bays and 13 visitor bays.

**Table 3.9 Parking ratio**

Parking types		Location A	Location B
Car parking <sup>1</sup>	1 bedroom dwellings	0.75 bay per dwelling	1 bay per dwelling
	2+ bedroom dwellings	1 bay per dwelling	1.25 bays per dwelling
	Visitor	1 bay per four dwellings up to 12 dwellings 1 bay per eight dwellings for the 13th dwelling and above	
Bicycle parking <sup>1</sup>	Resident	0.5 space per dwelling	
	Visitor	1 space per 10 dwellings	
Motorcycle/ Scooter parking <sup>2</sup>	Developments exceeding 20 dwellings provide 1 motorcycle/scooter space for every 10 car bays		
<sup>1</sup> Calculations of parking ratios shall be rounded up to the next whole number. <sup>2</sup> For each five motorcycle/scooter parking bays provided in accordance with Table 3.9, car parking bays may be reduced by one bay.			
<b>Definitions:</b> <b>Location A:</b> within 800m walkable catchment of a train station and/or 250m of a transit stop (bus or light rail) of a high-frequency route and/or within the defined boundaries of an activity centre. <b>Location B:</b> not within Location A.			

STATE PLANNING POLICY 7.3 RESIDENTIAL DESIGN CODES VOLUME 2 - APARTMENTS 55

**Figure 4.1: Extract from R-Codes.**

As the specific land use allocated to the commercial unit has not yet been finalised, the rate of parking provision has been based on the rate for ‘Shop’. This is stated in LPP23 as being 1 bay for every 10m<sup>2</sup> of retail floor area. Although the development plan indicates the proposed shop will have a total area of 96m<sup>2</sup>, it is not clear what this area includes. LPP23 defines ‘retail floor area’ as excluding concealed storage areas, food preparation areas and toilet areas. As a maximum, this would require 10 parking bays, although this appears excessive.

This number might be applicable for a stand-alone shop to which the majority of visitors would drive, but in this case, it is more likely that the majority of patrons would either be pedestrians walking past, or residents of the building itself. As such, parking demand driven by the commercial enterprise is likely to be minimal, and a shared use arrangement with the visitor bays already being provided would appear appropriate.

In addition, the development may need to provide a number of bicycle racks. LPP 23 states that:-

TOWN OF VICTORIA PARK  
Received: 15/02/2024

*“The Council may require the provision of bays marked exclusively for the use of motor cycles, bicycles, delivery and service vehicles, taxis, buses and coaches and courier services, where the nature of the development requires specific purpose bays. The Council will determine the number of bays to be marked for bicycles and the vehicles listed above depending on the nature of the development.”*

The Council will also require the provision of bays marked exclusively for use by drivers with a disability at the rate specified in the Building Code of Australia. This indicates that only a single ACROD bay is required for the commercial element.

#### 4.2 PARKING PROVISION

The latest layout plans indicate that 83 car parking bays will be provided, including 75 residential bays and 8 visitor bays. This will result in a shortfall of 10 bays in terms of the residential requirement.

This shortfall is only around 10% and is unlikely to present any issues with parking demand. Due to the proximity of the development to the forthcoming bus interchange and railway station, a significant number of visitors are likely to arrive by public transport, whilst a proportion of residents may choose not to own a private vehicle. Clearly, there will be an above average sustainable modal share in this location.

Residents will be provided with sufficient space in their storage areas to keep a bicycle, thus exceeding the requirement for 43 bicycle racks. The required 9 visitor bicycle racks have been provided on the ground floor.

See **Table 4.1** below.

**Table 4.1: Parking provision**

PARKING & BICYCLE SUMMARY		
PARKING	PROVIDED	REQUIRED
RESIDENT CAR BAYS	75	80
VISITOR CAR BAYS	8	13
TENANCY CAR BAYS	RECIPROCAL WITH VISITORS	
RESIDENT BICYCLE	85	43
VISITOR BICYCLE	9	9
MOTORCYCLE BAYS	0	8
<b>RESIDENTIAL STORE ROOMS:</b>		
2 BEDROOM DWELLINGS PROVIDED WITH 4m <sup>2</sup> STORAGE. 1m <sup>2</sup> ADDITIONAL WHERE BICYCLE STORAGE INCLUDED.		
1 BEDROOM DWELLINGS PROVIDED WITH 3m <sup>2</sup> STORAGE. 1m <sup>2</sup> ADDITIONAL WHERE BICYCLE STORAGE INCLUDED.		

There is also a requirement for 8 motorcycle bays, but these may be omitted at the discretion of the City, and have not been shown in the latest drawings.

TOWN OF VICTORIA PARK  
Received: 15/02/2024

A single ACROD bay has been provided, alongside the other visitor bays on the ground floor, in accordance with the Building Code of Australia (BCA) requirements.

## 5 TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

TOWN OF VICTORIA PARK  
 Received: 15/02/2024

### 5.1 TRIP GENERATION

Generally, the trip generation rate used for suburban residential dwellings might be taken as around 8 trips per dwelling per day. However, it is recognised that developments located near high frequency Public Transport routes tend to generate significantly less car trips. In this particular case, the site is located in close proximity to not only high frequency services, but also to a railway station that provides a direct link to the Perth CBD, a transit interchange, serviced by various bus routes, and a PSP.

Given the high likelihood of public transport trips, shared trips and walking or cycling trips, DVC has taken a trip generation figure of 6 trips per dwelling per day for the residential element of the proposed development, with 0.6 trips per apartment in each of the peak hours. These figures are still higher than the rates quoted for mid-rise apartments by the ITE Trip Generation rates – 8<sup>th</sup> Edition (ITE).

Thus the 85 apartments are expected to generate 510 daily trips, with 51 trips in each of the peak hours as shown in **Table 5.1**.

**Table 5.1: Trip generation –Apartments**

Peak period	Trip rate		Peak hour trips		
	Inbound	Outbound	Total trips	Inbound	Outbound
AM	0.31	0.69	51	16	35
PM	0.58	0.42	51	30	21

Source: ITE Trip Generation Rates

In terms of the commercial part of the development, the proposed business on the ground floor is shown as a ‘shop’. The WAPC Guidelines suggest peak hour trip generation rates for both commercial and retail establishments, but caution that trip rates can vary widely depending on what is being sold and where the shop is located.

Given that no details are currently available on the tenants of these businesses, and the likelihood that a significant proportion of patrons will be from either the residential apartments above, or other adjacent residential dwellings, DVC has estimated the potential peak hour trips using the rates for ‘Retail, with a significant food component’, as provided in Table 1 in Volume 5 of the WAPC’s TIA Guidelines. This gives 10 trips / 100 m<sup>2</sup> GFA in the AM peak and 2.5 in the PM, as a possible worst case scenario. It should be noted that the corresponding rates provided within Table 1 for ‘Commercial’ land uses are significantly lower.

Thus, with a total of 96m<sup>2</sup>, this gives a total of 10 trips in the AM peak and 3 trips in the PM peak as shown in **Table 5.2**.

All refuse and service vehicle trips would be scheduled for off-peak periods of the day and have therefore not been included in the peak hour trip generation numbers.

**Table 5.2: Trip generation - Commercial**

TOWN OF VICTORIA PARK  
Received: 15/02/2024

Peak period	Trip rate		Peak hour trips		
	Inbound	Outbound	Total trips	Inbound	Outbound
AM	0.80	0.20	10	8	2
PM	0.50	0.50	3	2	2

Source: WAPC Guidelines, Volume 5.

The total estimated trip generation for the development would therefore be as indicated in **Table 5.3**.

**Table 5.3: Total Peak hour trip generation**

Land Use	AM inbound	AM outbound	PM inbound	PM outbound
Commercial	8	2	2	2
Apartments	16	35	30	21
<b>Total</b>	24	37	32	23

Whilst the planned upgrades to the intersections adjacent the development, and the changes to traffic volumes and patterns associated with the removal of the railway level crossing, would render any analysis based on currently available data redundant, it can be seen that the total number of trips expected to be generated by the development is below the threshold of 100 trips in the peak hour in any case.

This means that, in accordance with the WAPC Guidelines, detailed or future year intersection analysis is not required.

## 5.2 DISTRIBUTION & ASSIGNMENT

Whilst the development site is located quite close to the Oats Street intersection, this is currently unsignalized, and drivers tend to rely to some extent on gaps in traffic resulting from closures of the level crossing in order to exit the side road, particularly during peak periods. However, a certain proportion of trips, where origins or destinations are located either to the south or east of the site, may make use of the links to Welshpool Road, via Forward Street or Swansea Street East.

Thus, the trips generated by the development are likely to be spread over a number of different routes, and the impact on each will therefore be quite low.

## 6 ANALYSIS OF TRANSPORT IMPACT

TOWN OF VICTORIA PARK  
Received: 15/02/2024

### 6.1 SCOPE OF THE ANALYSIS

As identified in the previous section, the relatively low levels of peak hour trip generation forecast for the development, which is reinforced by the site's location within easy walking distance of significant and soon to be upgraded Public Transport facilities, means that detailed analysis of the impact on the adjacent roads and intersections is not required.

However, as the timing of the Metronet works is currently unknown, and it remains possible that the development may go ahead prior to completion of the railway works, DVC has therefore carried out some interim assessment of the likely impact of the development in the short term.

### 6.2 BANK STREET

The latest available traffic data for Bank Street, adjacent the development site, south of Oats Street, shows that the road was carrying around 3,100 vpd in 2015.

If we assume that the peak hour trips already on Bank Street represent around 10% of the daily number, this would give 310 existing trips.

The number of AM peak hour trips forecast to be generated by the development is 61, with these likely to be split reasonably equally between the two directions from the site access points. Thus, the development will add approximately 30 trips to the existing 310 already on the road in the AM peak hour, or an increase of less than 10%. Given that the road is currently running well below capacity, this will have little impact on the operation of the road.



**Photo 8: Prior to the works commencing, Bank Street carried around 3,100 vpd, south of Oats Street.**

### 6.3 OATS STREET

TOWN OF VICTORIA PARK  
Received: 15/02/2024

The latest traffic figures for Oats Street were taken from the MRWA TrafficMap website. This shows a 2016/17 count on the level crossing of 12,598 vpd.

Clearly, even if all of the 61 AM peak hour trips generated by the development were added to Oats Street, the impact on its capacity or operation would be negligible.

### 6.4 BANK STREET / OATS STREET INTERSECTION

Although no formal analysis is warranted, it is clear that a proportion of the trips generated by the development will need to use this intersection.

Currently, with two, four-way Stop sign controlled intersections either side of the level crossing, there are some difficulties for vehicles wishing to exit the side roads. This is exacerbated to some extent by the queueing along Oats Street when the level crossing is closed, particularly if there is more than one train passing through in quick succession, even during off peak periods. See **Photo 9**.



**Photo 9: Queuing along Oats Street from the level crossing will become a thing of the past.**

However, the presence of ‘Keep Clear’ markings does seem to assist with some movements, leaving gaps through which turns away from the level crossing are able to continue, despite the closure.

See **Photo 10**.



**Photo 10: Keep clear markings allow some turns to / from the side road during level crossing closures.**

Although the amount of traffic generated by the development is unlikely to affect the operation of these intersections under their current configurations, it is expected that construction of the elevated railway station will probably have been completed by the time the development is open.

Notwithstanding general operational issues associated with traffic management and potential road closures during construction, it is not envisaged that the trips generated by the development would have any significant effect upon the operation of the reconfigured intersections post-completion of the Metronet upgrade works.

## 6.5 SITE ACCESS

The development parking is provided over three basement levels, with visitor / commercial parking on the ground floor. Access to all parking bays is provided via the single crossover onto Bank Street, with access ramps between the basement levels. As can be seen in **Figure 6.1**, a standard B99 vehicle can negotiate the entry and exit whilst remaining lane correct.

Service vehicles, including delivery vans and the refuse truck, will also use this crossover to access the loading bay and the bin store, located at the rear of the ground floor. Whilst small delivery trucks and vans will be able to enter the site in a forward gear and reverse into the loading bay via the down ramp, (See **Figure 6.2**), it is noted that a refuse truck may not be able to perform this manoeuvre.

Negotiations with the Town of Victoria Park have indicated that, rather than bins be collected from the verge, a private refuse collection contractor may be permitted to reverse into the site during specified off peak periods.

Details of the access arrangements for the requisite refuse vehicle can be found included in the separate Waste Management Plan report supplied by Stantec.



Client: Goldblaze Nominees Pty Ltd

Project: 167 & 169 Bank Street, East Victoria Park – TIA

TOWN OF VICTORIA PARK  
Received: 15/02/2024

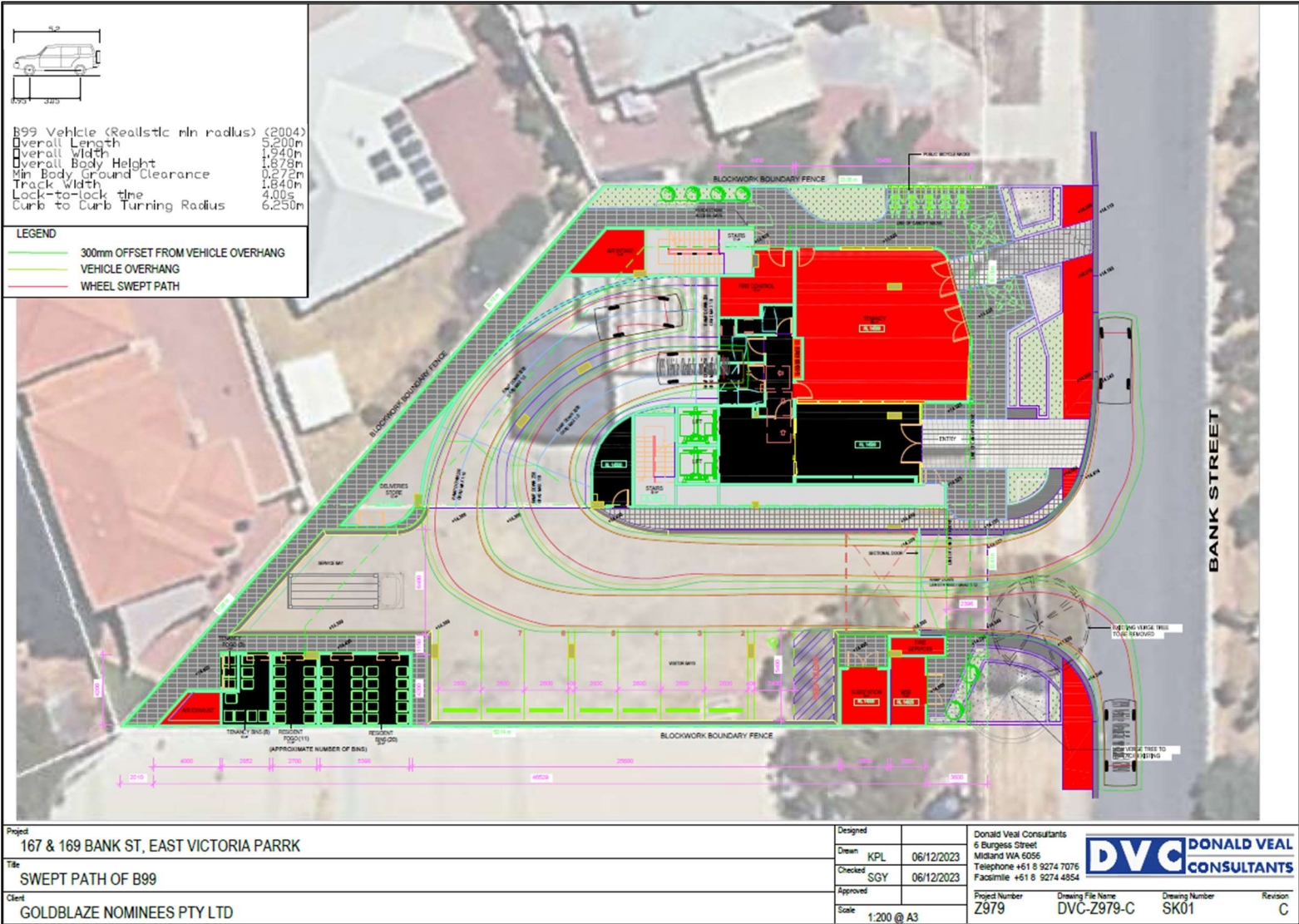


Figure 6.1: Swept path of a B99 vehicle.

Client: Goldblaze Nominees Pty Ltd

Project: 167 & 169 Bank Street, East Victoria Park – TIA

TOWN OF VICTORIA PARK  
Received: 15/02/2024

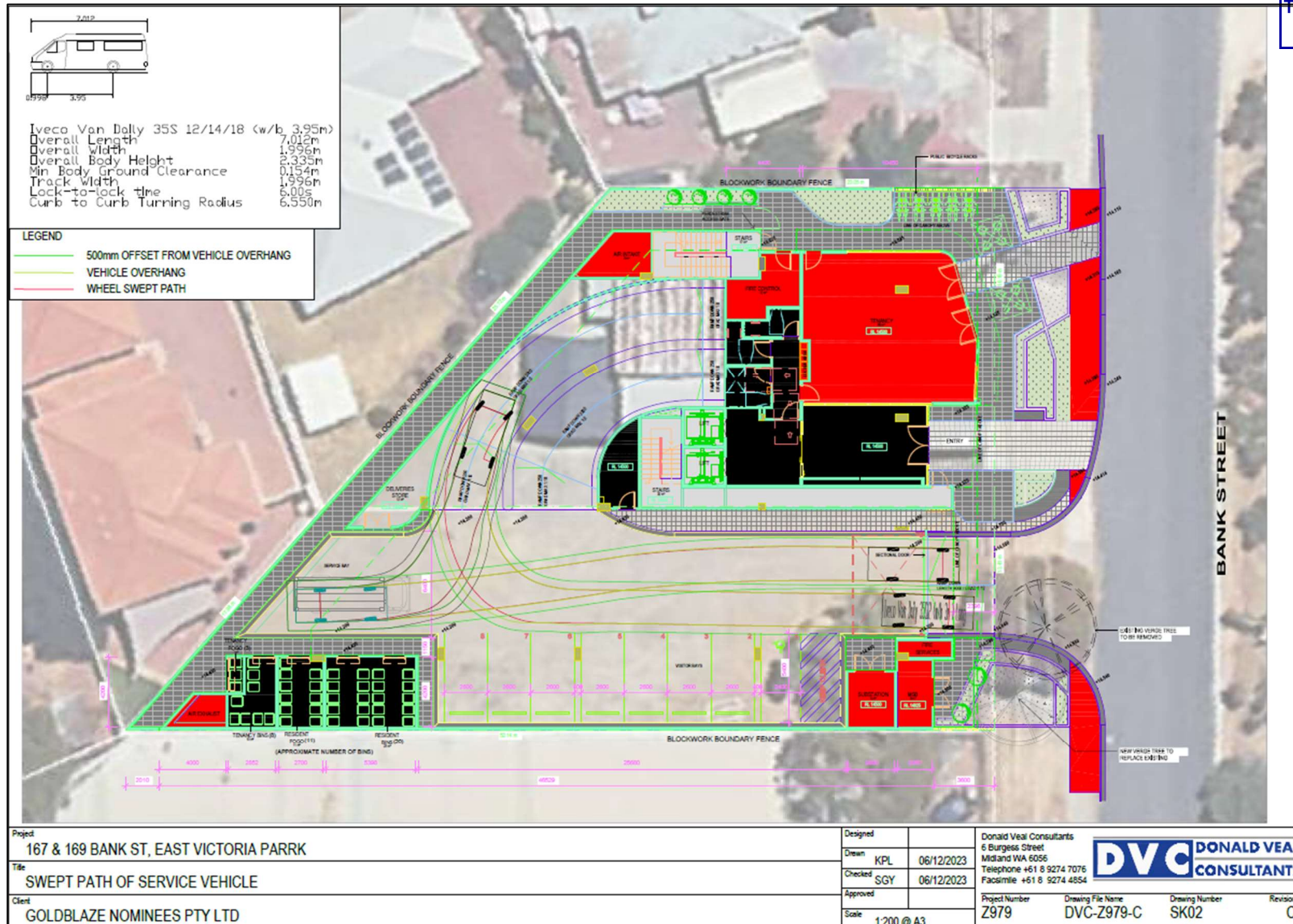


Figure 6.2: Swept path for a small delivery vehicle.

## 6.6 PARKING AREA ASSESSMENT

TOWN OF VICTORIA PARK  
Received: 15/02/2024

The visitor bays on the ground floor are shown on the latest layout plans as being 2.6m wide by 5.4 m long. The residential parking bays on the basement levels are of a similar size.

This exceeds the requirements of AS 2890.1 for User Class 1A (Residential) and meets the additional width requirement for User Class 3 or 3A, appropriate for patrons of the shop.

Aisle and ramp widths vary between 5.8m and 6.2m, again meeting or exceeding the requirements for Class 1A. The curved ramps also meet the minimum width requirements based on the indicated radii.

A single ACROD bay is indicated near the crossover on the ground floor.

## 7 SUSTAINABLE TRANSPORT

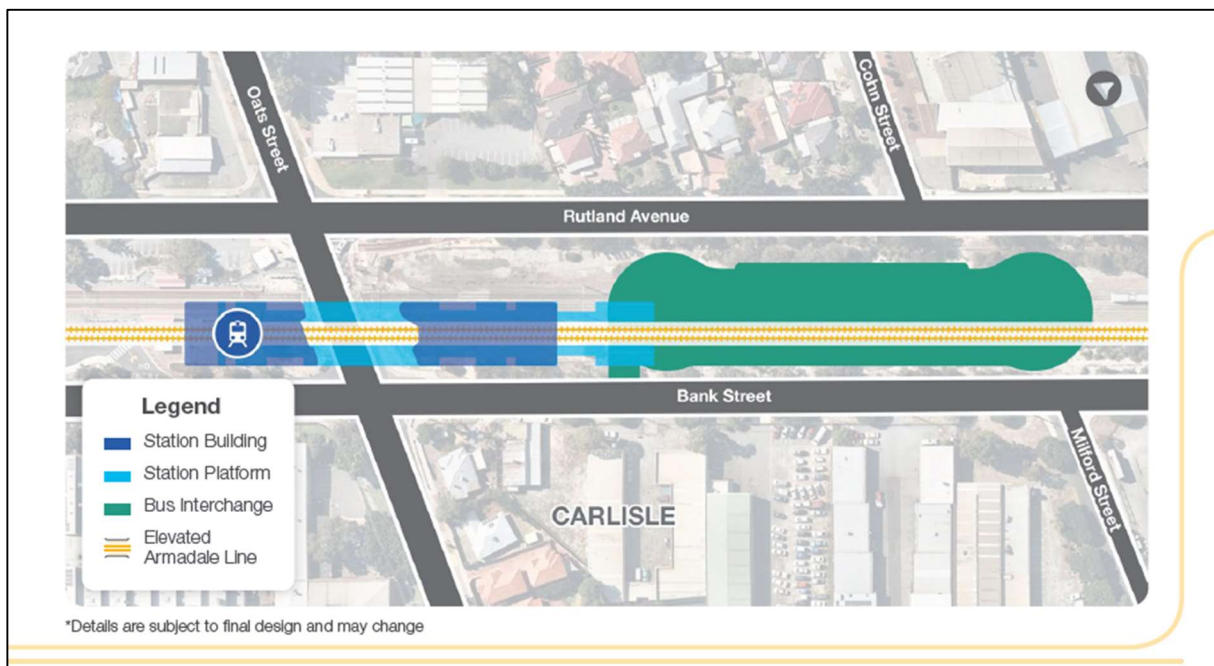
### 7.1 PUBLIC TRANSPORT

The site is already exceptionally well serviced by public transport, and this will only be improved when the Metronet project to elevate the Armadale line and remove the Oats Street level crossing is completed.

The existing Oats Street railway station and transit hub is only around 150m from the site. Similarly, residents of the proposed development on Bank Street will be able to walk to the new elevated station and bus terminal in just a few minutes.

Currently, there are also bus stops within walking distance of the site along Bank Street, Oats Street and Rutland Avenue, which are serviced by route numbers 282, 283, 285, 998, 999 and 907.

The planned works are also scheduled to include a new bus port, as well as a large (100 bay) park and ride facility. See **Figure 7.1**.



**Figure 7.1: Concept Layout.**

*Source: Metronet*

### 7.2 ELECTRIC VEHICLES

As the take up of Electric cars and scooters increases, the need to provide charging stations in residential and commercial areas is also more apparent.

The resident parking area will therefore include a minimum of 2 charging bays, with suitable additional infrastructure to allow for future increase in this capability.

These charging bays will not be specifically allocated to any particular apartment, and will be available for general use.

### 7.3 PEDESTRIANS AND CYCLISTS

TOWN OF VICTORIA PARK  
Received: 15/02/2024

The current layout in the vicinity of the site provides a footpath on the west side of Bank Street past the site accesses, with crossing points over Oats Street. The footpath continues north of Oats Street and provides connectivity to the bus interchange and railway station. Although some of this infrastructure does not meet current standards, it is expected that it will be upgraded as part of the Metronet works.

If, as expected the Oats Street / Bank Street intersection is to be signalised, there would almost certainly be a pedestrian phase included to assist ease of access to the Public Transport hub. See **Photo 11**.



**Photo 11: The existing pedestrian crossing of Oats Street does not meet current standards.**



**Photo 12: Existing bike store near the current Oats Street station.**

## 7.4 GREEN TRAVEL PLAN

TOWN OF VICTORIA PARK  
Received: 15/02/2024

Although a Green Travel (or Commuter) Plan is generally more effective for a workplace environment than a residential tower, there may still be some elements that can be applied to this development. Some popular initiatives, such as car-pooling, clearly relate more readily to shared commuter trips, but there may still be opportunities to promote the sharing of certain trips.

Clearly the availability of public transport services immediately adjacent the development will encourage the use of these modes, and the building management should ensure that timetables and route information is readily available to all residents.

The development is also well equipped with bicycle racks, although the types of end of trip facilities normally provided for people commuting by bike, such as lockers, changing rooms and showers, will probably be unnecessary with the vast majority of riders residing in the building.

Whilst still representing a private vehicle, and therefore still contributing to congestion, EVs are becoming more common, and are of course more sustainable than petrol or diesel vehicles. Charging stations should therefore be provided, to facilitate this option for residents.

A detailed Green Travel Plan should be drawn up once the Metronet works have been completed, and the development is in place.

## 7.5 OTHER ISSUES

It was noted on site that there are a number of existing safety issues around the level crossing and its two intersections. These include a number of short sections of W-beam safety barrier, which do not meet current standards, and will not provide suitable protection to errant vehicle occupants from the hazards they are meant to. See **Photos 13 & 14**.



**Photo 13: W-beam is too short to be effective and has non-crashworthy end treatments.**

Again, these are short term issues, and should be addressed as part of the Metronet works.

TOWN OF VICTORIA PARK  
Received: 15/02/2024



**Photo 14: W-beam is too short to be effective and has non-crashworthy end treatments.**

## 8 SUMMARY AND CONCLUSION

TOWN OF VICTORIA PARK  
Received: 15/02/2024

### 8.1 SUMMARY

Donald Veal Consultants (DVC) has been commissioned by Goldblaze Nominees Pty Ltd to prepare a revised Transport Impact Assessment (TIA) Report regarding the proposed development of 167 & 169 Bank Street, East Victoria Park.

The development will consist of a 15-storey building that will include 85 residential apartments over 14 floors, a ground floor commercial opportunity and three levels of basement parking.

Vehicular access to the building will be via a single crossover to Bank Street, allowing access to the basement parking levels, as well as for service vehicles to the delivery and waste areas to the rear of the building.

As part of the Metronet rail upgrades, the Armadale rail line will be elevated to provide a new Oats Street station, thus removing the Oats Street level crossing. This is likely to provide both operational and safety improvements, which will surely lead to changes in traffic patterns and volumes through the Oats Street / Bank Street intersection.

The upgrade works will include the signalisation of the Oats Street / Bank Street intersection and the introduction of a central median, effectively limiting the Rutland Avenue / Oats Street intersections to Left in Left out only movements either side of Oats Street. The Oats Street / Tuckett Street intersection will be controlled by a roundabout in order to facilitate the banned right turn movements.

The latest layout drawings on the Metronet website appear to indicate that there will be a new bus interchange to the south of Oats Street, with an access onto Bank Street.

Access to the building is good for standard B99 and small delivery vehicles, but difficulties have been identified regarding access by refuse collection trucks. Given the site constraints, it is not possible for the standard Cleanaway refuse truck used in this area to safely manoeuvre within the building to reach the bin enclosure on the ground floor.

Details of the resolution for this issue will be found in Stantec's Waste Management Plan for the site.

The parking provided within the proposed development has a small shortfall against the requirements of the local governments relevant policies, but this is not considered significant given the site's location with regard to bus and train alternatives. The car park layouts generally comply with Australian Standards, and a single ACROD bay is currently shown.

Public Transport access to the site is currently excellent, with the Metronet upgrades only likely to improve this. Some of the pedestrian facilities near the site do not currently meet standards, but it is expected that these will also be upgraded as part of the Metronet works.

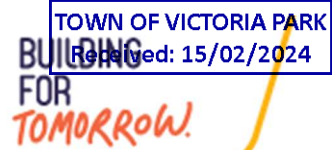
### 8.2 CONCLUSION

DVC supports the development proposal in terms of its transport and road safety impacts.



TOWN OF VICTORIA PARK  
Received: 15/02/2024

## **APPENDIX A: OATS STREET FACT SHEET**



# New Elevated Oats Street Station

Oats Street Station will be rebuilt as part of the elevated rail solution to remove the Oats Street level crossing.

The new elevated station will have two station entrances on either side of the road to help provide safe connections for those accessing the bus interchange, South Metropolitan TAFE campus, local aquatic centre and broader community.

## How Feedback is Shaping this Station

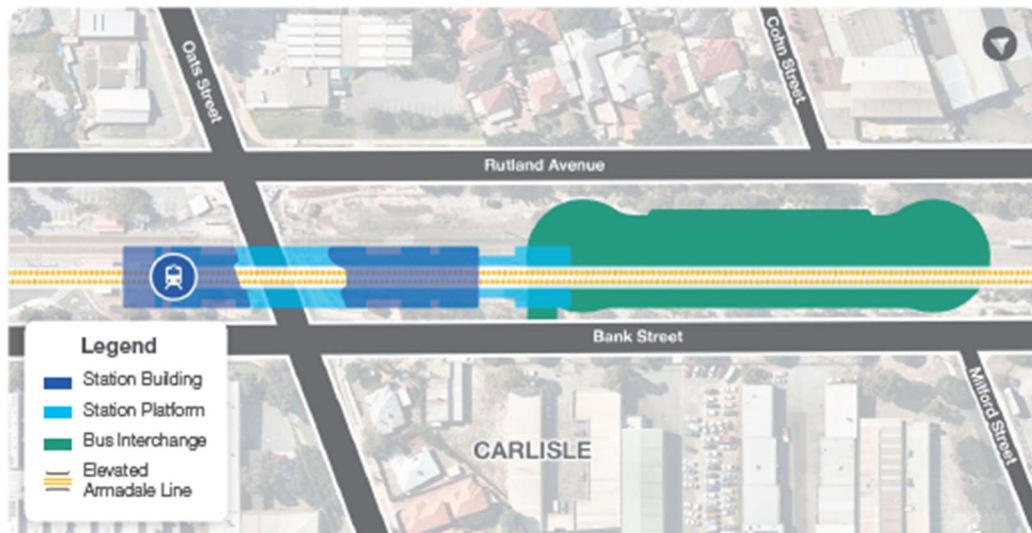


Community and stakeholders suggested having station entrances on either side of Oats Street to reduce how often people had to cross the road to get to train services.

The community also told us it is important to add greenery and shade and enhanced links to employment areas and the surrounding neighbourhood.

## To do this we are:

- ▶ Providing a station entrance on either side of Oats Street
- ▶ Recommending space is available across the road from the TAFE as a place for students and the community to enjoy
- ▶ Locating the bus interchange underneath the elevated rail and closer to the industrial area to support safe connections



\*Details are subject to final design and may change

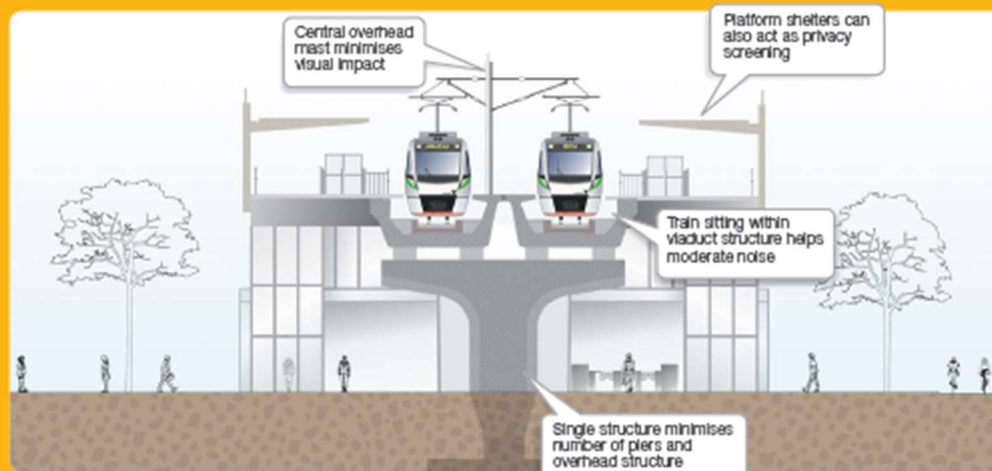
Funding Partners:

Delivery Agency:

July 2021

TOWN OF VICTORIA PARK  
Received: 15/02/2024

## What will elevated rail look like?



Example of a station cross-section – design concept only.

## Station snapshot\*

1 Zone fare (to Perth)

8 Bus stands

### Platforms and access



Lifts and stairs (future escalators)



Universal access



2 platforms



Toilets

- The elevated platforms will accommodate six-car trains with universal access to both platforms via lifts or stairs from ground level entry points either side of Oats Street.
- At least 70 per cent of the platform will be covered to provide protection from the elements.
- Future-proofing has also been considered to include gated entries and escalators when passenger demand increases in years to come.

### Parking and cycling



100 Parking bays (incl ACROD)



100 Bicycle spaces

- New Park 'n' Ride facilities will be available along with around 100 parking bays, new short-term parking options, a pick-up/drop-off area and a universally accessible taxi drop off zone.
- Cyclists will have approximately 100 bicycle spaces.

### Safety and security



- Passive security measures will be implemented through best practice design, such as good lighting and an open station design that provides clear lines of sight to parking, the bus interchange and pedestrian paths.
- Like all stations on the Transperth network, the rebuilt Oats Street Station will be monitored in a variety of ways including transit officers, mobile patrols, a high-tech CCTV system and a 24-hour Central Monitoring Room.

### Landscaping and public open space



- A dedicated public open space created by elevating the rail line will contribute new, quality recreational and community areas for Oats Street and surrounds.
- A 'green corridor' with tree canopy and extensive landscaping will provide shade, reduce urban heat and give the community a place to relax, exercise and gather for community events.

### Bus interchange and bus station

- A bus Interchange will be built next to the station entry to enable passengers to easily transfer between bus and rail services and connect with the urban rail network from locations such as Belmont Forum and Curtin University.



Join our new project group



\*Details are subject to final design and may change

### CONTACT US:

9328 8888  
info@metronet.wa.gov.au  
metronet.wa.gov.au

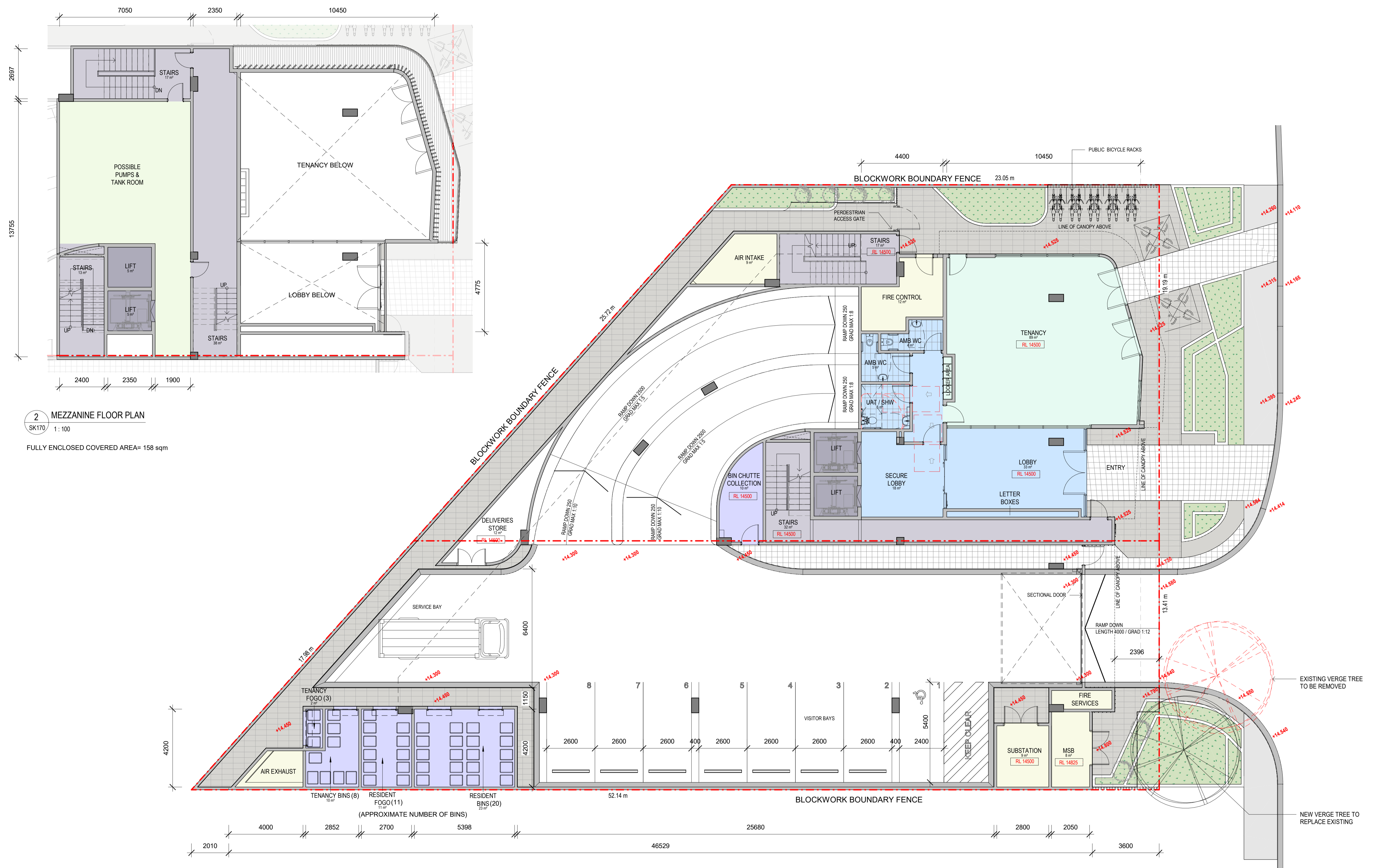


**METRONET**

facebook.com/groups/victoriaparkcanning | twitter.com/metronetperth | @metronet\_perth

TOWN OF VICTORIA PARK  
Received: 15/02/2024

## **APPENDIX B: DEVELOPMENT PLANS**



2 MEZZANINE FLOOR PLAN

SK170 1:100

FULLY ENCLOSED COVERED AREA= 158 sqm

1 GROUND FLOOR PLAN

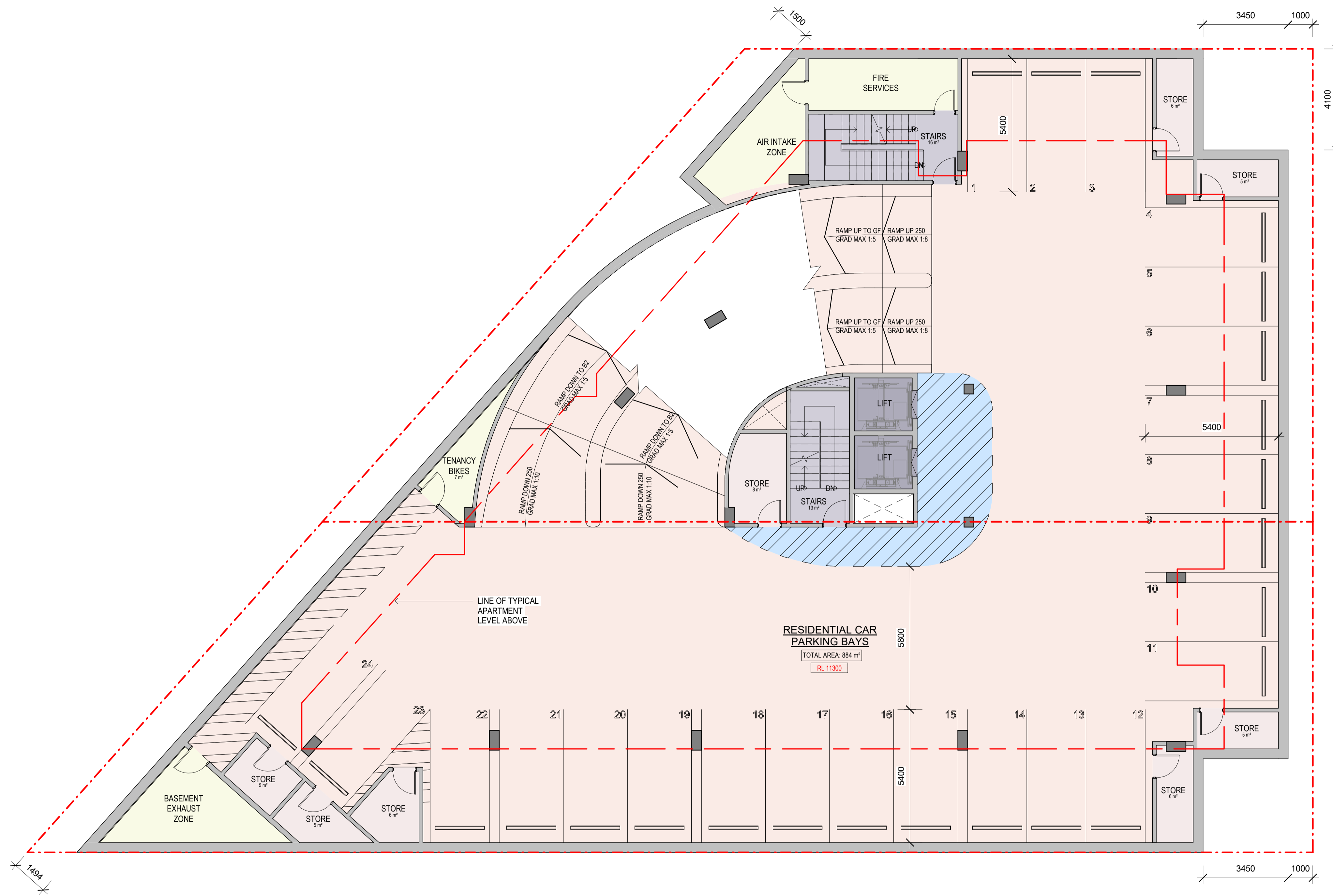
SK170 1:100

FULLY ENCLOSED COVERED AREA= 368 sqm

BANK STREET

PRELIMINARY ISSUE





1 B1 BASEMENT PLAN  
SK180 1:100

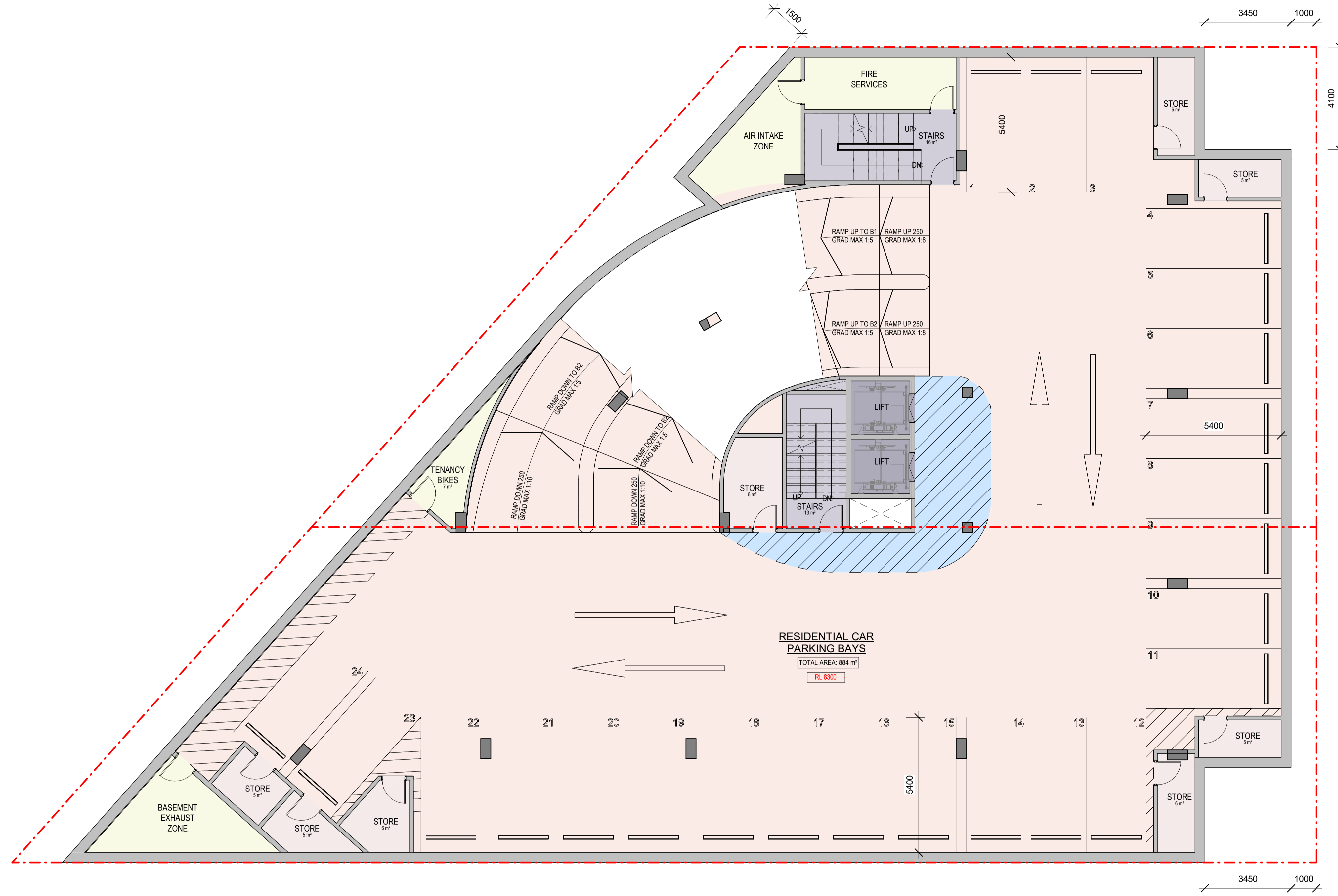
FULLY ENCLOSED COVERED AREA= 1039 sqm

RESIDENTIAL CAR  
PARKING BAYS  
TOTAL AREA: 884 m<sup>2</sup>  
RL 11300

GENERAL NOTE: THE APARTMENT AREAS SHOWN HERE ARE APPROXIMATE AND ARE MEASURED TO:  
- THE OUTSIDE FACE OF EXTERNAL WALLS  
- THE OUTSIDE FACE OF WALLS BETWEEN APARTMENT & LOBBY  
- THE MIDDLE OF PARTY WALLS  
- THESE AREA MEASUREMENTS ARE 'ARCHITECTURAL MEASUREMENTS' AND ARE DIFFERENT FROM 'SURVEY DIMENSIONS'.

PRELIMINARY ISSUE





**1 B2 BASEMENT PLAN**  
SK180/ 1:100  
FULLY ENCLOSED COVERED AREA= 1039 sqm

GENERAL NOTE: THE APARTMENT AREAS SHOWN HERE ARE APPROXIMATE AND ARE MEASURED TO:  
 - THE OUTSIDE FACE OF EXTERNAL WALLS  
 - THE OUTSIDE FACE OF WALLS BETWEEN APARTMENT & LOBBY  
 - THE MIDDLE OF PARTY WALLS  
 - THESE AREA MEASUREMENTS ARE "ARCHITECTURAL MEASUREMENTS" AND ARE DIFFERENT FROM "SURVEY DIMENSIONS".

PRELIMINARY ISSUE



1 B3 BASEMENT PLAN  
SK180 1:100  
FULLY ENCLOSED COVERED AREA= 943 sqm

GENERAL NOTE: THE APARTMENT AREAS SHOWN HERE ARE APPROXIMATE AND ARE MEASURED TO:  
 - THE OUTSIDE FACE OF EXTERNAL WALLS  
 - THE OUTSIDE FACE OF WALLS BETWEEN APARTMENT & LOBBY  
 - THE MIDDLE OF PARTY WALLS  
 - THESE AREA MEASUREMENTS ARE "ARCHITECTURAL MEASUREMENTS" AND ARE DIFFERENT FROM "SURVEY DIMENSIONS".

PRELIMINARY ISSUE