Metro Outer Joint Development Assessment Panel Agenda

Meeting Date and Time: Monday, 12 December 2022; 9:30am
Meeting Number: MOJDAP/218
Meeting Venue: Electronic Means

To connect to the meeting via your computer -
https://us06web.zoom.us/j/87524924849

To connect to the meeting via teleconference dial the following phone number -
+61 8 6119 3900
Insert Meeting ID followed by the hash (#) key when prompted - 875 2492 4849

This DAP meeting will be conducted by electronic means (Zoom) open to the public rather than requiring attendance in person.

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Attendance

DAP Members

Mr Eugene Koltasz (Presiding Member)
Ms Karen Hyde (Deputy Presiding Member)

Item 8.1
Cr Lorna Buchan (Local Government Member, City of Rockingham)
Cr Mark Jones (Local Government Member, City of Rockingham)

Item 8,2
Cr Vinh Nguyen (Local Government Member, City of Wanneroo)
Cr Frank Cvitan (Local Government Member, City of Wanneroo)

Item 8.3
Cr Michelle Rich (Local Government Member, Shire of Serpentine Jarrahdale)
Cr Lauren Strange (Local Government Member, Shire of Serpentine Jarrahdale)

Officers in attendance

Item 8.1
Mr David Banovic (City of Rockingham)
Mr Mike Ross (City of Rockingham)

Item 8.2
Mr Greg Bowering (City of Wanneroo)
Ms Alexandria Wood (City of Wanneroo)

Item 8.3
Mr Andrew Trosic (Shire of Serpentine Jarrahdale)
Ms Heather O'Brien (Shire of Serpentine Jarrahdale)

Minute Secretary

Mr Stephen Haimes (DAP Secretariat)

Applicants and Submitters

Item 8.1
Mr David Read (element)

Item 8.2
Mr Reegan Cake (Dynamic Planning & Developments)

Item 8.3
Mr Robert Walker (Planning Solutions)

Members of the Public / Media

Nil.

1. Opening of Meeting, Welcome and Acknowledgement

The Presiding Member declares the meeting open and acknowledges the traditional owners and pay respects to Elders past and present of the land on which the meeting is being held.

This meeting is being conducted by electronic means (Zoom) open to the public. Members are reminded to announce their name and title prior to speaking.

2. Apologies

Mr Jason Hick (Third Specialist Member)

3. Members on Leave of Absence

Nil.

4. Noting of Minutes

Signed minutes of previous meetings are available on the DAP website.

5. Declarations of Due Consideration

Any member who is not familiar with the substance of any report or other information provided for consideration at the DAP meeting must declare that fact before the meeting considers the matter.

6. Disclosure of Interests

Member	Item	Nature of Interest
Cr Lorna Buchan	8.1	Impartiality Interest – Under clause 2.4.9 of the DAP Code of Conduct, Cr Buchan participated in the prior Council decision in accordance with her functions as a member of a local government. Cr Buchan undertakes to exercise judgment in relation to any DAP application before her, which she will consider on its planning merits.
Cr Mark Jones	8.1	Impartiality Interest – Under clause 2.4.9 of the DAP Code of Conduct, Cr Jones participated in the prior Council decision in accordance with his functions as a member of a local government. Cr Jones undertakes to exercise judgment in relation to any DAP application before him, which he will consider on its planning merits.

7. Deputations and Presentations

7.1 Mr Tim Houweling (Cornerstone Legal) presenting against the recommendation for the application at Item 8.1. The presentation will address issues of legality about the proposed development.

7.2 Mr David Read (element) presenting in support of the recommendation for the application at Item 8.1. The presentation will address the planning merits of the application, address the issues raised during consultation and request the deletion of Condition 8(i) regarding the screening of west facing balconies.

7.3 Ms Tiffany Molloy (DMG Architects) presenting in support of the recommendation for the application at Item 8.1. The presentation will address the merits of the application and how the application has evolved during the assessment process to be worthy of approval.

7.4 Mr Reegan Cake (Dynamic Planning) presenting in support of the recommendation for the application at Item 8.2. The presentation will address support for the proposed development and address the conditions of approval.

The City of Rockingham, City of Wanneroo and Shire of Serpentine Jarrahdale may be provided with the opportunity to respond to questions of the panel, as invited by the Presiding Member.

8. Form 1 – Responsible Authority Reports – DAP Applications

8.1 Lot 62 (No. 89) Harrison Street, Rockingham & Lots 95 and 94 (142-144) Parkin Street, Rockingham

Development Description:	Propose 47 Multiple Dwellings
Applicant:	element
Owner:	Mr P S R Jackson
Responsible Authority:	City of Rockingham
DAP File No:	DAP/22/02311

8.2 67 (Lot 500) Kingsway, Madeley & 39 (Lot 501) King David Boulevard, Madeley

Development Description:	Child Care Centre
Applicant:	Dynamic Planning & Developments
Owner:	Justin Sonia Pty Ltd
Responsible Authority:	City of Wanneroo
DAP File No:	DAP/22/02308

8.3 Lot 9002 (formally Lot 801), 1780 Thomas Road, Oakford

Development Description:	Proposed Service Station, Rural Supplies Store and Veterinary Clinic
Applicant:	Planning Solutions
Owner:	Ms T D & Mr V Borello
Responsible Authority:	Shire of Serpentine Jarrahdale
DAP File No:	DAP/22/02211

9. Form 2 – Responsible Authority Reports – DAP Amendment or Cancellation of Approval

Nil.

10. State Administrative Tribunal Applications and Supreme Court Appeals

Current SAT Applications				
File No. & SAT DR No.	**LG Name**	**Property Location**	**Application Description**	**Date Lodged**
DAP/18/01543 DR 75/2022	City of Joondalup	Lot 649 (98) O'Mara Boulevard, Iluka	Commercial development	02/05/2022
DAP/22/02148 DR146/2022	City of Rockingham	Lot 53 (No 67) Folly Road, Baldivis	Proposed place of worship (Hindu Temple)	26/08/2022
DAP/22/02220 DR162/2022	City of Kwinana	Lot 9507 Berthold Street, Orelia	Proposed Child Care Centre	28/09/2022
DAP/22/02159 DR163/2022	Shire of Murray	No. 630 (Lot 137) Pinjarra Road, Furnissdale	Proposed Petrol Filling Station	28/09/2022

11. General Business

In accordance with Section 7.3 of the DAP Standing Orders 2020 only the Presiding Member may publicly comment on the operations or determinations of a DAP and other DAP members should not be approached to make comment.

12. Meeting Closure

Government of **Western Australia**
Development Assessment Panels

Presentation Request Form

Regulation 40(3) and DAP Standing Orders 2020 cl. 3.5

Must be submitted <u>at least</u> 72 hours (3 ordinary days) before the meeting

Presentation Request Guidelines

Persons interested in presenting to a DAP must first consider whether their concern has been adequately addressed in the responsible authority report or other submissions. Your request will be determined by the Presiding Member based on individual merit and likely contribution to assist the DAP's consideration and determination of the application.

Presentations are not to exceed **5 minutes**. It is important to note that the presentation content will be **published on the DAP website** as part of the meeting agenda.

Please complete a separate form for each presenter and submit to daps@dplh.wa.gov.au

Presenter Details

Name	Tim Houweling
Company (if applicable)	Cornerstone Legal
Please identify if you have any special requirements:	**YES ☐** **NO ☒** If yes, please state any accessibility or special requirements:

Meeting Details

DAP Name	Metro Outer Joint Development Assessment Panel
Meeting Date	12/12/2022
DAP Application Number	DAP/22/02311
Property Location	Lot 62 Harrison Street and Lots 94 and 95 Parkin Street, Rockingham
Agenda Item Number	8.1

Presentation Details

I have read the contents of the report contained in the Agenda and note that my presentation content will be published as part of the Agenda:	**YES ☒**
Is the presentation in support of or against the <u>report recommendation</u>)? *(contained within the Agenda)*	**SUPPORT ☐** **AGAINST ☒**
Is the presentation in support of or against the <u>proposed development</u>?	**SUPPORT ☐** **AGAINST ☒**
Will the presentation require power-point facilities?	**YES ☒** **NO ☐** **If yes, please attach**

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Development Assessment Panels

Presentation Content*

These details may be circulated to the local government and applicant if deemed necessary by the Presiding Member. Handouts or power points will not be accepted on the day.

Brief sentence summary for inclusion on the Agenda	*The presentation will address:* Issues of legality about the proposed development.

In accordance with Clause 3.5.2 of the *DAP Standing Orders*, your presentation request must also be accompanied with a written document detailing the content of your presentation.

Please attach detailed content of presentation or provide below:

- Issues surrounding due consideration of the relevant Deemed Provisions.
- Bulk and Form of the Development.
- Height Inconsistent with the R-Codes and Policy, and no basis for the exercise of discretion in favour of varying the height.
- Amenity impacts on surrounding development.
- Overlooking/Visual Impact.

Proposed 47 Multiple Dwellings Harrison and Parkin Street, Rockingham

Comparative Images

Comparison of Development Fronting Harrison Street



Figure 1: Proposed Development Fronting Harrison Street in Comparison to Neighbouring Properties

Comparison of Development Fronting Parkin Street



Figure 2: The Proposed Development Fronting Parkin Street in Comparison to Neighbouring Properties.

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Development Assessment Panels

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Presenter Details

Name	David Read
Company (if applicable)	element
Please identify if you have any special requirements:	**YES** ☐ **NO** ☒ If yes, please state any accessibility or special requirements:

Meeting Details

DAP Name	Metro Outer JDAP
Meeting Date	Monday 12 December
DAP Application Number	DAP/22/02311
Property Location	Lot 62 (#89) Harrison Street & Lots 94 and 95 (#142-144) Parkin Street Rockingham
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Is the presentation in support of or against the proposed development?	**SUPPORT** ☒ **AGAINST** ☐
Will the presentation require power-point facilities?	**YES** ☐ **NO** ☒ **If yes, please attach**

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Development Assessment Panels

Presentation Content*

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Brief sentence summary for inclusion on the Agenda	*The presentation will address:* The presentation will outline the planning merits of the application, address the issues raised during consultation and request the deletion of Condition 8(i) regarding the screening of west facing balconies.

In accordance with Clause 3.5.2 of the *DAP Standing Orders*, your presentation request must also be accompanied with a written document detailing the content of your presentation.

7 Minutes is respectfully requested given the quantum of matters raised in the objections.

Key Points

- The area is in transition, as evident by the objections, but it's a very slow transition. The planning framework has been in place since 2012 and people have had a decade to make investment decisions based on what the planning framework allows.

- The site is zoned 'City Centre' under the MRS – not just Urban and there is a clear intent in the framework to create a denser urban precinct around the Waterfront core to support the level of activity, employment and amenity, but also provide housing diversity and choice.

- Whist there are State led density targets, this framework is the City's framework, not the State's and I think the City have been ahead of the game introducing the framework a decade ago and credit should go to them for holding the line on achieving the vision.

- The development proposed is highly compliant with the desired vision and intent of the framework.

- In response to matters raised in objections, please note:

    - The legal advice provided by Lavan Legal (Page 465) makes clear that Clause 67(m) of the P&D Regulations has been changed to ensure regard is given to 'future character and amenity'
    - The City's Local Planning Policy 3.2.5 for the Waterfront clearly defines height to exclude lift overruns and roof plant and structures, from the assessment of building height.
    - The planning framework allows for nil setbacks to a 3-storey high podium level and then a 2-storey tower on top up to 5 levels with the upper two levels setback at 4m.
    - The development proposed is a significant under development of the building envelope, especially when you look at the Harrison Street end at three storeys and no building bulk in the middle. The setback encroachments are all very minor and have little or no amenity impact and largely assist with building detail, articulation and privacy.
    - Overshadowing is very limited given the lot orientation and fully complies.
    - Compliance with the privacy cone of vision requirements does not mean complete privacy for neighbours. The development achieves a balance between privacy, outlook and solar access, ensuring that adjoining properties'

sensitive rooms and areas of are not unreasonably impacted, demonstrated below:

- Overall, the development is sited, designed and oriented to avoid direct overlooking of adjoining properties on Harrison Street and particularly to the development to the west at 87 Harrison Street where the pool area is considered sensitive. The proposed North building located on 89 Harrison Street, is small and sited to the northern part of the lot, and as a result no part of the building is located opposite the 87 Harrison pool area and all windows are either set back according to the framework or are screened. The north facing balconies on the Southern building located on 142-144 Parkin Street can all comply at 6 metres, and there is a further 13 metres to the pool area, which is then three times the required setback to a balcony.
- The area of non-compliance is to the western and eastern side of the Parkin Street or southern building. The balconies on the eastern side overlook a driveway. On the western side, the architect has cleverly proposed a design solution with planters that ensure that the residents can't look down into the cone of vision area, but the dwellings will still enjoy a longer view aspect and outlook, plus be able to capture the cooling summer south westerly breeze.
- We also note that if there was redevelopment of the property in line with the planning framework, then their architect could propose a different design solution to have regard for the balconies, but it may even be terrace dwellings with an access driveway down the eastern side or some other lower scale development in which case reducing the amenity of the occupants of the affected apartments would be superfluous.
- We also question whether the intent of Council's Waterfront Policy was to ever apply the visual privacy requirements of the R-Codes given: the date of the Policy preceded the Apartment Code; it does not make reference to complying with the R-Codes applicable at the time; and it is clear in the document that a 4m tower setback was the desired outcome and it had regard for privacy in its preparation, but was silent on imposing any additional development standards. Was the intent to deal with privacy in the same way the Melville side of the Canning Bridge ACP precinct is and just have 8m separation between opposing balconies?

- We therefore request condition 8 (i) relating to the balcony privacy screens to be deleted.
- The Architect will go through the architectural merits next.

Thank you

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Development Assessment Panels

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Presenter Details

Name	Tiffany Molloy
Company (if applicable)	DMG Architecture
Please identify if you have any special requirements:	**YES** ☐ **NO** ☒ If yes, please state any accessibility or special requirements:

Meeting Details

DAP Name	Metro Outer JDAP
Meeting Date	Monday 12 December
DAP Application Number	DAP/22/02311
Property Location	Lot 62 (#89) Harrison Street & Lots 94 and 95 (#142-144) Parkin Street Rockingham
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Is the presentation in support of or against the report recommendation)? *(contained within the Agenda)*	**SUPPORT** ☒ **AGAINST** ☐
Is the presentation in support of or against the proposed development?	**SUPPORT** ☒ **AGAINST** ☐
Will the presentation require power-point facilities?	**YES** ☒ **NO** ☐ **If yes, please attach**

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Development Assessment Panels

Presentation Content*

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Brief sentence summary for inclusion on the Agenda	*The presentation will address:* The merits of the application and how the application has evolved during the assessment process to be worthy of approval.

In accordance with Clause 3.5.2 of the *DAP Standing Orders*, your presentation request must also be accompanied with a written document detailing the content of your presentation.

Please attach detailed content of presentation or provide below:

The presenter respectfully requests a 10 minute deputation to go through the details of the development.

The presentation will include a power point presentation that will address:

- How the plans have evolved during the pre-lodgement and lodgement phases, including further changes made following advertising.
- How the scale of development is sympathetic to the scale of development in Harrison Street and the neighbouring amenity.
- The visual privacy solution proposed.
- The sustainability merits of the proposal.
- The architectural merits of the proposal.
- The retention of the Norfolk Island Pine Tree.
- The universal access apartments actually total 10 ‘Silver standard’ and comply.

Thank you



ARBOUR APARTMENTS

HARRISON STREET & PARKIN STREET
ROCKINGHAM WA | DECEMBER 2022

DMG
ARCHITECTURE

CONTENTS

1 EVOLUTION OF DESIGN IN RESPONSE TO DRP & ADVERTISING

2 BUILT FORM AND SCALE

3 VISUAL PRIVACY & AMENITY

4 SUSTAINABILITY

5 ARCHITECTURAL DESIGN

6 NORFOLK ISLAND PINE TREE RETENTION

7 UNIVERSAL ACCESS APARTMENTS

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PERSPECTIVE
NTS





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ARCHITECTURE

EVOLUTION OF DESIGN HARRISON ST

- ORIGINAL - 6 STOREYS 1 BUILDINGS 45 APARTMENTS
- PROPOSAL - 5 STOREYS 1 BUILDING 42 APARTMENTS



146 140 **SUBJECT SITE 142-144 PARKIN STREET** 146 148





DMG
ARCHITECTURE

EVOLUTION OF DESIGN PARKIN ST

- ORIGINAL - 6 STOREYS 2 BUILDINGS 10 APARTMENTS
- PROPOSAL - 3 STOREYS 1 BUILDING 5 APARTMENTS



93 91 **SUBJECT SITE 89 HARRISON ST** 87 85

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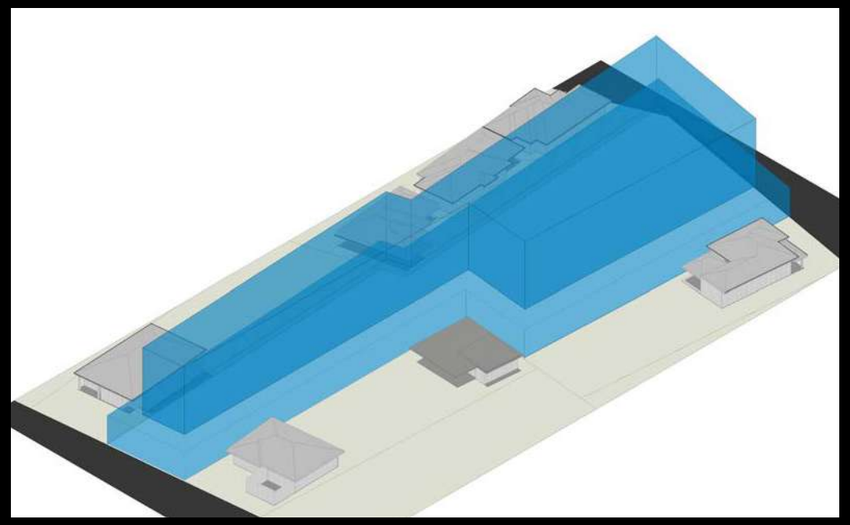

ALLOWABLE BUILD ENVELOPE



PRELIMINARY DESIGN - FULL SITE COVER
OVER HEIGHT (55 APMTS 5 STOREYS)



FINAL DESIGN
PARKIN ST MAIN FORM
HARRISON ST REDUCED DEVELOPMENT
47 AMPTS 4 STOREYS

EVOLUTION OF DESIGN FORM + SCALE

- ORIGINAL - 6 STOREYS 3 BUILDINGS 55 APARTMENTS
- PROPOSAL - 3/5 STOREYS 2 BUILDINGS
- 47 APARTMENTS

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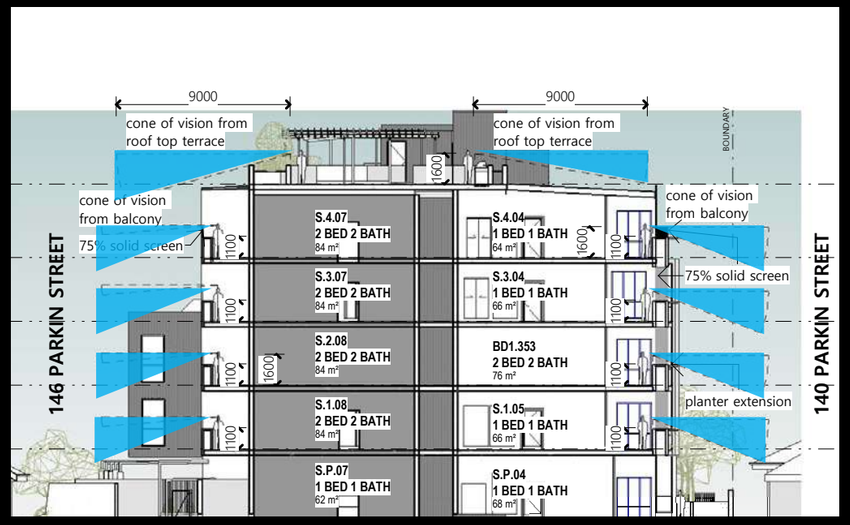
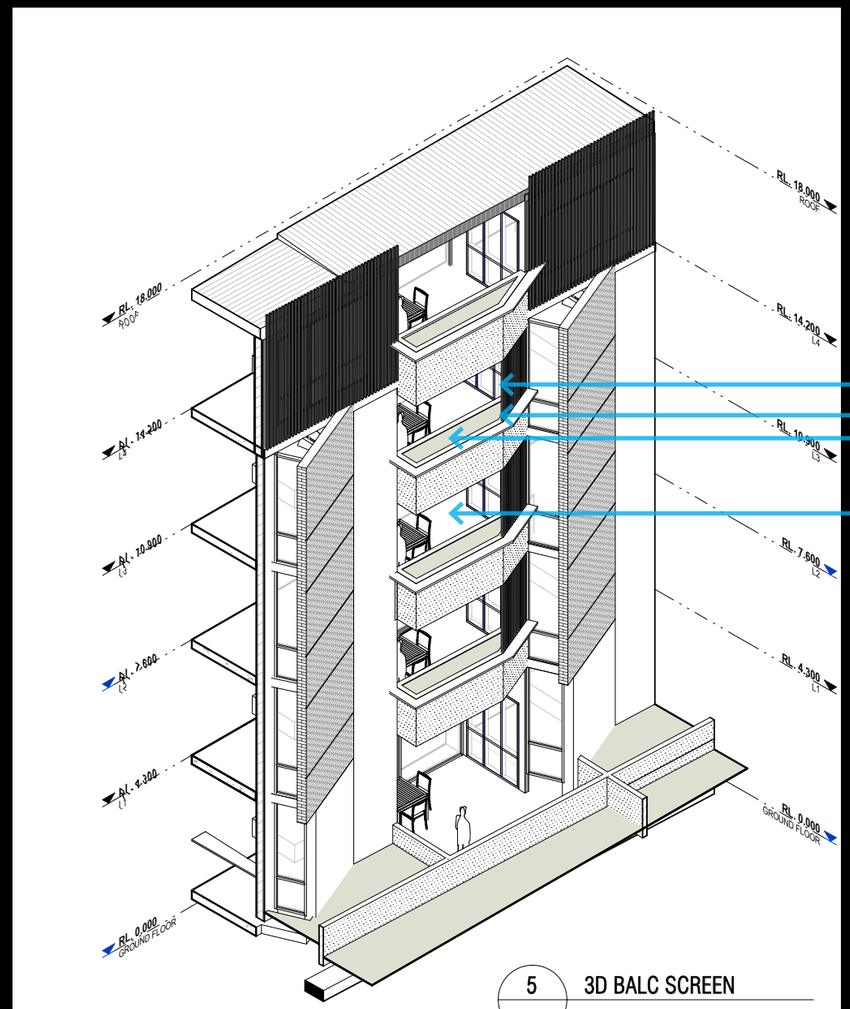
EVOLUTION OF DESIGN
SITE ELEVATION

- ORIGINAL - 6 STOREYS 3 BUILDINGS 55 APARTMENTS
- PROPOSAL - 3/5 STOREYS 2 BUILDINGS
- 47 APARTMENTS



VISUAL PRIVACY DIAGRAM
SOUTH BUILDING



BATTEN SCREEN
HORIZONTAL PLANTER LEDGE EXTENSION
1200H PLANTER

BALCONY SETBACK

PRIVACY CONTROL MEAUSRED -
BALCONY SCREENING

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VISUAL PRIVACY

- SCREENING
- VERTICAL BATTENS
- HORIZONTAL PLANTER LEDGE
- TOP FLOOR SET BACK

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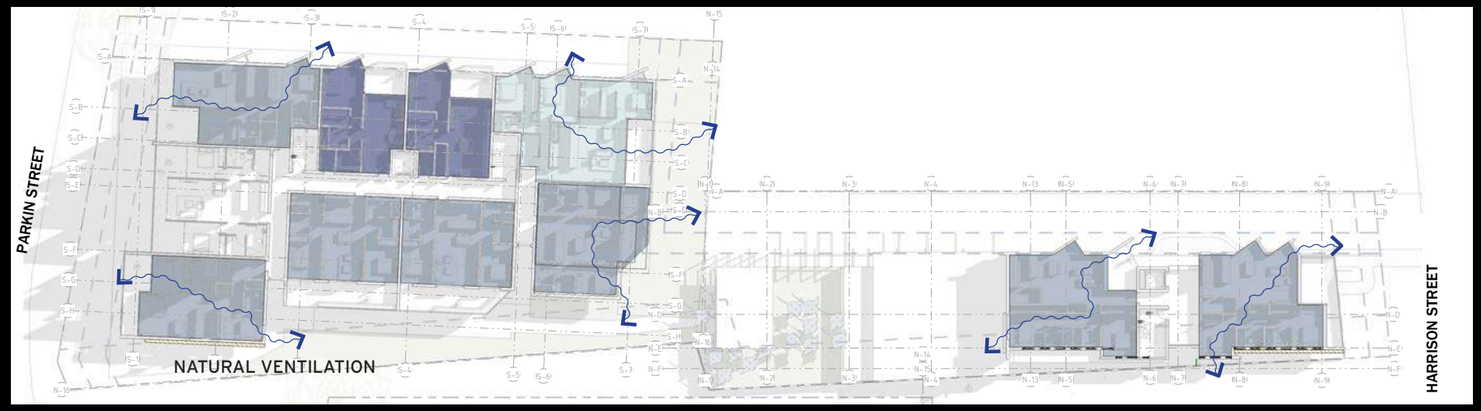
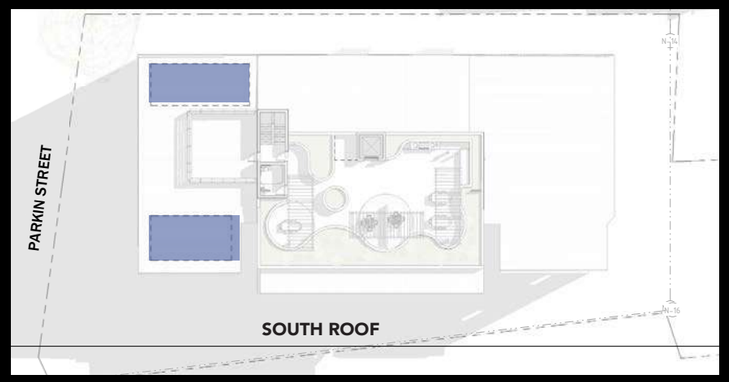
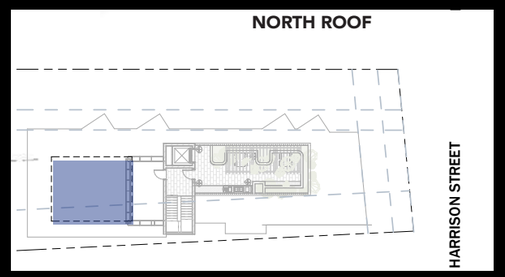


NATURAL VENTILATION





SOLAR PANEL PROVISION



SUSTAINABILITY

- EXTENDED WING WALLS + DEEP EAVES TO WESTERN FACADE
- NATURAL LIGHT + VENTILATION THROUGH APARTMENTS AND ALONG SHARED CORRIDORS
- SOLAR PANELS
- SOLAR ACCESS CONSIDERED THROUGH APARTMENT ORIENTATION

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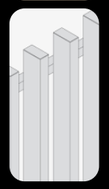



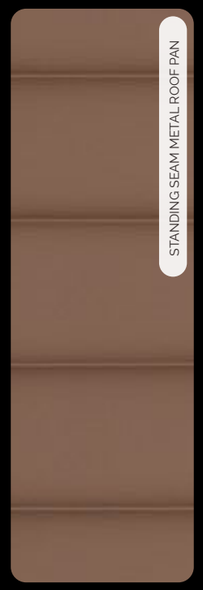

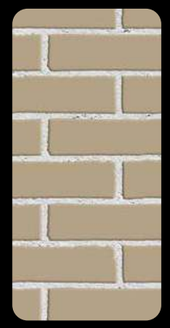







ARCHITECTURAL MERIT

- REFERENCE AND CONSIDERATION OF HISTORICAL AND LOCAL CONTEXT
- ROBUST MATERIALS + TIMBER ARBOUR REFERENCING ROCKINGHAM HISTORY AS TIMBER TRADING PORT
- SIGNIFICANT LANDSCAPING WITH LOCAL SPECIES
- ANGLED WING WALLS + DEEP EAVES FOR SHADING

Careful attention has been paid to the wider context of Rockingham and consideration given to how the design can respect, build on this character and enhance local activation.

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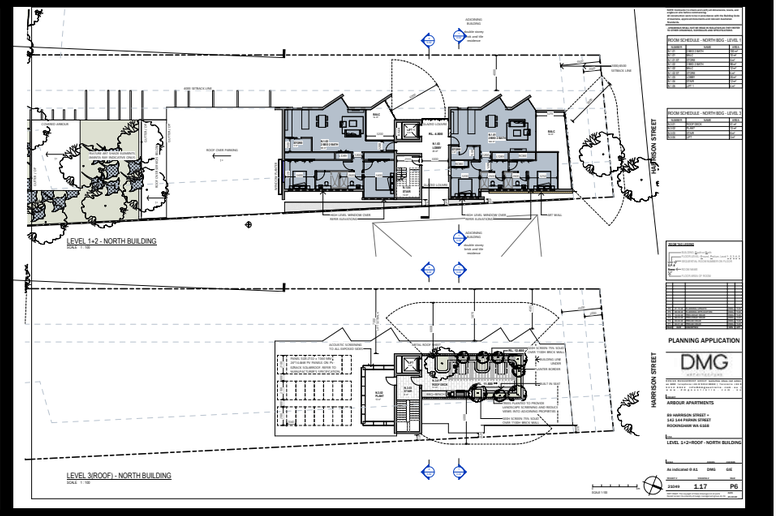
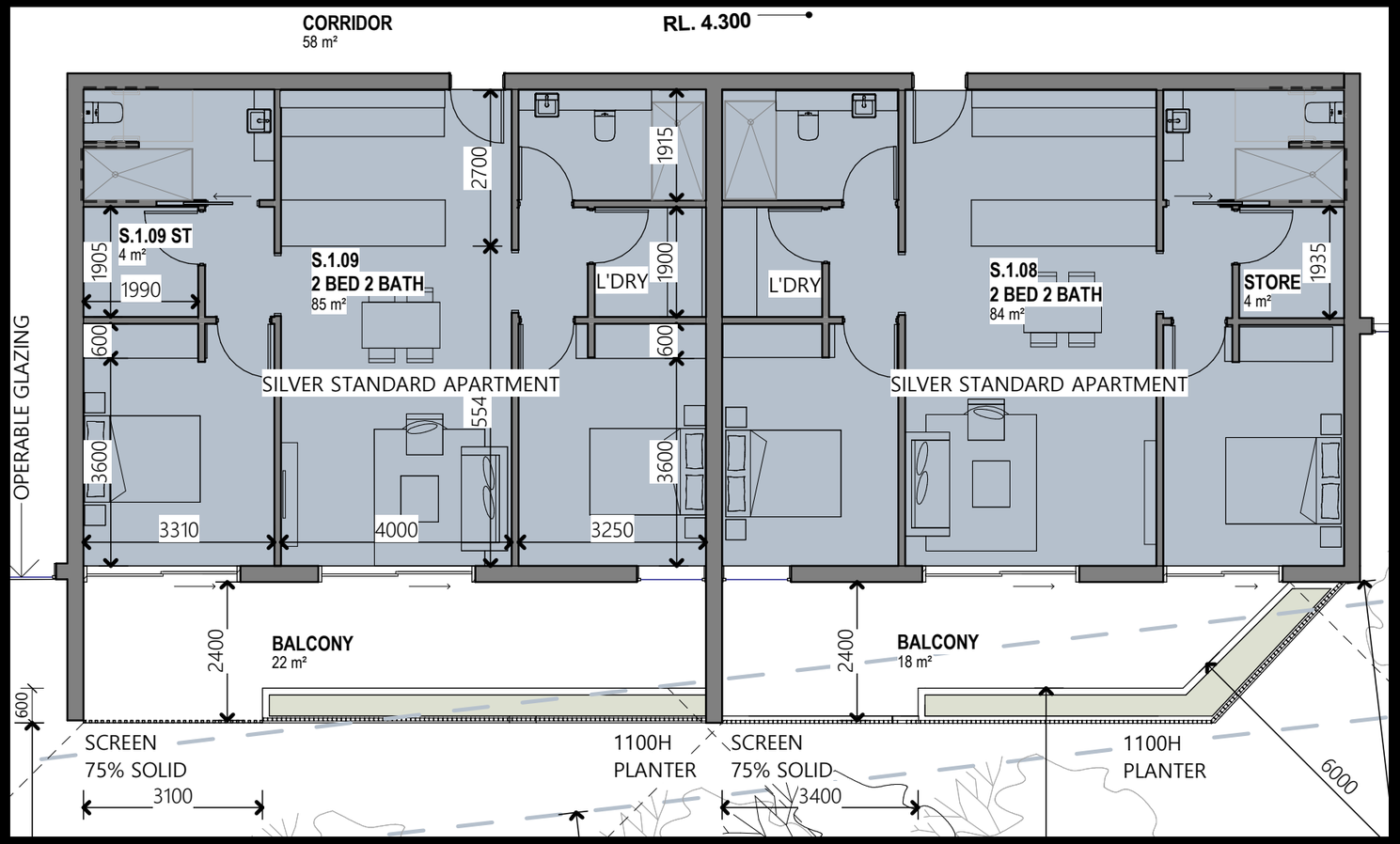
NORFOLK ISLAND PINE

- MAINTAIN SIGNIFICANT NORFOLK PINE ON SITE
- REDUCED BASEMENT TO PROTECT ROOT BALL
- SETBACK BUILDING FROM STRUCTURAL BRANCHES
- ARBOURIST REPORT TO PROTECT THROUGHOUT CONSTRICTION







DMG
ARCHITECTURE

UNIVERSAL ACCESS

- 10 APARTMENTS TOTAL
- 8 IN SOUTH BUILDING
- 2 IN NORTH BUILDING
- SILVER STANDARD MINIMUM

DMG
ARCHITECTURE



PERSPECTIVE
NTS

DMG
ARCHITECTURE



PERSPECTIVE
NTS

DMG

ARCHITECTURE

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Presenter Details

Name	Reegan Cake
Company (if applicable)	Dynamic Planning and Developments
Please identify if you have any special requirements:	**YES** ☐ **NO** ☒ If yes, please state any accessibility or special requirements: Click or tap here to enter text.

Meeting Details

DAP Name	Metro Outer Joint Development Assessment Panel
Meeting Date	12 December 2022
DAP Application Number	DAP/22/02308
Property Location	Lot 500 (No. 67) Kingsway & Lot 501 (No. 39) King David Boulevard, Madeley
Agenda Item Number	8.2

Presentation Details

I have read the contents of the report contained in the Agenda and note that my presentation content will be published as part of the Agenda:	**YES** ☒
Is the presentation in support of or against the report recommendation)? *(contained within the Agenda)*	**SUPPORT** ☒ **AGAINST** ☐
Is the presentation in support of or against the proposed development?	**SUPPORT** ☒ **AGAINST** ☐
Will the presentation require power-point facilities?	**YES** ☒ **NO** ☐ **If yes, please attach**

Government of **Western Australia**
Development Assessment Panels

Presentation Content*

These details may be circulated to the local government and applicant if deemed necessary by the Presiding Member. Handouts or power points will not be accepted on the day.

Brief sentence summary for inclusion on the Agenda	*The presentation will address:* Support for the proposed development and address the conditions of approval.

In accordance with Clause 3.5.2 of the *DAP Standing Orders*, your presentation request must also be accompanied with a written document detailing the content of your presentation.

Please attach detailed content of presentation or provide below:

See attached presentation.

METRO OUTER JOINT DEVELOPMENT ASSESSMENT PANEL
PROPOSED CHILD CARE CENTRE
LOT 500 (NO. 67) KINGSWAY & LOT 501 (NO. 39) KING DAVID BOULEVARD, MADELEY

12 DECEMBER 2022





AGEM PROPERTY GROUP

DYNAMIC PLANNING AND DEVELOPMENTS

Responsible Authority Recommendation

- The City of Wanneroo have recommended approval for the proposed development, which we are fully supportive of.
- In reviewing the proposed conditions of approval, all are supported with a minor modification to be requested to Condition 13 around the timing of the required Parking Management Plan.

Responsible Authority Recommendation

That the Metro Outer JDAP resolves to:

1. **Approve** DAP Application reference DAP/22/02308 and the accompanying plans provided in **Attachment 1** in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, and the provisions of the City of Wanneroo District Planning Scheme No. 2, subject to the following conditions:



SITE CONTEXT

18km north of Perth CBD and 1km north-east of the Kingsway Shopping Centres.

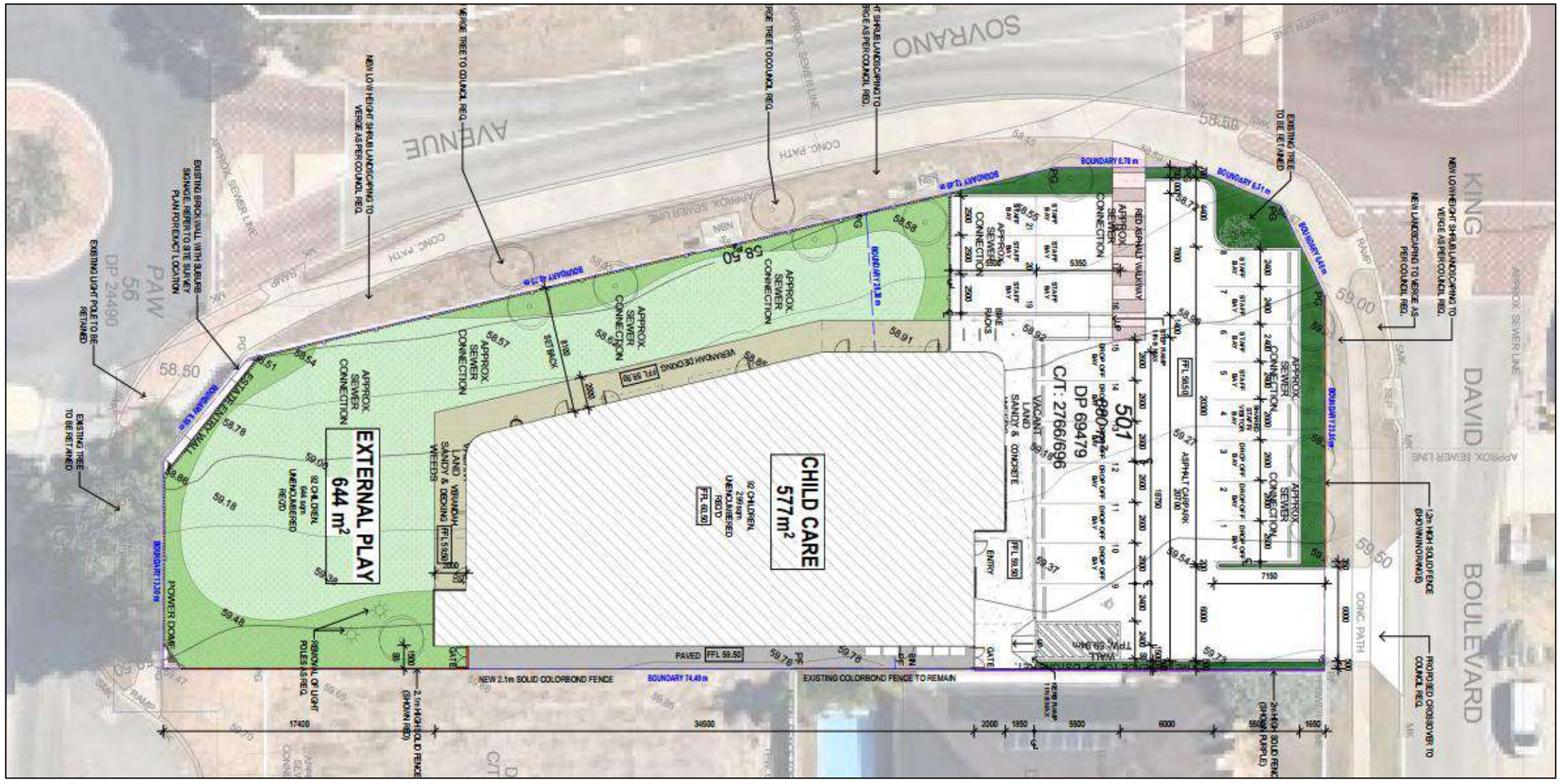
Schools in close proximity include:

- Kingsway Christian College (1km)
- Madeley Primary School (1km)
- Ashdale Secondary College (1.6km)
- Ashdale Primary School (2.1km)

The site is bound by three (3) streets being King David Boulevard, Sovrano Avenue and Kingsway. To the east of the site is existing residential development and a vacant lot.

Proposed Development

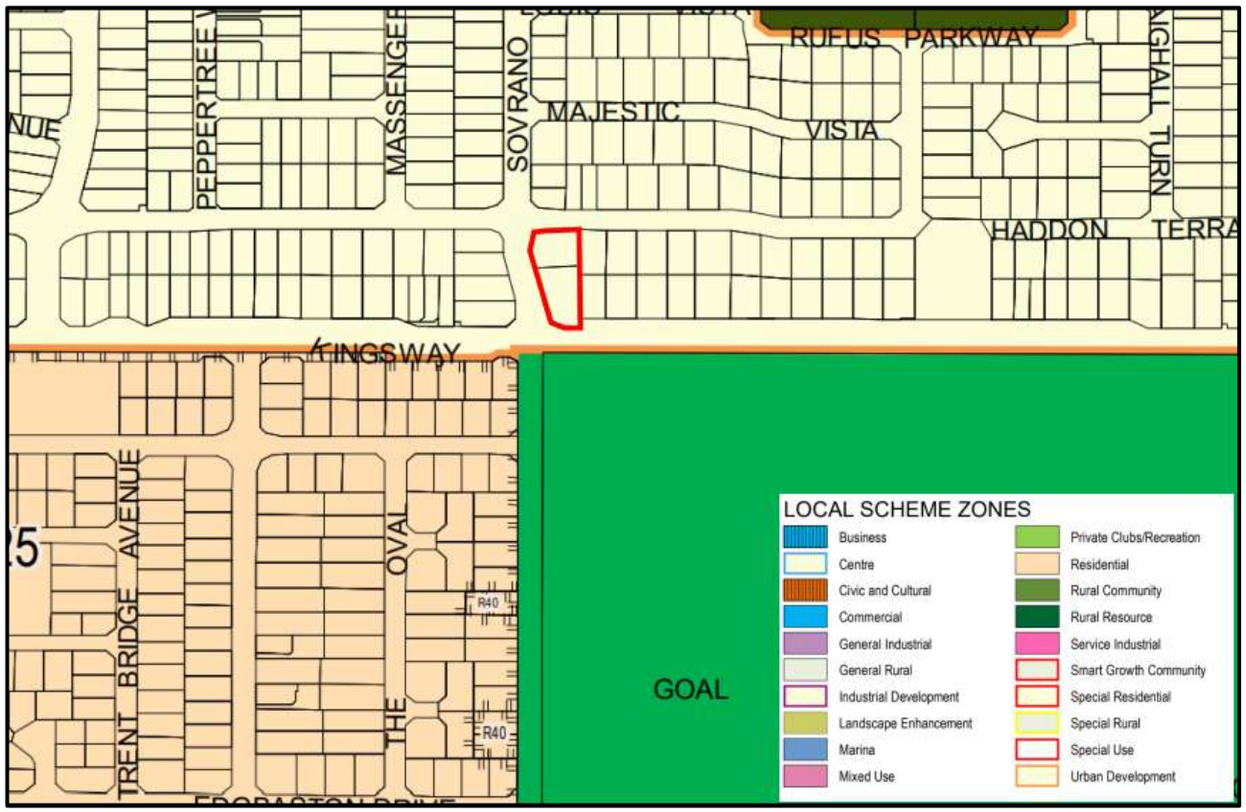
- Child Care Centre accommodating a total of 92 children and 13 staff.
- Operating between 6.30am to 6.30pm Monday to Friday.
- 577sqm of internal area and 644sqm of outdoor play area.
- One (1) crossover to King David Boulevard which enables access to 21 onsite car bays – 11 bays for pick up and drop off and 10 staff bays.
- Staff rosters will be staggered with peak staff levels occurring outside of pick up and drop of periods.

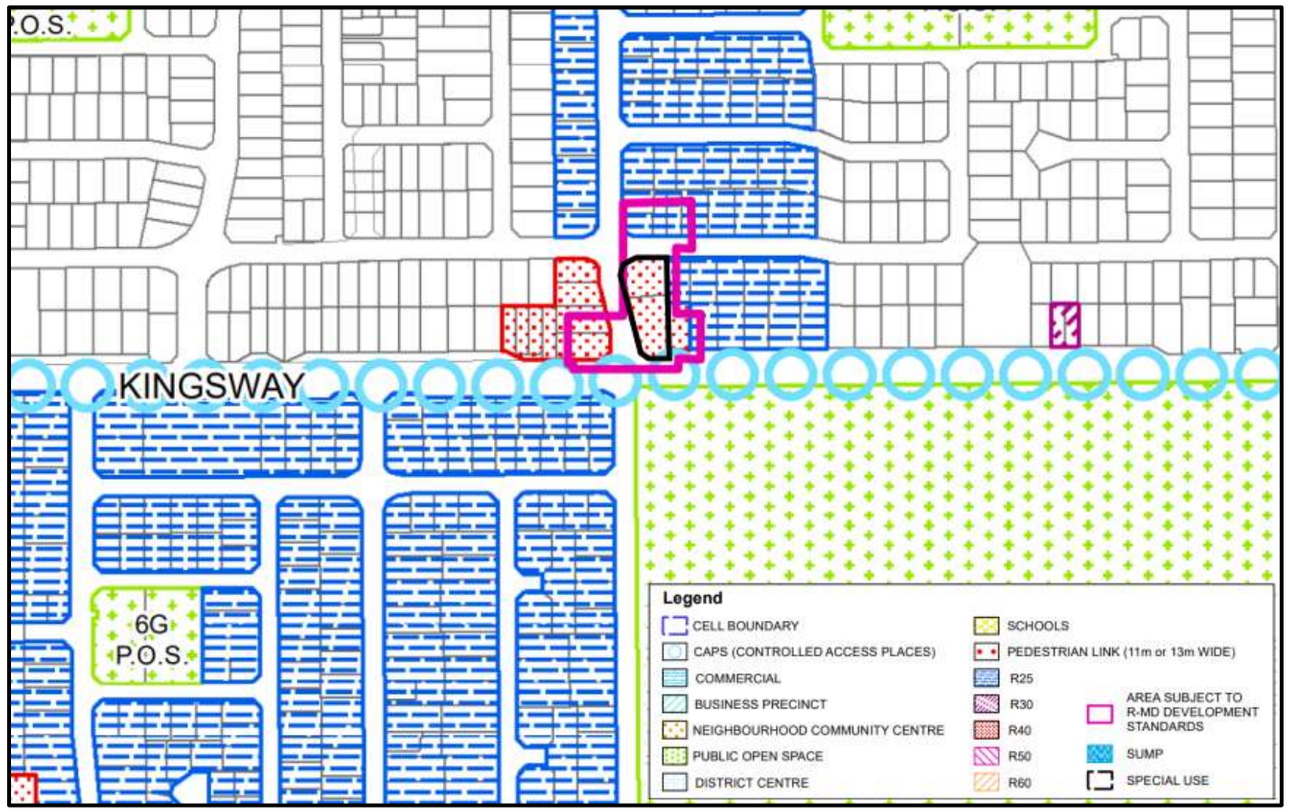


DYNAMIC PLANNING AND DEVELOPMENTS

Planning Framework

- Designated as 'Residential' under the East Wanneroo Cell 6 Structure Plan (ASP8)
- Child Care Centre is a Discretionary (D) land use.
- The development is generally compliant with the applicable planning framework with the exception of:
    - A reduced setback to the adjoining residential development on the eastern boundary. This variation is supported by the City.
    - Reduced landscaping in the car parking area to King David Boulevard and Sovrano Avenue. This variation is supported by the City.
    - A car parking shortfall of six (6) bays. This variation is supported by the City.





DYNAMIC PLANNING AND DEVELOPMENTS

Conditions of Approval

- We are supportive of all proposed conditions of approval and simply seek a minor modification to proposed Condition 13.
- Condition 13 requires a Parking Management Plan (PMP) to be provided. We have no objections to providing the PMP and simply seek a modification of Condition 13 to require this 'prior to occupancy' as opposed to prior to the building permit.
- As the PMP relates to the operation of the proposed business we don't consider that it is necessary to provide the PMP prior to the issuance of a building permit.

13. A Parking Management Plan shall be submitted for approval to the City prior to an application for a building permit being made. The plan is to address how the Centre will adequately cater for the expected number of staff and customers on-site. The Parking Management Plan is include the following:

    a. To help reduce noise emissions from car doors, there is to be no parking within Car Bay No.1 prior to 7:00am;
    b. To avoid confusion of car parking allocation, each car bay shall be marked and clearly signposted as dedicated as either a staff bay or drop off/pick up bay; and
    c. A sign is to be placed on-site to state that parking within the allocated drop off/pick up bays is limited to a maximum of 15 minutes.

Conclusion

- In summary, we support the City's recommendation of approval and all proposed conditions of approval.
- The provided technical reports demonstrate that the development will have no impact on the residential amenity of adjoining properties with respect to parking, traffic and noise.
- We consider that the development will provide a service to local residents whilst being compatible with the existing residential development in close proximity to the site.





LOT 62 HARRISON STREET AND LOTS 94 AND 95 PARKIN STREET, ROCKINGHAM - PROPOSED 47 MULTIPLE DWELLINGS

Form 1 – Responsible Authority Report
(Regulation 12)

DAP Name:	Metro Outer Joint Development Assessment Panel	
Local Government Area:	City of Rockingham	
Applicant:	Element Advisory Pty Ltd	
Owner:	Mr P S Jackson	
Value of Development:	$20,160,000.00 million ☒ Mandatory (Regulation 5) ☐ Opt In (Regulation 6)	
Responsible Authority:	City of Rockingham	
Authorising Officer:	Mr Peter Ricci, Director Planning and Development Services	
LG Reference:	DD020.2022.00000195.001	
DAP File No:	DAP/22/02311	
Application Received Date:	29 August 2022	
Report Due Date:	29 November 2022	
Application Statutory Process Timeframe:	90 days	
Attachment(s):	1. Development Plans 2. Development Application 3. Additional Supporting Information 4. Schedule of Submissions 5. Design Review Panel Meeting Notes	
Is the Responsible Authority Recommendation the same as the Officer Recommendation?	☒ Yes ☐ N/A	Complete Responsible Authority Recommendation section
	☐ No	Complete Responsible Authority and Officer Recommendation sections

Responsible Authority Recommendation

That the Metro Outer Joint Development Assessment Panel resolves to:

Approve DAP Application reference DAP/22/02311 and accompanying plans as contained within Attachment 1:

- Cover Sheet - Drawing No 0.00; Issue P6, dated 21 October 2022;
- 3D Harrison Street - Drawing No 10.01; Issue P6, dated 21 October 2022;
- 3D Parkin Street - Drawing No 10.02; Issue P6, 21 October 2022;
- Shadow Diagram - Drawing No 9.01; Issue P2, 21 October 2022;

- Allowable Development Envelope - Drawing No 3.05; Issue P1, 21 October 2022;
- Site Plan - Drawing No 1.02; Issue P6, 21 October 2022;
- Elevations - Drawing No 2.01; Issue P5, 21 October 2022;
- Elevations - Drawing No 2.02; Issue P7, 21 October 2022;
- Building Sections - Drawing No 3.01; Issue P2, 21 October 2022;
- Balcony Sections - Drawing No 3.02; Issue P1, 21 October 2022;
- Balcony Sections South - Drawing No 3.03; Issue P1, 21 October 2022;
- Basement - Drawing No 1.10, Issue P7, 21 October 2022;
- Podium Floor Plan - Drawing No 1.11, Issue P9, 21 October 2022;
- Level 1+2 South Building - Drawing No 1.12, Issue P6, 21 October 2022;
- Level 3 South Building - Drawing No 1.13, Issue P6, 21 October 2022;
- Level 4 South Building - Drawing No 1.14, Issue P6, 21 October 2022;
- Level 5 Roof Plan- Drawing No 1.15, Issue P5, 21 October 2022;
- Ground Floor Plan - North Building - Drawing No 1.16, Issue P10, 21 October 2022; and
- Level 1+2 North Building - Drawing No 1.17, Issue P6, October 2022;

in accordance with Clause 68 of the Planning and Development (Local Planning Schemes) Regulations 2015 and the provisions of clause 68(2)(b) of the deemed provisions of the City of Rockingham Town Planning Scheme No.2, subject to the following conditions as follows:

Conditions

1. This decision constitutes development approval only and is valid for a period of 4 years from the date of approval.

2. Pursuant to Clause 26 of the Metropolitan Region Scheme, this Development Approval is deemed to be an approval under Clause 24(1) of the Metropolitan Region Scheme.

3. Prior to development commencing, arrangements must be made to the satisfaction of the City of Rockingham for the landowner/applicant to contribute towards the costs of providing the Administration and Community Infrastructure items pursuant to Clause 5.5.14 of the City of Rockingham Town Planning Scheme No.2.

4. A cash contribution being provided for 8 visitor car parking spaces in accordance with Clause 4.15.2.1 of City of Rockingham Town Planning Scheme No.2, with the calculation of the cash contribution being in accordance with Clause 4.15.6.2 of Town Planning Scheme No.2, must be provided to the City, prior to applying for a Building Permit.

5. Prior to applying for a Building Permit, arrangements must be made to the satisfaction of the City of Rockingham for the amalgamation of Lot 62 Harrison Street and Lots 94 and 95 Parkin Street, Rockingham into one Certificate of Title.

   The amalgamation must be completed prior to occupation of the development.

6. Prior to applying for a Building Permit, a Construction Management Plan that details how the construction of the development will be managed to minimise impact on the surrounding area shall be lodged with and approved by the City, prior to issuing a Building Permit. The plan is required to address the following matters that relate to any works to take place on the site:

   (i) Public safety, amenity and site security;
   (ii) Contact details of essential site personnel;
   (iii) Construction operating hours;
   (iv) Noise control and vibration management;
   (v) Air, sand and dust management;
   (vi) Waste management and materials re-use;
   (vii) Traffic and access management;
   (viii) Parking arrangements for contractors and subcontractors
   (ix) Compliance with AS4970-2009 relating to the protection of trees on the development site.

   The Construction Management Plan shall be complied with at all times, for the duration of the construction of the development.

7. Prior to applying for a Building Permit, a Stormwater Management Plan must be prepared by a suitably qualified engineering showing how stormwater will be contained on-site and those plans must be submitted to the City of Rockingham for its approval. All stormwater generated by the development must be managed in accordance with Planning Policy 3.4.3 - Urban Water Management to the satisfaction of the City of Rockingham. The approved plans must be implemented and all works must be maintained for the duration of the development.

8. Prior to applying for a Building Permit, amended plans must be submitted for the development to the satisfaction of the City of Rockingham, in order to address the following requirements:-

   (i) Visual Privacy along the western elevation of the Parkin Street building, with Level 1 to 4 providing for screening devices as per the requirements of R-Codes Volume 1, along all balconies with reduced cone of vision setbacks to the side boundary; and

   (ii) Solid front fencing along Harrison Street being restricted to a maximum height of 750mm above the finished floor level of N.G.01.

9. Prior to applying for a Building Permit, an Acoustic Report which demonstrates that all mechanical services associated with the proposed development and any other noise source, will comply with the Environmental Protection (Noise) Regulations 1997, must be submitted to and approved by the City of Rockingham.

10. Prior to the occupation of the development, a Final Acoustic Assessment must be prepared and provided to the City of Rockingham which demonstrates to City's satisfaction, that the completed development complies with the Environmental Protection (Noise) Regulations 1997.

    The Final Acoustic Assessment must include the following information:

    (i) noise sources compared with the assigned noise levels as stated in the Environmental Protection (Noise) Regulations 1997, when the noise is received at the nearest "noise sensitive premises" and surrounding residential area;

    (ii) tonality, modulation and impulsiveness of noise sources; and

    (iii) confirmation of the implementation of noise attenuation measures.

    Any further works must be carried out in accordance with the Acoustic Report and implemented as such for the duration of the development.

11. Prior to occupation of development, the applicant/landowner shall implement the recommendations in the Environmental Noise Assessment report prepared by Lloyd George Acoustics, reference 21086626-02.

12. Prior to the occupation of the development, any damage to existing City infrastructure within the road reservation including existing streetscape lighting, grated gully pits, side entry pits, kerbing, footpaths, trees, turf is to be repaired to the satisfaction of the City of Rockingham at the cost of the applicant/landowner.

13. Prior to occupation of development, the applicant/landowner shall implement the recommendations of the Visual Tree Assessment report prepared by Treewest Australia, dated 25 October 2022.

14. All landscaped areas are to be planted, reticulated and mulched in accordance with the Landscape Plans prepared by Plan E, Job No.2118201, Rev C, prior to occupation of the development and maintained to the satisfaction of the City of Rockingham for the duration of the development.

    The Landscape Plans must include all road reserves works and be updated to reflect the retention of the Norfolk Pine Tree, as recommended within Condition 13 above.

15. In accordance with Planning Policy 3.3.25 Percent for Public Art – Private Developer Contribution, prior to occupation of the development, the developer shall either:

    (i) Submit to the City of Rockingham for approval an artwork designed by a professional artist at a cost of 1%of the total project cost (being $201,600), to be located within the subject site in an area which must be publicly visible for the duration of the development;

(ii) Enter into a contract with a professional artist/s to design and install the artwork approved by the City of Rockingham;

(iii) The artwork shall then be installed prior to occupation of the development and maintained thereafter to the satisfaction of the City of Rockingham; or

(iv) make a contribution to the City of Rockingham equal to 1% of the total construction value for the provision of public art, being $201,600 in value.

16. Prior to occupation of the development, 56 car parking bays and related access ways as shown on the approved plans shall be constructed and thereafter maintained in accordance with Australian Standard AS2890.1.

17. All driveways, car parking and manoeuvring area(s) which form part of this approval shall be sealed, drained, paved, and line marked in accordance with the approved plans prior to the first occupation of the development and maintained thereafter by the owner/occupier to the satisfaction of the City of Rockingham.

18. Prior to occupation of the development 20 bicycle parking spaces and 6 motorcycle/scooter spaces must be provided and maintained thereafter for the duration of the development to the satisfaction of the City of Rockingham.

A minimum 5 bicycle parking spaces must be dedicated to the Harrison Street end building.

19. The development must operate in accordance with the Waste Management Plan prepared by Talis Consultants, dated 13 October 2022, to the satisfaction of the City of Rockingham for the duration of the development.

20. Earthworks over the site associated with the development must be stabilised to prevent sand or dust blowing off the site, and appropriate measures must be implemented within the time and in the manor directed by the City of Rockingham in the event that sand or dust is blown from the site.

21. The development must be finished in accordance with the schedule provided, prior to occupation of the development.

22. All external fixtures, such as television antennas (of a non-standard type), radio and other antennas, satellite dishes, solar panels, external hot water heaters, air conditions, and the like, shall not be visible from the street(s), and are designed integrally with the building, and be located so as to not be visually obtrusive, to the satisfaction of the City of Rockingham.

23. Each multiple dwelling shall be provided with a clothes drying area screened from the public realm in accordance with the Residential Design Codes Volume 2, to the satisfaction of the City of Rockingham.

24. Any meter boxes shall be painted the same colour as the wall they are attached to, to the satisfaction of the City of Rockingham.

Background:

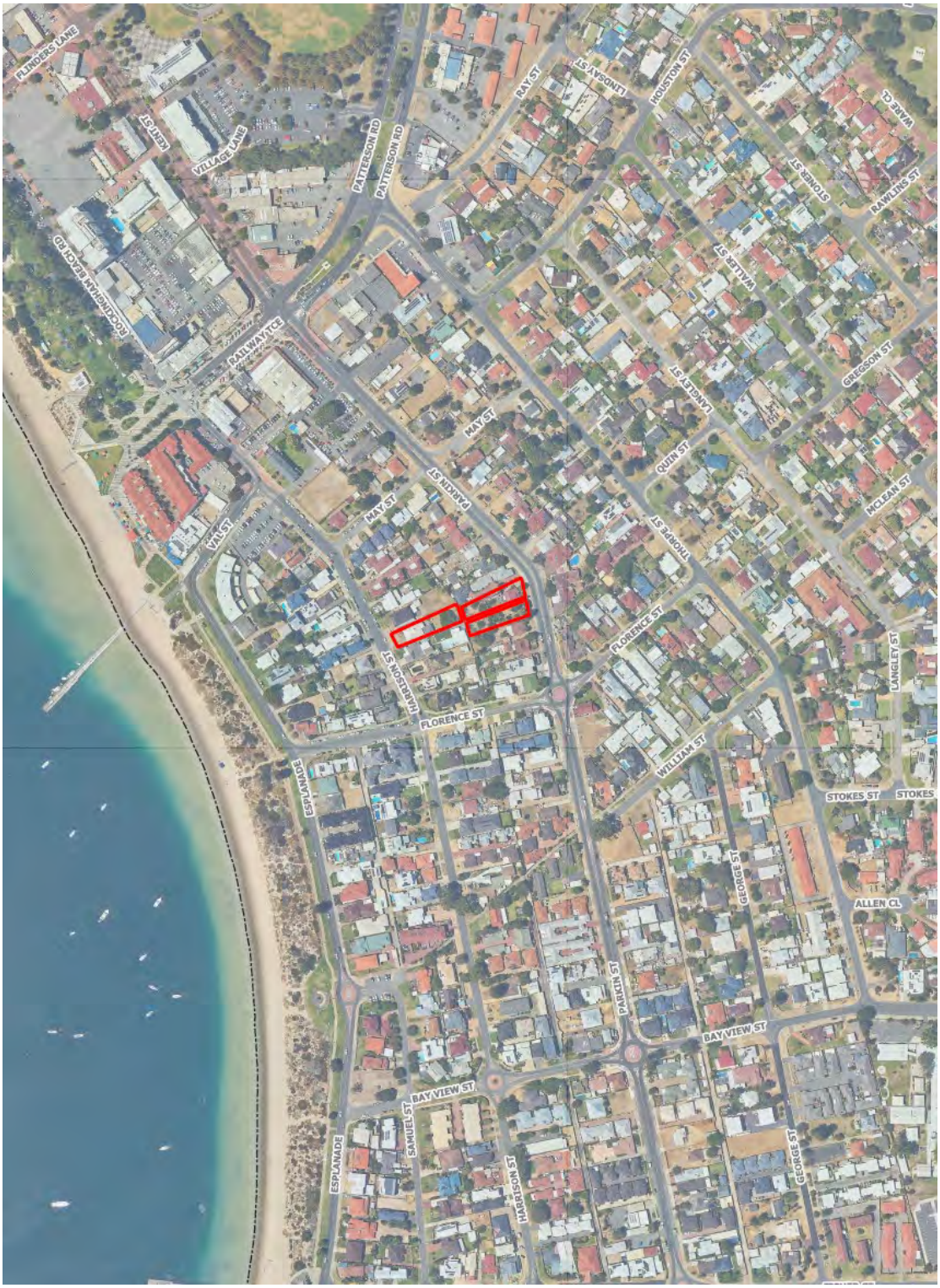


Figure 1 - Location Plan



Figure 2 - Aerial Photograph

Site Description

The subject site has a total land area of 3,161m^2 and contains two dwellings, associated outbuildings and vegetation on Lot 62 Harrison Street and Lot 94 Parkin Street.

Both dwellings are dilapidated and are understood to be vacant.

Lot 95 Parkin Street is free of building structures, however, it is relatively vegetated throughout.

The subject site is described as level, experiencing a fall of less than 1m from the Parkin Street (southern) boundary to the Harrison Street (northern) boundary.

Site Context

The subject site is within a residential street block which is bounded by Harrison Street to the north, May Street to the east, Parkin Street to the south and Florence Street to the west. Adjacent properties within the street block are predominantly low density single and two storey, single dwellings or grouped dwellings.

Under the Main Roads Western Australia Information Mapping System, Harrison Street is classified as an "Access Street" and Parkin Street is a "Distributor B" road. The City's most recent traffic counts for the roads are:

- Harrison Street (between May Street and Florence Street), 971 vehicles per day (average Monday to Friday), completed in February 2019; and

- Parkin Street (between May Street and Florence Street), 8,838 vehicles per day (average Monday to Friday), completed in April 2021.



Figure 3 - Harrison Street Streetscape looking North-East



Figure 4 - Parkin Street Streetscape looking North-East



Figure 5 - View of Subject Site from Harrison Street



Figure 6 - View of Subject Site from Parkin Street

In a broader context, the subject site is situated within the 'Rockingham Strategic Centre' (RSC), the details of which are discussed in the Planning Assessment section of this Report.



Figure 7 - Rockingham Strategic Centre Boundary

The RSC is covered by the existing 'Central City Area' zone under the Metropolitan Region Scheme. Under the City's Town Planning Scheme No.2 (TPS2), there are presently six (6) 'Primary Centre' zones. The subject site forms part of the 'Primary Centre Waterfront Village' zone.

Historically, the Waterfront Village was developed with low-rise holiday accommodation and residential development. The area has over time experienced a number of medium to high-density developments.

The Waterfront Village precinct is in a state of transition, having low-rise residential to high density development.

Pre-Lodgement Engagement/Subject Development Application
Through the initial concept design phase, the City liaised with the Applicant on the proposed development. This included a presentation to the City's Design Review Panel (DRP) in May 2022, details of which are discussed throughout this Report, as well as a follow up meeting to discuss how the revised design had addressed comments of the DRP.

In August 2022, the subject Development Assessment Panel (DAP) application was lodged with the City.

Details: outline of development application

Table 1: Planning Overview	
Region Scheme	Metropolitan Region Scheme
Region Scheme - Zone	Central City Area
Local Planning Scheme	Town Planning Scheme No.2
Local Planning Scheme - Zone	Primary Centre Waterfront Village
Activity Centre Plan	Rockingham Strategic Centre
Lot Size:	3,161m^2
State Heritage Register	No
Local Heritage	☒ N/A ☐ Heritage List ☐ Heritage Area
Design Review	☐ N/A ☒ Local Design Review Panel ☐ State Design Review Panel ☐ Other
Bushfire Prone Area	No
Swan River Trust Area	No

This application seeks Development Approval for one three storey building (fronting Harrison Street) and one five storey building (fronting Parkin Street), containing a total of 47 multiple dwellings.

The details of the proposal are summarised in **Table 2** below.

Table 2: Development Summary	
Subject Land	The development is proposed over three green-title lots.
Land Use	Multiple Dwelling - Discretionary 'D' use
Density	149 dwellings per hectare

Dwelling Mix and Size	The dwelling mix comprises of: • 13 one-bedroom dwellings (23%); • 29 two-bedroom dwellings (66%); and • Five (5) three bedroom dwellings (11%). The apartment sizes vary from 60sqm to 120sqm.
Building Height	Parkin Street Building: 21.4m high / 5 storeys; and Harrison Street Building: 11.1m high / 3 storeys.
Landscaping	A landscape scheme is proposed, comprising of: • Approximately 14% of the site is 'deep planted'; • Small to large new trees proposed, mainly around the edges of the development; • Retention of one Norfolk Pine tree adjacent to Parkin Street; • Raised planters; and • Garden beds.
On-site Amenities	• Ground floor and roof top communal areas; • Public domain interface; and • Wellness facility.
Parking	A total of 56 on-site parking spaces, comprising of: • Eight (8) at grade car parking spaces; and • 48 basement level car parking spaces.
Pedestrian Access	A dedicated pedestrian connection linking Parkin Street and Harrison Street.
Vehicular Access	The proposal rationalises three existing crossovers into one singular, two-way access point from Harrison Street.

The following Technical Reports and supporting material accompanied the application:

- Acoustic Report;
- Planning Report;
- Transport Impact Statement;
- Waste Management Plan; and
- Response to the Design Review Panel Meeting Notes.

While considering the application, the following matters were raised with the Applicant:

- Australian Standards non-compliance with areas proposed to be used for vehicle, bike and bicycle turning movements and parking;
- Landscape and irrigation plans; and
- Built form and scale, functionality and build quality, safety and legibility of the development.

The Applicant was also provided an opportunity to respond to the public submissions.

In October 2022, the Applicant submitted additional information comprising:

- Revised landscape and development plans (**Attachment 1**), with the most notable changes outlined in **Table 3** below:

Table 3: Development Plan modifications	
Modification	Planning Element
Changes to Parkin Street end building setback and reconfiguration of north facing elevation	Lot boundary setback, visual privacy, building separation
Balcony treatments and lowered basement ceiling heights	Visual privacy
Reduced street setback of Harrison Street end building	Street setback
Modification to vehicle access, basement area and pedestrian access	Vehicle access, parking and bicycle parking, pedestrian access and entries
Increased deep soil area, tree canopy and landscaping, tree species modification	Deep soil area and tree canopy landscaping
Additional apartments that meet 'Silver Level' requirements under the Liveable housing Design Guidelines	Universal access
Changes to storeroom access	Storerooms
Solar panels and additional water tanks	Energy efficiency and Water management

- Arborist Report; and
- Responses to the public submissions.

Table 2 factors in the abovementioned development plan modifications.

Legislation and Policy:

Legislation

- Planning and Development Act 2005
- Planning and Development (Development Assessment Panel) Regulations 2011
- Planning and Development (Local Planning Scheme) Regulations 2015
- Metropolitan Region Scheme
- Town Planning Scheme No.2 (TPS2)
- Environmental Protection (Noise) Regulations 1997

State Government Policies

- State Planning Policy 7.0 - Design of the Built Environment (SPP7.0)
- State Planning Policy 7.0 - Residential Design Codes Volume 2 (SPP7.3)

Activity Centre Plan

- Rockingham Strategic Centre: Centre Plan (RSC)

Local Policies

- Planning Policy 3.2.5 - Development Policy Plan: Waterfront Village Sector (PP3.2.5)
- Planning Policy 3.3.25 - Percent for Public Art - Private Developer Contribution (PP3.3.25)
- Planning Policy 7.4 - Design Review Panel (PP7.4)

Other

- Australian/New Zealand Standard - Parking Facilities Part 1: Off-street car parking

Consultation:

Public Consultation

As the application was considered likely to generate community concern, it was advertised for public comment in the following manner:

- Landowners and occupiers identified on the Consultation Plan below were notified in writing of the proposed application;

- The application was made available for public inspection at the City's Administration Offices and published on the City's website; and

- Submissions were requested over an 18 day period, between 23 September and 11 October 2022.

Specifically, the City sought comment on the building height and visual privacy deviations, as outlined in the Planning Assessment section of the Report.



Figure 8 - Consultation Plan

A total of 40 submissions were received at the conclusion of the advertising period, comprising:

- Two submissions in support; and
- 38 submissioners in objection or having raised concerns.

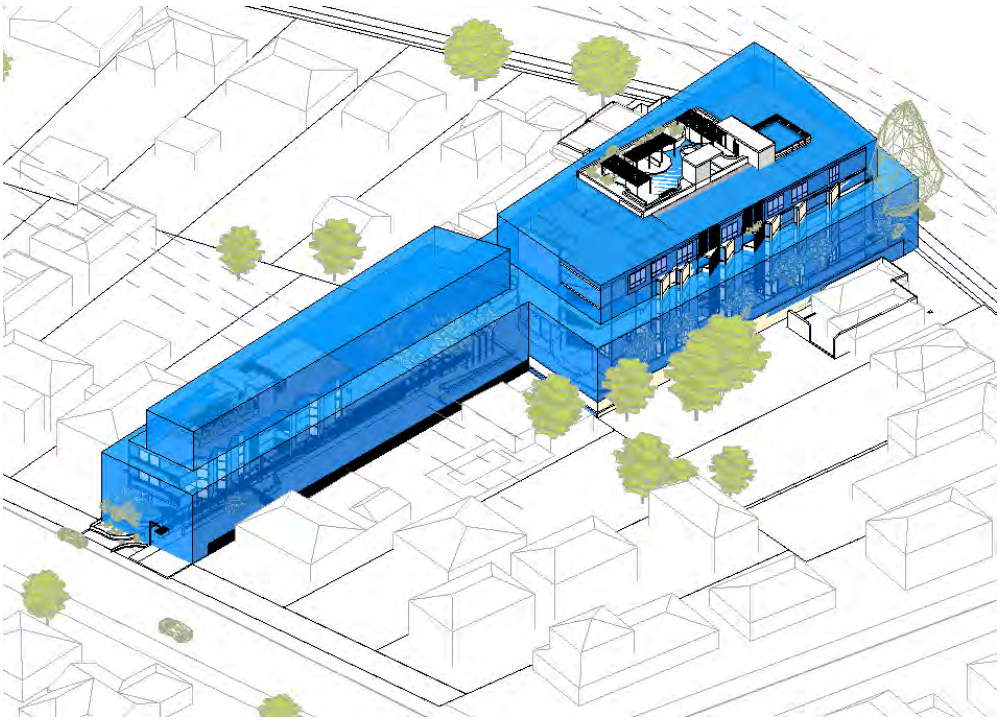
Matters raised in the submissions objecting to the proposal or raising concern are summarised within **Table 4** below (by theme), including the Applicant's and City's responses to submissioner comments.

Note: The amended application did not propose any greater discretion to Policy/Scheme requirements. Consequentially, the plans were not re-advertised for comment.

Bulk and Scale
Submission: **(i) The proposed building height Policy exceedance which relates to the Parkin Street end building.**
Applicant's Response: *The building height associated with the South Building's rooftop terrace, relates to a lift overrun, plant rooms and rooftop amenities which do not add visual bulk or scale to the building, do not create additional shadow, and has no perceptible impact on the streetscape.*

Bulk and Scale (cont…)
The buildings and structures in question have been located central to the building mass, so as not to be highly visible from the street, or adjoining properties. Line of sight diagrams have been prepared that demonstrate this.
City's Comment: The assessment of the proposal against the applicable height provisions for the area are provided in the Planning Assessment section of the Report.
Submission: **(ii) The proposed bulk and scale of the development.**
Applicant's Response: *To determine the compatibility and appropriateness of any development in the Waterfront Village, the starting point is Planning Policy 3.2.5 - Development Policy Plan: Waterfront Village Sector. The policy envisages, five-storey, potentially mixed-use, medium-to-high density development, configured with boundary-to-boundary podiums and recessed upper floors. Despite much of the area being low-rise, this is the anticipated height, bulk and scale for development in this particular area of the RSC.* *It is acknowledged that the proposal is of a greater scale than surrounding properties, but this is always the case in areas when they transition from low density to the level of development advocated by the planning framework.* *The intent of policy to transition the built form down from areas of very high density areas located in the Waterfront Village core is based upon sound urban design principles. The street block in which the subject site is located, has a 5 storey height limit to act as a buffer from the areas of very high density to the surrounding lower density areas. As the first application to respond to policy in this street block, the proposal has been iteratively modified to balance the expectations of the framework with existing low-rise properties.* *Instead of a hard 3 storey podium abutting the adjoining properties, overall the North and South building provide good separation between the two buildings and to adjoining properties. Upper floor setbacks comply or exceed the minimum standards of policy. The proposed building has by no means maximised the permitted building envelope as shown on the diagram below.*

Bulk and Scale (cont…)



City's Comment:

The importance of this area to the City's future dwelling yield and suitability for medium to high density is demonstrated by the minimum and maximum development size and yield provisions which are contained within the Planning Policy 3.2.5 - Development Policy Plan: Waterfront Village Sector.

The Policy seeks to prevent low-scaled development from reducing the area's potential growth.

The bulk of the building is massed towards the busier Parkin Street frontage and presents as a three storey building on the quieter Harrison Street. The building form responds to the differing street characteristics.

The scale and intensity of the development is discussed in detail within the Planning Assessment section of the Report.

In relation to the above diagram submitted by the Applicant, the City notes that it is not entirely reflective of the applicable planning framework as it does not take into consideration the various design and planning elements. The diagram does however, correctly illustrate the intent behind relevant primary development controls with respect to height and setback provisions.

Submission:

(iii) A claim has been made that Regulation 67(m) of Planning and Development (Local Planning Schemes) Regulations 2015 does not include a consideration of the future development but rather should consider the existing development.

Applicant's Response:

No response provided.

Bulk and Scale (cont…)

City's Comment:

Relevant excerpt from Regulation 67(m) of Planning and Development (Local Planning Schemes) Regulations 2015 is provided below:

"the compatibility of the development with its setting, including —

(i) the compatibility of the development with the desired future character of its setting; and

(ii) the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development.

The application considers the existing as well as the desired future character of its setting and City's assessment on the matter is discussed later in the Report.

Overshadowing

Submission:

(i) Overshadowing of the adjoining properties.

Applicant's Response:

Due to the orientation of the lot and the design of the building, the proposal does not unreasonably overshadow adjoining properties and meets the objective for overshadowing in the R-Codes.

City's Comment:

The Applicant has supplied an overshadowing diagram indicating the extent of overshadowing on the adjoining southern properties, being Lot 96 Parkin Street and Lot 61 Harrison Street.

In relation to winter months, and considering the built form on the abutting lots, the proposed development overshadows approximately 25.3% of Lot 96 Parkin Street and approximately 5.8% of Lot 61 Harrison Street. Whilst not illustrated on the diagram, the shadow cast during the summer months would further be reduced due to the higher sun angle.



OVERSHADOWING - RESIDENTIAL (EXISTING) CONTEXT

Overshadowing (cont…)

There is no maximum overshadowing requirement specified in the applicable local planning framework, however, it is generally acknowledged that overshadowing should be minimised through massing of built form.

In assessing the impact of overshadowing, the R-Codes outline that proposals should recognise the need for daylight and solar access to adjoining properties and minimise the extent of overshadowing on habitable rooms and open spaces.

Noting the permissibility of nil setbacks to the side boundaries up to three storey (12.5m in height), under Planning Policy 3.2.5 - Development Policy Plan: Waterfront Village Sector, it is reasonable to expect that any comprehensive new development on this site could have significant overshadowing impacts on its southern neighbour/s. This development includes generally larger side setbacks to the adjoining neighbouring properties, than required and provides for recessed upper floors as well as a generous separation between the two proposed buildings. The design features all assist in minimising the extent of overshadowing through massing of the buildings and do not have any major implications upon the neighbouring sites active habitable spaces.

The discretionary building height component which relates to the Parkin Street end building roof top, result in no additional overshadowing, as these elements are well set in from the side boundary.

The extent of overshadowing is considered to be negligible.

In relation to future redevelopment of the adjoining neighbouring properties, it would not be possible to consider what impact the proposed overshadowing may have due to uncertainties surrounding the development typology, height, footprint and other design elements. The re-development of adjoining properties would need to consider these elements as part of the design response along with the existing site constraints with respect to orientation and typology.

Overlooking

Submission:

(i) Overlooking of private indoor and outdoor areas.

Applicant's Response:

To address the concerns raised by the community, the building has been modified to either comply with the R-Codes or improve privacy at adjoining properties. Modifications have been made in respect of:

- *North-facing apartments have been reconfigured to provide greater separation between the balconies and habitable rooms of those apartments and the property to the north (No. 87 Harrison).*
- *The ground floor of the South Building has been lowered to RL0.45, removing the requirement for screening to adjoining properties along the east, west and north.*
- *The visual privacy setback shortfalls of the western elevation have been further improved so that outlook is directed to the horizon and are prevented from looking directly into adjoining properties. Line of sight diagrams have been provided to show that outlook from these areas of private open space do not adversely impact the privacy of No. 138 Parkin Street.*

Overlooking (cont…)

- *Line of sight diagrams have been prepared for both rooftop terraces, demonstrating how views are restricted by the roofs and landscaping so as not to impact on privacy of adjoining neighbours.*
- *The North Building's rooftop terrace now features screening along the eastern edge, to address the concerns raised by the neighbouring property to the east.*

The development has been carefully designed to minimise overlooking and has been further modified to address the concerns of particular properties. All habitable rooms and balconies are either appropriately set back or include design measures that result in views that are directed away from adjoining boundaries and toward the horizon.

City's Comment:

The proposed development has been assessed against the visual privacy requirements of the R-Codes where, in the opinion of the City, it has been found to either meet the Element Objectives of the document or can meet the Element Objective, subject to conditions of Development Approval.

Further commentary is provided in the Planning Assessment section of this Report.

Dividing Fence

Submission:

(i) The impacts associated with a 2.6m high dividing fence upon the adjacent grouped dwelling located at 146B Parkin Street.

Applicant's Response:

Following the lowering of the finished level of the ground floor of the Parkin Street end building, there is no need for screening along the side boundary and the previous 2.6m high walls have been removed from the proposal.

City's Comment:

As a consequence of the podium level apartments being lowered and now complying with visual privacy setbacks to adjoining properties, screening is no longer required, thus, removing the need for a fence height in excess of 1.8m above the natural ground level.

The modified plans reflect this change.

Traffic Impacts and Car Parking

Submission:

(i) Several traffic related concerns in relation to safety, congestion, access points and existing traffic issues in the area.

Applicant's Response:

The Traffic Impact Assessment has been prepared in accordance with the WAPC Transport Impact Assessment Guidelines. The Report concluded that the proposal would have minimal impact on the road network and would not pose any safety issues.

Traffic Impacts and Car Parking (cont…)

The vehicle access proposed from Harrison Street is entirely appropriate given that Parkin Street has restricted movement and access due to a central median island and road bend. Harrison Street is the safest entry and exit point for the development.

The impact on Harrison Street is well within acceptable limits and far less than the impacts envisaged by the planning framework if the remainder of the precinct was developed to the desired density of 160 dwellings per hectare.

It is also noted that if the access were limited to Parkin Street, then west bound vehicles would need to exit eastbound and head down Harrison Street to the roundabout to be able to head west along Parkin Street.

City's Comment:

The City has assessed the TIA and, whilst it acknowledges that the proposed land use would result in increased traffic using the local road network surrounding the subject site, on balance, the City considers that the road network has the capacity to accommodate the increase in traffic proposed by the development.

By virtue of the endorsed RSC planning framework, it must be recognised that as land use intensification increases, so will the vehicular movements.

The City also favours the rationalisation of three existing crossovers into one singular, two-way access point from Harrison Street, on the basis that the access point is designed and generally located to provide safe access and egress for vehicles.

The modified plans also address the non-compliance matters raised by the City in relation to areas which are to be used for vehicle, bike and bicycle turning movements and parking.

Submission:

(ii) No on-site visitor parking bays being provided as part of the application.

Applicant's Response:

The concern raised by residents in respect of the lack of visitor bays is acknowledged, however, the proposal is responding to the planning framework by supporting the construction of a public parking facility through a mandatory cash-in-lieu payment, in preference to on-site visitor parking.

City's Comment:

The City's TPS2 mandates visitor cash-in-lieu payment for residential development within portion of the Waterfront Village. This requirement has been in place for approximately 15 years where, through a condition of Development Approval, proponents are required to make a specific cash-in-lieu payment to satisfy their visitor car parking requirement.

The funds received are used for the provision of 'at grade' public parking within 'Area B' of the Waterfront Village, as detailed in the Planning Assessment section of this Report.

Traffic Impacts and Car Parking (cont…)

The proposal complies with TPS2 requirements for residential visitor parking. The car parking assessment is discussed later in the Report, however, it is acknowledged that development provides 12 surplus car parking spaces which may be available for on-site visitor parking.

Noise

Submission:

(i) The use of roof terraces, air-conditioners and vehicles entering/leaving early and at late hours.

Applicant's Response:

The development has been assessed and the noise sources from the development can be mitigated through design measures, which will be incorporated into the design prior to occupation and required as a condition of any approval.

The development is residential in nature and noise from residents will have exactly the same potential to impact on amenity as any other residential development.

City's Comment:

The City has reviewed the Applicant's submitted Acoustic Report and is satisfied that development is unlikely to have an adverse noise impact on surrounding development, subject to the implementation of the recommended measures contained within the Acoustic Report.

The most notable measures include:

- Minimum glazing performance requirements for fixed/awning style windows and sliding doors;
- Plant must be selected with a night-mode feature, programmed to units during night hours of 10pm to 7am; and
- A Noise Management Plan for roof top terraces as part of Strata Management.

Condition/s requiring compliance with the recommended measures can be applied in the event that the development is approved.

Submission:

(ii) The application does not provide assurance that noise emissions will be managed.

Applicant's Response:

As per above.

City's Comment:

The City considers that further noise mitigation measures will need to be clarified at the detailed design stage as well as prior to occupation of development, to confirm that the development can at all times comply with the *Environmental Protection (Noise) Regulations 1997.*

This matter can be managed via separate noise conditions of Development Approval.

Services and Utilities
Submission: **(i) The application does not address site service infrastructure and impact on nearby properties.**
Applicant's Response: *The utility and services of the area are the responsibility of State government providers.*
City's Comment: In the event the development is approved, the builder and/or developer would be responsible for the provision and/or arrangement of services and utilities for the development (gas, water, telecommunications), in accordance with the standards and requirements of the relevant infrastructure provider. Infrastructure provision is further detailed below within the Planning Assessment section of this Report, where it is determined that development can be appropriately serviced.
Reduced Property Value
Submission: **(i) Submissions have been received claiming reduced property value for surrounding properties.**
Applicant's Response: *No response provided.*
City's Comment: This is not a relevant planning consideration and should not form part of the assessment or decision-making process.

All submissions received, as well as the Applicant's comments with respect to these, are included in the Schedule of Submissions **(Attachment 4)**.

Referrals/consultation with Government/Service Agencies
Consultation with other agencies is not required pursuant to TPS2.

Design Review Panel Advice

Pursuant to Clause 6.1.1 of TPS2, the Council has appointed a DRP for the purpose of considering, and advising Council with respect to certain applications. Given the nature of the subject proposal, it was referred to the City's DRP on two occasions in May 2022, prior to lodgement and September 2022, post lodgement as outlined in the **Table 5** below.

Table 5: DRP meeting summary		
Date	**Stage**	**Key Issues/Recommendation**
30 May 2022	Pre-lodgement	There are design and site planning concerns more or less with each of the 10 Design Principles and this is generally resultant from 'overdevelopment' of the site, by virtue of scale and massing. Primarily: • Development does not respond or demonstrate an understanding of place and scale; • Impact on amenity of adjoining neighbours is unresolved; • Stepping/articulation of the buildings (including podium) and the associated opportunities have not been adequately resolved; • Street front podium should be reduced to 1m maximum; • Landscaping outcomes throughout are not acceptable; • Functionality and security of the arbour is unresolved; • It has not been demonstrated that building separation is in proportion to the building height; and • Communal area/s disposition is weak. **The design is not supported.**
27 September 2022	Development Lodgement	• Further site planning and layout is required for Harrison Street end of the development, particularly the ground floor activation offering and the applicant should address safety concerns around pedestrian and vehicle crossover; • More deep soil would be better; • Consideration to be given to softening and reducing the 6m wide driveway; and • Overlooking elements require further consideration and innovation. **The design is supported subject to:** • **Separation of pedestrian and traffic flow along Harrison Street and improved amenity along ground floor plain; and** • **Addressing overlooking through innovative design outcomes or providing compliant setbacks.**

A copy of the full notes from each of the above-mentioned DRP meetings is contained within **Attachment 5** to this Report. **Table 6** below provides a visual representation of the design's evolution since the first DRP meeting.

Table 6: DRP design quality evolution		
	Supported	
	Pending further attention	
	Not supported	
	DRP Meeting 1: 30 May 2022	*DRP Meeting 2: 27 September 2022*
Principle 1 **Context and Character**		
Principle 2 **Landscape Quality**		
Principle 3 **Built Form and Scale**		
Principle 4 **Functionality and Build Quality**		
Principle 5 **Sustainability**		
Principle 6 **Amenity**		
Principle 7 **Legibility**		
Principle 8 **Safety**		
Principle 9 **Community**		
Principle 10 **Aesthetics**		

Pursuant to Clause 6.1.3, when dealing with applications on which a recommendation has been made by the City's DRP, the decision maker (MOJDAP) shall have due regard for that recommendation.

The outcomes of the DRP meetings are discussed below in the Planning Assessment section of this Report, where it is concluded that the development can be supported from a design perspective.

Swan Valley Planning

Not applicable

Planning Assessment:

The proposal has been assessed against all the relevant legislative requirements of the Scheme, State and Local Planning Policies and applicable Activity Centre Plan as outlined in the Legislation and Policy section of this report.

The following matters have been identified as key considerations for the determination of this application:

- Design of Built Environment Assessment
- Residential Design Codes Volume 2 Assessment
- Rockingham Strategic Centre: Centre Plan Assessment
- Rockingham Strategic Centre Framework Review
- Waterfront Village Sector Assessment
- Percentage for Public Art - Private Developer Contribution Assessment
- Town Planning Scheme No.2 Assessment
- Other

These matters are discussed below.

Design of Built Environment Assessment

SPP7.0 is the lead Policy that elevates the importance of design quality across the whole built environment across Western Australia.

The purpose of SPP7.0 is to inform and guide landowners, proponents, designers, reviewers and decision-makers to achieve good design outcomes in the built environment.

The City's summary of the proposed development against SPP7.0 is outlined in **Table 7** below, as follows:

Table 7: SPP7.0 - Design of the Built Environment	
Design Principle	**Officer Comment**
1. Context and Character *Good design responds to and enhances the distinctive characteristics of a local area, contribution to a sense of place.*	In the light of the applicable planning framework, it is considered that careful attention has been paid to the wider context of the Waterfront Village and consideration has been given to how the design can respect, build on the character and enhance local activation. The proposal will be the first major development in the Village West sub-precinct and begins the transformation of this local area, consistent with the future vision for the broader RSC. The City's DRP supports the manner in which the proposed development addressed Design Principle 1.

Table 7: SPP7.0 - Design of the Built Environment	
Design Principle	**Officer Comment**
2. Landscape Quality *Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context.*	The Applicant engaged the services of a qualified landscape architect to provide a landscape response for the proposed development, which has been reviewed by the City and is supported. The development seeks to retain one Norfolk Pine tree adjacent to Parkin Street and provides significant deep soil area and soft landscape areas throughout the development site.  The extent of canopy cover will positively contribute to the streetscape and landscape character of the area. The City's DRP supports the manner in which the proposed development addressed Design Principle 2. It is noted that the development plans and landscape plans slightly differ to the extent that the landscape plans do not illustrate the retained Norfolk Pine tree. This matter can be rationalised via a condition of Development Approval. 

Table 7: SPP7.0 - Design of the Built Environment	
Design Principle	**Officer Comment**
3. Built Form and Scale *Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.*	The City's DRP recommended further refinements to improve built form and scale through: • More planting along the western side of the development; and • Improved amenity for ground floor apartment at the Harrison Street end of development. The modified plans address the above suggestions through:- • Increased planting along the western and northern edge of the Parkin Street end building; and • Reconfiguration of the arbour and ground floor entry to enhance amenity. The development responds appropriately to the local and future context and is oriented to take advantage of the northerly aspect. The design of the building is lower on the Harrison Street frontage allowing both buildings to obtain outlook to the foreshore, albeit, it is acknowledge that views may be restricted as re-development within the area occurs to the west. Having regard for the above-mentioned refinements, it is considered that the proposed built form and intensity provide an appropriate transition between the existing built form of Rockingham and the desired outcomes being sought for the RSC. It is noted that the increased building street setbacks to Parkin Street and Harrison Street as well as the general building and massing was supported by the DRP.
4. Functionality and Design *Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life cycle.*	The development is broadly consistent with the planning requirements of the applicable planning framework. The built form and site planning is expected to meet the needs of its future users.
5. Sustainability *Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.*	The development maximises apartment access to direct sunlight, and prevailing breezes. Generous room sizes and ceiling heights ensure that these apartments are liveable and functional. The development also includes rooftop solar panels that will generate renewable energy for the buildings and for the electricity grid. The City's DRP supports the manner in which the proposed development addressed Design Principle 5.

Table 7: SPP7.0 - Design of the Built Environment	
Design Principle	**Officer Comment**
6. Amenity *Good design provides successful places that offer a variety of uses and activities while optimising internal and external amenity for occupants, visitors, and neighbours, providing environments that are comfortable, productive and healthy.*	The existing amenity of the surrounding area will change as a result of this development. The development, however, generally satisfies the planning requirements for the Waterfront Village. These requirements have been developed to address amenity concerns taking into consideration development of a scale and intensity as proposed. As the Waterfront Village evolves, the amenity of the area will transition from its existing suburban character to an urban centre with appropriate land use and built form outcomes, including a range of medium to high density housing within a walkable catchment of the central public transit system, in a preeminent coastal location. The built form of the buildings, the site planning and provision of landscaping as well as communal open spaces and sustainability initiatives provide for a pleasant environment for occupiers and visitors, whilst appropriately minimising impact on adjacent residential properties. The City's DRP supports the manner in which the proposed development addressed Design Principle 6.
7. Legibility *Good design results in buildings that are legible, with clear connections and easily identifiable elements to help people find their way around.*	The City's DRP recommended that additional attention be paid to the Harrison Street end building entrance and wayfinding, to maximise legibility and provide identifiable elements to help people find their way around. The modified plans ensure the proposal provides a more legible layout. The design and location of the entry and the residential lobby now provide evident pedestrian entrances into the development through the redesigned entry lobby and gate reconfiguration.
8. Safety *Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and uses.*	The City's DRP recommended that additional site planning and layout be undertaken by the Applicant to separate pedestrian and traffic flow along the Harrison Street end of development and to improve passive surveillance to and from the street along the ground floor plain. Modified arbours and walkways have been introduced into the design to enhance building framing and signal entries as well to separate pedestrians from vehicles. The ground floor apartment has also been reconfigured to allow an increased level of passive surveillance to the street and away from driveway lights, however, the surveillance level is still not satisfactory due to the proposed solid height of the front fence which limits passive surveillance and interaction between the two spaces.

Table 7: SPP7.0 - Design of the Built Environment	
Design Principle	**Officer Comment**
	 This matter is further discussed later in the Report. The site planning layout and built form creates spaces that optimise safety and security, such as through the provision of a low-speed vehicle environment and passive surveillance opportunities, however, pending application of appropriate conditions of Development Approval.
9. Community *Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.*	The design of the communal spaces has been refined and improved in response to the initial DRP comments. The City's DRP supports the manner in which the proposed development addressed Design Principle 9.
10. Aesthetics *Good design is the product of a skilled judicious design process that results in attractive and inviting buildings and places that engage the sense.*	The design of the building facades has been refined and improved in response to the initial DRP comments. The City's DRP supports the manner in which the proposed development addressed Design Principle 10.

The development ensures that the aforementioned Design Principles are adequately addressed.

The City's DRP commentary is outlined in the Design Review Panel Advice section of this Report and provides the basis for the City's assessment against the aforementioned Design Principles.

Residential Design Codes Volume 2 Assessment

The purpose of SPP7.3 is to provide a comprehensive basis for the control of residential development throughout Western Australia. The Policy provides planning and guidance for residential apartments in areas coded Residential R40 and above, within mixed use development and activity centres. The Policy applies to this proposal, as it is located within the RSC, which is a type of an activity centre under the planning hierarchy.

With regard to the design of the proposed apartments, the development is broadly consistent with the Acceptable Outcomes and/or Element Objectives of SPP7.3. The Element Objectives which warrant further consideration are discussed within **Table 8** below.

It should also be noted that SPP7.3 permits all of Part 2 (Primary Controls) of the Policy and some sections of Part 3 (Siting the Development) to be modified by local planning framework. In this instance, several of the requirements of SPP7.3 that are applicable to the proposal are superseded by the requirements of Planning Policy 3.2.5 - Development Policy Plan: Waterfront Village Sector, which is discussed in further detail in the Local Planning Policies section of this Report.

Table 8: SPP7.3	
Part 2 - Primary Controls	
Element Objectives	**Officer Comments**
2.6 Building Depth	The Acceptable Outcomes require developments which comprise single aspect apartments on each side of a central circulation corridor to have a maximum building depth of 20m and the remaining development is to be considered on its merits with consideration for solar and daylight access and natural ventilation. The Parkin Street end building has a building depth of 22m. The single aspect apartments have been designed with living spaces that do not exceed 9m, which ensures that they receive appropriate light and ventilation. The development also satisfies the Element Objectives of 4.1 Solar and Daylight Access and 4.2 Natural Ventilation. The development is considered to achieve the relevant Element Objectives.
2.6.1 Building depth supports apartment layouts that optimise daylight and solar access and natural ventilation.	
2.6.2 Articulation of building form to allow adequate access to daylight and natural ventilation where greater building depths are proposed.	
2.6.3 *Room depths and/or ceiling heights optimise daylight and solar access and natural ventilation.*	
2.7 Building Separation	The Harrison Street end building is a low-rise development, with generous separation provided to the western side boundary. The Parkin Street end building is a mid-rise development with generous setback to all boundaries and includes a recessed top floor to ensure it is appropriately setback when viewed from the public realm and adjacent neighbouring properties.
2.7.2 Building separation is in proportion to building height.	
2.7.3 Buildings are separated sufficiently to provide for residential amenity including visual and acoustic privacy, natural ventilation, sunlight and daylight access and outlook.	

<table>
<tr><th colspan="2">Table 8: SPP7.3</th></tr>
<tr><th colspan="2">Part 2 - Primary Controls (cont…)</th></tr>
<tr><th>Element Objectives</th><th>Officer Comments</th></tr>
<tr><td>2.7.4 Suitable areas are provided for communal and private open space, deep soil areas and landscaping between buildings</td><td>Subject to imposition of a visual privacy conditions, as outlined under Element Objective 3.5 - Visual Privacy, it is considered that the buildings can be designed to ensure that the adjoining residential properties can maintain good solar access, are not unreasonably overshadowed and can continue to maintain privacy.
The building separation is a positive site design response.</td></tr>
<tr><th colspan="2">Part 3 - Siting the Development</th></tr>
<tr><th>Element Objectives</th><th>Officer Comments</th></tr>
<tr><td>3.5 Visual Privacy
3.5.1 The orientation and design of buildings, windows and balconies minimises direct overlooking of habitable rooms and private outdoor living areas within the site and of neighbouring properties, while maintaining daylight and solar access, ventilation and the external outlook of habitable rooms.</td><td>
<table>
<tr><th rowspan="2">Cone of vision from unscreened:</th><th colspan="2">First 4 storeys</th><th rowspan="2">5th storey and above</th></tr>
<tr><th>Adjoining sites coded R50 or lower</th><th>Adjoining sites coded higher than R50</th></tr>
<tr><td>Major opening to bedroom, study and open access walkways</td><td>4.5m</td><td>3m</td><td rowspan="3">Refer Table 2.7</td></tr>
<tr><td>Major openings to habitable rooms other than bedrooms and studies</td><td>6m</td><td>4.5m</td></tr>
<tr><td>Unenclosed private outdoor spaces</td><td>7.5m</td><td>6m</td></tr>
</table>
The above table outlines the 'cone of vision' (COV) setbacks to the adjoining lot boundaries. The COV criteria of R50 or higher coding is applicable, as the adjoining land has a density coding of R-ACO and primary control provisions of Planning Policy 3.2.5 - Development Policy Plan: Waterfront Village Sector apply.
<u>Harrison Street end building</u>
All COV is contained within the subject site.
<u>Parkin Street end building</u>
North
The advertised plans proposed 3.5m (in lieu of 4.5m) COV setbacks for major openings to the common boundary and 3.3m (in lieu of 6m) COV setbacks for balconies. The modified plans now only include balconies across Level 1 to 4 (S.1 and 2.06, S.1 and 2.07,S.3.05, S.3.06, S.4.05 and S.4.06), facing north, where the balcony COV setbacks are generally compliant or setback 5.7m to 5.9m in lieu of 6m.
The areas of non-compliance are illustrated below (section highlighted).</td></tr>
</table>

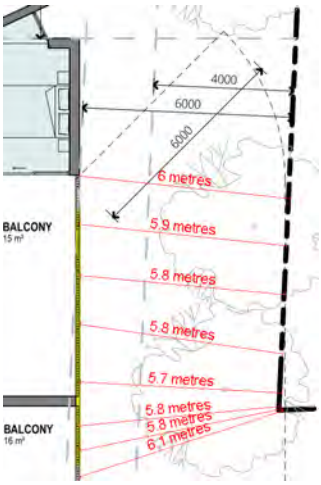
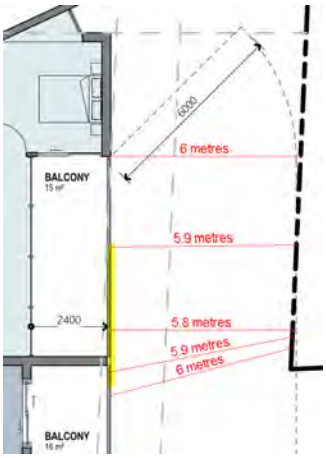
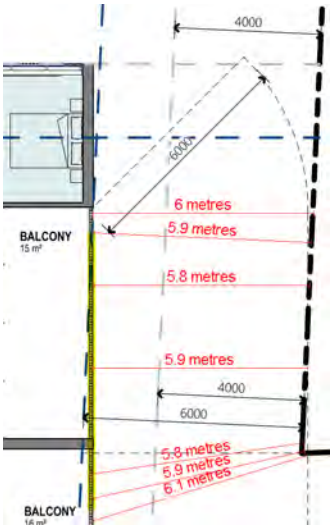
Table 8: SPP7.3	
Part 3 - Siting the Development	
Element Objectives	**Officer Comments**
	Level 1 + 2  Level 3  Level 4 

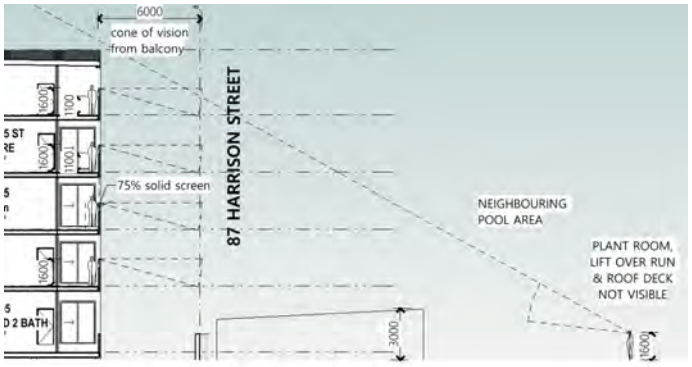
Table 8: SPP7.3	
Part 3 - Siting the Development (cont…)	
Element Objectives	**Officer Comments**
	 When considering the proposal against the design guidance and Element Objective, the COV which extends beyond the boundary (up to 300mm), falls over a pathway and continues over the roof of rear building located at Lot 60 (No.87) Harrison Street. As illustrated in the above cross-section diagram, reduced COV does not directly overlook any habitable rooms or outdoor private spaces and maintains outlook to the horizon. *East* The plans include balconies across Level 1 to 4 (S.1 and 2.08, S.1 and 2.09, S.3.08, S.3.07, S.4.03 and S.4.04), facing east, where the balcony COV setbacks vary between 4.25m to 5.9m, in lieu of 6m. When considering the proposal against the design guidance and Element Objective, the COV which extends beyond the boundary (up to 1750mm), falls within the common property driveway of three grouped dwelling development at Lot 3 (No. 146) Parkin Street, which is not considered to be active habitable space. Such spaces are more easily tolerated than overlooking into habitable spaces. Furthermore, the balconies include feature balcony screening (1.5m high) and planter boxes (1.1m high) that have been carefully placed to ensure that views from these balconies do not allow directly overlooking into the driveway or any habitable spaces beyond, while maintaining outlook to the horizon. *West* The plans include balconies across Level 1 to 4 (S.1 and 2.04, S.1 and 2.05, S.3.03, S.3.04, S.4.03 and S.4.04), facing west, where the balcony COV setbacks are 4m in lieu of 6m.

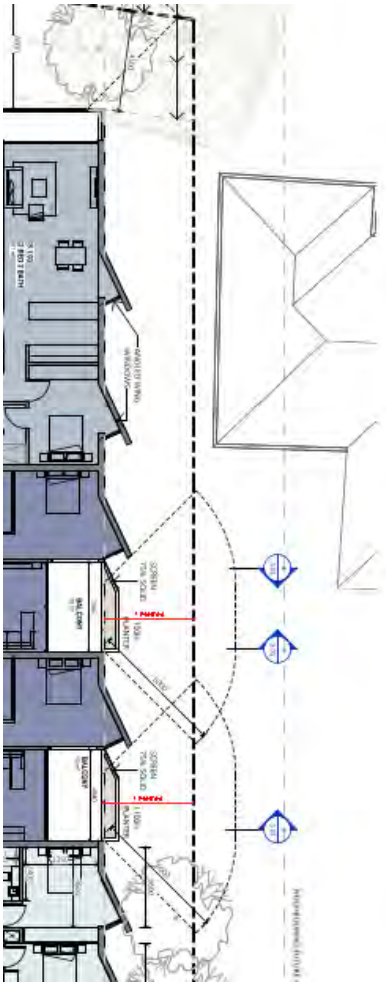
Table 8: SPP7.3	
Part 3 - Siting the Development (cont…)	
Element Objectives	**Officer Comments**
	 All balconies included planter boxes (1.1m high) and across levels 1 to 3, a section of the balconies are provided with screening to limit direct overlooking of any habitable spaces at Lot 96 (No.140) Parkin Street. Given the extent of the backyard at Lot 96 (No.140) Parkin Street, it is difficult to quantify the total area outside used as active habitable space, however, it is generally considered that the screening and planter boxes can ensure the main outdoor spaces associated with the patio/alfresco are protected from direct overlooking. In relation to future re-development of the adjoining neighbouring properties, it would not be possible to consider the level of amenity impact the proposed COV (that extends beyond the boundaries) may have on the development.

Table 8: SPP7.3	
Part 3 - Siting the Development (cont…)	
Element Objectives	**Officer Comments**
	It is, however, considered unreasonable for the future re-development of these properties to implement increased COV setbacks or screening measures to rationalise any direct and/or unresolved overlooking implications, given similar or equivalent level of development may be realised. On balance, the COV variations to the east and north are supported as they adequately address the existing and future character of development, however, the City is not satisfied that the intended screening measures can sufficiently address the future character of development to the west. Hence, in the event the development is approved, it is recommended that all west facing balconies (with reduced COV setbacks) are provided with permanent screening as defined with R-Codes Volume 1 (i.e. screening at least 1.6m in height, at least 75% per cent obscure, permanently fixed and made of durable material). With the minor screening refinement along the western boundary, the development achieves the relevant Element Objective. *Note: the communal roof top gardens are not classified as 'private outdoor spaces', hence not subject to visual privacy assessment.*
Part 4 - Designing the Building	
Element Objectives	**Element Objectives**
4.2 Natural Ventilation *4.2.1 Development maximise the number of apartments with natural ventilation.* *4.2.2 Individual dwellings are designed to optimise natural ventilation of habitable spaces.* *4.2.3 Single aspect apartments are designed to maximise and benefit from natural ventilation.*	The development maximises opportunites for natural ventilation including large operable sections of glazing oriented to capture prevailing breezes to 38 units, which equates to 76% of the total appartments in achieving cross ventilation, through opposite walls to reduce energy consumption and improve indoor air quality.  NATURAL VENTILATION The development is considered to achieve the relevant Element Objectives.

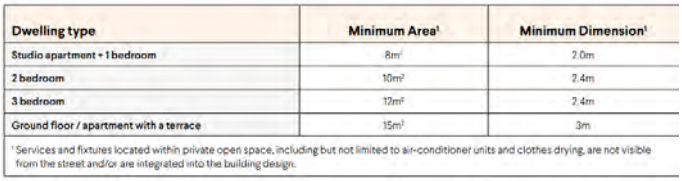
Table 8: SPP7.3	
Part 4 - Designing the Building (cont…)	
Element Objectives	**Element Objectives**
4.4 Private open space and balconies *4.4.1 Dwellings have good access to appropriately sized private open space that enhances residential amenity.* *4.4.2 Private open space is sited, oriented and designed to enhance liveability for residents* *4.4.3 Private open space and balconies are integrated into the overall architectural form and detail of the building.*	 **Dwelling type** / **Minimum Area[1]** / **Minimum Dimension[1]** Studio apartment + 1 bedroom: 8m² / 2.0m 2 bedroom: 10m² / 2.4m 3 bedroom: 12m² / 2.4m Ground floor / apartment with a terrace: 15m² / 3m [1] Services and fixtures located within private open space, including but not limited to air-conditioner units and clothes drying, are not visible from the street and/or are integrated into the building design. All five apartments within the Harrison Street end building achieve the minimum area and dimension requirements for balconies and open spaces. Out of the 42 apartments within the Parkin Street end building, 28 achieve the minimum area and dimension requirements for balconies and open spaces. The outstanding 14 apartments (level 1 and 2 - S1.01, S1.07, S1.08 and S1.09, level 3 - S3.06, S3.07 and S3.08, level 4 - S4.06, S4.07 and S4.08) have slightly narrower dimensions that the minimum standard, however, maintain functionality and provide an overall superior total area that the minimum requirement. It is also noted the development is also serviced by excellent outdoor communal areas on the ground floor and roof top, which contribute positively to the overall outdoor amenity experience for the occupier and visitor. All private open spaces and balconies are directly connected to an internal living space. The balconies are either screened to an extent or fully unscreened. The balconies with screening provide a balance between protections from overlooking and maintain satisfactory visual outlook. All balconies are integrated into the building design. No visible services and fixtures are proposed on the balconies. The development is considered to achieve the relevant Element Objectives.
4.8 Dwelling Mix *4.8.1 A range of dwelling types, sizes and configurations is provided that caters for diverse household types and changing community demographics*	The dwelling mix comprises of: • 13 one-bedroom dwellings (23%); • 29 two-bedroom dwellings (66%); and • five three-bedroom dwellings (11%). The apartment sizes vary from 60sqm to 120sqm. The development provides for a cohesive mix of one, two and three bedroom apartments that can accommodate a variety of household types, particularly singles and smaller families. The mix of dwellings is considered to be appropriate for a development within the Waterfront Village. The development is considered to achieve the relevant Element Objective.

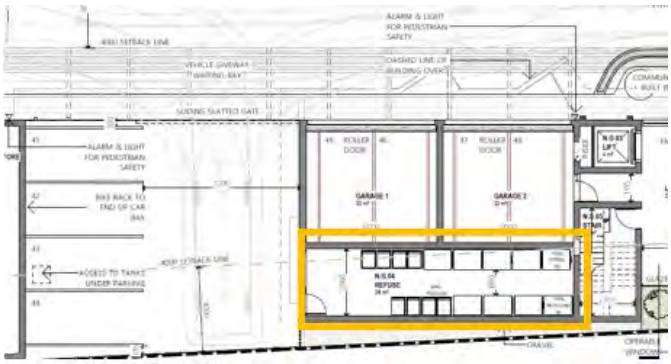
Table 8: SPP7.3	
Part 4 - Designing the Building (cont…)	
Element Objectives	**Element Objectives**
4.9 Universal Design *4.9.1 Development includes dwellings with universal design features providing dwelling options for people with disabilities or limited mobility and/or to facilities aging in place.*	The development is required to provide either: a) 20 per cent of all dwellings to meet Silver Level requirements as defined in the Liveable Housing Design Guidelines; or b) 5 per cent of dwellings are to be designed to Platinum Level as defined in the Liveable Housing Design Guidelines. The development provides for 8 dwellings which will meet the Silver Level requirement, equating to 17%. No dwellings are proposed to achieve the Platinum Level requirement. Overall, the apartments are well-designed and include a good mix of dwelling sizes, which will meet a diversity of households. The development is considered to achieve the relevant Element Objective.
4.11 Roof Design *4.11.1 Roof forms are well integrated into the building design and respond positively to the street.* *Where possible, roof spaces are utilised to add open space, amenity, solar energy generation or other benefits to the development.*	Flat roofs are proposed. The surrounding area contains a variety and mix of old and new housing/unit stock and some have flat roofs, some pitched. The proposed roof form is not inconsistent with the surrounding roof forms. The roof spaces are used to provide open space, amenity, and solar energy generation. The Harrison Street roof top amenities have been screened to limit the perceived level of visual privacy. The development is considered to achieve the relevant Element Objectives.
4.17 Waste Management *4.17.1 Waste storage facilities minimise negative impacts on the streetscape, building entries and the amenity of residents.* *4.17.2 Waste to landfill is minimised by providing safe and convenient bins and information for the separation and recycling of waste.*	 The location and design of the refuse area is concealed from view and is not expected to impose any substantial amenity impacts to residents on-site or residents adjacent to the site.

Table 8: SPP7.3	
Part 4 - Designing the Building (cont…)	
Element Objectives	**Element Objectives**
	The Strata management will be responsible for aspects of the internal management of waste, noting at times the waste vehicle may restrict movements to/from the adjoining four car parking bays. A Waste Management Plan has been prepared in support of the development application, which has been reviewed and is supported by the City. The development is considered to achieve the relevant Element Objectives.
4.18 Utilities	The development will be required to be fully serviced by power, water, wastewater, telecommunications and fire services. Internal service areas are provided for utilities and are contained within lockable rooms. The locations have no impact on vehicle or pedestrian movement. Any exposed utilities will need to be fully integrated into the design of the building, which can be managed through a condition of Development Approval. Laundries are provided in each dwelling and are expected to be suitable for residents. Subject to conditions, the development is considered to achieve the relevant Element Objectives.
The site is serviced with power, water, gas (where available), wastewater, fire services and telecommunications/broadband services that are fit for purpose and meet current performance and access requirements of service providers.	
4.18.2 All utilities are located such that they are accessible for maintenance and do not restrict safe movement of vehicles or pedestrians	
4.18.3 Utilities, such as distribution boxes, power and water meters are integrated into design of buildings and landscape so that they are not visually obtrusive from the street or open space within the development.	
4.18.4 Utilities within individual dwellings are of a functional size and layout and located to minimise noise or air quality impacts on habitable rooms and balconies.	

Rockingham Strategic Centre: Centre Plan Assessment

Planning Context
In September 2009, Council adopted the Centre Plan for the Rockingham Strategic Metropolitan Centre (as it was then known). It was endorsed by the Western Australian Planning Commission in November 2009, as a plan to guide future planning and development. The scope of the Centre Plan covers an area of almost 600 hectares between the Rockingham Train Station and Rockingham Foreshore, per Figure 7 above and is divided into 11 'Sectors', as illustrated within Figure 9 below.

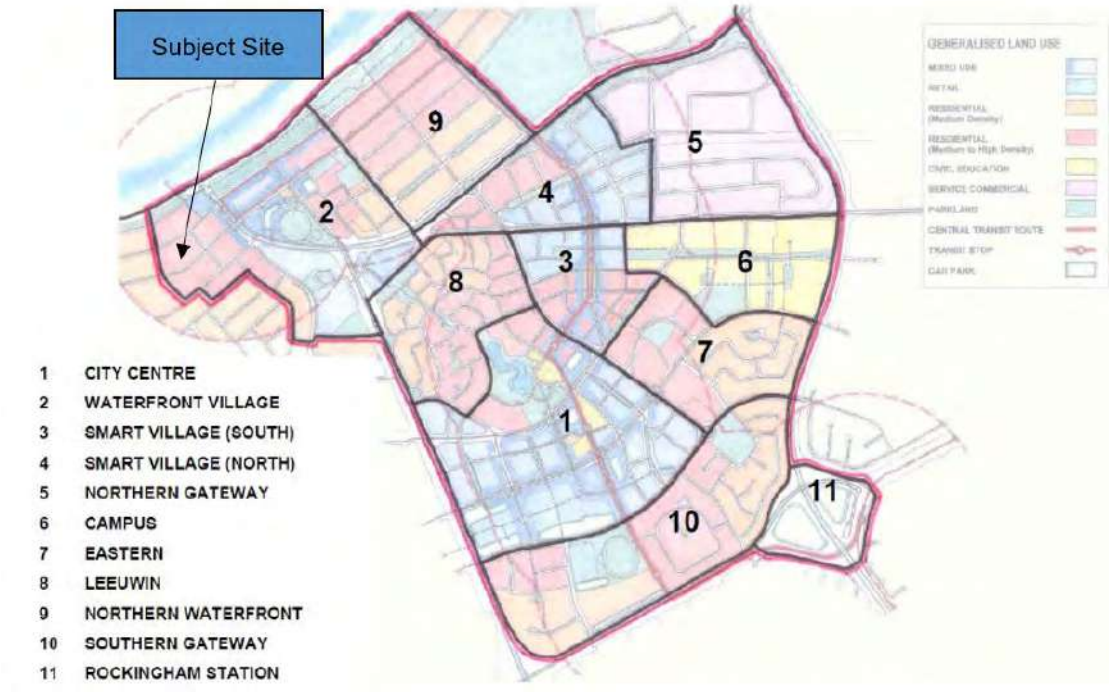


Figure 9 - Rockingham Strategic Centre Sectors

The Centre Plan is guided by the following vision:

"The vision is for a modern, distinctly coastal centre offering a wide range of mixed uses including retail, commercial, office, civic, residential, education and recreation within an accessible and highly inter-connected, urban-scaled townscape, comprising a major activity centre and related urban villages based on 'Main Street' principles."

The Centre Plan provides general direction for the detailed planning investigations which followed for each Sector, via preparation of individual Development Policy Plans (i.e. Local Planning Policies).

Transit Oriented Development
The Centre Plan applied sustainable development principles to land development and redevelopment options, with particular emphasis on the Transit Oriented Development (TOD) potential of land within the Centre.

The Centre Plan committed to achieving the vision of a fixed route, streetcar transit system as the focus of a corridor of high intensity, mixed-use development between Rockingham Train Station and Rockingham Foreshore.

With respect to TOD potential for the Waterfront Village Sector, the Centre Plan states:

"The Waterfront Village will continue with its transformation into a regionally significant beachfront hub with further redevelopment of under-utilised land and lower density properties. A vibrant mix of medium to high density residential and short-stay apartments, hospitality focused retail, office and urban waterfront recreation uses will combine to make this a priority destination on the Rockingham coastline".

In this regard, the City for some time now has been working towards securing funding commitment toward the construction of a fixed route transit system, known as the 'Rockingham City Centre Transit System' (RCCTS).

The approved route of the RCCTS is via a shared and partially dedicated transport corridor which starts and ends at the Rockingham Train Station, taking in the City Centre and Rockingham beachfront, as illustrated within Figure 10 below.

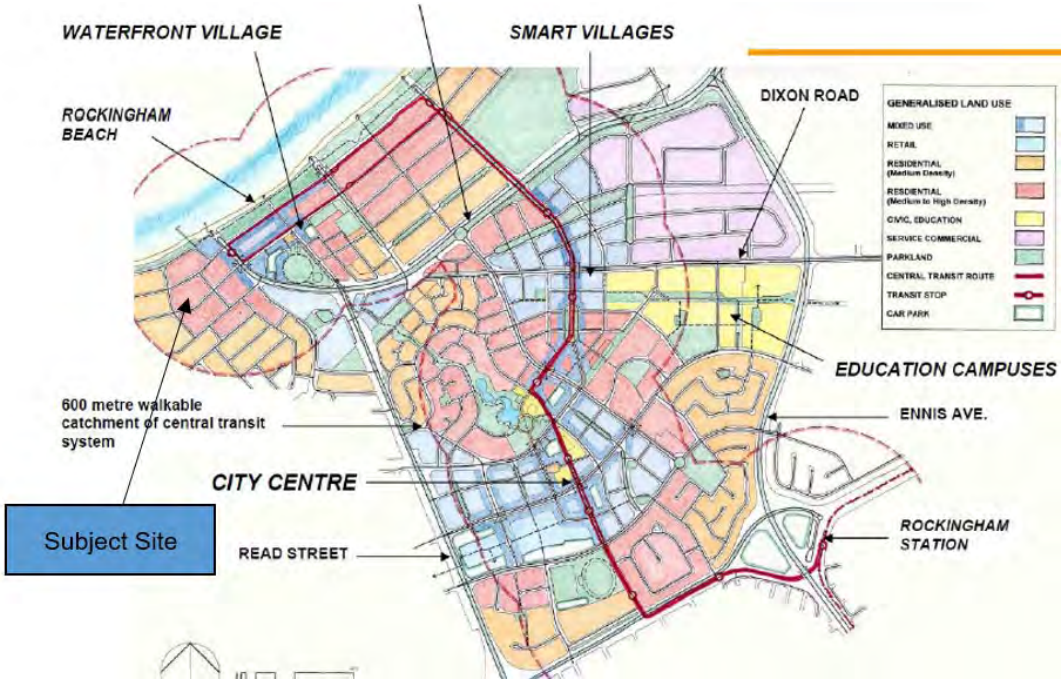


Figure 10 - Rockingham City Centre Transit System Alignment

The subject site is within the walkable catchment of the central transit system (approximately 300m), which is the alignment of the existing Route 555 (Rockingham Shuttle Bus).

Waterfront Village Sector Assessment

PP3.2.5 has been established to guide development within the Waterfront Village, within which there are seven precincts. For each of the precincts, PP3.2.5 identifies a desired future character, preferred land uses and required elements for development proposals.

As noted previously in the Background section of this Report, the subject site is within the 'Village West' sub-precinct of the 'Primary Centre Waterfront Village' zone.

The proposal is consistent with the desired future character for the sub-precinct, having medium height residential density fronting Parkin Street and Harrison Street. It is also consistent with the predominant preferred land use for the sub-precinct, being 'Multiple Dwelling'.

The proposal is broadly consistent with the required elements and intent of PP3.2.5. The elements which seek discretion and warrant further discussion are discussed in detail below.

Minimum Site Area
The importance of good built form outcomes is underpinned by the minimum site area requirements. The Policy requires a minimum lot width of 35-40m and lots should be minimum 2,200m^2 to permit a feasible, functional development. The subject site has a total land area of 3,161m^2. The Parkin Street lot width frontage is 34.17m, whilst the Harrison Street lot width frontage is 16.05m.

Although the lot width of the development falls short of the minimum requirement, the City and its DRP is confident that development is aligned with the broader intent of 'Village West' sub-precinct as well as RSC, which is to delivery high quality medium density residential development.

Building Height
PP3.2.5 provides a Building Height Overlay (refer to Figure 11 below), which permits building heights generally increasing in height in proximity to transit routes and activity generators.

Its intent is to ensure the building height and density provisions of the Policy are generally consistent with transit oriented development height provisions of the adopted Centre Plan.

The subject site has a maximum building height of 19m/5 storeys. The proposed Parkin Street end building is 21.4m/five storeys in height. The overall height of the building excluding the servicing equipment of the roof is less than 19m. As some of the servicing equipment exceeds 3m in height, it needs to be included in the building height calculation per the Policy requirements.

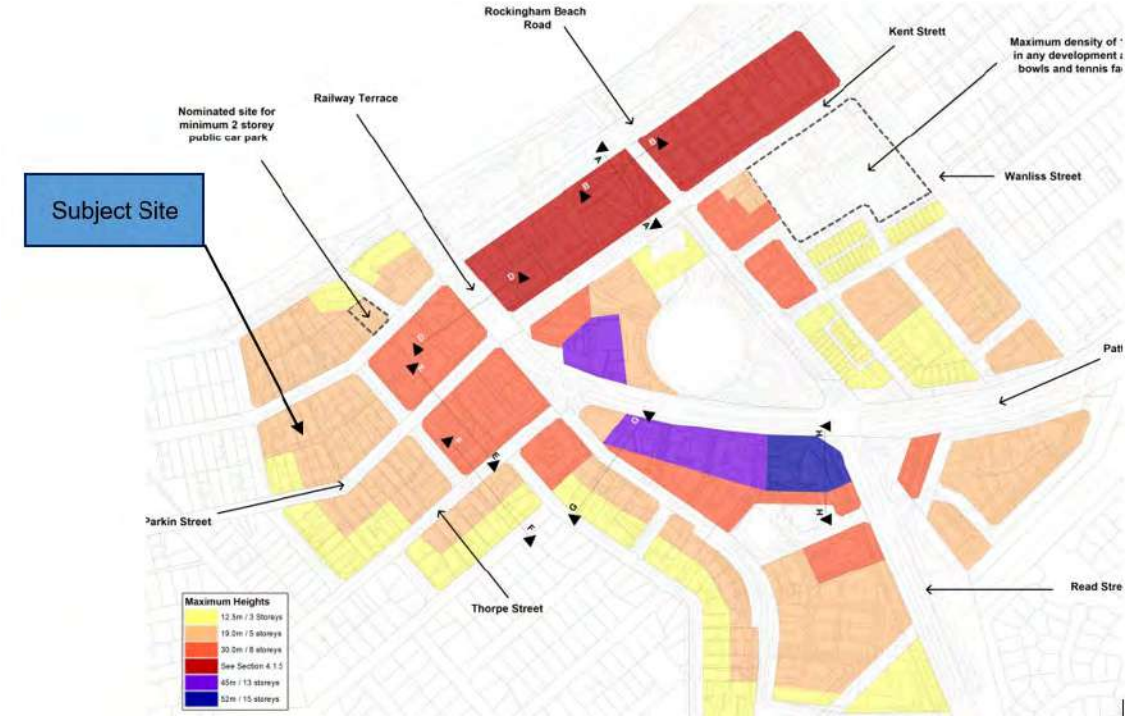


Figure 11 - Building Height Diagram

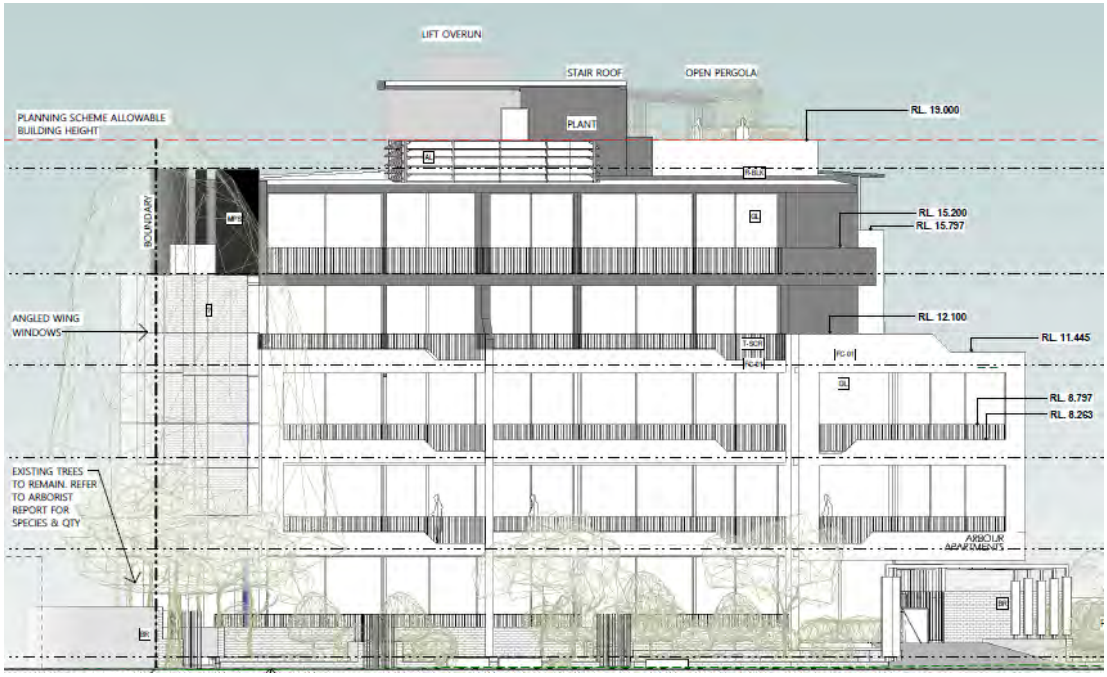




Figure 12 - Proposed Building in Context of Building Height Diagram

The building height pattern within the previously referred to street block (under the Background section of this Report) is single to two storey. No development has been approved in the street block exceeding two storeys. It is noted also that this is the very first proposed development within the street block which seeks to align to future vision of the RSC.

In assessing the development's impact on the amenity of the locality, the extra 2.4m building height is not considered to have a significant impact, with the over-height section being located central to the building mass and, is not highly visible from the public realm or adjacent properties.

The bulk and scale of the servicing equipment has been broken up through separation and height articulation.

The variation is minor in that it does not constitute an additional storey.

The overall building in general, incorporates generous setbacks from lot boundaries which reduce the perceived level of bulk impact when viewed from neighbouring properties, noting the policy permits for up to 12m in height (3 storeys) to be built up to side boundaries.

Under the RSC planning framework, a building of this height and scale is not considered to be an over-dominant development and would not be inconsistent with the desired future scale and character of the area, because:

- The subject site is surrounding by residential properties which have a similar or equivalent level of development potential with respect to scale and intensity and this ensures the future context of the area can be appropriately managed as the development context transitions;

- The increased boundary setbacks assist in ensuring views to and from are not unduly impacted.

- The City's DRP confirmed support for the built form and scale of the proposed development.

Frontage Type

PP3.2.5 provides a Frontage Type Overlay (refer to Figure 13 below) had been formulated in accordance with the 'Main Street' development principles that require buildings to frame, address and activate in interconnected hierarchical street network.



Figure 13 - Frontage Type Overlay

The proposed development requires 'Type 3 Frontage Type' to both Parkin Street and Harrison Street. The requirements of the frontage type are as follows:

"A moderate level of frontage activation with a mix of small scale commercial tenancies and residential apartments at ground level and a 2 to 3 storey façade positioned behind a 2 metre, green landscaped setback. At the ground level, the facades of mixed use buildings would address the street with a commercial shopfront, primary business entrance and/or residential entry lobby that is transparent over at least 60% of the area of the facade. The ground level of Village residential units would address the street with a façade that is transparent over at least 30% of its area."

The proposed ground level along Parkin Street provides a façade that is transparent over 85% of its area. The proposed ground level along Harrison Street provides a façade that is also transparent over 30% of its area, however, the solid fencing along the ground floor unit reduces glazing visibility and as a consequence, defeats the purpose of satisfying a moderate level of transparency.

"2m landscaped setback to building frontage, 4.5m setback for development from 12.5m to 19m high".

The Parkin Street end building provides a 4.5m landscape setback on average, with the building frontage on average achieving a 6.4m setback. The Harrison Street end building provides a 4.5m landscape setback and achieves an average building setback of 5m.

The buildings achieve greater street setbacks than what PP3.2.5 requires, whilst being close enough to provide a good urban street frontage response.

The street setbacks provide for an increase in the amenity of the site and its locality, given that the south-western end of Parkin Street and Harrison Street (where the site is situated) are unlikely to be capable of achieving the traditional 'Main Street' design criteria i.e. highly activate frontage with retail/commercial uses and nil setbacks.

The proposed setbacks are not considered to negatively impact on the planned character of the area.

The variations to PP3.2.5 are supported, subject to application of a recommended condition of Development Approval that restricts any solid fencing to a maximum height of 750mm above the finished floor level of the Harrison Street end ground floor unit, in order to improve transparency and ensure than an appropriate level of passive surveillance can be maintained.

Side Setbacks
PP3.2.5 permits nil setback up to a 3 storey podium height and a minimum 4m setback applies above the podium.

The development is broadly complaint or exceeds the setback requirements, except along the western elevation of the Parkin Street end building.

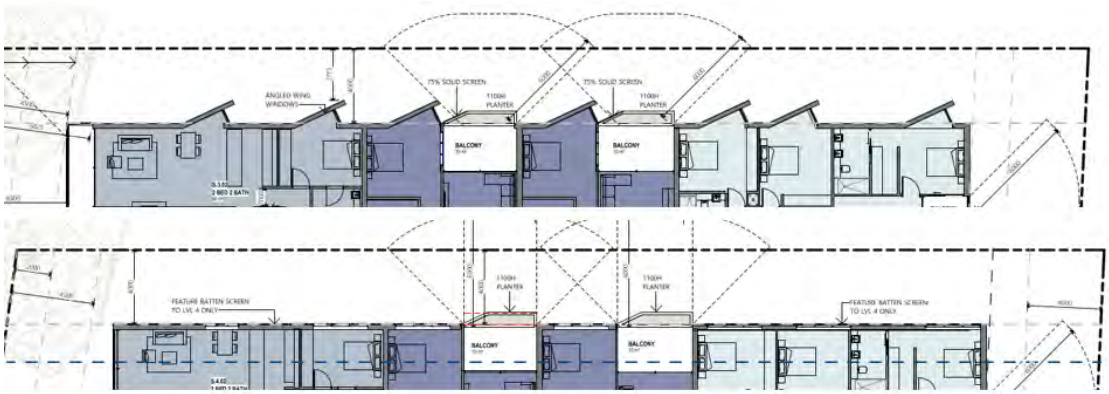


Figure 14 - Side Setback Variations

The side setback variations relate to the seven angled window features which are setback 2.75m, on level three and the two planter boxes which are setback 3.3m, on level four.

These features add articulation to the design and assist in reducing perceived building bulk.

These variations are minor.

<u>Rockingham Strategic Centre Framework Review</u>

In 2020, the City commenced a review of the Rockingham Strategic Centre planning framework with a goal to refine the elements of the Centre Plan, to ensure the framework aligns with the current State Government planning framework.

The draft Rockingham Strategic Centre Precinct Structure Plan (RSCPSP), and accompanying Amendment No.191 to TPS2 (Draft Planning Instruments) will ultimately coordinate future subdivision, land use and development of the RSC. Together they will constitute the 'planning framework'.

Notably, under the draft framework residential visitor parking in the Waterfront Village zone, would no longer be mandated in the form of a cash-in-lieu payment. Instead, and if agreed by the City, a proponent could make a cash payment to the City in lieu of the provision of all or any of the required number of visitor parking bays.

A reduction in building height/storey is also contemplated and includes the subject land, where it is proposed to reduce from 19m/5 storeys to 12m/3 storeys.

The Draft Planning Instruments were supported by Council in June 2022 for the purpose of public consultation. The City subsequently forwarded the Draft Planning Instruments to the State Government in August 2022, for consent to advertise. This consent is yet to be received and the Draft Planning Instruments have yet to be advertised.

Precinct Structure Plans (i.e. the RSCPSP) are advocated as the 'key planning instrument' to guide the planning and development of activity centres such as Rockingham Strategic Centre. Structure Plans, which are prepared and guided by the accompanying deemed provisions in the Planning and Development (Local Planning Schemes) Regulations 2015 are considered a robust and high order 'due regard' planning instrument which requires endorsement of the WAPC.

Clause 67(2) of the deemed provisions of the Regulations sets out the matters the Local Authority is to have 'due regard' to when considering an application, including paragraph (b), with relevant excerpt below:

"the requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under Planning and Development (Local Planning Schemes) Regulations 2015 or any other proposed planning instrument that the local government is seriously considering adopting or approving".

In the context of this application, it is the City's view that the Draft Planning Instruments cannot be given 'due regard' for the following reasons. Firstly, Amendment No.191 has not been granted consent to be advertised. The City understands that consent to advertise is unlikely to be granted prior to February 2023. Secondly, with respect to the draft RSCPSP (being a 'proposed planning instrument'), the City does not consider it has reached the stage where there City is 'seriously considering adopting or approving' it. At this stage Council has only supported the draft RSCPSP for the purposes of public consultation. It remains to be seen whether this support will continue once public consultation has been undertaken.

Ultimate approval of the draft RSCPSP is not imminent as, based on the statutory timeframes, the City does not expect to have the draft framework presented to Council for final endorsement until late 2023. Subsequently, approvals must be obtained from the State Government and Minister for Planning, meaning that the final RSCPSP may not take effect upon the final gazettal of proposed Amendment No.191 to TPS2, likely to occur early to mid-2024.

Ultimate approval of the draft RSCPSP in its current form is not certain either.

The RSCPSP and Amendment No.191 are inextricably linked and together form the 'local planning framework'. For full effect, both documents need to proceed to final approval before they supersede the existing Centre Plan and PP3.2.5.

Percentage for Public Art - Private Developer Contribution Assessment

In accordance with PP3.3.25, where a proposed development has an estimated construction cost exceeding $5M, there is a requirement to provide Public Art to a value of not less than 1% of the building works.

The Policy provides for the developer to nominate the method of providing Public Art, to either:

(a) Provide public artwork in a publicly visible location within the boundaries of an approved development site; or

(b) Provide a cash-in-lieu payment to enable the City to procure artwork for installation on public land within the vicinity of the approved development site.

The application proposes 'Public Art' to be provided along a section of the eastern elevation for each building, as illustrated below in Figure 15.



Figure 15 - Proposed Public Art

The proposed 'Public Art' is generally considered to be located in a publicly visible location. Should MOJDAP resolve to approve the development, it is recommended that the owner/developer make a Public Art contribution equal to 1% of the total construction value of the development. Based on the estimated cost of development of $20,160,000, this is equivalent to $201,600.

Town Planning Scheme No.2 Assessment

Clause 4.3B.1 - Objectives of the Primary Centre Waterfront Village zone
The proposed development is considered to be generally consistent with the objectives of the zone, which include *inter alia:*

"(a) to promote contemporary waterfront residential accommodation, commercial, tourism and recreational activities which serves local residents and visitors alike, in accordance with the Development Policy Plan for the Waterfront Village Sector;

(c) to achieve appropriate land use and built form outcomes, including a range of medium to high density housing, within a walkable catchment of the central public transit system;

(e) to provide contiguous, activated street front development; and

(g) to encourage vibrant and diverse uses which promote the Waterfront as a destination."

Given the nature of the proposed and the existing uses within the 'Waterfront Village' zone, it is considered that the proposed Multiple Dwelling land use, whilst not present in the 'Village West' sub-precinct, is one that is planned for under the existing planning framework.

The development presents a generally activated residential frontage to Parkin Street and Harrison Street and acknowledges the road hierarchy as "Access Road and Distributor B" from an urban townscape principle. The activated urban form, proposed land use and quality of the building finish will make a significant contribution towards the desired streetscape vision for the area.

A Multiple Dwelling development is appropriate for the desired future character of the area and is a preferred land use within the 'Village West' sub-precinct.

Overall, the proposal addresses the objectives of the Waterfront Village zone, as the development provides for a residential land use, which is consistent and appropriate within this zone.

Clause 4.3B.2 - R-Codes

(a) All residential development is required to be assessed against the R-AC0 density of the R-Codes.

The proposed development has been assessed in accordance with the R-AC0 density code and the applicable provisions.

(b) The local government may exercise its discretion in respect of the R-Codes provisions, consistent with the urban design objectives for individual Precincts, as set out in the relevant planning policy.

The development has been assessed against PP3.2.5 and generally meets the objectives of the policy, as detailed within the Policy section of this Report. Assessment of the R-Codes was also undertaken where its provisions did not supersede PP3.2.5.

Clause 4.3B.3 - Minimum Residential Density

A minimum density of 1 dwelling per 180m^2 of land area is required in the 'Primary Centre Waterfront Village' zone. Based on a site area of 3,161m^2, a minimum of 18 dwellings is required. The development provides for a total of 47 residential apartments, which exceeds the minimum residential density requirement.

Clause 4.15 - Car parking

Pursuant to Clause 4.15.1.2, car parking is required to be provided in accordance with Table 4 of TPS2.

Use	**Minimum Required**		**Provided**
	Rate	**Number**	
Multiple Dwellings	As per R-Codes		
1 bedroom dwellings (13)	0.75 per dwelling	9.75	
2+ bedroom dwellings (34)	1 bay per dwelling	34	

Total		43.75 (44)	56
Residential visitor parking			
Motorcycle/Scooter parking			
Bicycle parking			
47 Dwellings	1 visitor bay per four dwellings up to 12 dwellings 1 visitor bay per eight dwellings for the 13th dwelling and above	8	0
	1 motorcycle/scooter bay for every 10 car bays	5.6	6
	0.5 bicycle parking space per dwelling and 1 visitor space per 10 dwellings	20	20
Notes: 1. As per the R-Codes, Location A. 2. Calculation of parking rations shall be rounded up to the next whole number. 3. Clause 4.15.2.1 (b) of TPS2 supersedes element objectives 3.9 'Car and bicycle parking' with respect to provision of on-site visitor parking bays.			

The proposed development provides a total of 56 on-site car parking spaces which satisfies the parking requirements of Clause 4.15 of TPS2.

It is recommended that provision be made for 20 bicycle parking spaces with a minimum 5 bicycle parking spaces dedicated to the Harrison Street end of development.

Clause 4.15.2 - Provision of Parkin in the Primary Centre Waterfront Village zone
In the Waterfront Village zone, the minimum number of car parking bays required under Clause 4.15.2.1 for visitor parking where R-Codes apply, must be provided in the form of cash-in-lieu payment to the local government. As per Table 4 of TPS2, cash-in-lieu must be provided for 8 visitor car parking spaces based on the proposed development. The application acknowledges this mandatory requirement.

Clause 4.15.6 - Cash-In-Lieu of Parking Provisions
Under Clause 4.15.6.2(4), the cash-in-lieu payment for development on land within 'Area B', requires the provision and construction of parking bays in the form of on-street parking and includes full civil works, lighting, signage, line marking and landscaping.

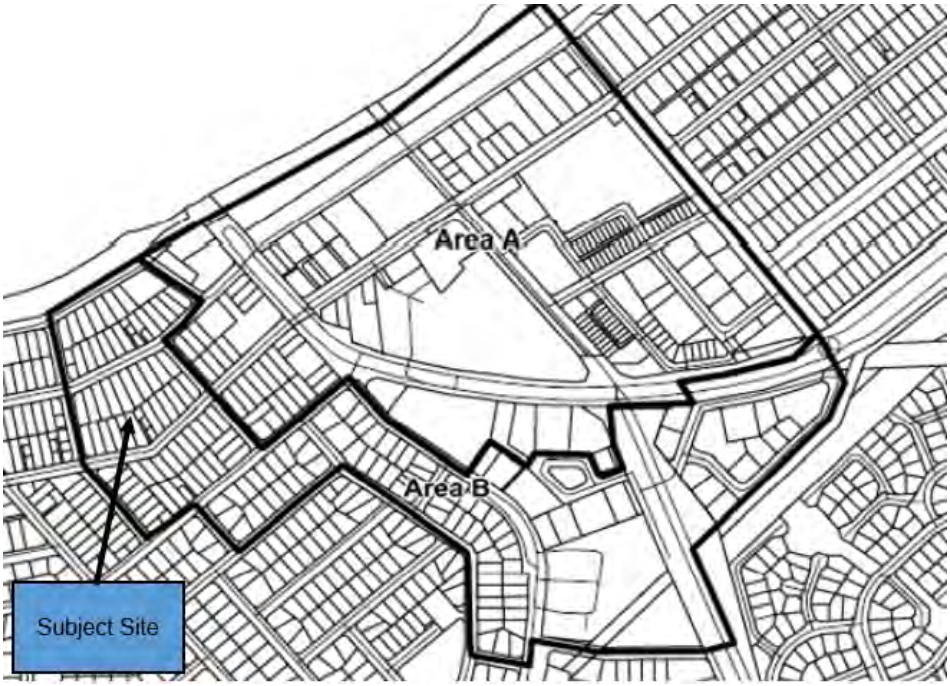


Figure 16 - Car Parking for Waterfront Village Plan

Clause 4.18.2 - Amenity
Pursuant to Clause 4.18.2, all land and buildings are required to be used and maintained to preserve the amenity of the neighbourhood in which they are situated.

The existing amenity has been considered in the design of the proposal, however, regard must be given to the amenity that will be derived from implementation of the planning framework. The architectural design is contextual and positively responds to the varied coastal character of the area. The amenity characterises were previously discussed in the Policy section of the Report, where it was concluded that overshadowing, visual privacy, outlook, bulk and scale, noise and traffic matters have been adequately addressed by this proposal and can be managed via conditions of Development Approval.

The proposal complies with Clause 4.18.2 of TPS2.

Clause 5.5 - Development Contribution Areas
Pursuant to Clause 5.5.1, contributions are applicable to land within the 'Development Contribution Area No.2', as set out under Schedule No.11 of TPS2.

Development Contributions are only required when a subdivision or development including dwelling/s occurs, and will typically be payable before the clearance of conditions of subdivision approval, or before construction of a dwelling/s commences, via a condition of Development Approval.

The amount due is dependent on the number of new residential dwellings which are being created and where the proposed development is located.

Contributions apply to land within the Waterfront Village zone, within which, the proposed development is located. Should MOJDAP resolve to approve the development, a condition of Development Approval is recommended, requiring the owner/developer to make contribution in accordance with the requirements of TPS2.

The contribution cost per dwelling within the Rockingham 'sub-area' is currently $1,622. It is noted that the contribution amount is reviewed at least annually and may change prior to becoming payable.

Other

Lot Amalgamation
Given the development is proposed over three green-title lots, the land will need to be amalgamated via a condition of Development Approval.

Construction Management
The careful management of the construction process and associated off-site impacts is required, in the event the development is approved, to ensure that it does not have an adverse impact on the surrounding residential properties and the local road network.

Queries have been raised during the community consultation period regarding the lack of information submitted with the application in relation to construction machinery and management. A Construction Management Plan would require the builder and/or developer to demonstrate how the construction phase and off-site impacts would be managed, including details on construction hours, crane location and operation, noise, sand and dust control, traffic management and access as well as public safety.

Conclusion:

The proposal is considered to represent a development with well-designed apartments providing strong outcomes in relation to amenity, landscaping, solar access and ventilation.

The proposed development is compatible with the desired future scale and character of the area under the existing RSC planning framework. Where discretion is being sought, the proposal achieves compliance with the relevant considerations and objectives.

In light of the above, it is recommended that the application be conditionally approved.

ARIA PROJECT DEVELOPMENT

ARBOUR APARTMENTS

89 HARRISON STREET + 142-144 PARKIN STREET
ROCKINGHAM





NOTE: Contractor to check and verify all dimensions, levels, and angles on site before commencing.
All construction work to be in accordance with the Building Code of Australia, approved documents and relevant Australian Standards.

- DRAWINGS SHALL NOT BE READ IN ISOLATION AS THEY REFER TO OTHER DRAWINGS, SCHEDULES AND SPECIFICATIONS

DRAWING SCHEDULE

0.00	COVER SHEET	P6
0.01	SURVEY PLAN	P2
1.01	SITE PLAN CONTEXT	P4
1.02	SITE PLAN	P6
1.10	BASEMENT - SOUTH BUILDING	P7
1.11	PODIUM FLOOR PLAN - SOUTH BUILDING	P9
1.12	LEVEL 1+2 - SOUTH BUILDING	P6
1.13	LEVEL 3 - SOUTH BUILDING	P6
1.14	LEVEL 4 - SOUTH BUILDING	P6
1.15	LEVEL 5 (ROOF) - SOUTH BUILDING	P5
1.16	GROUND FLOOR PLAN - NORTH BUILDING	P10
1.17	LEVEL 1+2+ROOF - NORTH BUILDING	P6
2.01	ELEVATIONS - NORTH + SOUTH	P5
2.02	ELEVATIONS - EAST + WEST	P7
3.01	BUILDING SECTIONS	P2
3.02	BALCONY SECTIONS - NORTH	P1
3.03	BALCONY SECTIONS - SOUTH	P1
3.05	ALLOWABLE DEVELOPMENT ENVELOPE	P1
9.01	SHADOW DIAGRAM	P2
10.01	3D - HARRISON ST	P6
10.02	3D - PARKIN ST	P6

PROPERTY INFORMATION

RESIDENTIAL APARTMENTS

89 HARRISON STREET + 142-144 PARKIN STREET,
ROCKINGHAM WA 6168

Lot 94 on P 5742; Lot 95 on P 5742; Lot 62 on P 5742
CITY OF ROCKINGHAM

SITE AREAS: Lot 94-1067m²; Lot 95-928m²; Lot 62-1166m²;
TOTAL:3161m²

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG
ARCHITECTURE

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

COVER SHEET

SCALE	DRAWN	CHECKED
@ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	0.00	P6

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DATE
21.10.22

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HARRISON STREET

VIEW FROM 87 PARKIN



VIEW FROM 91 HARRISON





ENTRY ARBOUR VIEW



NORTHERN ELEVATION
(89 HARRSION ST)

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

3D - HARRISON ST

SCALE	DRAWN	CHECKED
@ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	10.01	P6

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PARKIN STREET

VIEW FROM 146 PARKIN



VIEW FROM 142 PARKIN





ENTRY ARBOUR VIEW



SOUTHERN ELEVATION
(142-144 PARKIN ST)

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.06.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG
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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

3D - PARKIN ST

SCALE	DRAWN	CHECKED
@ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	10.02	P6

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DATE 21.10.22



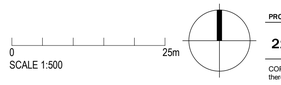
SITE winter 12noon - RESIDENTIAL

SCALE 1 : 500



SITE winter 12noon - WATERFRONT

SCALE 1 : 500



SCALE 1:500

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TOTAL APARTMENT #47

DUAL ASPECT + NORTH/WEST/EAST
FACING APARTMENTS = 44
=93.6% MIN 2 HRS SUN
BETWEEN 9AM-3PM 21ST JUNE

SINGLE ASPECT SOUTH
FACING APARTMENTS = 3
= 6.38% NO DIRECT SUN
BETWEEN 9AM-3PM 21ST JUNE

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P2	21.10.22	PLANNING UPDATE	DMG	TLM
P1	08.08.22	PLANNING APPLICATION	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

SHADOW DIAGRAM

SCALE	DRAWN	CHECKED
1 : 500 @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	9.01	P2

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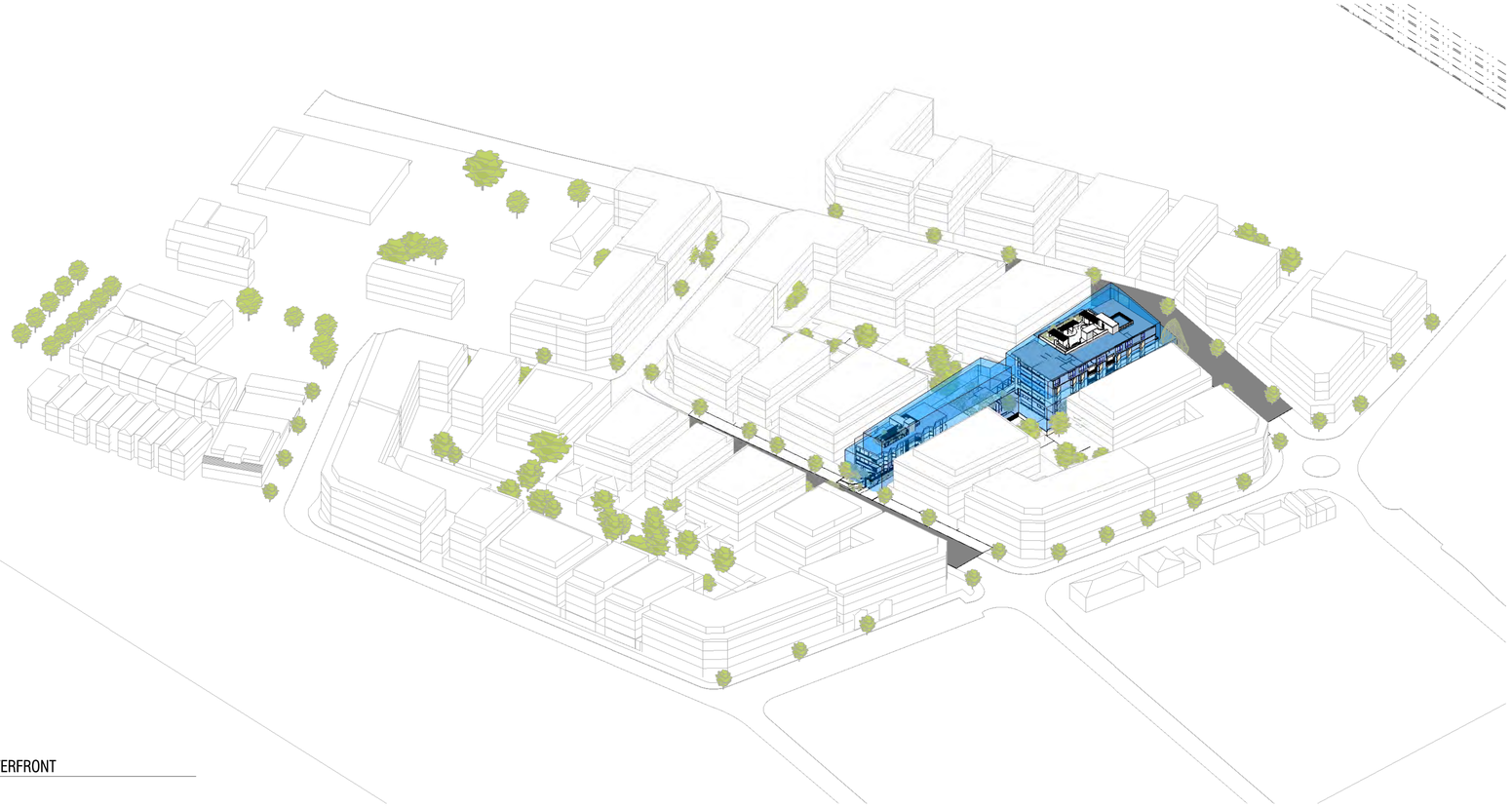
1 CONTEXT - EXISTING



2 CONTEXT - WATERFRONT

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P1	21.10.22	PLANNING UPDATE	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

ALLOWABLE DEVELOPMENT ENVELOPE

SCALE	DRAWN	CHECKED
@ A1	SJ	TLM

PROJECT #	DRAWING #	ISSUE
21049	3.05	P1

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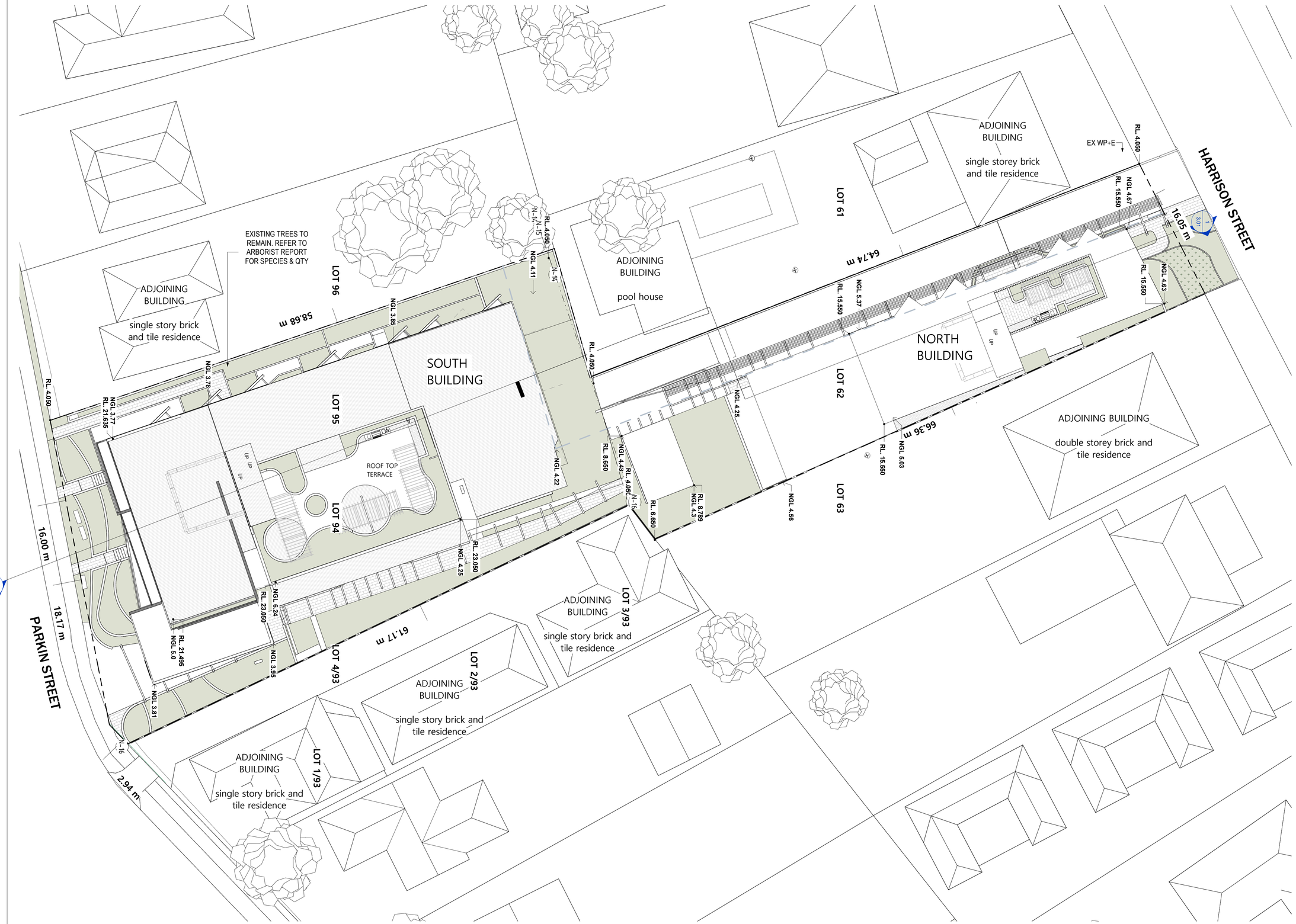

0 10m
SCALE 1:200

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SITE	3154 m²	
DEEP PLANTING	436 m²	14%

89 HARRISON STREET + 142-144 PARKIN STREET, ROCKINGHAM WA 6168

CITY OF ROCKINGHAM
Lot 94 on P 5742;
Lot 95 on P 5742;
Lot 62 on P 5742

SITE AREAS:
Lot 94-1067m²;
Lot 95-928m²;
Lot 62-1166m²;
TOTAL:3161m²

RAC-0

NORTH BUILDING
GF = 1 APARTMENT (1*1B)
L1 = 2 APARTMENTS (2*2B)
L2 = 2 APARTMENTS (2*2B)
L3 (ROOF)
NORTH TOTAL = 5 APARTMENTS

SOUTH BUILDING
PODIUM = 8 APARTMENTS (4*1B, 3*2B, 1*3B)
L1 = 9 APARTMENTS (2*1B, 6*2B, 1*3B)
L2 = 9 APARTMENTS (2*1B, 6*2B, 1*3B)
L3 = 8 APARTMENTS (2*1B, 5*2B, 1*3B)
L4 = 8 APARTMENTS (2*1B, 5*2B, 1*3B)
L5 (ROOF)
SOUTH TOTAL = 42 APARTMENTS

DEVELOPMENT TOTAL = 47 APARTMENTS

ONE BED - 13	23%
TWO BED - 29	66%
THREE BED - 5	11%

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
SITE PLAN

SCALE	DRAWN	CHECKED
1 : 200 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.02	P6

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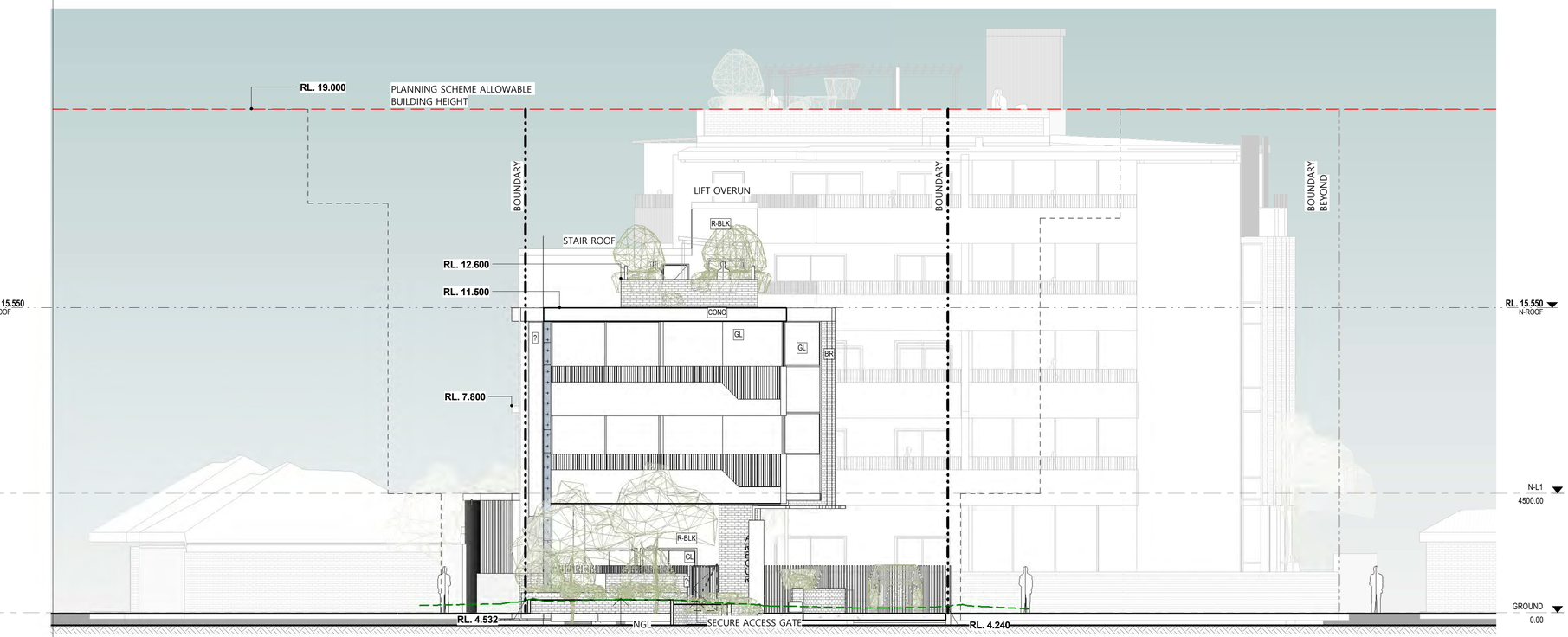
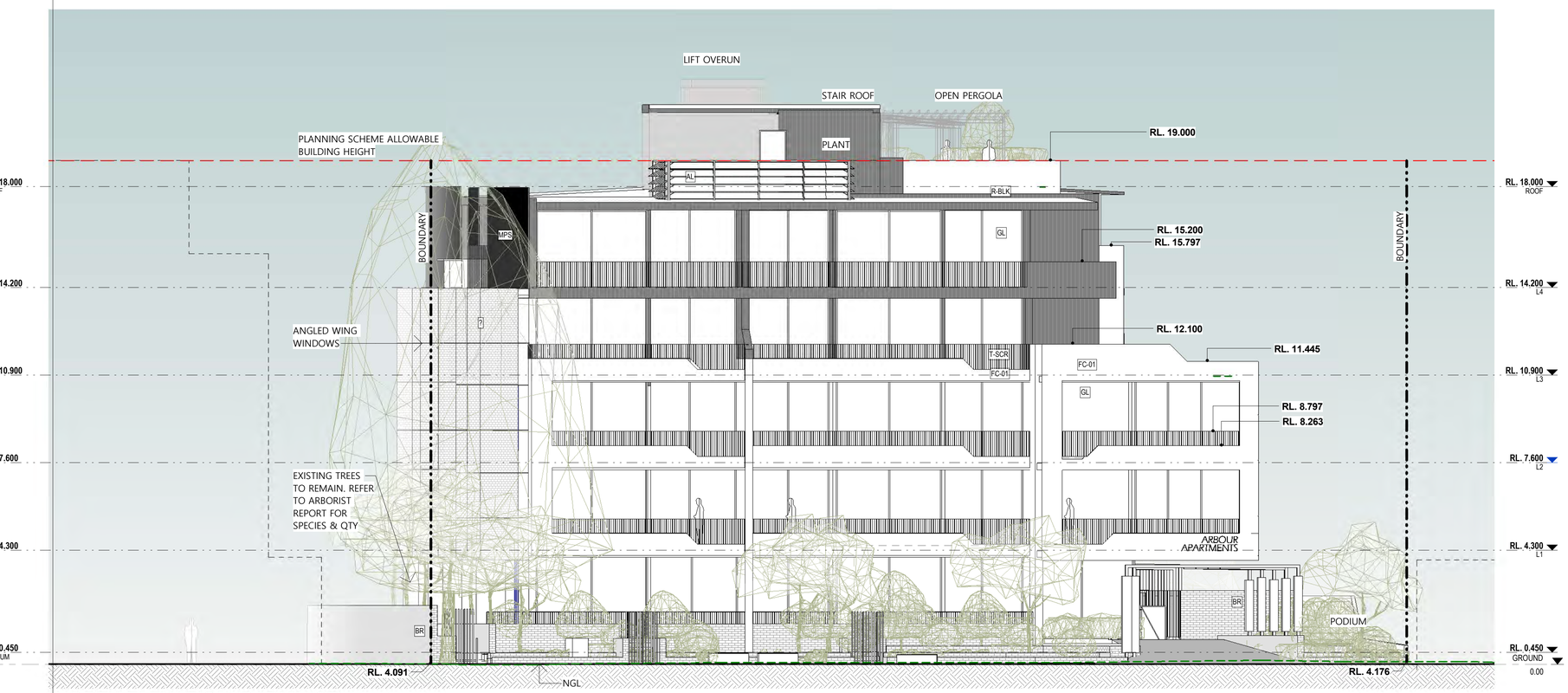


SOUTH ELEVATION (HARRISON ST)

SCALE 1 : 100



NORTH ELEVATION (PARKIN ST)

SCALE 1 : 100

CODE	IMAGE	DESCRIPTION
AL		ANODIZED ALUMINUM
ART		ART/MURAL (INDICATIVE ONLY)
BLK		MASONRY BLOCK - PAINTED
BR		FACE BRICK
CONC		CONCRETE - EXPOSED AGG
FC-01		FIBERCEMENT CLADDING - PAINT FINISH
GL		GLASS - LOW REFLECTANCE BRONZE TINT
MF-1		METAL FINISH - 1
MPS		METAL PAN WALL CLADDING
MRS		METAL ROOF SHEET
PF		PAINT FINISH
R-BLK		RENDER FINISHED MASONRY BLOCK
RRM		Asphalt
T		<varies>
T-CONC		TEXTURED CONCRETE RENDERED MASONRY
T-SCR		TIMBER LOOK ALUMINIUM SCREEN

0 5m
SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	21.10.22	PLANNING UPDATE	DMG	TLM
P4	08.08.22	PLANNING APPLICATION	DMG	TLM
P3	14.04.22	PRELODGE ISSUE	DMG	TLM
P2	06.04.22	PRELODGE ISSUE	DMG	TLM
P1	08.03.22	PRELODGE ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

ELEVATIONS - NORTH + SOUTH

SCALE	DRAWN	CHECKED
1 : 100 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	2.01	P5

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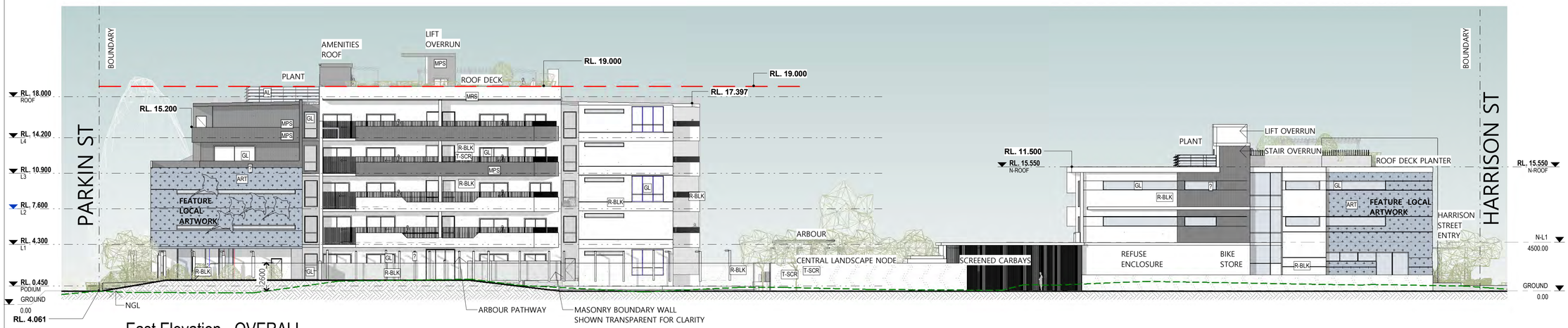
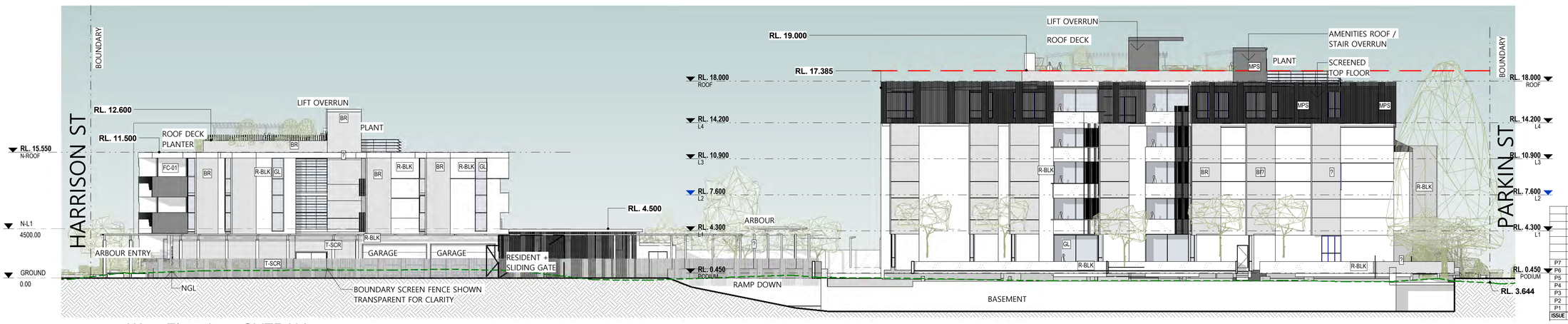


East Elevation - OVERALL

SCALE 1 : 200



West Elevation - OVERALL

SCALE 1 : 200

CODE	IMAGE	DESCRIPTION
AL		ANODIZED ALUMINUM
ART		ART/MURAL (INDICATIVE ONLY)
BLK		MASONRY BLOCK - PAINTED
BR		FACE BRICK
CONC		CONCRETE - EXPOSED AGG
FC-01		FIBERCEMENT CLADDING - PAINT FINISH

CODE	IMAGE	DESCRIPTION
GL		GLASS - LOW REFLECTANCE BRONZE TINT
MF-1		METAL FINISH - 1
MPS		METAL PAN WALL CLADDING
MRS		METAL ROOF SHEET
PF		PAINT FINISH

CODE	IMAGE	DESCRIPTION
R-BLK		RENDER FINISHED MASONRY BLOCK
RRM		Asphalt
T		<varies>
T-CONC		TEXTURED CONCRETE RENDERED MASONRY
T-SCR		TIMBER LOOK ALUMINIUM SCREEN

0 5m
SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P7	21.10.22	PLANNING UPDATE	DMG	TLM
P6	08.08.22	PLANNING APPLICATION	DMG	TLM
P5	14.04.22	PRELODGE ISSUE	DMG	TLM
P4	06.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
ELEVATIONS - EAST + WEST

SCALE	DRAWN	CHECKED
1 : 200 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	2.02	P7

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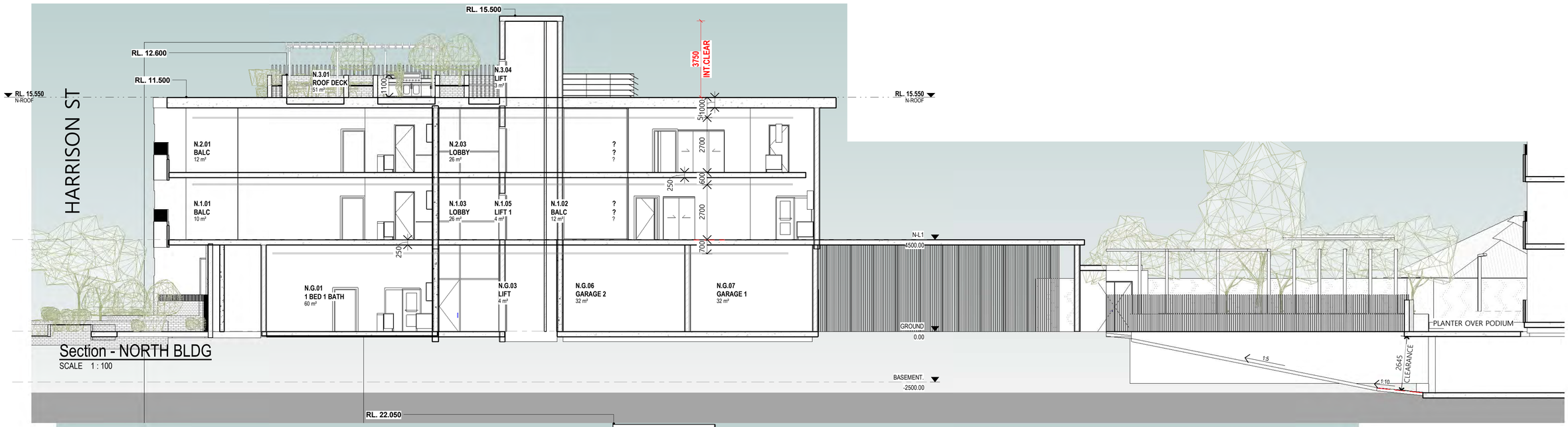
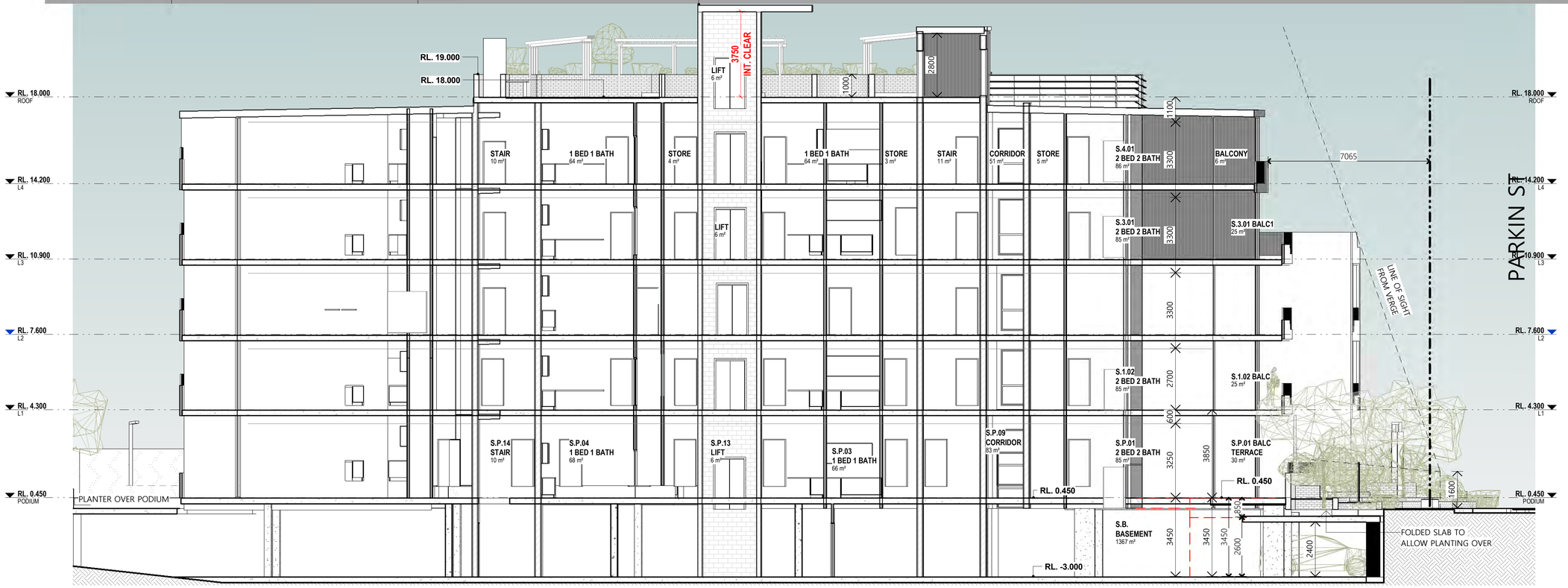


Section - NORTH BLDG

SCALE 1 : 100



Section - SOUTH BLDG

SCALE 1 : 100

0 5m

SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P2	21.10.22	PLANNING UPDATE	DMG	TLM
P1	08.08.22	PLANNING APPLICATION	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

BUILDING SECTIONS

SCALE	DRAWN	CHECKED
1 : 100 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	3.01	P2

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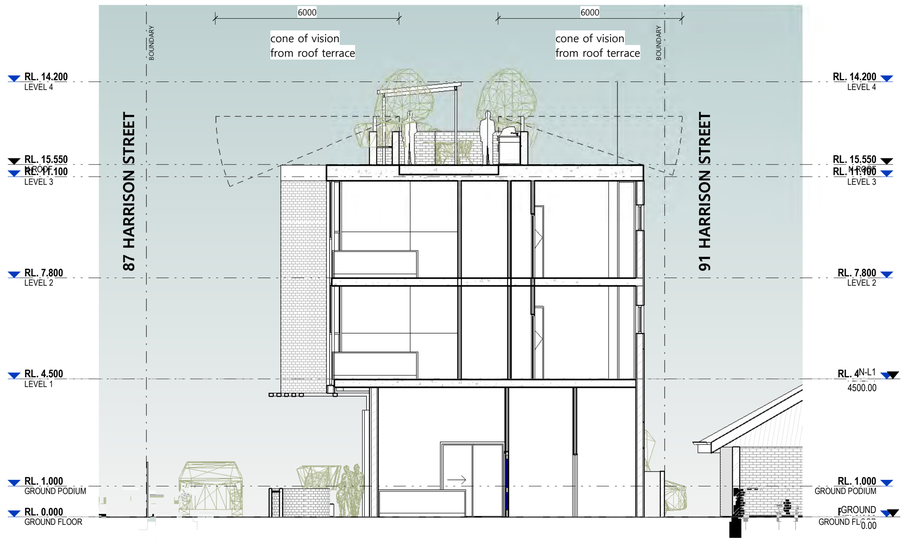
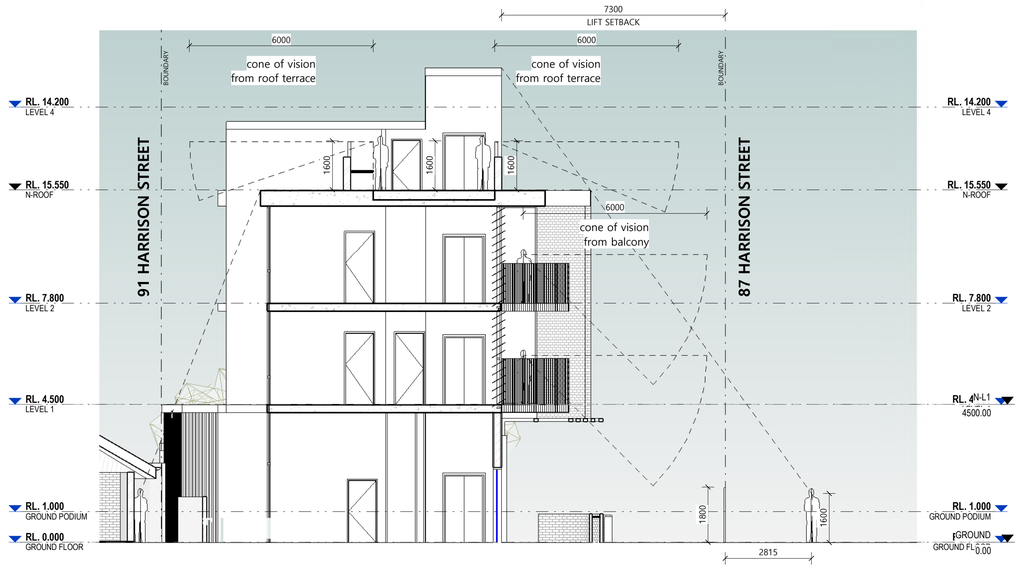


1 / 1.17 Section 10
1 : 100



4 / 1.16 Section 19
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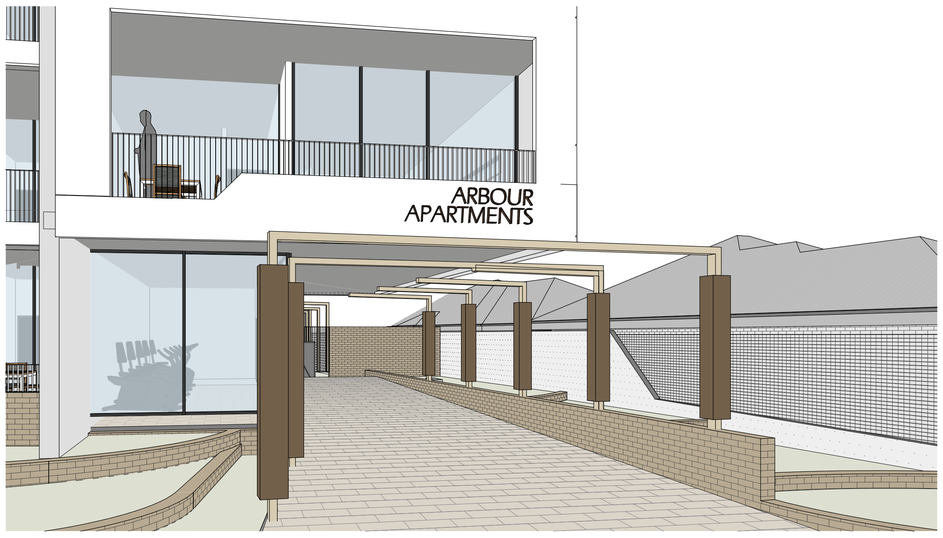
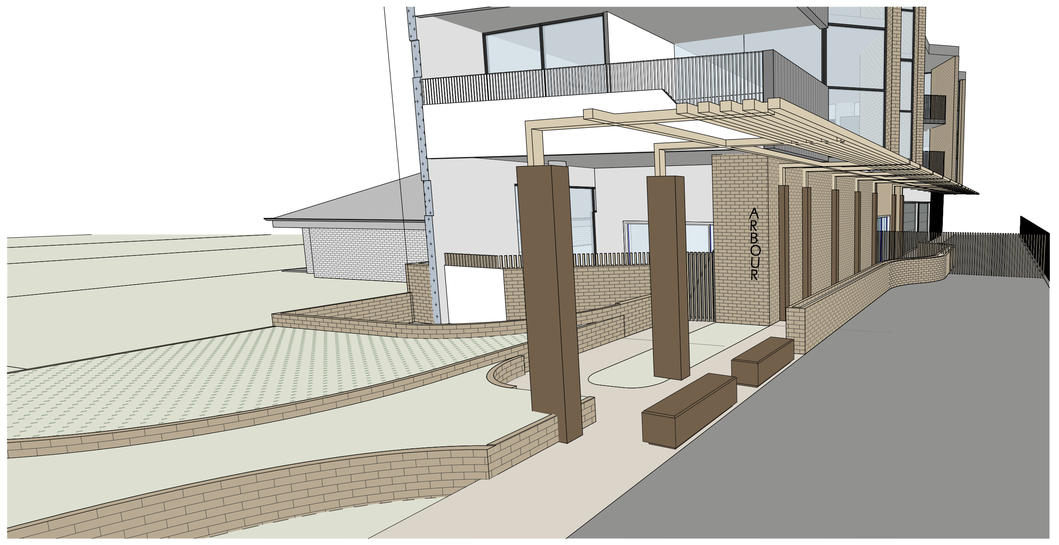


2 PARKIN STREET - ENTRY ARBOUR



3 HARRISON STREET - ENTRY ARBOUR

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ISSUE	DATE	DESCRIPTION	DRN.	APP.
P1	21.10.22	PLANNING UPDATE	DMG	TLM

PLANNING APPLICATION

DMG
ARCHITECTURE

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

BALCONY SECTIONS - NORTH

SCALE	DRAWN	CHECKED
1 : 100 @ A1	Author	Checker

PROJECT #	DRAWING #	ISSUE
21049	3.02	P1

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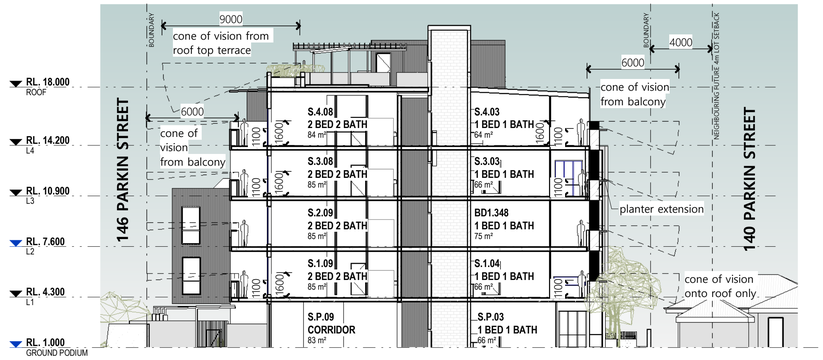
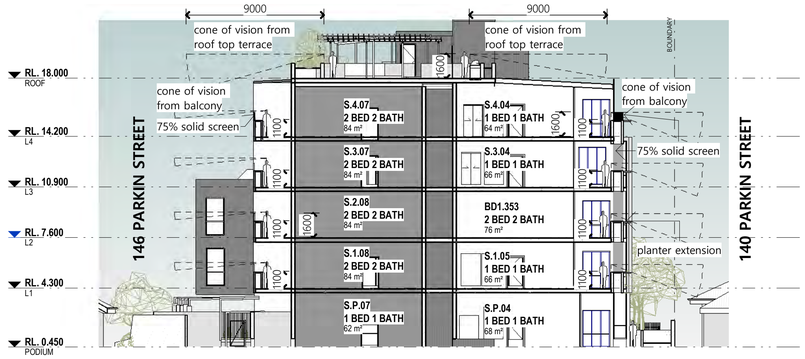
DATE 21.10.22



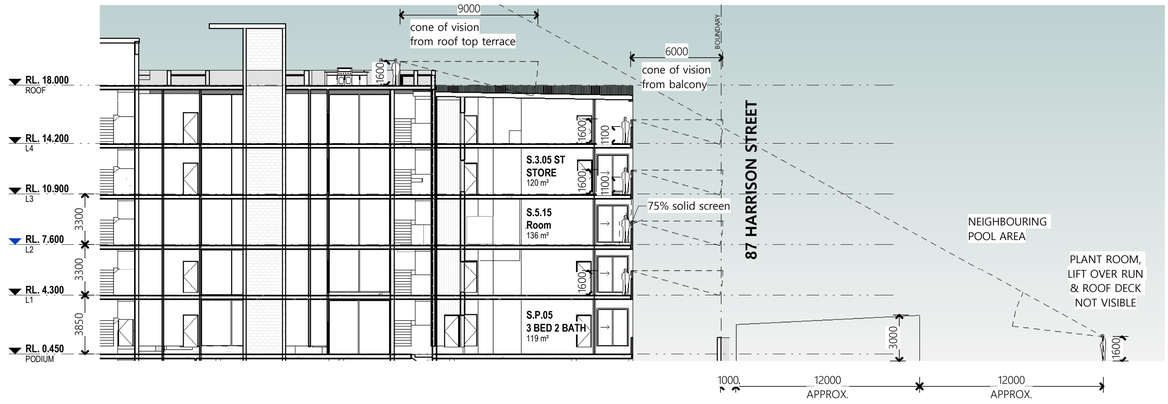
1 1.11 Section 19 - BALCONIES

1 : 200



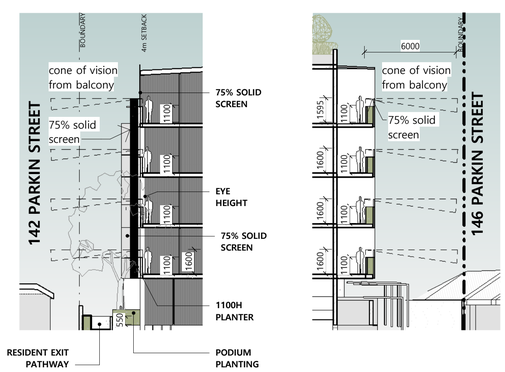
2 1.11 Section 17 - BALCONIES

1 : 200



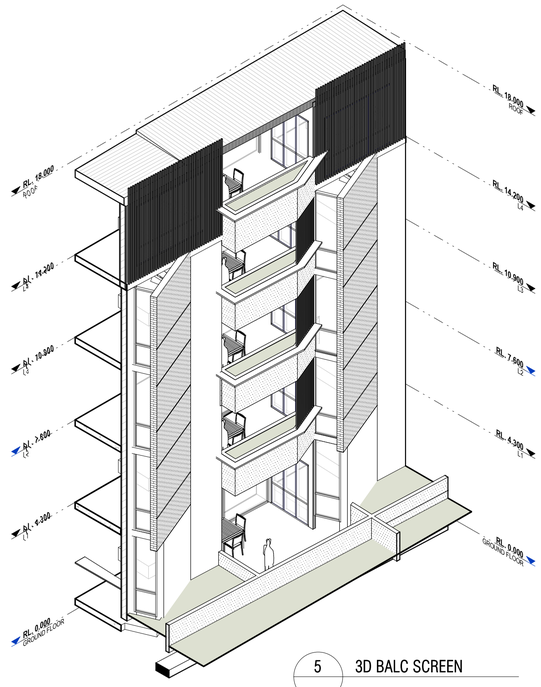
3 1.12 Section 14 - BALCONIES

1 : 200



4 1.12 SHORT SECTION - PLANTERS+WALKWAY

1 : 200



5 3D BALC SCREEN

NOTE: Contractor to check and verify all dimensions, levels, and angles on site before commencing.
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ISSUE	DATE	DESCRIPTION	DRN.	APP.
P1	21.10.22	PLANNING UPDATE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

BALCONY SECTIONS - SOUTH

SCALE	DRAWN	CHECKED
1 : 200 @ A1	SJ	TLM

PROJECT #	DRAWING #	ISSUE
21049	3.03	P1

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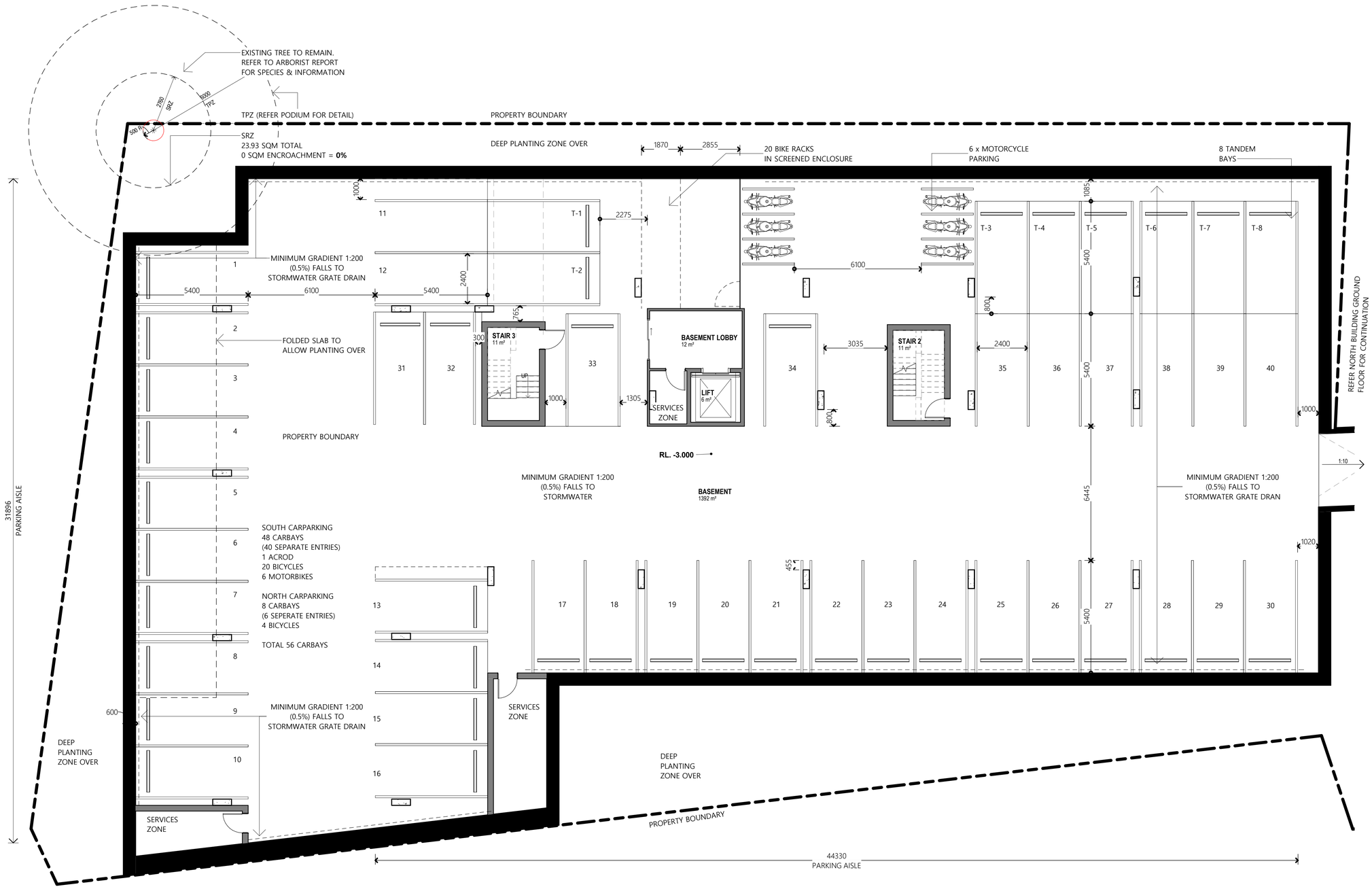

0 5m
SCALE 1:100

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m²
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P7	21.10.22	PLANNING UPDATE	DMG	TLM
P6	12.10.22	CONSULTANT UPDATE	TLM	SJ
P5	05.10.22	PLANNING UPDATE	TLM	SJ
P4	08.08.22	PLANNING APPLICATION	DMG	TLM
P3	26.07.22	CONSULTANT UPDATE	DMG	TLM
P2	14.04.22	PRELODGE ISSUE	DMG	TLM
P1	06.04.22	PRELODGE ISSUE	DMG	TLM

PLANNING APPLICATION

DMG
ARCHITECTURE

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
BASEMENT - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.10	P7

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ROOM SCHEDULE - SOUTH BDG - PODIUM

NUMBER	NAME	AREA
S.P.01	2 BED 2 BATH	85 m²
S.P.01 BALC	TERRACE	30 m²
S.P.01 ST	STORE	5 m²
S.P.02	2 BED 2 BATH	87 m²
S.P.02 BALC	TERRACE	37 m²
S.P.02 ST	STORE	4 m²
S.P.03	1 BED 1 BATH	66 m²
S.P.03 BALC	TERRACE	17 m²
S.P.03 ST	STORE	3 m²
S.P.04	1 BED 1 BATH	68 m²
S.P.04 BALC	TERRACE	17 m²
S.P.04 ST	STORE	4 m²
S.P.05	3 BED 2 BATH	119 m²
S.P.05 BALC	TERRACE	15 m²
S.P.05 ST	STORE	6 m²
S.P.06	2 BED 2 BATH	83 m²
S.P.06 BALC	TERRACE	16 m²
S.P.06 ST	STORE	4 m²
S.P.07	1 BED 1 BATH	62 m²
S.P.07 BALC	TERRACE	18 m²
S.P.07 ST	STORE	4 m²
S.P.08	1 BED 1 BATH	63 m²
S.P.08 ST	STORE	4 m²
S.P.08. BALC	TERRACE	19 m²
S.P.09	CORRIDOR	88 m²
S.P.10	STAIR	17 m²
S.P.13	LIFT	6 m²
S.P.14	STAIR	10 m²
S.P.16	RESIDENT FITNESS	37 m²

SITE	3154 m²	
DEEP PLANTING	436 m²	14%

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m² ← FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P9	21.10.22	PLANNING UPDATE	DMG	TLM
P8	12.10.22	CONSULTANT UPDATE	TLM	SJ
P7	08.08.22	PLANNING APPLICATION	DMG	TLM
P6	26.07.22	CONSULTANT UPDATE	DMG	TLM
P5	14.04.22	PRELODGE ISSUE	DMG	TLM
P4	06.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
PODIUM FLOOR PLAN - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.11	P9

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ROOM SCHEDULE - SOUTH BDG - LEVEL 1

NUMBER	NAME	AREA
BALCONY	BALCONY	15 m²
N.B.18	STORE	3 m²
S.1.01	2 BED 2 BATH	86 m²
S.1.01 BALC	BALCONY	16 m²
S.1.01 ST	STORE	4 m²
S.1.02	2 BED 2 BATH	85 m²
S.1.02 BALC	BALCONY	25 m²
S.1.02 ST	STORE	5 m²
S.1.03	2 BED 2 BATH	91 m²
S.1.03 BALC	BALCONY	20 m²
S.1.03 ST	STORE	4 m²
S.1.04	1 BED 1 BATH	66 m²
S.1.04 BALC	BALCONY	10 m²
S.1.05	1 BED 1 BATH	66 m²
S.1.05 BALC	BALCONY	10 m²
S.1.05 ST	STORE	4 m²
S.1.06	3 BED 2 BATH	120 m²
S.1.06 ST	STORE	6 m²
S.1.07	2 BED 2 BATH	81 m²
S.1.07 BALC	BALCONY	16 m²
S.1.08	2 BED 2 BATH	84 m²
S.1.08 BALC	BALCONY	18 m²
S.1.08 ST	STORE	4 m²
S.1.09	2 BED 2 BATH	85 m²
S.1.09 BALC	BALCONY	22 m²
S.1.09 ST	STORE	4 m²
S.1.10	CORRIDOR	58 m²
S.1.11	STAIR	11 m²
S.1.12	LIFT	6 m²
S.1.13	STAIR	10 m²



ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR

S.P. #
Name
m²
ROOM NAME
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 1+2 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.12	P6

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ROOM SCHEDULE - SOUTH BDG - LEVEL 3

NUMBER	NAME	AREA
S.3.01	2 BED 2 BATH	85 m²
S.3.01 BALC1	BALCONY	25 m²
S.3.01 BALC2	TERRACE	20 m²
S.3.01 ST	STORE	5 m²
S.3.02	2 BED 2 BATH	90 m²
S.3.02 BALC	BALCONY	20 m²
S.3.02 ST	STORE	4 m²
S.3.03	1 BED 1 BATH	66 m²
S.3.03 BALC	BALCONY	10 m²
S.3.03 ST	STORE	3 m²
S.3.04	1 BED 1 BATH	66 m²
S.3.04 BALC	BALCONY	10 m²
S.3.04 ST	STORE	4 m²
S.3.05	3 BED 2 BATH	Redundant Room
S.3.05 ST	STORE	120 m²
S.3.06	2 BED 2 BATH	83 m²
S.3.07	2 BED 2 BATH	84 m²
S.3.07 BALC	BALCONY	18 m²
S.3.07 ST	STORE	4 m²
S.3.08	2 BED 2 BATH	85 m²
S.3.08 BALC	BALCONY	22 m²
S.3.08 ST	STORE	4 m²
S.3.09	CORRIDOR	51 m²
S.3.10	STAIR	11 m²
S.3.11	LIFT	6 m²
S.3.12	STAIR	10 m²



ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name
m²
ROOM NAME
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 3 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.13	P6

SCALE 1:100 (0 – 5m)

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DATE 21.10.22

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ROOM SCHEDULE - SOUTH BDG - LEVEL 4

NUMBER	NAME	AREA
BALCONY	BALCONY	16 m²
S.4.01	2 BED 2 BATH	86 m²
S.4.01 BALC 1	TERRACE	30 m²
S.4.01 BALC 2	BALCONY	6 m²
S.4.01 ST	STORE	5 m²
S.4.02	2 BED 2 BATH	89 m²
S.4.02 BALC	BALCONY	10 m²
S.4.02 ST	STORE	4 m²
S.4.03	1 BED 1 BATH	64 m²
S.4.03 BALC	BALCONY	10 m²
S.4.03 ST	STORE	3 m²
S.4.04	1 BED 1 BATH	64 m²
S.4.04 BALC	BALCONY	10 m²
S.4.04 ST	STORE	4 m²
S.4.05	3 BED 2 BATH	115 m²
S.4.06 ST	STORE	4 m²
S.4.07	2 BED 2 BATH	84 m²
S.4.07 BALC	BALCONY	18 m²
S.4.07 ST	STORE	4 m²
S.4.08	2 BED 2 BATH	84 m²
S.4.08 BALC	BALCONY	22 m²
S.4.08 ST	STORE	4 m²
S.4.09	CORRIDOR	51 m²
S.4.10	STAIR	11 m²
S.4.11	LIFT	6 m²
S.4.12	STAIR	10 m²
STORE	STORE	6 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m² ← FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 4 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.14	P6

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DATE 21.10.22

0 5m
SCALE 1:100

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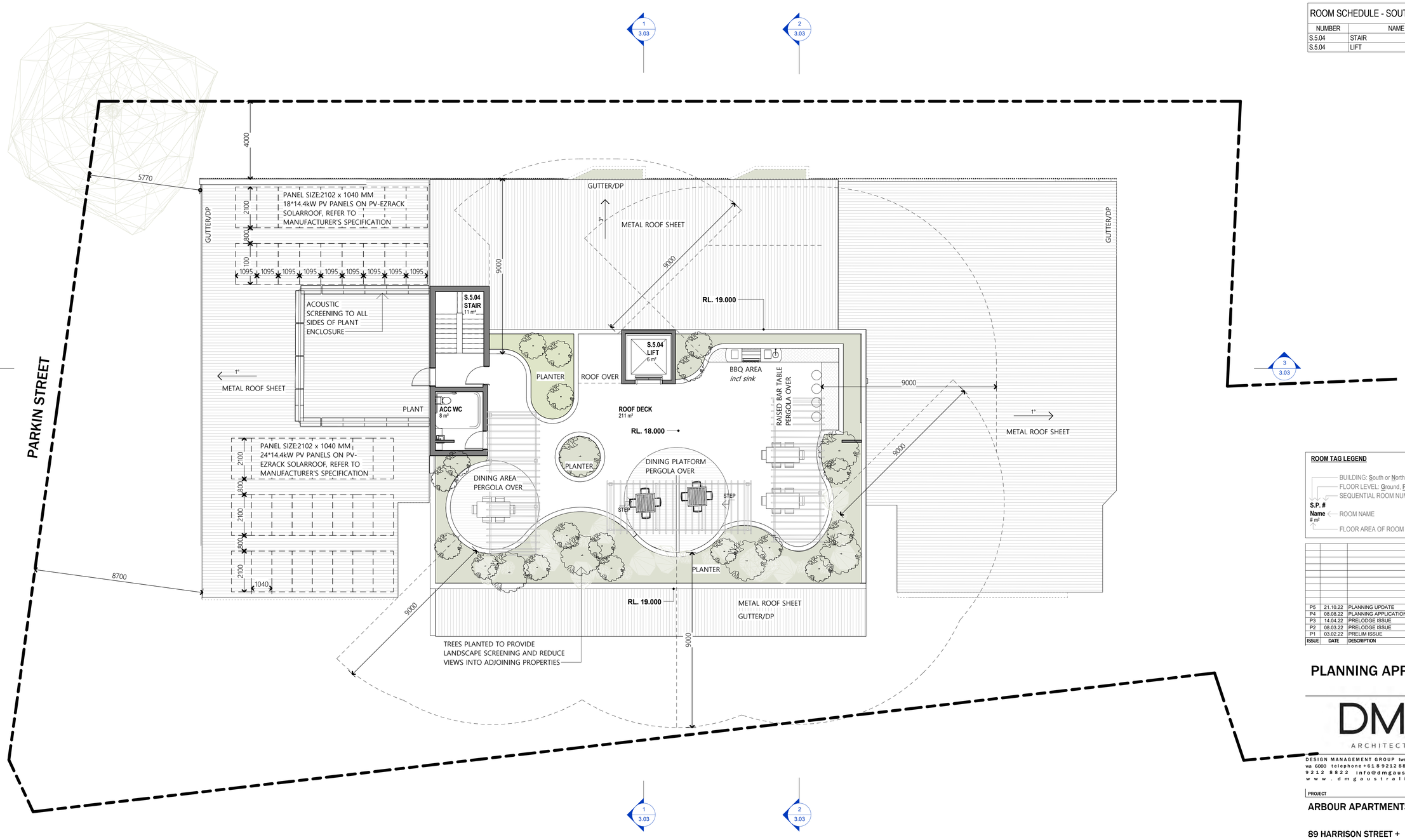
ROOM SCHEDULE - SOUTH BDG - LEVEL 5		
NUMBER	NAME	AREA
S.5.04	STAIR	11 m²
S.5.04	LIFT	6 m²



ROOM TAG LEGEND

S.P. #
Name
m²

- BUILDING: South or North
- FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
- SEQUENTIAL ROOM NUMBER ON FLOOR
- ROOM NAME
- FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	21.10.22	PLANNING UPDATE	DMG	TLM
P4	08.08.22	PLANNING APPLICATION	DMG	TLM
P3	14.04.22	PRELODGE ISSUE	DMG	TLM
P2	08.03.22	PRELODGE ISSUE	DMG	TLM
P1	03.02.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 5 (ROOF) - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.15	P5

0 5m
SCALE 1:100

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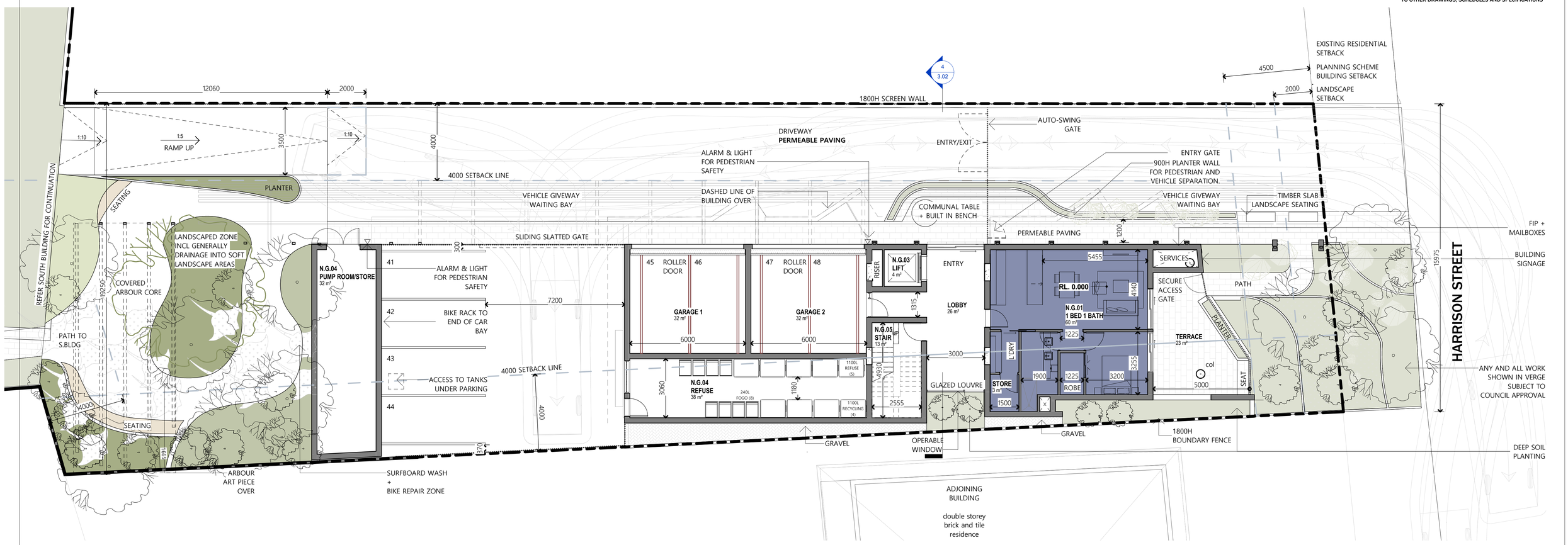

ROOM SCHEDULE - NORTH BDG -...		
NUMBER	NAME	AREA
N.G.01	1 BED 1 BATH	60 m²
N.G.01	STORE	3 m²
N.G.01	TERRACE	23 m²
N.G.03	LIFT	4 m²
N.G.04	PUMP ROOM/STORE	32 m²
N.G.05	STAIR	13 m²

SITE	3154 m²	
DEEP PLANTING	436 m²	14%

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name
 # m²
ROOM NAME
FLOOR AREA OF ROOM

0 5m
SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P10	21.10.22	PLANNING UPDATE	DMG	TLM
P9	12.10.22	CONSULTANT UPDATE	TLM	SJ
P8	05.10.22	PLANNING UPDATE	TLM	SJ
P7	08.08.22	PLANNING APPLICATION	DMG	TLM
P6	26.07.22	CONSULTANT UPDATE	DMG	TLM
P5	14.04.22	PRELODGE ISSUE	DMG	TLM
P4	06.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG
ARCHITECTURE
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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

GROUND FLOOR PLAN - NORTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.16	P10

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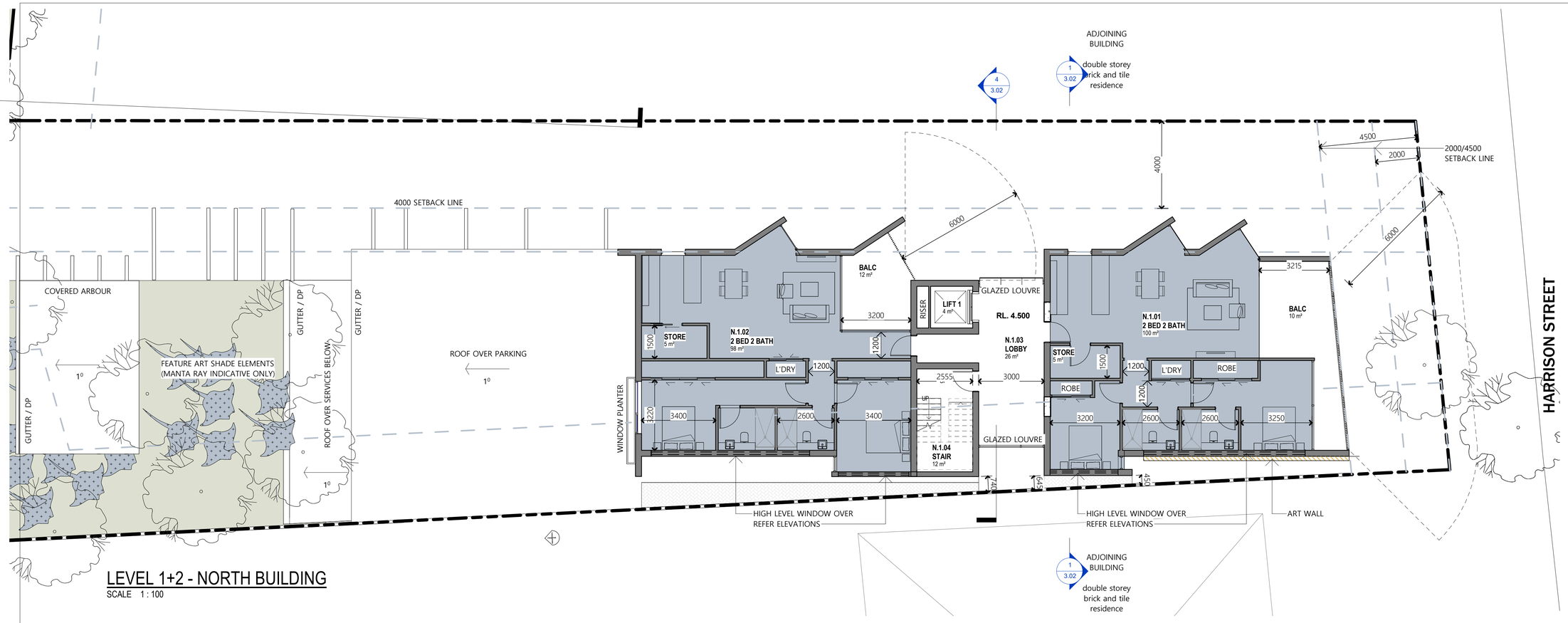
DATE 21.10.22



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ROOM SCHEDULE - NORTH BDG - LEVEL 1

NUMBER	NAME	AREA
N.1.01	2 BED 2 BATH	100 m²
N.1.01	BALC	10 m²
N.1.01 ST	STORE	5 m²
N.1.02	2 BED 2 BATH	98 m²
N.1.02	BALC	12 m²
N.1.02 ST	STORE	5 m²
N.1.03	LOBBY	26 m²
N.1.04	STAIR	12 m²
N.1.05	LIFT 1	4 m²

ROOM SCHEDULE - NORTH BDG - LEVEL 3

NUMBER	NAME	AREA
N.3.01	ROOF DECK	51 m²
N.3.02	PLANT	13 m²
N.3.03	STAIR	8 m²
N.3.04	LIFT	3 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name — ROOM NAME
m² — FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 1+2+ROOF - NORTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.17	P6

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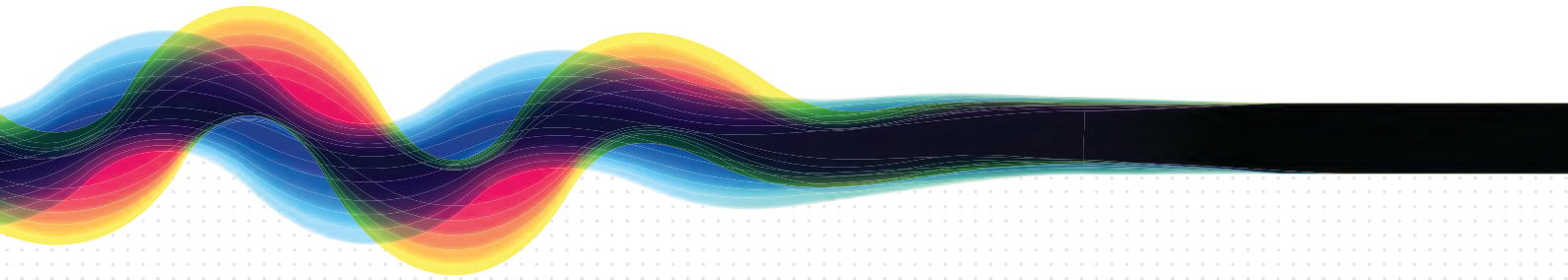
DATE 21.10.22

Lot 62 (No. 89) Harrison Street and Lots 94 and 95 (No. 144 and 142) Parkin Street, Rockingham

Application for 47 Multiple Dwellings

Prepared for Mr P Jackson

August 2022 | 21-739



element.

the art and science of place

We acknowledge the Whadjuk people of the Noongar nation as traditional owners of the land on which we live and work.

We acknowledge and respect their enduring culture, their contribution to the life of this city, and Elders, past and present.

Document ID: /Volumes/Graphics/2021/21-739 89 Harrison Street/01 InDesign Report/02 Final/00 InDesign/21-739 Rockingham DA F1 220826 Folder

Issue	Date	Status	Prepared by	Approved by	Graphics	File
1	26.08.22	Draft	Renee Young	David Read	SA	D1
2	26.08.22	Final	Renee Young	David Read	SA	F1

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1. Key Application Details

1.1 Executive Summary

This application for development approval seeks to develop a 3 and 5 storey multiple dwelling development on Lot 62 (No. 89) Harrison Street, Rockingham and Lots 94 and 95 (No. 142 and 144) Parkin Street, Rockingham (the subject site). The proposed development comprises 47 apartments with basement parking and resident amenities such as a wellness facility and quality rooftop areas. The subject site is located within the Village West sub-precinct of the Waterfront Village Sector, and forms part of the broader Rockingham Strategic Metropolitan Centre.

This report supports the development of a quality residential apartment building within a higher-order Activity Centre that will contribute to the desired future character of the area and the City's infill dwelling target. Locating density within areas of high amenity public transport and employment is a fundamental principle of planning and is consistent with the planning framework.

The proposal has been designed to respond to the ten design principles of State Planning Policy 7.0 – Design of the Built Environment (SPP 7.0) by referencing the context and character of the local area, minimising its bulk and scale impacts, providing generous areas of landscaping and high internal amenity and addressing its existing and future context. The proposal includes the following design strengths:

- High-quality contextual design aesthetic;
- Two excellent rooftop amenity areas with recreation facilities and landscaping;
- Resident fitness centre (gym);
- Basement and sleaved car parking areas;
- Retention of a mature tree;
- Substantial areas of deep soil and planting areas;
- Central landscape node;
- Streetscape upgrades;
- Sustainable design:
    - Solar panels that will generate renewable energy for the development and network;
    - 60% of apartments are dual aspect, and a further 17% of single aspect apartments are oriented to the prevailing breeze;
    - Generous floor to ceiling heights;
    - 93.6% of apartments that receive 2 hours of sun and 60% of apartments are capable of cross ventilation; and
- Highly articulated form with large areas of separation in the middle of the site which reduces the impact of baulk and scale on adjoining properties


ARBOUR
APARTMENTS

2. Consulting Team

Discipline	Company
Project Manager	Aria Project Management Pty Ltd
Architect	DMG Architecture
Planning	**element** Advisory
Landscape	Plan / E
Acoustic	Lloyd George Acoustics
Traffic	Transcore
Waste	Talis



3. Introduction

This application for development approval seeks to develop a 3 and 5 storey multiple dwelling development on Lot 62 (No. 89) Harrison Street, Rockingham and Lots 94 and 95 (No. 142 and 144) Parkin Street, Rockingham (the subject site). The proposed development comprises 47 apartments with basement parking and resident amenities such as a wellness facility and quality rooftop areas. The subject site is located within the Village West sub-precinct of the Waterfront Village Sector, and forms part of the broader Rockingham Strategic Metropolitan Centre.

The proposed development has been designed to help act as a catalyst to transform the area in line with the City's Waterfront Village vision, whilst having regard for the low scale development that currently exists in the area, particularly in Harrison Street.

3.1 Requirement for planning approval

As the proposal has an estimated construction cost of approximately $20,160,000.00 and includes more than 10 dwellings, the development application is considered 'mandatory' and must be determined by the Metro Outer Joint Development Assessment Panel, with the Responsible Authority Report (RAR) to be prepared by the City of Rockingham.



4. Site Details

4.1 Site Location and Property Description

The development is proposed over Lot 62 (No. 89) Harrison Street and Lots 94 and 95 (Nos. 144 and 142) Parkin Street, Rockingham (the subject site). The subject site currently contains two (2) residential dwellings, associated outbuildings and vegetation. The site has a combined area of 3,161m^2 and is located within the street block that is bound by Harrison Street to the north, May Street to the east, Parkin Street to the south and Florence Street to the west. Due to the lot configuration, the site benefits from having frontage to both Harrison and Parkin Streets. The particulars of the Certificates of Titles are summarised in Table 1 below.

Table 1 – Certificate of Title Particulars

Lot	Address	Volume	Folio	Plan/Diagram	Registered Proprietor
62	89 Harrison Street, Rockingham	1314	540	P005742	Phillip Sidney Redmond Jackson
94	144 Parkin Street, Rockingham	1077	530	P005472	Phillip Sidney Redmond Jackson
95	142 Parkin Street, Rockingham	1082	540	P005742	Phillip Sidney Redmond Jackson

Refer to Appendix A – Certificates of Title

4.2 Site Characteristics and Context

The site is described as level, experiencing a fall of less than 1m from the southern street boundary to the northern street boundary. Adjacent properties are predominantly single and two storey, single or grouped dwellings. To the east of the site exists a two storey single house and three grouped dwellings. To the east, the site is adjoined by two single houses.

Refer to Figure 1 - Aerial

Harrison Street is local road and is the continuation of Rockingham Beach Road which runs parallel to the foreshore area. The character of the street varies as the street bends northward, becoming less residential and containing more commercial activity. Parkin Street has similar characteristics, with the only exception being it is a busier road.

Refer to Appendix B – Architecture Report

The site is located one street block from Rockingham's Palm Beach foreshore reserve, and benefits from numerous nearby public amenities including: Churchill Park, Rockingham Jetty, Anzac Park, Lake Richmond, Point Perron Reserve.

Refer to Figure 2 – Location Plan

The site is located within Rockingham's 'Strategic Metropolitan Activity Centre', which in terms of hierarchy, is the State's second highest order centre, below 'Capital City'. The site is located within the Village West sub-precinct of the Waterfront Village Sector, which is situated to the west of the Foreshore precinct, the area's main commercial area. The site is located to the north-west of the City Centre which includes the Rockingham (shopping) Centre, offices, and a diverse range of commercial and retail businesses that service the broader sub-region. Historically, the area was developed with low-rise holiday accommodation and residential development, however, since being designated a Strategic Metropolitan Activity Centre, and the adoption of a framework that facilitates development consistent with that scale, the surrounding area has experienced a number of high-density developments up to 9 storeys high, particularly further along Harrison St to the north-east of the site where it becomes Rockingham Beach Road (located 400m from subject site). As a result, the surrounding area is in a state of transition, having both low-rise residential and high density development.

Refer to Figure 3 – Planning context



Figure 1. Aerial

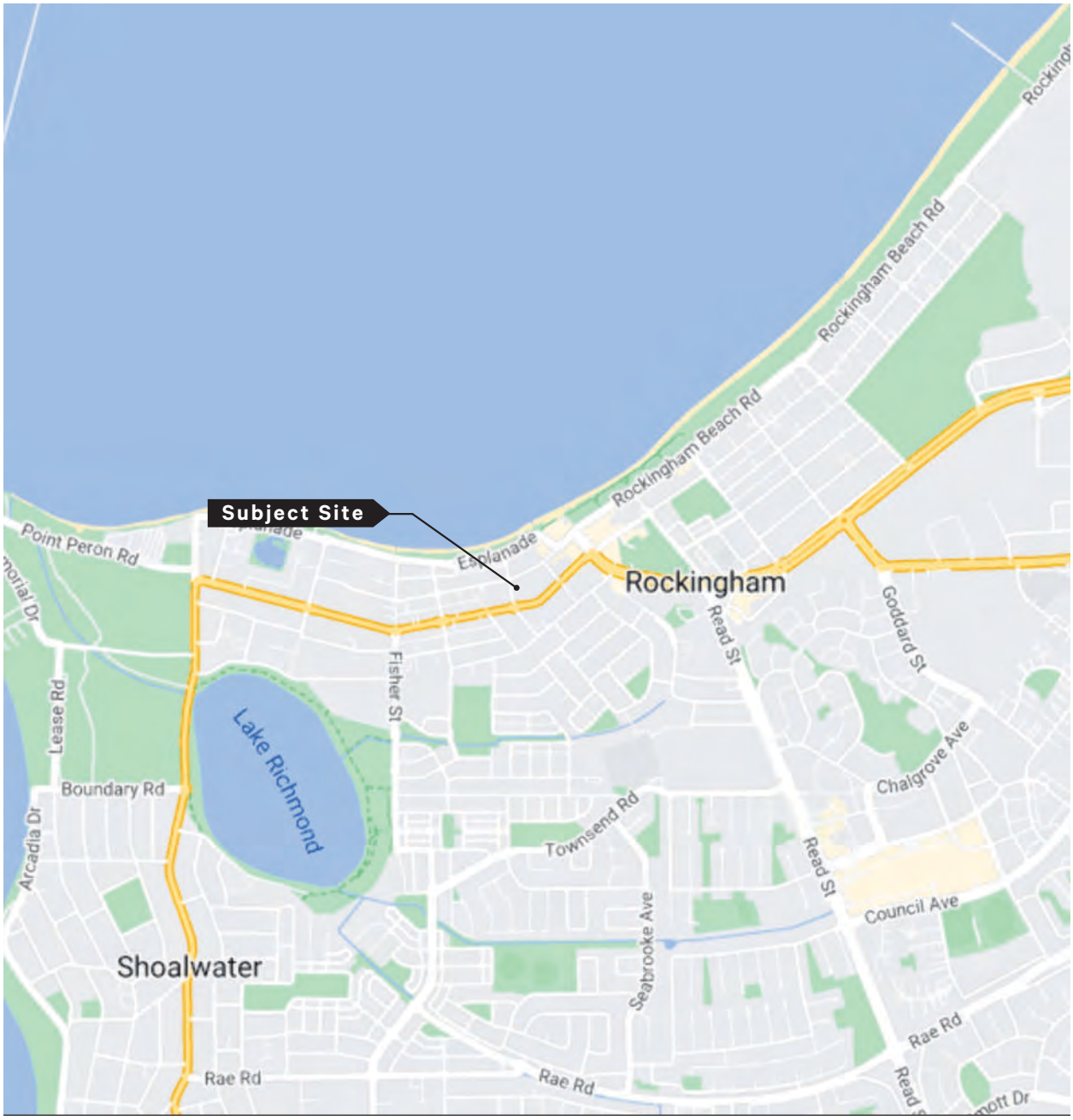


Figure 2. Location Plan



Subject Site

Source: nearmaps

Figure 3. Planning context

4.3 Encumbrances

There are no encumbrances on any of the three Certificate of Titles that make up the subject site.

4.4 Environmental and Heritage Considerations

4.4.1 Heritage

A desktop search of the Department of Planning, Lands and Heritage's (DPLH) Aboriginal Heritage Inquiry System indicates that there are no areas of heritage significance affecting the subject site.

4.4.2 Acid Sulphate Soils

A desktop search of DWER Acid Sulphate Soil Risk Map, Swan Coastal Plain, indicates the site has no risk of acid sulphate soils.

4.4.3 Contamination

A desktop search of Department of Water and Environmental Regulation (DWER) Contaminated Sites Database indicates that the subject site is not identified as being a known contaminated site.

4.4.4 Bushfire

A desktop search of the Department of Fire and Emergency Services (DFES) Map of Bushfire Prone Areas indicate the site of the proposed development is not within a bushfire prone area.



5. Pre-Lodgement Engagement

Throughout the development of the proposed concept design the project team have liaised with the City of Rockingham (the City) on the proposed design of the development. This has included a presentation to the City's Design Review Panel ('DRP') and a follow up meeting with the City's Planning team to discuss how the development has responded to DRP's comments.

5.1 Design Review Panel

The design has been iteratively modified to address the feedback from the City's Design Review Panel (DRP). A detailed report on how the development has addressed the feedback from the DRP is provided in Appendix C.

Refer to Appendix C – Development Plans



6. Proposed Development

6.1 Development Summary

This proposal seeks approval to develop a mixed-use building comprising 47 multiple dwellings as shown in the accompanying development plans. The details of the proposal are summarised in Table 1 below.

Table 1 Development Summary

Residential	47 Multiple Dwellings, comprising the following dwelling mix – • 17 one-bedroom dwellings • 25 two-bedroom dwellings • 5 three-bedroom dwellings
Communal Open Space	Combined area of 327m^2, comprising the following key areas – • Ground floor residential fitness centre • Rooftop amenities including 4 x outdoor dining areas with 7 tables, BBQ facilities, kitchen facilities, and a bar area with ocean views • Ground floor green zone with arbour and seating areas
Soil Area and Tree Canopy	• 845m^2 of total planting area, of which 368m2 is classified as deep soil area • Substantial tree planting and canopy cover comprising: - 1 large retained tree - 5 medium/large trees - 19 small/medium trees - 12 small trees
Car, Motorcycle/Scooter and Bicycle Parking	• 60 car parking bays • 6 motorcycle/scooter bays • 28 bicycle bays
Building height	• North building is 3 storeys with an additional floor of rooftop servicing rooms • South building is 5 storeys with and additional floor of rooftop servicing rooms
Density	• 149 dwellings per hectare
Community benefit and sustainability	• Basement/Sleaved parking areas • Streetscape upgrades (subject to City approval) • Rooftop solar panels • Water efficient appliances and irrigation • 93.6% of apartments receive 2 hours or more of direct sun. • 60% of apartments are cross ventilated • Tree canopy cover of 660.8m^2



7. Specialist Technical Inputs

7.1 Landscape Design

The Landscape Design prepared by Plan E has been developed iteratively to integrate with the architectural design. The Landscaping plan includes the following key features:

- 1 large retained tree;
- 5 new large trees;
- 19 new medium trees;
- 9 small trees;
- 11.7% Deep Soil Area;
- Two rooftop terraces with amenities;
- High quality front gardens and streetscape upgrades; and
- Balcony planter boxes.

Refer to Appendix D – Landscape Plan

7.2 Acoustic

The Acoustic Report prepared by Lloyd George Acoustics has been prepared in accordance with the Prescribed Methodology under the Environmental Protection (Noise) Regulations 1997. A summary of the key conclusions from the Acoustic Report are provided below:

The Acoustic Report demonstrates that the development is capable of achieving compliance with acceptable noise targets, subject to the implementation of noise mitigation measures.

Refer to Appendix E – Acoustic Report

7.3 Traffic and Parking

The Transport Impact Statement (TIS) prepared by Transcore has been prepared in accordance with the Western Australian Planning Commission's (WAPC) *Transport Impact Assessment Guidelines for Developments: Volume 4 – Individual Developments* (2016). A summary of the key conclusions from the TIS are provided below:

- Traffic generation from the proposed development is estimated to be approximately 215 daily trips with about 25 morning and 16 afternoon weekday peak hour trips (inbound and outbound)
- Parking facilities as follows:
  - 40 single bays
  - 20 tandem bays
  - Six motorcycle bays
  - 28 bicycle bays
- The site has very good accessibility to pedestrian, cyclist infrastructure and public transport.
- The development will not adversely impact the road network and is supported

Having regard to the above, and the TIS the proposal is considered acceptable from a traffic perspective.

Refer to Appendix F – Traffic Impact Statement

7.4 Waste Management

The Waste Management Plan (WMP) prepared by Talis Consultants has been prepared to satisfy the City's submission requirements. A summary of the key conclusions and recommendations from the WMP are provided below:

- Five 1,100L refuse bins, collected once each week;
- Four 1,100L recycling bins, collected fortnightly;
- Eight 240L recycling bins, collected once each week;
- The City will be responsible for the collection of waste; and
- Strata management will be responsible for aspects of the internal management of waste.

Refer to Appendix G – Waste Management Plan

8. Planning Framework

8.1 Perth and Peel @ 3.5 Million and Central Sub-Regional Framework

The Perth and Peel @ 3.5 Million framework is an overarching suite of documents, which builds upon the vision established under Directions 2031. It aims to achieve a more consolidated urban form to meet long–term housing needs and strengthen key activity centres and employment nodes as the Perth and Peel population grows to 3.5 million. The framework guides infill development to increase residential housing choice and to reduce the need for people to commute long distances for work.

The subject site is located within the 'South Metropolitan Peel Sub-region' which is identified as having the following priorities which are relevant to the proposed development:

- To create sustainable communities that are attractive;
- Develop a consolidated urban form that limits the identification of new greenfield areas places to live and work;
- Avoid areas that are at a high risk of bushfire to manage the potential impact on people;

The proposed development directly responds to these priorities, supporting the provision of a more consolidated urban form within an existing residential development and increasing the number and diversity of housing options to meet demand and house workers of the area.

8.2 Metropolitan Region Scheme

Under the provisions of the Metropolitan Regional Scheme (MRS) the Site is zoned 'Urban'.

The purpose and function of the 'Central City Area' zone is to provide strategic regional centres for major retail, commercial and office facilities as well as employment, civic, businesses and residential use. As such the proposed development is consistent with the purpose and intent of the zoning under the MRS, being residential.

Refer Figure 4 – Metropolitan Scheme Zoning



Figure 4. Metropolitan Scheme Zoning

8.3 Planning and Development (Local Planning Schemes) Regulations 2015

Clause 67(2) of Schedule 2 of the Planning and Development (Local Planning Schemes) Regulations 2015 (the Regulations) specifies the other matters that may be taken into consideration by the local government when assessing/determining a development application. The following relevant provisions to this development are listed and discussed below.

Matter	Assessment
a. *the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area;*	Satisfies - Refer to the assessment of the Scheme.
b. *the requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the Planning and Development (Local Planning Schemes) Regulations 2015 or any other proposed planning instrument that the local government is seriously considering adopting or approving;*	Satisfies – Refer to the assessment of the City's draft Precinct Structure Plan.
c. *any approved State planning policy*	Satisfies – Refer to the assessment of SPP 4.2 Refer to the assessment of SPP 7.0 Refer to the assessment of SPP 7.3
g. *any local planning policy for the Scheme area*	Satisfies – Refer to assessment of DPP 3.2.5 – Waterfront Village Refer to the assessment of LPP 3.4.3 – Urban Water Management Refer to the assessment of LPP 3.3.14 – Bicycle Parking and End of Trip Facilities Refer to the assessment of LPP 3.3.253 – Percent for Public Art – Private Developer Contribution Refer to the assessment of LPP 7.4 – Design Review Panel
m. *the compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development*	Satisfies - Refer to assessment of SPP 7.0 Refer to assessment of built form and orientation elements in R-Codes Vol. 2
n. *the amenity of the locality including the following —* i. *environmental impacts of the development;* ii. *the character of the locality;* iii. *social impacts of the development;*	Satisfies – Refer to the assessment of SPP 7.0 and SPP 7.3.
p. *whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved*	Satisfies – Refer to the assessment of R-Code Vol. 2 and landscape plan prepared by Plan / E
q. *the suitability of the land for the development taking into account the possible risk of flooding, tidal inundation, subsidence, landslip, bush fire, soil erosion, land degradation or any other risk*	Satisfies -The site is level and is suitable for a medium density, mid-rise apartment building.
s. *the adequacy of —* i. *the proposed means of access to and egress from the site; and* ii. *arrangements for the loading, unloading, manoeuvring and parking of vehicles;*	Satisfies - The development seeks to rationalise three crossovers into one central crossover. The parking areas and vehicle access areas have been assessed by a qualified traffic consultant. Refer to Appendix F – Transport Impact Assessment.

Matter	Assessment
t. *the amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect on traffic flow and safety;*	Satisfies - Refer to Appendix F – Transport Impact Assessment
u. *the availability and adequacy for the development of the following —* i. *public transport services;* ii. *public utility services;* iii. *storage, management and collection of waste;* iv. *access for pedestrians and cyclists (including end of trip storage, toilet and shower facilities);* v. *access by older people and people with disability;*	Satisfies – Refer to Appendix F – Transport Impact Assessment Refer to Appendix G – Waste Management Plan Refer to Appendix H – R-Codes Vol. 2 Assessment
w. *the history of the site where the development is to be located*	Refer to Appendix B
x. *the impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals*	Refer to the R-Codes Vol. 2 assessment.

8.4 State Planning Policy 7.0 Design of the Built Environment

State Planning Policy No. 7.0 – Design of the Built Environment (SPP 7.0) is a State Government policy aimed at ensuring good design is a key consideration of all development in Western Australia.

The policy includes '10 Design Principles of Good Design' which developments are assessed against. The City's Design Review Panel considered the proposal in accordance with the principles of SPP 7.0. To demonstrate how the development meets SPP 7.0, an assessment of the 10 principles is provided in Appendix B.

8.5 State Planning Policy 7.3 Residential Design Codes Volume 2 – Apartments (R-Codes Vol. 2)

Accompanying SPP 7.0, State Planning Policy 7.3: Residential Design Codes Volume 2 – Apartments (R-Codes Volume 2) represents the primary tool for the assessment of residential apartment developments throughout the State.

The R-Codes Volume 2 is a performance-based policy that seeks to elevate the importance of design quality in the assessment of new residential apartment projects. In doing so, the R-Codes Volume 2 represents a shift from the deemed-to-comply approach of the previous Residential Design Codes, in acknowledgment that there are limits to the effectiveness of highly prescriptive controls in achieving good design outcomes.

Accordingly, the R-Codes Volume 2 is structured to provide:

- A statement of intent for each design element that explains the intended outcome and why it is important;
- Element objectives that further define the intended outcome for each design element;
- Acceptable outcomes that are specific measures designed to assist in meeting the element objectives; and
- Additional design guidance outlining additional matters that can be considered in seeking to address the element objectives.

As a performance-based policy, the R-Codes Volume 2 seeks to ensure that applications for development approval meet the applicable element objectives for each design element, and states that:

> *While addressing the Acceptable Outcomes is likely to achieve the Objectives, it is not a deemed-to-comply pathway as alternate design solutions may result in a better outcome for this particular locality The proposal will be assessed in context of the entire design solution to ensure the Objectives are achieved. Additionally, proposals may also satisfy the Objectives via alternative means or solutions.*

Accordingly, this application is accompanied by a detailed assessment against the element objectives of the R-Codes Volume 2, having regard to the associated acceptable outcomes and design guidance. The elements that warrant further discussion include:

- Building Height;
- Street Setback;
- Side Setbacks;
- Building Separation;
- Plot Ratio;
- Tree Canopy and Deep Soil Areas;
- Visual Privacy;
- Car and Bicycle Parking;
- Private Open Space;
- Noise Management; and
- Waste Management;

Refer to Appendix H – R-Codes Vol. 2 Assessment

8.6 Local Planning Scheme No. 2

The City of Rockingham Local Planning Scheme No. 2 (LPS 2) establishes use and development within the local authority area. The subject site is zone 'Primary Centre Waterfront Village' under LPS 2, and the primary land use and development controls for the site are determined by Local Planning Policy 3.2.5 Development Policy Plan – Waterfront Village Sector (DPP 3.2.5), which is discussed in the section below.

8.6.1 Clause 1.6 – Scheme Objectives

The development has been assessed and meets all relevant zone objectives and relative provisions, as demonstrated below.

OBJECTIVES OF THE PRIMARY CENTRE WATERFRONT VILLAGE ZONE	
to promote contemporary waterfront residential and accommodation, commercial, tourism and recreational activities, which serves local residents and visitors alike, in accordance the Development Policy Plan for the Waterfront Village Sector;	With 47 dwellings, the contemporary development will help activate the primary centre by providing a medium density, mid-rise development in close proximity to the centre. It is noted that the Scheme has minimum density codes.
to maximise the potential of the northerly coastal aspect, sheltered beach and shady parkland of the Waterfront through appropriate quality built form and site responsive architecture;	The development responds to the local context and is oriented to take advantage of the northerly aspect. The design of the building is lower on the Harrison Street frontage allowing both buildings to have views and outlook to the area's ocean, foreshore and amenities. The buildings have also been designed with a coastal aesthetic to fit in with the desired architecture for the precinct.
to achieve appropriate land use and built form outcomes, including a range of medium to high density housing, within a walkable catchment of the central public transit system	The proposal is for a low and a mid-rise building, which together provide a medium to high density development, which is located within a walkable distance of public transport.
to create a permeable, well connected network of public streets and spaces that provides legible and high amenity linkages, particularly for pedestrians	The development will improve the street frontage through landscaping, tree canopy, hardscaping and quality design features such as arbours, balconies and fencing. The lighting and passive surveillance of the street will contribute to an improved and safe pedestrian experience with the central pedestrian connection ensuring all residents have more direct access through to the beach and Waterfront precinct.
to provide contiguous, activated street front development;	Both street frontages have dwellings located at ground level with terraces that address the street. The South Building incorporates a podium style frontage, although with larger side setbacks to accommodate tree canopy and landscaping.

OBJECTIVES OF THE PRIMARY CENTRE WATERFRONT VILLAGE ZONE	
to promote active day and night time retail and social environments	The medium density development will contribute to the necessary levels of activity to support the day and night time economy.
to encourage vibrant and diverse uses which promote the Waterfront as a destination	
to provide a high amenity, street based transit route that will provide a high calibre model of sustainable, transit oriented development	The development supports consolidation of the urban centre and future transit route and has been designed to maintain the amenity of a medium-density area. Future residents of the development will further activate the area and assist in the diversification of the local economy.
to provide high quality public spaces that permits a range of recreation and social activities and foster high quality development along their margins	The development does not directly contribute public open space however it does include upgrades to the public realm and is of a high-quality design.

8.6.2 Clause 4.3B.1 – Zoning Table

Table 1 of LPS2 sets out the land use permissibilities for each zone. Within the Primary Centre Waterfront zone, multiple dwellings are a discretionary land use, meaning the use is not permitted unless the local government has exercised its discretion by granting approval. The use must be considered against the objectives of the zone.

Refer to assessment of Zone Objectives.

8.6.3 Other matters

Scheme Provisions relevant to the proposal		
Clause	**Provision**	**Assessment**
4.3B.1	*Table 1 Zoning Table of LPS 2 lists multiple dwellings has a discretionary land use*	The development is consistent with the framework and meets the objectives of the zone.
4.3B.2(a)	*Where residential development is proposed the R-AC0 density code of R-Codes is to apply.*	The development has been assessed in accordance with the R-AC0 density code and the applicable provisions.
4.3B.2(b)	*In order to encourage residential development within the Primary Centre Waterfront Village Zone, consistent with the urban design objectives for individual Precincts set out in the Policy or other adopted Policies, the local government may exercise its discretion in respect of the R-Codes provisions*	The development has been assessed against DPP3.5.2 and meets the objectives of the policy.
4.3B.3	*In the Primary Centre Waterfront Village Zone, all development for the purpose of grouped or multiple dwellings must have a minimum of one dwelling per 180m2 of land area.*	Based on the required density ratio, the site requires a minimum of 18 dwellings. With 47 proposed, the development complies.
4.15.1.2	*Car parking to be in accordance with Table 4*	The development has been assessed and meets the minimum parking requirements.
4.15.2.1(b)	*Visitor allocation as per the R-Codes must be provided in the form of cash-in-lieu payment to the local government*	The development does not provide visitor bays in accordance with LPS 2. It is anticipated that a condition will be imposed addressing clause 4.15.2.1(b) as part of the approval.
4.15.2.1(c)	*The number of parking spaces provided on-site shall be reduced by the number of parking spaces provided through the cash-in-lieu contribution*	As above.
4.15.6.2(d)	*Area B Cash-in-lieu requirements*	As above.

8.7 Planning Policy 3.2.5 Development Policy Plan – Waterfront Village Sector

Development Policy Plan 3.2.5 – Waterfront Village Sector (DPP 3.2.5) sets out the desired future character, the planning principles and guidance for development within the Waterfront Village precinct, which forms part of Rockingham's broader Strategic Metropolitan Centre. DPP 3.2.5 has been in effect since 2010 and establishes a framework to deliver a medium to high density Transport Oriented Development (TOD). The Waterfront Village has proven to be a preferred area for high density mixed-use and residential development, due to the area's high-quality amenities, facilities and public open space. DPP 3.2.5 covers 600 hectares and is comprised of 7 sub-precincts, with varied characters. The site is located within the Village West sub-precinct, which is primarily intended to accommodate residential development. This report considers the elements of DPP 3.2.5 applicable to residential development.

DPP 3.2.5 Waterfront Village – Sector 2 (Type 2) Assessment

Vision Statement	Comment
The vision is for a modern, distinctly coastal centre offering a wide range of mixed uses including retail, commercial, office, civic, residential, education and recreation within an accessible and highly interconnected, urban-scaled townscape, comprising a major Activity Centre and related urban villages based on 'Main Street' principles.	The development is consistent with the objectives of the Waterfront Village Zone and the vision for the precinct by providing a contemporary and high-quality medium density development, in the desired form and that actives the street through street upgrades.

Section	Provision	Comment
3.3	**Relevant Residential and Mixed Use Building Topologies**	
	High density residential developments (including mixed use) should predominantly take the form of street framing developments, preferably with internal landscaped courtyards located over basement and/or off-street car parking areas. Developments over 4 storeys in height should generally be sited on 2-3 storey podiums, with upper floors setback from the street front building line of the podium and set back from the adjoining lot boundaries.	The development accords with the desired form and character by proposing a podium and recessed upper floors.
	Minimum Site area	
	Lots should be of sufficient area with dimensions to permit a feasible, functional development. The dimensions of multiple dwelling and mixed use lots should permit conventional car parking layouts and convenient vehicle circulation. Typically, this requires a minimum lot width of 35-40 m.	The form of the development responds to the site dimensions and areas. The northern building is a low-rise, narrow building, while the southern building is larger and wider, with a podium and recessed upper floors. The car parking layout is legible, functional and complies with the relevant Australian Standards.
	Multiple dwelling and mixed use development lots should generally be 2,500m^2 in area, with a minimum of 2,200m^2.	The development has sought to rationalise the existing crossovers from three crossovers down to one.
	New multiple dwelling and mixed use development lots should be provided with vehicular access (public roads, laneways) on a minimum of two sides.	The development has sought to rationalise the existing crossovers.
3.4	**R-Codes**	
	Where residential development is proposed the R-AC0 density code of R-Codes is to apply.	The development has been assessed against the provisions of the R-Codes. Given that the local framework seeks a density commensurate with Residential R80, where there are differing standards for lower and higher density development, the development has been considered against the standards of higher density development.

	In order to encourage residential development within the Primary Centre Waterfront Village Zone, consistent with the urban design objectives for individual Precincts set out in the Policy or other adopted Policies, the local government may exercise its discretion in respect of the R-Codes provisions	Where small variations are proposed, alternate design solutions have been proposed in order to develop in accordance with the desired future character.
	In the Primary Centre Waterfront Village Zone, all development for the purpose of grouped or multiple dwellings must have a minimum of one dwelling per 180m^2 of land area.	The local framework requires a minimum of 18 units, 47 units are proposed.
3.5	*Residential Density*	This clause augments element 2.5 Plot ratio of the R-Codes Vol. 2. The development complies with the maximum density standards. Refer to the assessment of R-Codes Vol. 2 in Appendix H.
3.6	*Building height* *Podium: Maximum 3 storeys/12.5m* *Maximum: 19m (5 storeys).)* *Building height to consider solar access of adjoining properties* *Storeys that contain lift overruns, utility or service buildings up to 3m in height are not included in the assessment of Building height*	This clause augments element 2.2 Building height of the R-Codes Vol. 2. The development proposes 3-5 storey buildings with additional storeys containing rooftop service buildings. Although the lift overruns exceed the intended 3m height, this is a design requirement which will not be visible from the street. It is noted that DPP 3.2.5 outlines there is flexibility in the scale and configuration of development to meet the policy's objectives and principles. The development is consistent with the building height standards, taking into account the exempted buildings of DPP 3.2.5. Refer to the assessment of R-Codes Vol. 2 in Appendix H and the Line of sight diagrams contained within Appendix C.
3.7	*Frontage types (Moderate Activation, 2m setback)* *Podium setback: 2m*	This clause augments element 2.3 Street setback of the R-Codes Vol. 2. The development is consistent with the street setback standards. Refer to the assessment of R-Codes Vol. 2 in Appendix H.
3.8	**Car parking**	
	Residential car parking *Parking in accordance with Appendix 1 (as per the R-Codes)*	This clause augments element 3.9- Car parking and bicycle parking, however, DPP 3.2.5 imposes the standards of the R-Codes Vol. 2. The development is considered consistent with the provisions of the R-Codes Vol. 2.
	Visitor bays	
	In the case of residential development, the cash-in-lieu contribution shall be the visitor allocation as per the Residential Design Codes.	In accordance with DPP 3.2.5, the development does not allocate visitor bays to the development. Pursuant to Figure 3.5 - The cash in-lieu contribution is based on Area B requirements and it is anticipated that a condition of approval will be imposed to that effect.
	The number of parking spaces provided on-site may be reduced by the number of parking spaces provided through the cash-in-lieu.	
3.8.2	**General Parking standards**	
	Car parking areas are to be located behind buildings/screened and colonnades	Parking is located at basement level or is sleaved by an apartment.
	Limited crossovers to maintain streetscape continuity	The proposal rationalises three crossovers into a single two-way access point.

	Village West Precinct Policy	
4.4.2	*This Precinct forms part of the western boundary of the Rockingham Strategic Metropolitan Centre. Medium to high density residential development is preferred.* *The interface with existing, predominantly single storey residential development beyond should be carefully managed with the massing and scale of buildings stepped down where appropriate to the 2 storey minimum height of the Precinct.*	The development is consistent with a mid-rise, medium density residential development. The development has been carefully designed to respond to adjoining development and the characteristics of the site. The North Building has responded to its narrow lot width by having a low-rise form with increased setback to the western lot boundary. The South Building has a podium façade design with recessed upper floors to manage the density transition between the site and adjoining properties.
4.4.3	*Preferred uses:* • *multiple dwellings/residential* • *office and commercial* • *professional consulting rooms* • *serviced accommodation*	The development is residential in nature.
4.4.4	**Required elements**	
a)	*The precinct is to be developed as a mixed use area conforming to an urban townscape*	The development is not mixed-use, however, this is appropriate given the existing context and the Precinct Concept Plan.
c)	*Buildings are to be located, configured and activated to frame and address street frontages, laneways and other public space in a way that is consistent with the Precinct Concept Plan and the desired frontage type*	The development conforms with the intent of the Precinct Concept Plan and the desired frontage type as it is a medium density development which presents with a podium form with recessed upper floors.
d)	*Residential development within the Precinct is to be developed to accommodate a balanced mix of dwellings sizes at preferred densities ranging from 80 to 160 dwellings per hectare, with a minimum density of 60 dwellings.*	The development achieves a density of 149 dwellings per hectare. The development proposes a range of dwelling sizes and configurations to appeal to a wide range of demographics. Refer to the R-Codes Vol. 2 assessment.
e)	*Building height, upper-level setbacks, and side setbacks are to be in accordance with Sections 3.4-3.7 and 4.4.5 and Figures 3.3 and 3.3.6 and are to present as a min. 2 storey (6m) or equivalent parapet height to the street. The scale and massing of buildings are to be designed to minimise overshadowing of adjoining residential properties and public spaces.*	Refer to the R-Codes Vol. 2 assessment.
f)	*Minimum lot size for redevelopment is 2,200m²*	The site has a total land area of 3,161m²
g)	*Ground floor levels should not exceed 1m in height above the level of the adjacent public footpath.*	The ground floor of the South Building is raised 1m above the natural ground level.
h)	*Street framing development with podium level courtyard gardens over car parks will be the preferred infill development model. Examples of this form of development are located at Rockingham Beach, Midland, Mandurah Marina, Joondalup City Centre, Subi-Centro Subiaco and in Northbridge over the Graham Farmer Freeway.*	In order to maximise the amount of useable communal open space, the development proposed rooftop gardens in lieu of podium level gardens. Basement parking is proposed to ensure parking areas do not interrupt the rhythm of the street and do not detract from the streetscape. Both the North and South Buildings have design features that frame the development.
i)	*Car parking is to be provided in accordance with Clauses 4.15, 4.16 and Table 4 of Town Planning Scheme No.2, refer to Appendix 1.*	This clause augments element 3.9 Car and bicycle parking of the R-Codes Vol. 2. The development meets the anticipated number of bays and the cash-in-lieu requirements of the Scheme. Refer to the assessment of R-Codes Vol. 2 in Appendix H.

j)	*Car parking is not permitted between the road reserve boundary and building frontages.*	The proposal's parking areas are setback from the street setback area behind the building or are located at basement level.
k)	*Off-street car parking is to be located behind, under or over ground floor, street front buildings or alternatively, no closer than 20 m to the street front boundary in the case of land identified in the IDP for future building development.*	
l)	*To complement the City's townscape objectives for the Waterfront Village, the massing, articulation and facade treatments of all development will be required to adhere to a quality, urban waterfront aesthetic. The basic building finishes should favour materials which complement the colours and textures of the Rockingham coastal landscape to the satisfaction of the City.*	The development has been designed with coastal and local material palettes in mind. Refer to the SPP 7.0 assessment.
m)	*Corrugated steel (whether painted or not) or similar wall cladding, face brickwork, reflective glass and curtain-walling will not be permitted.*	N/A
n)	*The frontage of any building is to incorporate and maintain the required area of transparent facade with suitably glazed shopfronts, windows and doors, consistent with the applicable 'Frontage Types' set down in Section 3.7.*	The development incorporates a mix of solid and clear glazing consistent with the expectations of a residential building.
q)	*In lieu of the normal landscaping requirements of the Scheme, developers may be required to contribute to the cost of streetscape and/or landscape works within the public domain in the general vicinity of their development site.*	The developer is prepared to accept conditions to remove redundant crossovers and undertake relandscaping of verges and setback areas as its contribution towards the streetscape enhancement.
4.4.5	**Building height development Controls**	
a)	*Street front:* *Minimum 6m or 2 storeys, maximum 12.5m or 3 storeys between 2m and 4.5m street setback or to the mid block of western perimeter sites as indicated on Figure 3.3.* *Remainder of site: Maximum 19m, subject to Sections 4.4.5(b), (c) & (d).* *Ground floor to first floor:* *Minimum 3.2m with a minimum floor to ceiling height clearance of 3m.* *Rear of site/laneway: Maximum 7m over 4m setback.*	The development achieves the minimum street wall height. The development does not exceed the maximum height. The development is consistent with the ground floor height.
b)	*2m landscaped setback to building frontage, 4.5m setback for development from 12.5m to 19m high*	The development achieves the minimum setbacks and the intent for a landscaped streetscape. Refer to the R-Codes Volume 2 Assessment contained in Appendix H.
c)	*Nil to 3 storeys, Minimum 4m above the podium*	

8.9 Urban Water Management

Local Planning Policy 3.4.3 Urban Water Management applies to the subject proposal. In accordance with the general requirements of the Policy, a landscape plan has been prepared to support the application. The architectural drawings show drainage infrastructure that will contain rainfall run off on-site with detailed engineering drawings to be submitted as part of the building permit. It is anticipated that a condition of approval will be imposed to ensure compliance with the Policy's provisions.

8.10 Draft Rockingham Strategic Centre Precinct Structure Plan and Scheme Amendment 191 to LPS 2

At its June Ordinary Council meeting, Council approved for advertising the draft Rockingham Strategic Centre Precinct Structure Plan (PSP) and associated scheme amendment which includes the Waterfront Village Precinct. Given that the proposal is not advertised, the PSP is likely to change following advertising, and the consideration of Council, and the WAPC. It is, therefore, not considered a seriously entertained planning proposal as it is neither final nor imminent.

With the above in mind, the provisions of the draft PSP have not been assessed,

8.11 Planning Policy 3.3.14 Bicycle Parking and End of Trip Facilities

The aim of Planning Policy 3.3.14 Bicycle Parking and End of Trip Facilities (LPP 3.3.14) is to facilitate the appropriate provision of secure, well designed and effective on site bicycle parking and end-of-trip facilities to encourage the use of bicycles.

As the land use is defined as a 'Multiple Dwelling' the provision of bicycle bays is determined by the Residential Design Codes. Additional requirements are established by LPP 3.3.14 and the proposal has been assessed against the relevant aspects in the table below.

Objective	Comment
(a) To ensure the provision of appropriate bicycle parking and end-of-trip facilities as outlined in Table 1 and Table 2;	Bicycle parking has been provided in accordance with the R-Codes Vol. 2. 28 bicycles are provided on-site.
(b) To provide guidance on the development and design of bicycle parking and end-of-trip facilities; and	
(c) To encourage the use of bicycles for all sorts of journeys.	

8.12 Planning Policy 3.3.25 Percent for Public Art – Private Developer Contribution

Planning Policy 3.3.25 seeks to facilitate the provision of public art as part of the development application approval process. The Policy provides the statutory mechanism to require a contribution, which is set at one percent.

Given the proposal is for 47 residential apartments, the provisions of Planning Policy 3.3.25 apply. To meet the provisions of the Policy, the application will include a commission two artworks on the north and South Building's eastern elevation. This future artwork will comply with all relevant provisions and objectives of LPP3.3.25.

8.13 Planning Policy 7.4 Design Review Panel

Planning Policy 7.4 seeks to facilitate expert design advice on particular forms and types of development, to ensure that development delivers quality outcomes for the City.

With 47 residential apartments proposed, the provisions of Planning Policy 7.4 apply. The application has been considered by the City's Design Review Panel prior to lodgement and the design significantly updated to reflect its advice. The feedback and recommendations have been addressed in the final architectural drawings. It is anticipated that a final DRP meeting may be scheduled prior to the determination of the proposal by the JDAP.

Refer to Appendix B – Architecture Report


ARBOUR
APARTMENTS

9. Key elements of the proposal

9.1 Overview

The development is largely compliant with the anticipated standards of the framework. However, the following elements are worthy of detailed discussion:

- Building height;
- Street setback;
- Side setbacks;
- Plot ratio;
- Building separation;
- Tree Canopy and Deep Soil Areas;
- Visual Privacy;
- Traffic, car and bicycle parking;
- Private Open Space;
- Acoustic; and
- Waste Management.

9.2 Building height

The City of Rockingham DPP3.2.5 - Development Policy Plan - Waterfront Village Sector, Section 3.6 replaces A2.2.1 of the R-Codes and as such, the maximum height for the site is 5 storeys and 19 metres.

Noting that the policy excludes lift overruns, plant rooms and other utility / servicing buildings and structures, the building is assessed as 5 storeys with an additional floor comprising rooftop amenities and service buildings. In addition to meeting the Acceptable Outcome, the development has been assessed and meets the relevant objectives for Building height.

Element objective	Assessment
O2.2.1 – The height of development responds to the desired future scale and character of the street and local area, including existing buildings that are unlikely to change.	Proposed at five storeys of residential apartments with an additional floor for rooftop service and amenities, the proposed South Building is consistent with the anticipated building height under DPP 3.2.5. The North Building is proposed at three storeys with an additional floor for rooftop services such as a mechanical plant, lift overrun and amenities, which is two storeys below the anticipated height. **Future Character** The development is consistent with the desired future character of the street and area. The desired future character of this area is established by DPP 3.2.5 and detailed below: *This Precinct forms part of the western boundary of the Rockingham Strategic Metropolitan Centre. Medium to high density residential development is preferred.* Underpinning the desired future character, is the City and State's strategic framework which designates the area as a Strategic Metropolitan Centre, which is to deliver a significant proportion of the City's infill dwelling target, employment opportunities and community facilities. The framework settings were established to ensure the area achieves density around areas with high levels of amenity, serves and facilities, existing and planned public transport routes and employment. The importance of this area to the City's future dwelling yield and suitability for medium to high density is demonstrated by the minimum development size and yield provisions contained within DPP 3.2.5. The Policy seeks to prevent low-scaled development from sterilising lots and reducing the area's potential growth. Design Response to the Existing Buildings Within the Street and Surrounding Area **Precedent development** There are many precedent buildings within the local area which have been built in accordance with DPP 3.2.5 including but not limited to: • 9 storeys on Lot 76 Rockingham Road; 315m from the subject site on the same street alignment • 9 storeys on Lot 100 Rockingham Beach Road; 400m away from the subject site on the same street alignment • 7 storeys on Lot 374 Kent Street; 450m from the subject site. Importantly DPP 3.2.5 encourages height up to 5 storeys, subject to precinct-specific guidelines. The proposed height of the development directly responds to the desired future scale of the area under DPP 3.2.5. Importantly the additional bulk and scale beyond the 5 storeys and 19 metre control is set back and massed away from adjoining properties. The development includes large areas of deep soil planting, in excess of the framework standards, at ground level which accommodates extensive tree canopy and additional landscaping provided on-structure. The extensive landscaping at the building's edges will provide an attractive interface to adjoining properties and will reduce the building's scale impact. The building's form responds to the differing street characters. The bulk of the building is massed toward the busier Parkin Street frontage, and presents as a three storey building on the quieter Harrison Road. Despite a three storey podium being acceptable, the development recognises the scale differences between it and adjoining development and has sought to minimise the scale impact by pulling the bulk away from the side boundaries. The development meets the element objective.
O2.2.2 – The height of buildings within a development responds to changes in topography.	The subject site is generally flat with less than one (1) metre fall from north to south across the site. The development meets the element objective.

Element objective	Assessment
O2.2.3 – Development incorporates articulated roof design and/or roof top communal open space where appropriate.	The development features a concealed roof form, with rooftop communal open space comprising a high quality recreation facilities and amenities. The development contains large areas of communal open space co-located with high-quality landscaping. The development meets the element objective.
O2.2.4 – The height of development recognises the need for daylight and solar access to adjoining and nearby residential development, communal open space and in some cases, public spaces.	The site is oriented north-south, with minimal overshadowing to adjoining lots. The development meets the element objective.

9.3 Street Setback

The development is setback further than what is required under DPP 3.2.5. The larger setbacks have sought to balance between existing and future built form within the street. The generous setbacks accommodate a highly landscape frontage to both streets that reflect the existing gardens within the streetscape. The development also meets all the street setback objectives as demonstrated below.

Element objective	Assessment
O2.3.1 – The setback of the development from the street reinforces and/or complements the existing or proposed landscape character of the street.	As demonstrated above the proposal is consistent with the front setback requirements of DPP 3.2.5. **Existing landscape Character** Many properties along both streetscapes have gardens with significant areas of lawn and some contain trees. The development will positively contribute to the existing and future landscape character by providing meaningful tree canopy, significant areas of landscaping, and direct points of access. To complement the existing coastal landscape of the area, The proposed landscape plan features AGONIS FLEXUOSA, which is an iconic West Australian endemic coastal tree species that thrive in the sandy beach soils of the coast. The development meets the element objective.
O2.3.2 – The street setback provides a clear transition between the public and private realm.	The entry arbors, walls, hard landscaping, and tree canopy provide a clear delineation between the private and public realm. The development meets the element objective.
O2.3.3 – The street setback assists in achieving visual privacy to apartments from the street.	The upper floors of the building have sought to balance the need for privacy with the need for passive surveillance. The building achieves greater average setbacks than what DPP 3.2.5 anticipates, while being close enough to provide 'eyes on the street'. The development meets the element objective.

9.4 Side setbacks

The City of Rockingham DPP3.2.5 - Development Policy Plan - Waterfront Village Sector, Section 4.4.5 replaces A2.4.1 of the R-Codes. The desired side and rear setbacks for this site are nil up to the third storey and 4m above the podium. While minor setbacks shortfalls are proposed on Levels 3 and 4 in respect of the north and west elevations, the development provides good average setbacks overall. The development has been assessed and meets the relevant objectives for side setbacks for the reasons outlined below.

Element objective	Assessment
O2.4.1 – Building boundary setbacks provide for adequate separation between neighbouring properties.	The desired levels of separation are governed by the lot boundary setback settings of DPP 3.2.5. As demonstrated above the proposed development generally meets or exceeds the side setback requirements of DPP 3.2.5. Small shortfalls are proposed, however, these are largely associated with small design features or as a result of the unusual lot configuration. Taking into account average setbacks, the building exceeds the intended separation. The development meets the element objective.
O2.4.2 – Building boundary setbacks are consistent with the existing streetscape pattern or the desired streetscape character.	The desired streetscape pattern is for a podium and upper level 'tower' set back from the lot boundaries. The development has been iteratively modified to achieve the appearance of a podium to align with the desired form of DPP 3.2.5. Further to this, the design responds to the residential nature of the area and proposes greater side setbacks at lower levels than what the policy prescribes. This reinforces the rhythm of the streetscape. The development meets the element objective.
O2.4.3 – The setback of development from side and rear boundaries enables retention of existing trees and provision of deep soil areas that reinforce the landscape character of the area, support tree canopy and assist with stormwater management.	The side setbacks are designed to accommodate trees in the large areas of deep soil areas located along the site boundaries. Substantial areas of landscaping are achieved through the building's form., contributing to the landscape character of the area, supporting tree canopy, reducing the urban heat island effect and assisting with rainfall runoff. The development meets the element objective.
O2.4.4 –The setback of development from side and rear boundaries provides a transition between sites with different land uses or intensity of development.	Transition of the built form can be achieved in a number of ways. The development has achieved this through greater side setbacks, recessed upper floors, landscape screening and framing and an articulated form. The development meets the element objective.

9.5 Plot ratio

The City of Rockingham DPP3.2.5 - Development Policy Plan - Waterfront Village Sector, Section 3.5 replaces A2.2.1 of the R-Codes and as such, the maximum dwelling yield for the site is 160 dwellings per hectare. With 47 dwellings on a site area of 3,161m2, the development will achieve 149 dwellings per hectare, and therefore meets the anticipated dwelling density for the sub-precinct. Notwithstanding its compliance, the development meets the element objective, as demonstrated below.

Element objective	Assessment
O2.5.1 – The overall bulk and scale of development is appropriate for the existing or planned character of the area.	The proposal has been carefully and iteratively designed, including responses based on feedback received from the City's Design Review Panel. This has resulted in a final design that achieves an acceptable level of building bulk and scale that delivers a quality residential apartment building with the anticipated number of dwellings for this location. The building's varied materials, colour palette, setbacks and recessed elements minimise the impact of bulk on adjoining properties. The landscape strategy has been designed to provide attractive interfaces and soften the bulk and scale impact on the adjoining properties. **Planned and Emerging Character** As noted in the assessment of Building Height, the City's DPP 3.2.5 articulates a strong desire for medium density development in this location and has built form settings to facilitate that desired character. The surrounding area has a number of high-density precedent developments built in accordance with DPP 3.2.5. The number and scale of these developments demonstrates that the precinct is in transition. The development is consistent with the planned and emerging character of the area. The development meets the element objective.

9.6 Building Separation

The setbacks of Section 4.4.5 of DPP 3.2.5 set out the desired separation standards for the precinct and replace A2.7.1. Notwithstanding the development's largely compliant setbacks and separation, the development also meets the element objective as demonstrated below.

Element objective	Assessment
O2.7.1 – New development supports the desired future streetscape character with spaces between buildings.	DPP 3.2.5 establishes the desired future character of the area, and the lot boundary setback provisions underpin the City's desired streetscape type. The Policy seeks to have minimal setback at lower levels and greater setbacks above the podium. The proposed development is consistent with the side setback requirements of DPP 3.2.5. Larger setbacks are proposed for the first three storeys, and sufficient setback is provided at the top three storeys. The development meets the element objective.
O2.7.2 – Building separation is in proportion to building height.	**North Building** The North Building is a low-rise development, with generous separation provided to the western side boundary. Although minimal, the separation to the eastern side boundary exceeds the anticipated setbacks under DPP 3.2.5. **South Building** The South Building is a mid-rise development with generous average setbacks to both boundaries. The top floor is recessed slightly, ensuring the development is setback appropriately when viewed from the street. The development meets the element objective.
O2.7.3 – Buildings are separated sufficiently to provide for residential amenity including visual and acoustic privacy, natural ventilation, sunlight and daylight access and outlook.	The building has been designed to ensure that the adjoining properties maintain good solar access and are not unreasonably overshadowed. The framework has established what the necessary setback is to maintain the amenity of new development. Given that the development largely exceeds the anticipated setbacks, the development meets the element objective.

Element objective	Assessment
O2.7.4 – Suitable areas are provided for communal and private open space, deep soil areas and landscaping between buildings	The North and South Building's exceed the required areas of deep soil, communal and private open space, and provide a quality landscaping response. Due to the significant separation between the North and South Building, a tree is able to be retained and a large communal garden area accommodated. The development meets the element objective.

9.7 Tree Canopy and Deep Soil Areas

The development will be an exemplar for future development proposals in respect of landscaping and tree canopy. In addition to the retained tree, the development will add 5 medium/large trees, 19 small/medium trees and 12 small trees. At maturity, the development will have 660.8m^2 of canopy cover, far exceeding the anticipated area.

Due to the generous side setbacks, the development includes 368.3m^2 of deep soil area, which equates to 11.7% of the total site area, exceeding the anticipated proportion of deep soil area by 4.7%. The development meets all the objectives as demonstrated below.

Element objective	Assessment
O3.3.1 – Site planning maximises retention of existing healthy and appropriate and protects the viability of adjoining trees.	The separation provided between the North and South Building allows for the retention of a large tree in the middle of the site. Adjoining trees are sufficiently set back from their respective boundary so as not to be adversely impacted by the development. The development meets the element objective
O3.3.2 – Adequate measures are taken to improve tree canopy (long term) or to offset reduction of tree canopy from pre-development condition.	The development will add a total of 660.8m^2 of canopy cover to the site. The number and extent of canopy cover will positively contribute to the streetscape and landscape character of the area. The development meets the element objective
O3.3.3 – Development includes deep soil areas, or other infrastructure to support planting on structures, with sufficient area and volume to sustain healthy plant and tree growth.	The basement footprint is set in from the site boundaries to provide good opportunities for deep soil planting. Large areas of deep soil and planting areas on-structure will ensure the viability of all trees and plantings. The landscape plan has carefully considered the available soil depth, area and dimension when selecting tree species. The development meets the element objective

9.8 Visual Privacy

Privacy shortfalls are proposed on each floor in respect of the balconies of the South Building's north, east and west elevations. Each of these terraces and balconies are provided with an appropriate screening device that maintains the adjoining properties privacy and outlook to the horizon or landscaping areas. The development meets the objective for privacy as demonstrated below.

Element objective	Assessment
O3.5.1 – The orientation and design of buildings, windows and balconies minimises direct overlooking of habitable rooms and private outdoor living areas within the site and of neighbouring properties, while maintaining daylight and solar access, ventilation and the external outlook of habitable rooms.	The majority of rooms and private open space meet the required side setback requirements of DPP 3.2.5, which establishes the separation standards. The South Building's western elevation, from Podium to Level 3, is provided with a 4m setback, which meets the setback requirements of DPP 3.2.5. The narrow, angled winged windows allow northern light and views to the ocean whilst minimising the privacy impact of adjoining properties. The ground floor balconies are screened at their edges or by the adjacent dividing fence to provide visual separation from circulation areas and adjoining properties. While not meeting A3.5.2 and 3.5.3, the setting of these apartments amongst landscaping and tree canopy and the generous size of the balconies will provide a high-amenity outcome for these apartments. Upper floor balconies that are not set back 6m from the adjoining lot boundary, feature balcony screening and 1.4m high planter boxes that will provide attractive landscape screening. The height and depth of these planter boxes have been carefully designed to ensure that views from these balconies do not allow direct overlooking, while maintaining outlook to the horizon. The element objective has been met.

9.9 Traffic, Car and Bicycle parking

Due to the number of apartments proposes, a Transport Impact Assessment has been undertaken in support of the development in accordance with State guidelines. The development will not adversely impact the local road network, which has sufficient capacity. All parking areas have been assessed and comply with the relevant standards.

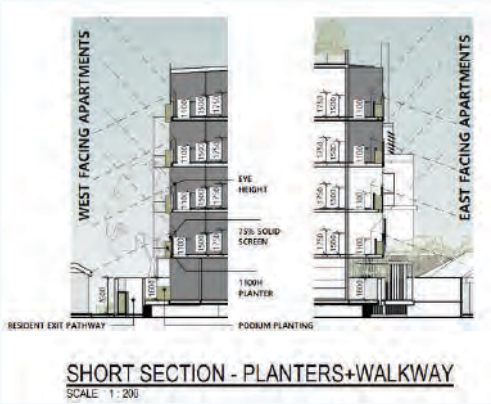
The parking areas of the proposal include 60 residential bays, 6 motorcycle bays, and 28 bicycle bays. In accordance with DPP 3.2.5, the development does not include any visitor bays. The development meets the Car and Bicycle Parking objectives as demonstrated below.

Element objective	Assessment
O3.9.1 – Parking and facilities are provided for cyclists and other modes of transport.	The development exceeds the anticipated number of cycle and motorcycle bays. The development provides cycle infrastructure in convenient locations to encourage the use of non-motorised transport. The development achieves this element objective
O3.9.2 – Car parking provision is appropriate to the location, with reduced provision possible in areas that are highly walkable and/or have good public transport or cycle networks and/or are close to employment centres.	The site is classified as Location A in accordance with the Regional Strategic Centre boundary noted below. Appendix 1 of DPP 3.2.5 sates that residential car parking is to be in accordance with the R-codes Vol. 2. Due to the site's proximity to public transport and the amenities and facilities of the foreshore area, the lower parking ratios in Table 3.9a apply. The development provides 60 car parking bays, which exceeds the minimum number by 17.bays. No visitor parking is proposed given the provisions of DPP 3.2.5 requiring cash in lieu for these. The development achieves this element objective  Figure 1.1 - Rockingham Strategic Metropolitan Centre Planning Envelope
O3.9.3 – Car parking is designed to be safe and accessible.	The car parking area has been designed in accordance with AS and reviewed by a qualified traffic consultant. The car parking layout is efficient, legible and universally accessible. The development is not required to provide a ACROD bay however, one bay has been provided.

Element objective	Assessment
O3.9.4 – The design and location of car parking minimises negative visual and environmental impacts on amenity and the streetscape.	Car parking is predominantly in the basement, or screened behind built form to be concealed from view.

9.10 Private open space

All balconies and private open space meet the minimum areas in Table 4.4. Several apartments (Level 1 and 2 S1.01, S1.09, S1.08, S1.07; Level 3 S3.08, S3.07, S3.06; Level 4 S4.06, S4.07 and S4.08) have slightly narrower dimensions, however, these areas maintain their functionality. The balconies and terraces are an integral element of the overall design intent and meet the objectives as demonstrated below.

Element objective	Assessment
O4.4.1 – Dwellings have good access to appropriately sized private open space that enhances residential amenity.	Balconies are generally consistent with or exceed the minimum area requirements and are functionally designed to allow flexible use. The development meets the element objective
O4.4.2 – Private open space is sited, oriented and designed to enhance liveability for residents.	All balconies have been oriented and sited to be accessed from one or more habitable room and are free of services and utilities. Balconies that address the street will have excellent outlook. Apartments that address the side boundaries balance the need for outlook with adjoining properties' privacy. The height and depth of the planter boxers have been designed to allow views to the horizon, but prevent views down into the properties' side boundaries and major openings, as shown. Vegetation in the planter boxes will further improve both outlook and privacy and provide an attractive interface for neighbouring properties. The development meets the element objective 
O4.4.3 – Private open space and balconies are integrated into the overall architectural form and detail of the building.	The balconies are designed to be open in nature to maximise opportunities for views, solar access and natural ventilation and to reduce bulk and scale as viewed from the street. The development meets the element objective.

9.11 Acoustic

An acoustic report has been prepared by Lloyd George Acoustics. The development will incorporate the recommendations of the Acoustic Report and will meet the requirements of the National Construction Code. It is anticipated that a condition will be imposed as part of approval in this regard. Notwithstanding that the development meets the Acceptable Outcomes, the development also meets the objectives for Noise Management as demonstrated below.

Element objective	Assessment
O4.7.1 – The siting and layout of development minimises the impact of external noise sources and provides appropriate acoustic privacy to dwellings and on-site open space.	The predicted noise emission levels from the plant rooms will comply subject to acoustic treatments being installed. Communal open space areas have been purposefully sited away or shielded from key noise sources. Where required, management of noise sources such as the gym and rooftop will be incorporated into the development. It is anticipated that a condition of approval will be imposed that will require the recommendations of the acoustic report to be implemented. The development meets the element objective.
O4.7.2 – Acoustic treatments are used to reduce sound transfer within and between dwellings and to reduce noise transmission from external noise sources.	The development will be built to the required Building standards to minimise noise transfer. The development meets the element objective.

9.12 Waste Management

A waste management plan (WMP) has been prepared by Talis consultants in support of the application. Waste facilities include FOGO, recycling and general waste with the bin storage area being capable of accommodating all bins and allowing for collection on site with no bins being required to be placed on the verge for collection. The waste storage facilities have been designed in accordance with the City's standards, commensurate with the predicted volume of waste generation and frequency of delivery. The development meets the objectives for waste management as demonstrated below.

Element objective	Assessment
O4.17.1 – Waste storage facilities minimise negative impacts on the streetscape, building entries and the amenity of residents.	Enclosed waste storage areas adjoin the car parking areas, within the development. All dwellings are separated from the proposed bin rooms, maximising internal amenity. The development meets the element objective.
O4.17.2 – Waste to landfill is minimised by providing safe and convenient bins and information for the separation and recycling of waste.	Waste facilities include FOGO, recycling and general waste. The bin storage areas are conveniently located for residents to utilise. The development meets the element objective.

10. Conclusion

The subject site forms part of a strategically important Activity Centre, which is to deliver jobs, dwellings and an increase in population within a consolidated urban form. To facilitate this objective, DPP 3.2.5 seeks medium density development for the site and prohibits low-intensity forms of development.

The development proposal responds to the site's context and the planning framework by proposing a low to mid-rise residential building, with a density consistent with the framework's target. Although the development is larger in scale than existing properties, the framework clearly articulates the suitability of the development's form and scale. The design has responded to its residential context and proposes larger setbacks at the lower levels to incorporate larger areas of tree canopy, deep soil and high quality landscaping than what the framework anticipates.

The proposal includes high-quality amenities and design features, streetscape upgrades and sustainably designed apartments. Following assessment, the proposal has been found to meet the provisions of the planning framework and is consistent with the principles of good design. On that basis we respectfully request the application be conditionally approved.

element.

the art and science of place

Level 18, 191 St Georges Tce, Perth WA 6000

T. (08) 9289 8300 – **E.** hello@elementwa.com.au

elementwa.com.au

WESTERN AUSTRALIA

REGISTER NUMBER	
94/P5742	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
1	14/7/2005

VOLUME 1077 FOLIO 530

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 94 ON PLAN 5742

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

PHILLIP SIDNEY REDMOND JACKSON OF 144 PARKIN STREET ROCKINGHAM WA 6168
(T J348214) REGISTERED 4/7/2005

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. *O651277 MORTGAGE TO NATIONAL AUSTRALIA BANK LTD REGISTERED 24/2/2021.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1077-530 (94/P5742)
PREVIOUS TITLE: 1041-220
PROPERTY STREET ADDRESS: 144 PARKIN ST, ROCKINGHAM.
LOCAL GOVERNMENT AUTHORITY: CITY OF ROCKINGHAM

NOTE 1: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING K647066

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Transfer 2297/1942. 5425/42.
Application
From Volume Folio
1041. 220.
24505-49
8838/51
16317/52
2337/56
3431/56
17211/57
20515/61
15106/63

ORIGINAL

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REGISTER BOOK.

Vol. 1077 Fol. 530.

WESTERN AUSTRALIA.

CT 1077 0530 F

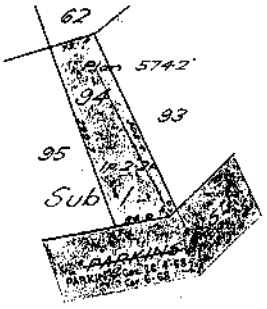
Certificate of Title

under "The Transfer of Land Act, 1893" (56 Vic., 14, Sch. 5).

Annie Doris Mell of 19. View Street. Subiaco, Married Woman. is

now the proprietor of an estate in fee simple subject to the easements and encumbrances notified hereunder in ALL that piece of land delineated and coloured green on the map hereon, containing one rood two and two tenths perches or thereabouts. being portion of Rockingham Suburban Lot 1. and being Lot 94 on plan 5742.

Scale: 160 links to an inch



Dated the eleventh day of May One thousand nine hundred and forty-two

Application 684/1951. Transfer 14190/1949 Transferred to Francis Frederick Penny of 59 Bulwer Street Perth Taxi Driver Registrar of Titles. Registered 20th September 1949 at 4 o'c

A Blackmore 26th February 1951 ASSISTANT REGISTRAR OF TITLES

W J Beetemaster ASSISTANT REGISTRAR OF TITLES.

Application 693/1951 On the 7th April 1950 Francis Frederick Penny died and the 5th October 1950 probate of his will was granted to Livinia Minnie Penny of 59 Bulwer Street Perth Widow the executrix therein named.

A Blackmore 26th February 1951 ASSISTANT REGISTRAR OF TITLE

TRANSFER 3658/1951. to Livinia Minnie Penny of 59 Bulwer Street, Perth, Widow.
Registered 26th February 1951. at 3 o'c
A Blackmore Assistant Registrar of Titles

TRANSFER 3659/1951. to Richard Thomas Slater of 25 Gladstone Avenue. South Perth, Motor Mechanic.
Registered 26th February 1951 at 3 o'c.
A Blackmore Assistant Registrar of Titles

Transfer A 177019 to Mario Giannini of 5 Waikiki Road, Rockingham, Welder. Registered 13th June 1969 at 11.56 o'c

K.G. Abbott ASSISTANT REGISTRAR OF TITLES

For encumbrances and other matters affecting the land see back.

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LANDGATE

EASEMENTS AND ENCUMBRANCES REFERRED TO.

Collateral to
Instrument stamped £2.
MORTGAGE 2313/1951
Richard Thomas Slater to
The Bank of Australasia
Registered 26th February 1951 at 3 o'c
Assistant Registrar of Titles

As to Mortgage 2313/1951 Application 2063/1952. The correct name of the mortgagee is now The Bank of Australasia Limited.
3rd June 1952. Assistant Registrar of Titles

DISCHARGE 4687/1952 of Mortgage 2313/1951
Registered 3rd June 1952 at 10-15 o'c
Assistant Registrar of Titles

Collateral to
Instrument stamped £3-2-6
MORTGAGE 6104/1952
Richard Thomas Slater to
The National Bank of Australasia Limited
Registered 3rd June 1952 at 10-15 o'c
Assistant Registrar of Titles

DISCHARGE 364/1956 of Mortgage 6104/1952
Registered 18th January 1956 at 10-15 o'c
Assistant Registrar of Titles

Collateral to
Instrument stamped £1-5-0.
MORTGAGE 839/1956 Richard Thomas Slater to The National Bank of Australasia Limited
Registered 21st January 1956 at 2-40 o'c
Assistant Registrar of Titles

Caveat 20/1957 Lodged 4-1-1957 at 9-40 o'c
ASSISTANT REGISTRAR OF TITLES

Withdrawal 683/1957 of Caveat 20/1957 Lodged 22-5-1957 at 11-05 o'c

Discharge 4424/1957 of Mortgage 839/1956
Registered 22nd May 1957 at 11-05 o'c

Instrument stamped £1-
Mortgage 5631/1957 Richard Thomas Slater to The West Australian Cowcell Investment Benefit Building Society Registered 22nd May 1957 at 11-05 o'c
DISCHARGED

Instrument stamped £/3
Mortgage 6245/1961 Richard Thomas Slater to The West Australian Cowcell Investment Benefit Building Society Registered 7th June 1961 at 10-48 o'c
DISCHARGED
ASSISTANT REGISTRAR OF TITLES

Instrument stamped £/2
Mortgage 1619/1963 Richard Thomas Slater to The West Australian Cowcell Investment Benefit Building Society Registered 27th March 1963 at 10-31 o'c
DISCHARGED
Asst. Registrar of Titles

Mortgage 33125/66 to The West Australian Savings and Building Society Registered 20th May 1966
DISCHARGED
Asst. Registrar of Titles

Mortgage 7351/67 to The West Australian Savings and Building Society Registered 3rd February 1967 at 9-30 o'c
DISCHARGED
Asst. Registrar of Titles

Mortgage A112028 to The West Australian Savings and Building Society Registered 10th December 1968 at 10-57 o'c
DISCHARGED
ASSISTANT REGISTRAR OF TITLES

As to Mortgages 5631/1957, 6245/1961 and 1619/1963.
APPLICATION A139748 The correct name and address of the mortgagee are now THE WEST AUSTRALIAN SAVINGS AND BUILDING SOCIETY of "Savings House" 96 St. Georges's Terrace, Perth.
6th March 1969. Assistant Registrar of Titles.

Discharge A125743 of Mortgages 5631/1957, 6245/1961, 1619/1963, 33125/1966, 7351/1967 and A112028 Registered 6th March 1969 at 12-20 o'c
ASSISTANT REGISTRAR OF TITLES

CT 1077 0530 B

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Vol. Fol.

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WESTERN AUSTRALIA

REGISTER NUMBER	
95/P5742	
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1	14/7/2005

VOLUME 1082 FOLIO 540

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 95 ON PLAN 5742

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

PHILLIP SIDNEY REDMOND JACKSON OF 174 LITTLE MARINE PARADE, COTTESLOE
(T J348213) REGISTERED 4/7/2005

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. *O651275 MORTGAGE TO NATIONAL AUSTRALIA BANK LTD REGISTERED 24/2/2021.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1082-540 (95/P5742)
PREVIOUS TITLE: 1041-220
PROPERTY STREET ADDRESS: 142 PARKIN ST, ROCKINGHAM.
LOCAL GOVERNMENT AUTHORITY: CITY OF ROCKINGHAM

NOTE 1: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING K647066

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3659/44

Transfer 1809/1944 6812/46
Application 14424-49
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20304-49. 4112-6-50

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WESTERN AUSTRALIA.

CT 1082 0540 F

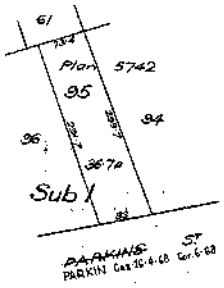
Certificate of Title

under "The Transfer of Land Act, 1893" (56 Vic., 14, Sch. B).

Annie Doris Abell of 19. View Street, Subiaco, Married Woman, is

now the proprietor of an estate in fee simple subject to the easements and encumbrances notified hereunder in ALL that piece of land delineated and coloured green on the map hereon, containing thirty six and seven tenths perches or thereabouts, being portion of Rockingham Suburban Lot 1 and being Lot 95 on plan 5742.

Scale-160 links to an inch



Dated the sixth day of April One thousand nine hundred and forty-four

Registrar of Titles.

Transfer 3408/1946. Transferred to William Leonard Fletcher of 180 Sugar Road, Mount Hawthorn, Builder. Registered 19th March 1946 at 12.15 pm.

Transfer 11029/1949. Transferred to George Edward Grigg of Esplanade, Rockingham, Retired Hotelkeeper. Registered 27th July 1949 at 1.35 pm.

Transfer 11926/1949. Transferred to Caroline Rose McNaught of 601, Murray Street, Perth, Married Woman. Registered 11th August 1949 at 1.50 pm.

TRANSFER 21764/1950 to Olive Lavinia Hopkins of 217. Lotus Street, Lederville, Married Woman. Registered 27th November 1950. 9.35

Transfer A961533 to Mario Giannini, Boilermaker and Berta Giannini, Married Woman both of 16A Parkin Street, Rockingham as joint tenants. Registered 15th May 1975 at 12-2607

For encumbrances and other matters affecting the land see back.

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62/P5742	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
1	14/7/2005

VOLUME 1314 FOLIO 540

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 62 ON PLAN 5742

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

PHILLIP SIDNEY REDMOND JACKSON OF 89 HARRISON STREET ROCKINGHAM WA 6168
(T J348212) REGISTERED 4/7/2005

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. *O651276 MORTGAGE TO NATIONAL AUSTRALIA BANK LTD REGISTERED 24/2/2021.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
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----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	1314-540 (62/P5742)
PREVIOUS TITLE:	1082-498
PROPERTY STREET ADDRESS:	89 HARRISON ST, ROCKINGHAM.
LOCAL GOVERNMENT AUTHORITY:	CITY OF ROCKINGHAM

NOTE 1: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING K647066

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Transfer 53027/66
Volume 1082 Folio 498

JT

WESTERN AUSTRALIA.

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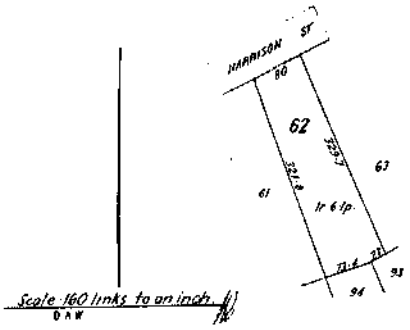
CT 1314 0540 F

Certificate of Title

under "The Transfer of Land Act, 1893" (56 Vic., (4. Sch. 5).

Clarence Gregory McMahon, Electrician, and Christine Nancy McMahon, his Wife, both of 89 Harrison Street, Rockingham, are now the proprietors as joint tenants of an estate in fee simple subject to the easements and encumbrances notified hereunder in all that piece of land delineated and coloured green on the map hereon containing one rood six and one-tenth perches or thereabouts, being portion of Rockingham Suburban Lot 1 and being Lot 62 on Plan 5742.

Dated the 4th day of August, 1966.



REGISTRAR OF TITLES.

Application A441215 On the 1st June 1971 Clarence Gregory McMahon died and thereupon Christine Nancy McMahon became the sole proprietor.

17th September 1971.

Transfer A441216 to Charles Reginald Hall Housing Officer and Joan Hall his wife both of 9 Stevenage Street Rockingham Park as joint tenants. Registered 17th September 1971 at 2.16 p.m.

Transfer C925037. to Kevin Francis Sebo, Milk Vendor and Mary Rose Sebo, his wife, both of 32 Temple Street, Victoria Park, as joint tenants. Registered 20th December, 1984 at 2.16 o'c.

For encumbrances and other matters affecting the land see back.

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EASEMENTS AND ENCUMBRANCES REFERRED TO

Mortgage A441217 to Walter Roy Richards of 16 Joseph St. DISCHARGED Retired Business Proprietor Registered 11th September 1972 at 9.06 a.c.

Mortgage A441218 to Alcoa of Australia (W.A.) Limited DISCHARGED Registered 11th September 1972 at 9.06 a.c.

Discharge A558624 of Mortgage A441217 Registered 22nd August 1972 at 9.28 a.c.

Discharge A558625 of Mortgage A441218 Registered 22nd August 1972 at 9.28 a.c.

Mortgage A558626 to Perth Building Society DISCHARGED Registered 22nd August 1972 at 9.28 a.c.

Mortgage A558627 to Alcoa of Australia (W.A.) Limited DISCHARGED Registered 22nd August 1972 at 9.28 a.c.

Discharge B105380 of Mortgage A558627. Registered 25th February 1976 at 9.24 o'c.

Mortgage B105381 to Alcoa Of Australia (W.A.) Limited. Registered 25th February 1976 at 9.24 o'c.

Mortgage B 397104 to Commonwealth Trading Bank of Australia. Registered 2nd September 1977 at 10. DISCHARGED

Caveat B813346. Lodged 9.11.1979 at 1.08 o'c.

Withdrawal C390629 of Caveat B813346. Lodged 14.7.82 at 12.13 o'c.

Discharge C393867 of Mortgage B105381. Registered 20th July, 1982 at 2.37 o'c.

Mortgage C393868 to Alcoa of Australia Limited. Registered 20th July, 1982 at 2.37 o'c.

Caveat C399204. Lodged 30.7.1982 at 11.34 o'c.

Discharge C919200 of Mortgage B397104. Registered 14th December, 1984 at 9.10 o'c.

Dup C/T not prod. Since Prod.

Discharge C925034. of Mortgage A558626. Registered 20th December, 1984 at 2.16 o'c.

Discharge C925035. of Mortgage C393868. Registered 20th December, 1984 at 2.16 o'c.

Withdrawal C925036 of Caveat C399204. Lodged 20/12/1984 at 2.16 o'c.

CT 1314 0540 B

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Vol. **1314** Fol. № **540**

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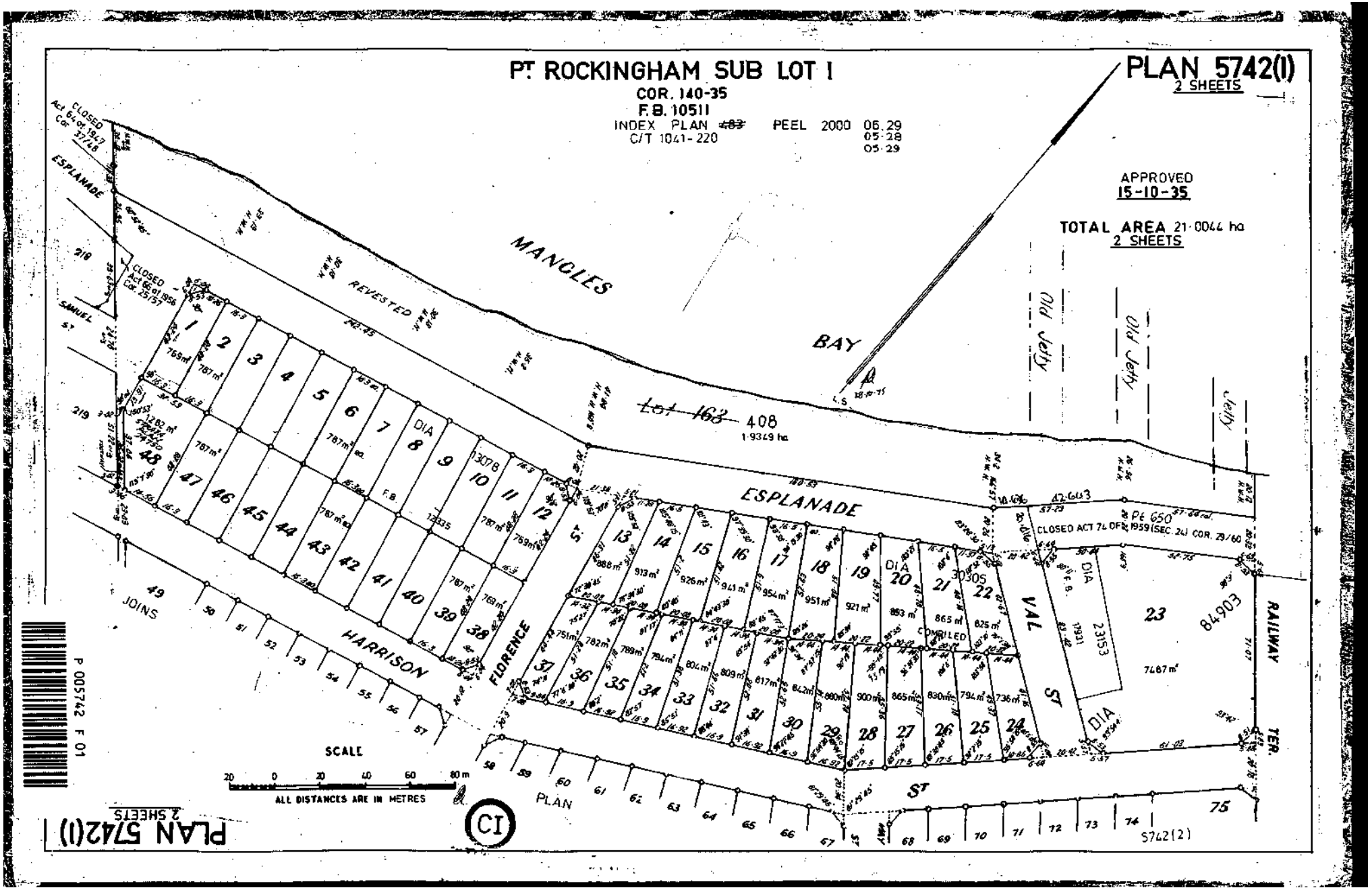

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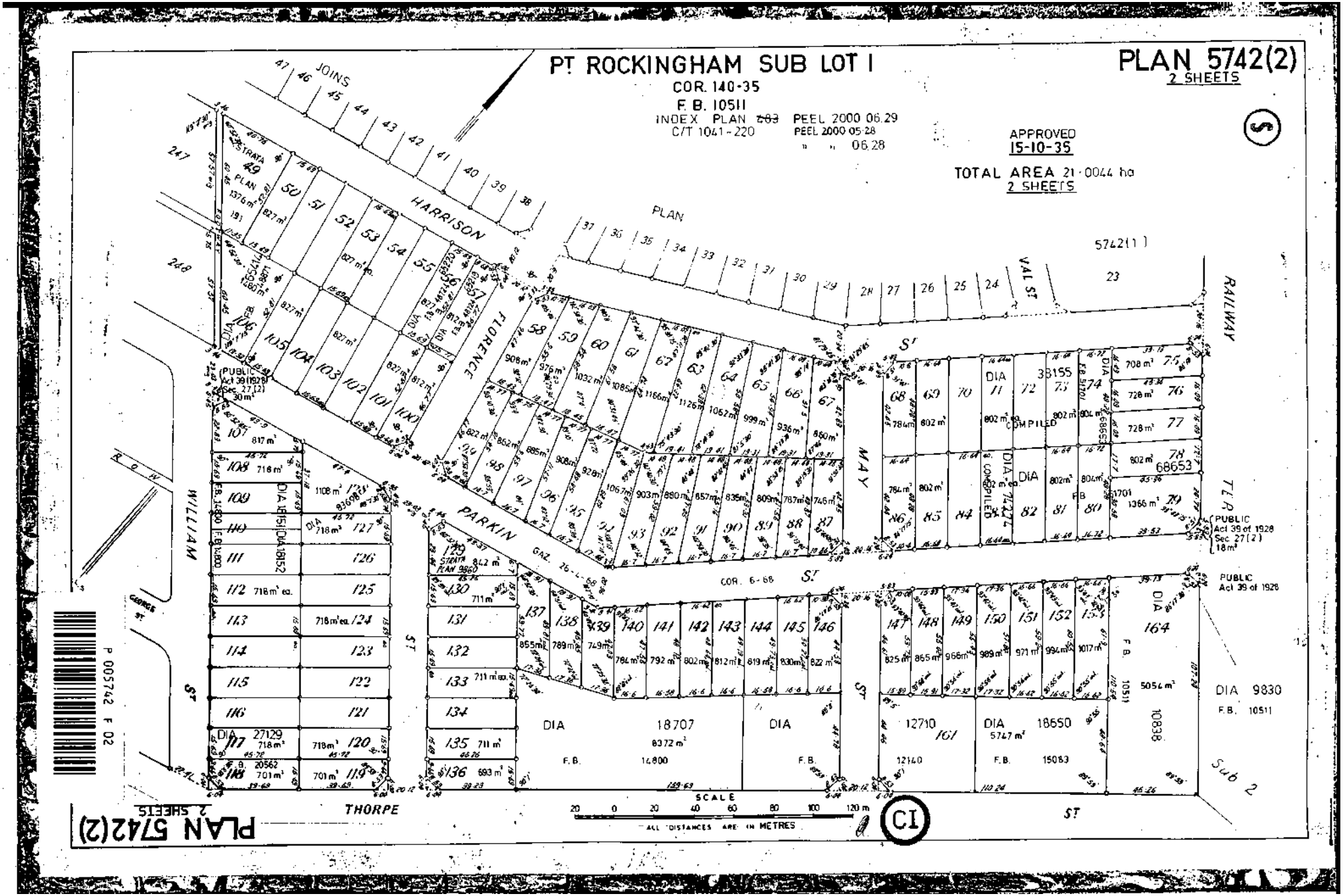

Landgate
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ARBOUR APARTMENTS

Harrison Street & Parkin Street
ROCKINGHAM WA



Prepared for DEVELOPMENT APPLICATION
AUGUST 2022

DMG
ARCHITECTURE

DMG
ARCHITECTURE

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1.4) Contextural Design Statement

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b) DRP Minutes response



	R-AC0	Proposed
Building Height (Storeys)	Maximum 19m (5 storeys).	South 5 storeys + uncovered accessible roof deck / 19.000 North 3 storeys + uncovered accessible roof deck / 12.600
Minimum Primary & Secondary Street Setbacks	Moderate activation, 2m landscaped setback to building frontage 4.5m setback for development from 12.5m to 19m high.	Landscaped (public) and Residential fitness (private) street activation South 4.5-6m landscaped set back North 6m landscaped setback 4.5m setback for development from 12.5m to 19m high.
Minimum Side Setbacks	Nil to 2 or 3 storey podium height. Minimum 4m above podium height.	Nil to 2 or 3 storey podium height. Minimum 4m above podium height.
Minimum Rear Setbacks	Minimum of four (4) metres (above podium height)	Minimum of four (4) metres (above podium height)
Residential Density	80 to 160 Dwellings per hectare	47 dwellings 3161m^2 / 0.3161 hect TOTAL: 148.69 dwellings / hectare

	Public Standard	Required Bays	Provided bays
Resident	1 bedroom dwelling: 0.75 bay per dwelling 2+ bedroom dwelling: 1 bay per dwelling (As per Activity Centre (ACP) Zone)	43.75 (44) residential bays	60 bays
Residential Visitor	Cash-in-lieu payment	7.3 (8) visitor bays	Cash-in-lieu payment
Total		52 bays (incl visitors)	60 bays on site (excl. visitor)

1) Development Controls & Overview

This proposal will be the first major development on Harrison & Parkin Street and begins the transformation of Rockingham's Waterfront Village Sector. The proposal demonstrates a strong addition to the City's ongoing strategy of civic improvements, mixed use urban renewal and townscape consolidation to provide greater opportunities for people to live and recreate in a high amenity environment within walking distance of one of the State's best family beaches.

The key features of the proposal include:

- A mix of small to large apartment typologies providing opportunities for local Rockingham residents to downsize and remain in the area;

- Articulated entry lobbies and ride-share wait zones to activate and strengthen the existing character of Harrison and Parkin Street

- A considered design that maximises sunlight and ventilation and sets a standard of finish and amenity for future developments to follow.

This proposal is important for the City of Rockingham and the Rockingham community as it will set the standard for a new era of development under PP3.2.5 – DPP - Waterfront Village Sector.

1.1) Carparking strategy

- Southern Building:
  Basement carparking comprising 52 bays, of which 10 are tandem entries, 42 separate entries.
- Lockable screened enclosure for 20 bicycles
- Zone for 6 motorbikes

Northern Building:
- On-grade carparking comprising 8 carbays; 4 within 2 private garages
- Locakable enclosure for 8 bicycles
- Wait zone for automated gate and ample space for refuse truck entry; 3-point turn and exit.

DMG ARCHITECTURE

1. Context and Character

Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place





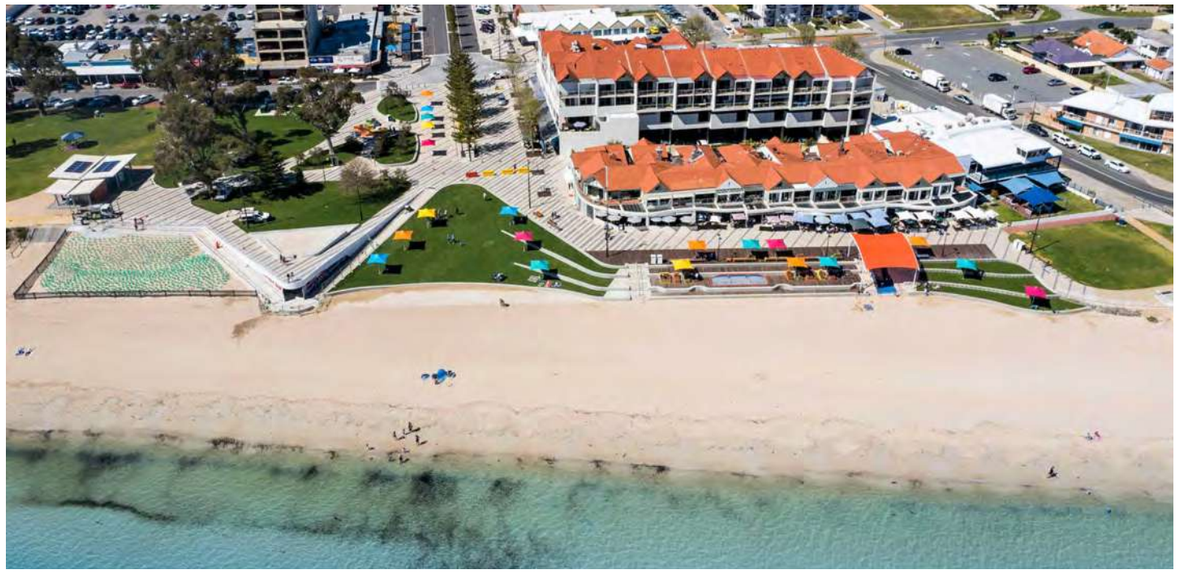














1.1) Place Context

Rockingham has a unique sense of existing and developing place drawn from:

- Geographical proximity to one of the states best family beaches;
- Emerging dining and entertainment precincts;
- Low to medium scale existing residential character with short and long term accommodation use;
- Native landscaping;
- Local community facilities including:
    - Rockingham Foreshore
    - Rockingham Golf Club
    - Rockingham Regional Environment Centre

Careful attention has been paid to the wider context of Rockingham and consideration given to how the design can respect, build on this character and enhance local activation.

DMG ARCHITECTURE

1. Context and Character

Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place



LOCALITY VIEWS



1.2) Town Centre

The Rockingham Town Centre acts as the primary centre for the City of Rockingham. It has a beach-side location at Mangles Bay, the southern extremity of Cockburn Sound.

The surrounding land consists of:

- A large landscaped ANZAC Park is located 600m north-east of the subject site.

- A range of mid to high-rise developments are located between approximately 20m and 200m North-west of the subject site. Refer context plan

- Low density residential development, comprising single dwellings on freehold lots, to the south and east.

By responding to these existing characteristics, the proposal provides an opportunity to create and exemplar of quality design for future development within the Centre.

1.3) Site Analysis

The site combines three large single blocks, which presents a unique opportunity for the development of Harrison/Parkin Street as part of the heart of Rockingham

The design carefully considers the environmental influences of the site including:

- Northern winter sun access;
- Prevailing breezes;
- Views of significance to the coast and jetty;
- Existing residential neighbouring properties.

DMG ARCHITECTURE

1. Context and Character

Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place





The design of Arbour draws on the rich history of the locale and the site's geographic and historical context. The landscape design elements draw references from the marine life of Palm Beach and Cockburn Sound that were so important to the traditional Nyoongar custodians of this area sited on the boundary of the Whadjuk & Binjareb peoples.

Forms in the landscape reflect the sweeping curves of the coastal arc with artwork reflecting the abundant marine life such as the manta ray, the shell and the jellyfish. Sweeping curvilinear forms occur as repeated patterns in the hardscape elements and wall surfaces of the architecture.

The long history of Rockingham as a port for shipping the forestry timbers from the Jarrahdale mill is also referenced in the design for this project. The Jarrahdale timber mill was an economically important driver of the settlement of Rockingham from with a mill established in circa-1870 and a rail line constructed in circa-1890 leading straight to the long jetty at the beach just near the site. This jetty served as a critical port facility for shipping the timber from Jarrahdale across the world to South Africa, Europe and the eastern states of Australia as a vital construction material.

The use of timber elements throughout the design, most notably for the construction of the landscape arbour that frames the pedestrian walkway connecting Parkin Street resident's entry through the landscaped heart of the development to the Harrison Street resident's entry and the beach precinct.

These recycled timber portal frames present the natural beauty and strength of these timbers and are a tactile reminder of the importance of this material to the establishment of the Rockingham community and Western Australia in general. Timbers are proposed to be left untreated to naturally weather and age in their coastal environment in the same way as the many jetties that served to make the port an active and vibrant trading hub. Timber linings to key common areas also reference the maritime history of the area predominantly characterised by the wooden sailing ships of the 1800s to early 120th century. These ships were typically 3 masted barques with large cross timbers and wooden hulls.

Panelling and seating to common areas reflects this heritage in the use of maritime forms derived from the material language and rugged aesthetic of these ships. The walkway through the site is proposed to be constructed in part as a raised deck reminiscent of a jetty or wharf with similar rugged timbers and simple robust timber joints and fixings. Materials for the building itself are also selected for their robustness and simplicity as a further reflection of the hardiness of the timber trading ships. Materials are muted in their colour selection within a limited palette to allow the sharp summer sunlight and shadow of the coast to better emphasise the form of the building through shadow created by deep recesses in the façade contrasting with large planar wall surfaces on each elevation. Wall planes project from each side of the building to shield windows and wide balconies deeply recessed from the building edge provide further contrast.

A further contextual reference central for the design of the arbour apartments is the arbour itself. The land of this development was previously used for a number of years as a plant and tree nursery. The tree lined arbour not only provides a natural shaded canopy to frame the pedestrian walkway but is also a reminder of this former use of the site. Trees and plantings have been selected for their appropriateness in the coastal environment of Rockingham and for their shade value and aesthetic.

1.4) Contextural Design Statement

Contextual analysis of locality, history and local character, forms and references

2. Landscape Quality

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context





2.1) Public Realm Landscape

The site has two separate street frontages which are joined by an arboured spine - offering a unique vegetation opportunity along almost the entire length of the development.

-Generous parklet space is proposed to each portion of the site fronting offering amenity and providing a softened edge interfacing the streetscape

- Upgrade to the existing verge condition to encourage pedestrian activity along all street edges

- Sheltered entries at both northern and southern access points

Maintaining at least one exsting feature tree; the landscape design uses the following elements:

- Robust Species, tone & texture from greens, reds and silvers
- Street appeal through greening
- Screening via low hedging
- Permeability for sightlines
- Break linear forms
- Street planting in natural clumps
- Water wise, light and bright exposed natural colours
- Lobby and ride-share wait zone street appeal

2. Landscape Quality

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context



LEGEND

01 PROPOSED NEW TREES
02 1M HIGH GARDEN BED WITH TREES AND CASCADING PLANTING
03 0.5M HIGH GARDEN BED TO ALLOW FOR OCEAN VIEWS
04 SUN DECK
05 SEMI-PRIVATE DINING
06 MOVABLE FURNITURE
07 HIGH BREAKFAST BENCH
08 BBQ FACILITIES
09 MOVABLE POT PLANTING
10 FEATURE TILE PAVING - WARM TONES
11 ARBOUR STRUCTURE WITH CREEPER PLANTING OVER





LOCATION MAP

LEGEND

01 PROPOSED NEW TREES
02 1M HIGH GARDEN BED WITH TREE AND CASCADING PLANTING
03 IN-BUILT SEATING BENCH TO 0.5M HIGH GARDEN BED TO ALLOW FOR OCEAN VIEWS
04 RAISED SUN DECK
05 MOVABLE FURNITURE
06 BBQ FACILITIES
07 FEATURE TILE PAVING - WARM TONES



2.2) Private Landscaped Areas

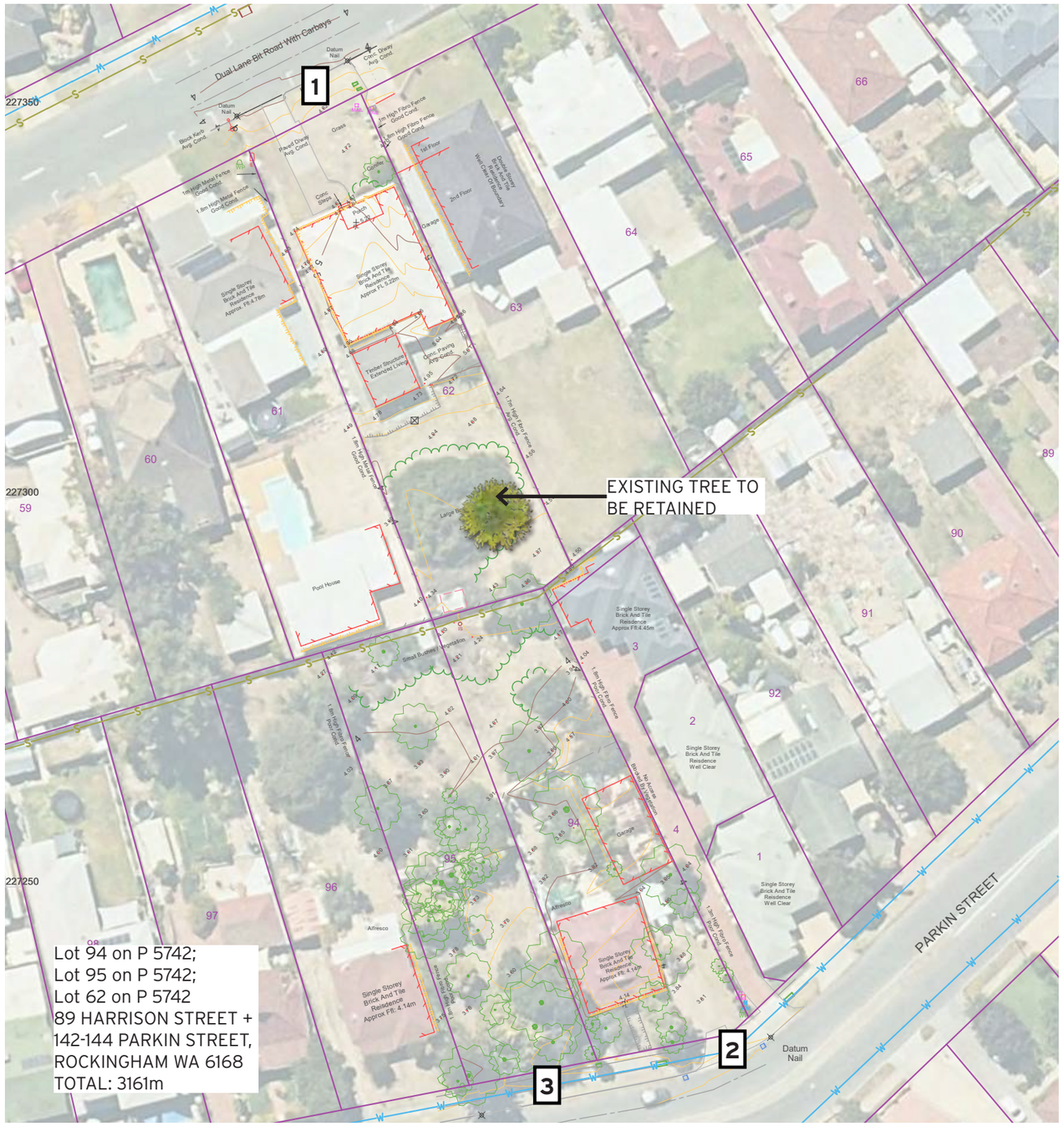
The site offers a large resident accessible roof deck on both North and South Buildings and a generous communal green space to the centre of the site.

- Robust Species, light coastal planting colours
- Communal Oasis for residents, use planters to create nooks
- Screen anything unsightly from communal space
- Planters for hardy plant growth
- Mass and mixed planting
- Break linear forms
- Wind resistant plants
- Screening from weather
- Seating in organic shapes

DMG ARCHITECTURE

2. Landscape Quality

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context



2.3) Existing Site + Retention of existing tree and vegetation

The three sites have existing vegetation - established tree anticipated to remain (subject to arbourist report + structural design) IS shown on the survey plan adjacent.

Existing residences to be removed - street view with non-viable vegetation below shown below.



89 HARRISON ST



142 PARKIN ST



144 PARKIN ST

2. Landscape Quality

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context







SUGGESTED TREE SPECIES



2.4) Landscape Palette

DMG ARCHITECTURE

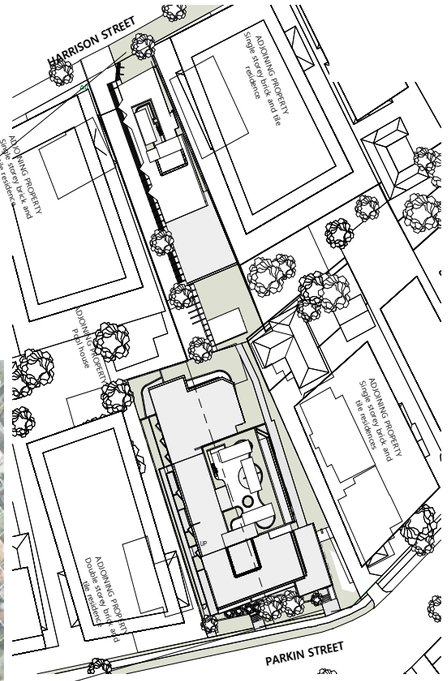
3. Built Form and Scale

Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.

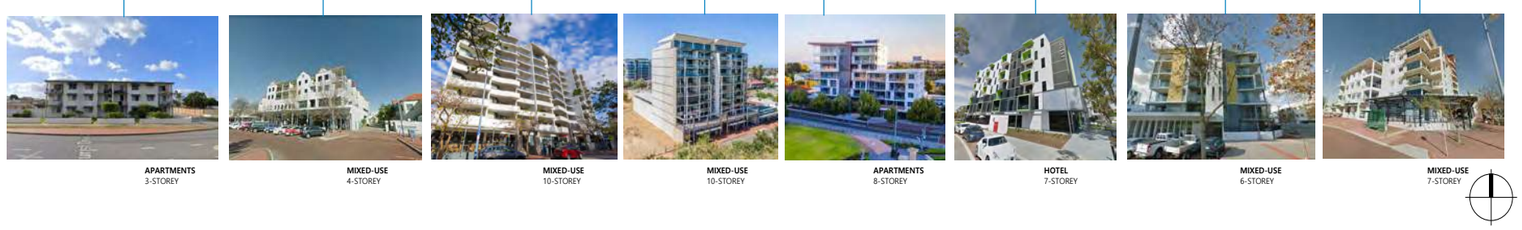


VIEW OF SIGNIFICANCE





PROPOSED DEVELOPMENT CONTEXT
SCALE 1 : 500



APARTMENTS 3-STOREY | MIXED-USE 4-STOREY | MIXED-USE 10-STOREY | MIXED-USE 10-STOREY | APARTMENTS 8-STOREY | HOTEL 7-STOREY | MIXED-USE 6-STOREY | MIXED-USE 7-STOREY

3.1) Built Context

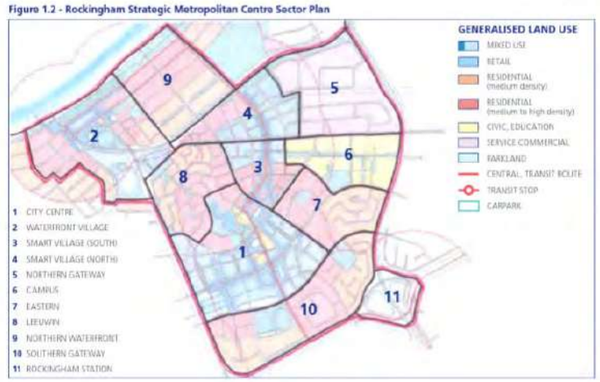
The City Centre and the Waterfront Village are established Activity Centres which have to date been planned to accommodate the bulk of retail, office, hospitality and higher density residential development. The 2009 Centre Plan allows for a more balanced distribution of activity-generating uses along the transit corridor where there are significant opportunities for sustainable TOD

- A range of mid to high-rise developments are located between approximately 20m and 200m North-west of the subject site.

- Low density residential development, comprising single dwellings on freehold lots, to the south and east.

By responding to these existing characteristics, the proposal provides an opportunity to create and exemplar of quality design for future development within the Centre.

Figure 1.2 - Rockingham Strategic Metropolitan Centre Sector Plan

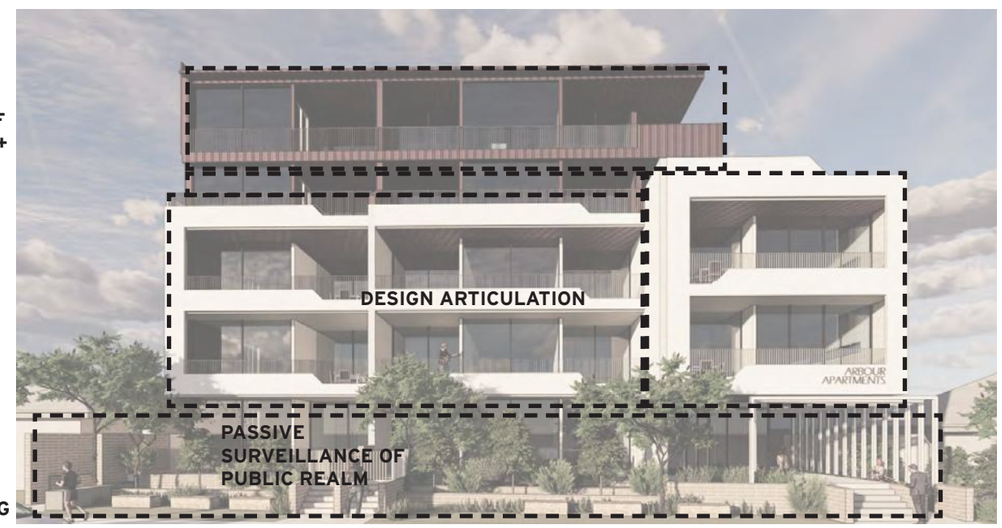


3. Built Form and Scale

Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built forı



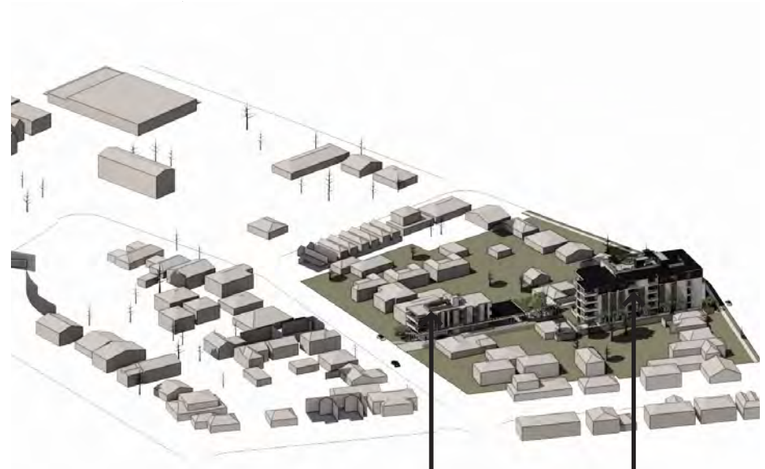




PROPOSED BUILT FORM - South Elevation

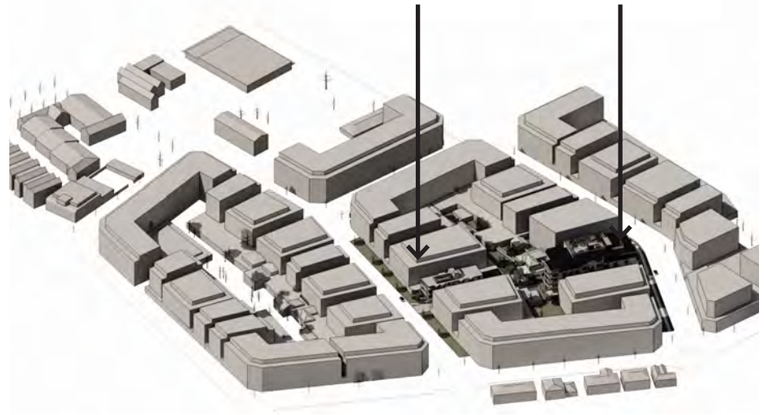
3.2) Design Response

The proposed sixth storey elements are recessed well back to limit visibility from the street / public realm and use recessive colours to further mitigate its impact on bulk and scale.



EXISTING CONTEXT

NORTH BUILDING SOUTH BUILDING



SURROUND CONTEXT - FUTURE

3. Built Form and Scale

Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.



3.3) Rockingham Strategic Metropolitan Centre Framework Plan

Below excerpt from the Rockingham Strategic

The vision is for a modern, distinctly coastal centre offering a wide range of mixed uses including retail, commercial, office, civic, residential, education and recreation within an accessible and highly interconnected, urban-scaled townscape, comprising a major activity centre and related urban villages based on 'Main Street' principles.

This vision builds on the principles of the Network City (2004) regional planning framework and the objectives and concepts of the adopted 1995 Rockingham City Centre DPP. It has a wider scope to encompass higher education campuses and urban villages along the route of the RCCTS through to Rockingham Beach.

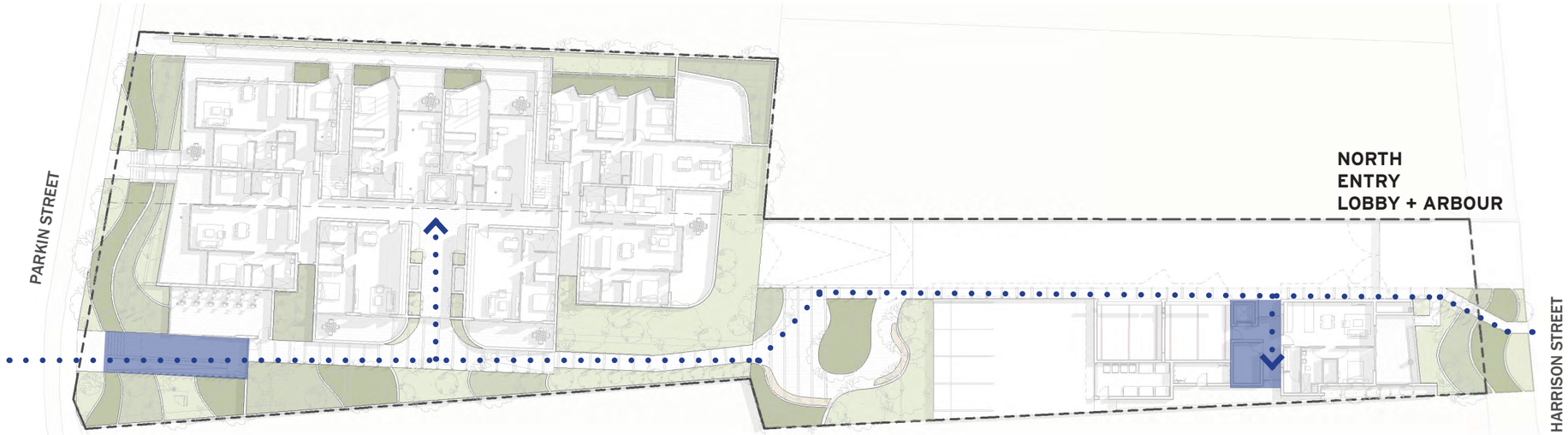
Development in the Rockingham Strategic Metropolitan Centre will be defined and characterised by:

- Medium to high density development based on activated, 'Main Street' principles.
- A configuration of generally contiguous streetfront buildings and a mix of uses that generate high levels of pedestrian activity and a sense of vitality.
- A street-based transit system, with closely spaced stops.
- A permeable network of streets, laneways, arcades and public spaces that provide high quality linkages, particularly
for pedestrians, to Centre activities from transit stops, street and off street car parking and from the surrounding walkable catchment.
- An identifiable City Centre hub to provide major CBD functions.
- Connected urban villages between the City Centre and Rockingham Beach along the route of the transit system. The new urban villages will make provision for mixed and consolidated education (university), technology, commercial and medium to high density residential development, based on sustainable planning principles and design criteria.

DMG ARCHITECTURE

4. Functionality and Build Quality

Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.





4.1) Accessibility

- All circulation spaces are compliant for wheelchair access and manoeuvrability
- Step free transitions provided from the public realm all apartments - terrace apartments are accessible from inside corridor.

4.2) Ease of Use

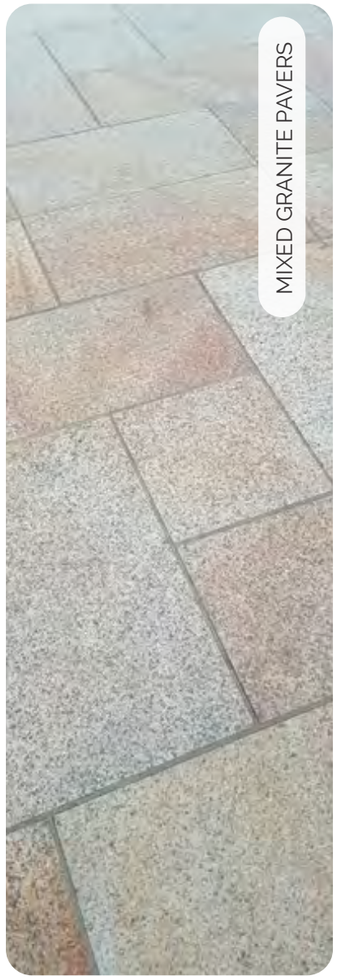
- The articulation of the built form and the resident accessible arbour directs users into the two main pedestrian entries of the building providing a direct link from the street to all levels of the building

- Legible entry portals and signage across the elevation for ease of use

DMG ARCHITECTURE

4. Functionality and Build Quality

Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.









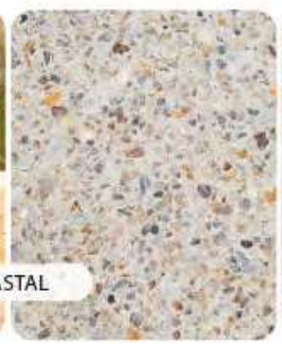
















4.3) Materiality

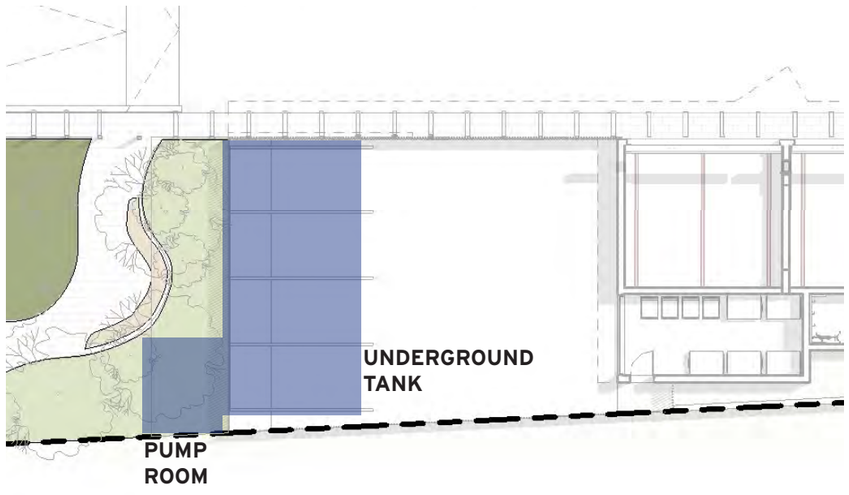
Durable materials, finishes, elements and systems that are easy to maintain and weather well over time

- Mixed tone granite pavers
- Textured concrete
- Rendered / texture painted Accents
- Timber look alum batten screen
- Anodised Aluminium frames
- Standing seam metal roof pan
- Feature brick fins
  (Alternative - coloured textured concrete)
- Landscape to soften, add layered texture and warm tones

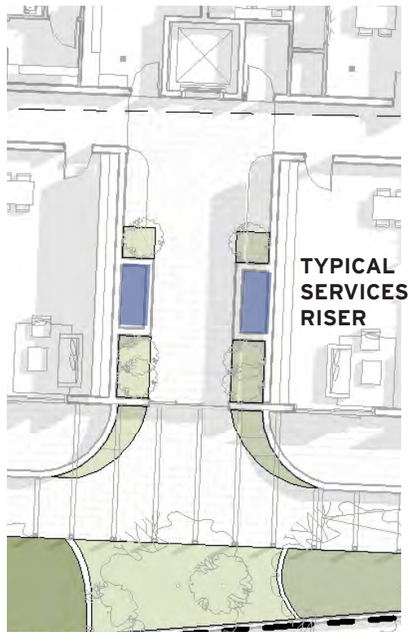
DMG ARCHITECTURE

4. Functionality and Build Quality

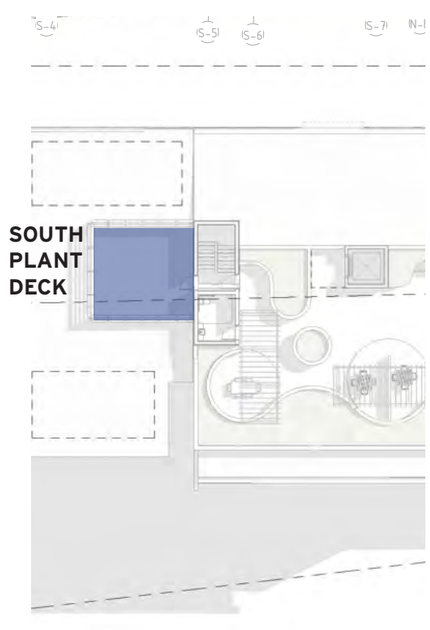
Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.



BELOW GROUND TANKS AND CONCEALED PUMPS



SERVICES RISERS BUILT INTO TYPICAL LIFT CORE ARRANGEMENT TO RUN EFFICIENTLY THROUGH BUILDING TO ROOF PLANT DECK



TYPICAL SERVICES ENCLOSURE TO ROOF TERRACE (NATURALLY VENTILATED)

4.4) Services & Equipment

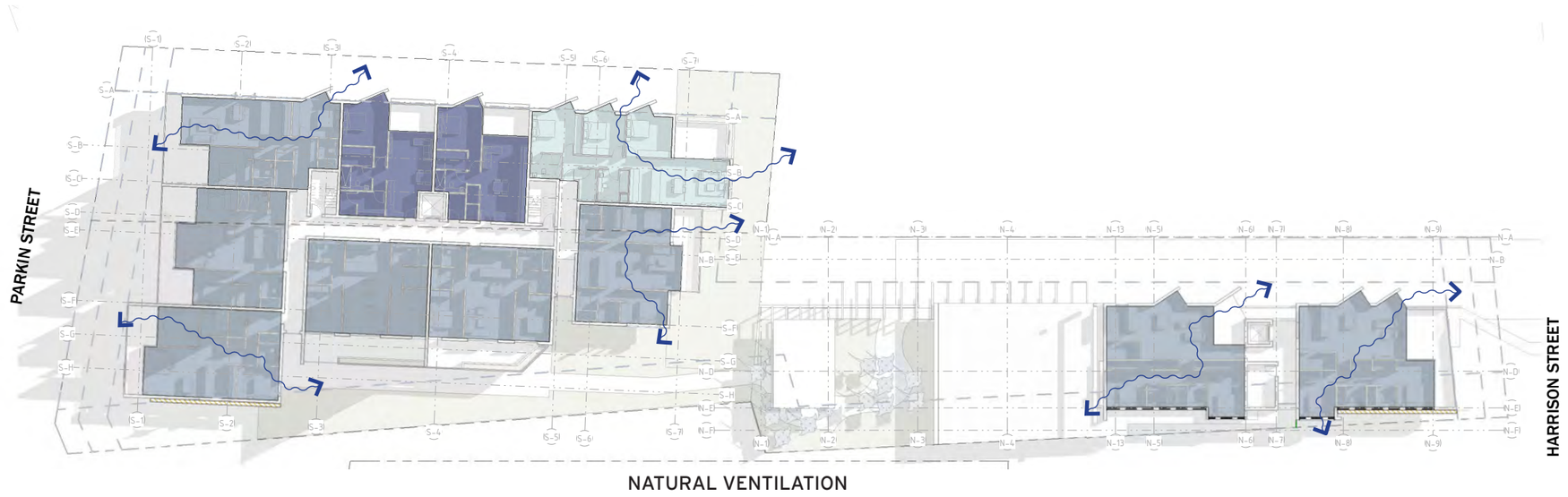
The rationale for the arrangement of services through the building is to be fully integrated and visually concealed within the architectural envelope or concealed beside parking enclosures.

A plant deck is located to the roof terraces and will be acoustically treated to minimise noise impact to the common amenity areas.

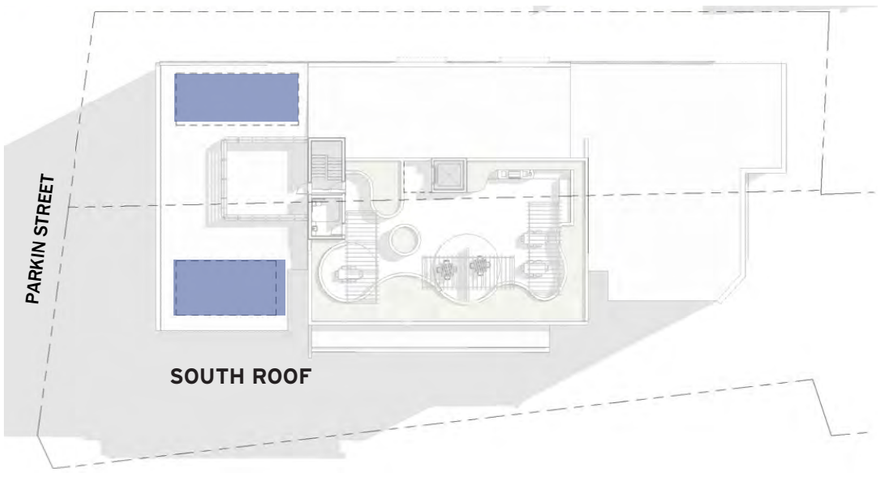
DMG ARCHITECTURE

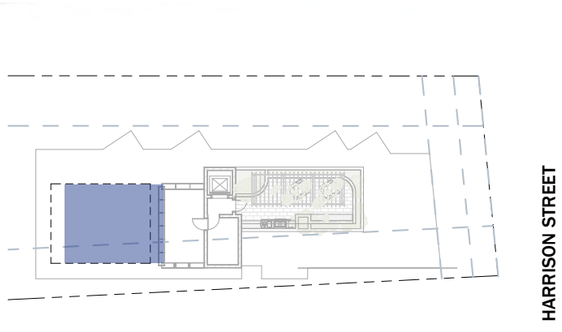
5. Sustainability

Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.



NATURAL VENTILATION





SOLAR PANELS - FUTURE PROVISION

5.1) Passive Ventilation + energy and resource reduction strategy

- Maximising opportunities for natural ventilation; large operable sections of glazing oriented to capture prevailing breezes to 38 units; equating to 76% of the apartments achieve cross ventilation through opposite walls to reduce energy consumption & improve indoor air quality

- Effective shading from summer sun; deep eaves thermal mass shading any glazing on Western elevation - no single aspect south facing apartments

- Roof top plant zones capacity for future Installation of systems such as a photovoltaics

- Conduits and capacity in the electrical distribution system and metering for future provision of electric car charging within car parking areas

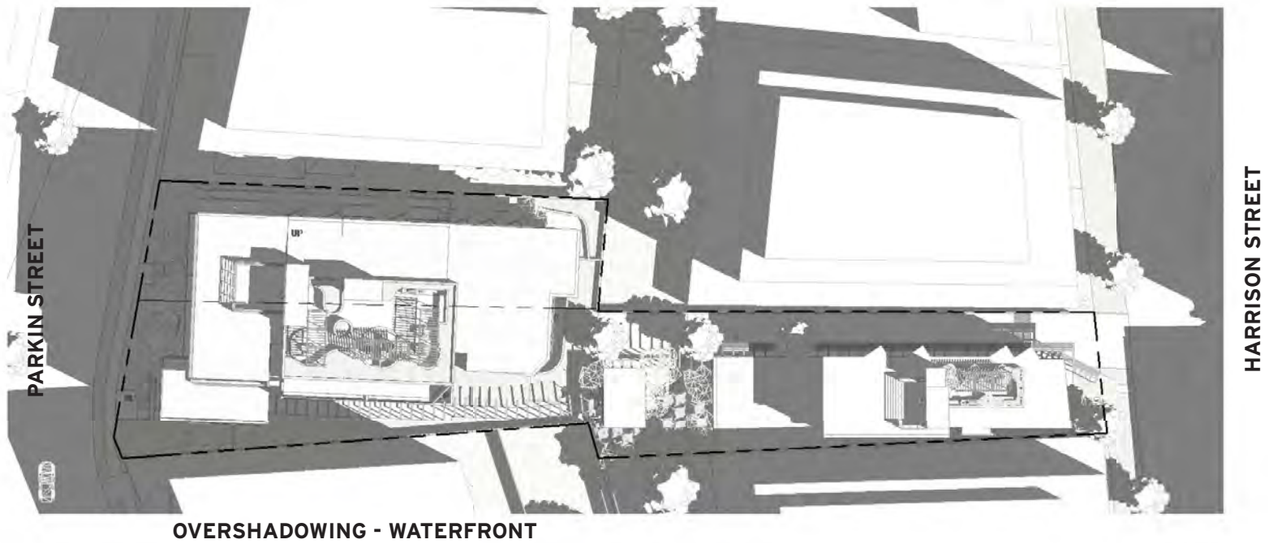
- Waste management systems & dedicated waste store with recycling areas

- Low water use fixtures & fittings

- Generous balconies, shading screens to the northern facade & high performance glazing reduces heat gain & glare into rooms



OVERSHADOWING - RESIDENTIAL (EXISTING) CONTEXT



OVERSHADOWING - WATERFRONT (FUTURE CONTEXT)

5.2) Solar Access

The proposed development complies with the requirements outlines in chapter 4.1.1 of the R-Codes which states:

Dwellings with a northern aspect are maximised, with a minimum of 70 per cent of dwellings having living rooms and private open space that obtain at least 2 hours direct sunlight between 9am and 3pm on 21 June

Total apartments 47

Dual aspect + north/west/east facing apartment = 44
=93.6% min 2 hrs sun between 9am-3pm 21st June

Single aspect south facing apartments = 3
= 6.38% no direct sun between 9am-3pm 21st June

5.3) Overshadowing

The proposed development complies with the requirements outlines in chapter 4.1.1 of the R-Codes which states:
.....

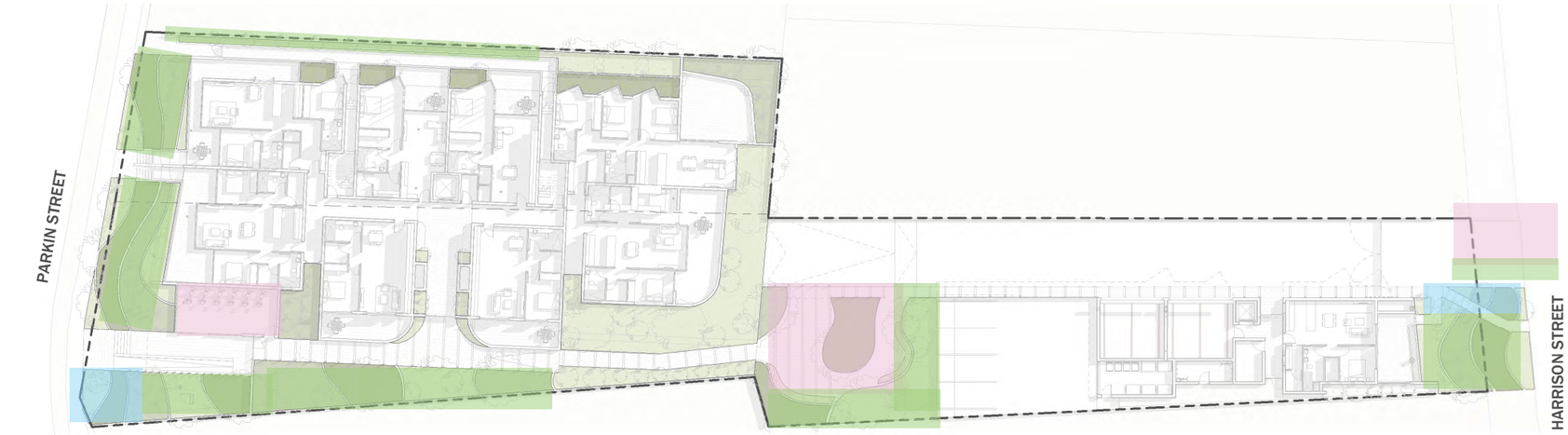
Northern neighbour site area: 1064.7 sqm
62.5 sqm over shadowing
= xx%

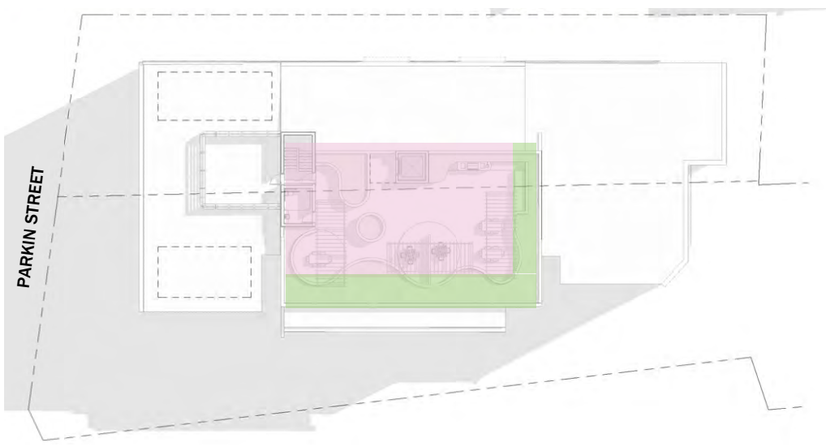
Southern neighbour site area: 907sqm
22.96 sqm over shadowing
= xx%

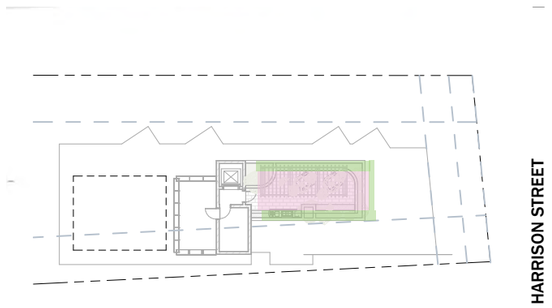
DMG ARCHITECTURE

6. Amenity

Good design provides successful places that offer a variety of uses and activities while optimising internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy







6.1) Public Realm Amenity

- Public ride-share wait zones create activation to both Harrison and Parkin St.

- A generously landscaped building edge is proposed to both streets particularly along Parkin Street offering amenity and providing a softened edge interfacing the streetscape

- Upgrade to the existing verge condition to encourage pedestrian activity to all street edges

- Sheltered entries at both northern and southern access points

6.2) Private Amenity

Rooftop Terrace
- Communal Kitchen, Dining
- Communal universal amenities

Ground floor parklet:
- Landscaped Zones - Private Parklets

PUBLIC AMENITY

PRIVATE COMMUNAL AMENITY

SOFT LANDSCAPING

7. Legibility

Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.







7.1) Wayfinding

Sightlines over the development are well-considered, with the built form responding to important vantage points. There are 2 x primary pedestrian access points identifiable from the ground floor street plane, made legible by being highlighted by feature portals and well considered, signage elements. Externally, their purpose is immediately obvious and provides a clear distinction between public and private spaces.

7.2) Access and Circulation

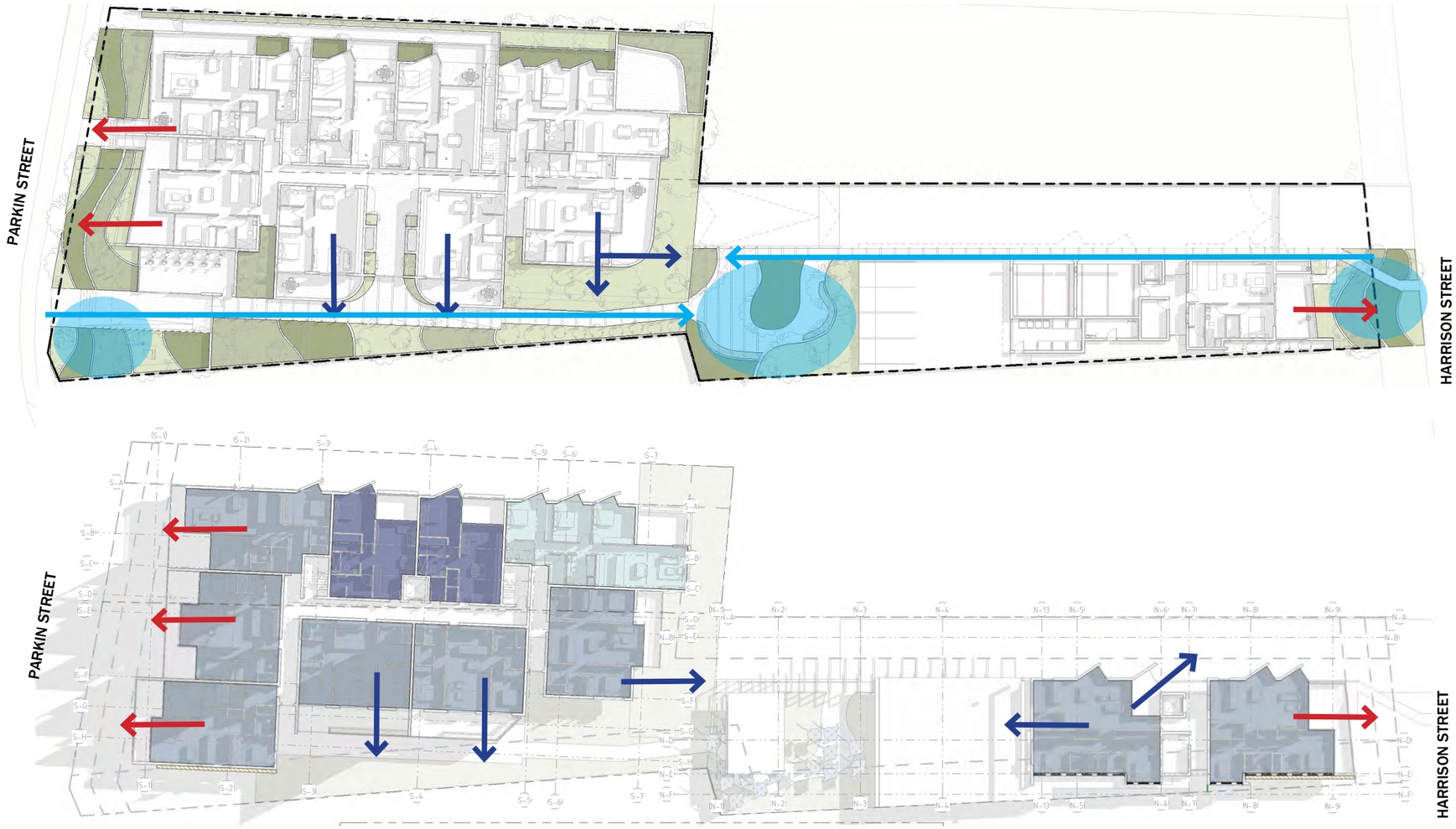
A focus has been given to the movement throughout the ground floor plane, to be easy for everyone who moves through the space.

Pedestrian movement is given priority over vehicular movement and occupies the two major frontages.

DMG ARCHITECTURE

8. Safety

Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.



8.1) Site Planning for Safety

- Safety and security is promoted throughout the proposal by maximising opportunities for passive surveillance and providing clearly defined, well-lit, secure access points that are easily maintained and appropriate to the intended use of the ground floor plane.

- The typical apartment floor plate has been designed with glazing and balconies to address street fronting elevations, promoting passive surveillance to the footpath, parklet and adjacent streetscapes.

- The design of the vehicular crossover is located to Harrison St at the north of the property and limits potential safety issues or interference with the pedestrian activity.

DMG ARCHITECTURE

9. Community

Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.



9.1) Apartment Mix

The development proposes a mix of dwelling types providing housing options for different demographics, living needs and household budgets, and accommodating all ages and abilities.

NORTH BUILDING
GF = 1 apartment (1*1B) *DA[1]
L1 = 2 apartments (2*2B) *DA[2]
L2 = 2 apartments (2*2B) *DA[2]
L3 (roof)
North total = 5 apartments

SOUTH BUILDING
Podium = 8 apartments
(4*1B, 3*2B, 1*3B) *DA[4]
L1 = 9 apartments
(2*1B, 6*2B, 1*3B) *DA[5]
L2 = 9 apartments
(2*1B, 6*2B, 1*3B) *DA[5]
L3 = 8 apartments
(2*1B, 5*2B, 1*3B) *DA[4]
L4 = 8 apartments
(2*1B, 5*2B, 1*3B) *DA[4]
L5 (roof)
South total = 42 apartments

Development total = 47 apartments

One bed - 13	23%
Two bed - 29	66%
Three bed - 5	11%

*DA[x] = dual aspect apartments

9. Community

Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.



ROOF TOP TERRACE



COMMUNAL
LANDSCAPE NODE

9.2) Social Amenity

The proposal encourages social engagement and physical activity in an inclusive, equitable manner

- Rooftop Terrace
- Communal Dining
- Communal Lounge
- BBQ
- Landscaped Zones:
    - Public landscaped streetscape
    - Private Parklets

10. Aesthetics

Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.















10.1) Design Concept

Form:
Bold structural forms creative an landscaped arbour link through the project

Sense of arrival - a distinct address for each entry for each building.

Articulated form that offers a range of textures and shadow reducing a single material spanning the entire facade.

A recessed top floor that reduces bulk + scale

Ample residential amenity - a central communal landscape node and other communal use zones.

Wing walls with angled deep eaves shading large feature windows - allowing views for residents and carefully controlling sightlines away neighbouring properties to protect privacy.

Careful placement of pathways with meaningful connections along 'desire lines' to focal places provide opportunities for casual social interactions along arbour pathway

Material Diversity:
Timber-look battens: to soften and shade balconies
Brick wing walls: reflecting existing materiality of the surrounding built form

Landscaped verge gardens terrace along the elevation and provide street shade and amenity

Individual places within landscape spaces that allow for small groups to gather casually, large group areas, celebration areas, smaller pockets for 1-2 people

DMG
ARCHITECTURE

A. UPDATED PLANS

ARIA PROJECT DEVELOPMENT

ARBOUR APARTMENTS

89 HARRISON STREET + 142-144 PARKIN STREET
ROCKINGHAM





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DRAWING SCHEDULE

0.00	COVER SHEET	P5
0.01	SURVEY PLAN	P1
1.01	SITE PLAN CONTEXT	P3
1.02	SITE PLAN	P5
1.10	BASEMENT - SOUTH BUILDING	P4
1.11	PODIUM FLOOR PLAN - SOUTH BUILDING	P7
1.12	LEVEL 1+2 - SOUTH BUILDING	P5
1.13	LEVEL 3 - SOUTH BUILDING	P5
1.14	LEVEL 4 - SOUTH BUILDING	P5
1.15	LEVEL 5 (ROOF) - SOUTH BUILDING	P4
1.16	GROUND FLOOR PLAN - NORTH BUILDING	P7
1.17	LEVEL 1+2+ROOF - NORTH BUILDING	P5
2.01	ELEVATIONS - NORTH + SOUTH	P4
2.02	ELEVATIONS - EAST + WEST	P6
3.01	BUILDING SECTIONS	P1
9.01	SHADOW DIAGRAM	P1
10.01	3D - HARRISON ST	P5
10.02	3D - PARKIN ST	P5

PROPERTY INFORMATION

RESIDENTIAL APARTMENTS

89 HARRISON STREET + 142-144 PARKIN STREET,
ROCKINGHAM WA 6168

Lot 94 on P 5742; Lot 95 on P 5742; Lot 62 on P 5742
CITY OF ROCKINGHAM

SITE AREAS: Lot 94-1067m²; Lot 95-928m²; Lot 62-1166m²;
TOTAL:3161m²

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG
ARCHITECTURE

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PROJECT

ARBOUR APARTMENTS

**89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168**

TITLE

COVER SHEET

SCALE	DRAWN	CHECKED
@ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	0.00	P5

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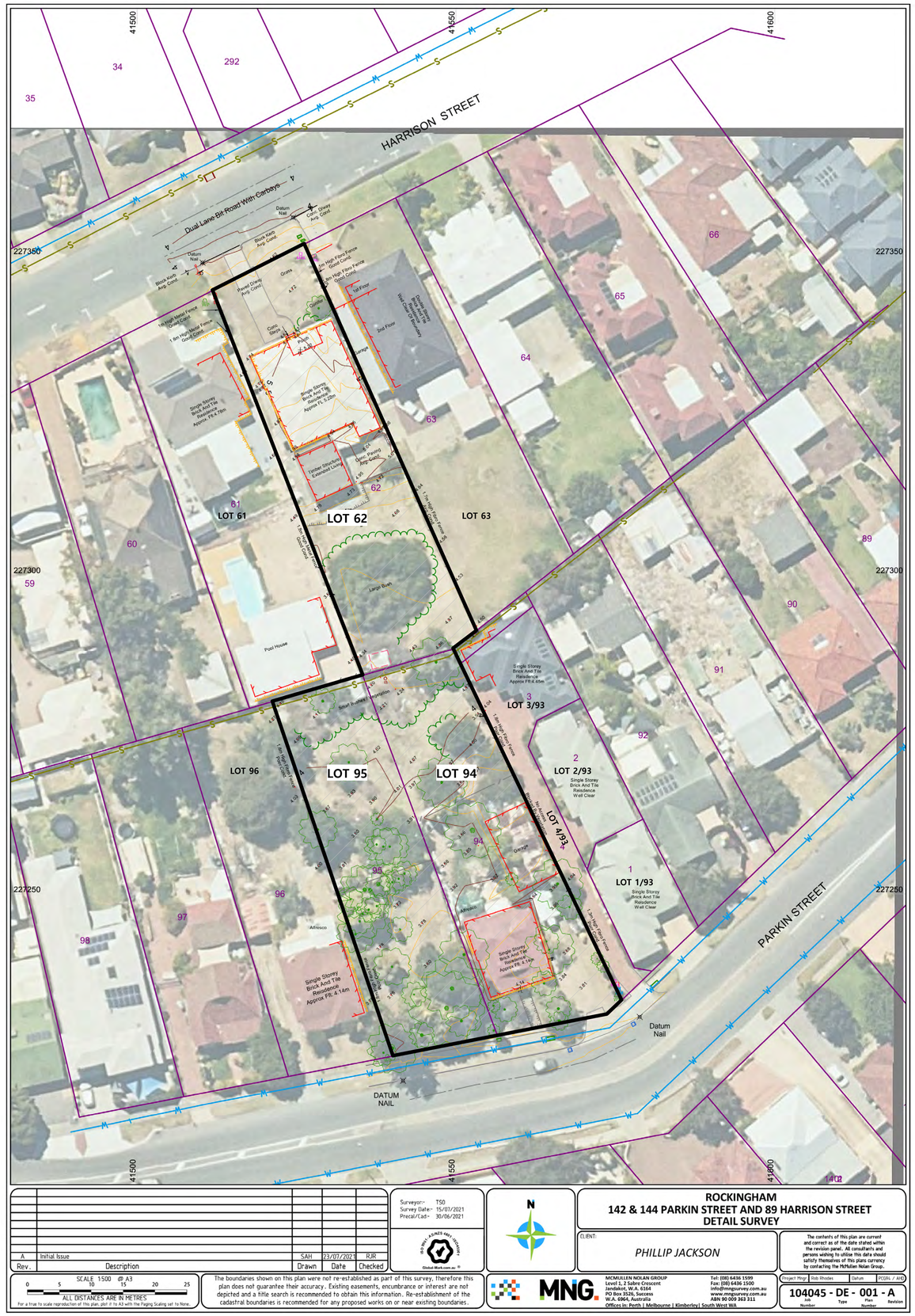
DATE
08.08.22



SUBJECT LOTS

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P1	08.08.22	PLANNING APPLICATION	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

SURVEY PLAN

SCALE	DRAWN	CHECKED
1 : 1 @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	0.01	P1

DATE
08.08.22

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Rev.	Description	Drawn	Date	Checked
A	Initial Issue	SAH	23/07/2021	RJR

Surveyor:- TSO
Survey Date:- 15/07/2021
Precal/Cad:- 30/06/2021

ISO 9001 & AS/NZS 4801 ISO 14001
Global-Mark.com.au

N

ROCKINGHAM
142 & 144 PARKIN STREET AND 89 HARRISON STREET
DETAIL SURVEY

CLIENT:
PHILLIP JACKSON

The contents of this plan are current and correct as of the date stated within the revision panel. All consultants and persons wishing to utilise this data should satisfy themselves of this plans currency by contacting the McMullen Nolan Group.

SCALE 1:500 @ A3
0 5 10 15 20 25
ALL DISTANCES ARE IN METRES
For a true to scale reproduction of this plan, plot it to A3 with the Paging Scaling set to None.

The boundaries shown on this plan were not re-established as part of this survey, therefore this plan does not guarantee their accuracy. Existing easements, encumbrance or interest are not depicted and a title search is recommended to obtain this information. Re-establishment of the cadastral boundaries is recommended for any proposed works on or near existing boundaries.

MNG
MCMULLEN NOLAN GROUP
Level 1, 2 Sabre Crescent
Jandakot, W.A. 6164
PO Box 3526, Success
W.A. 6964, Australia
Offices in: Perth | Melbourne | Kimberley | South West WA
Tel: (08) 6436 1599
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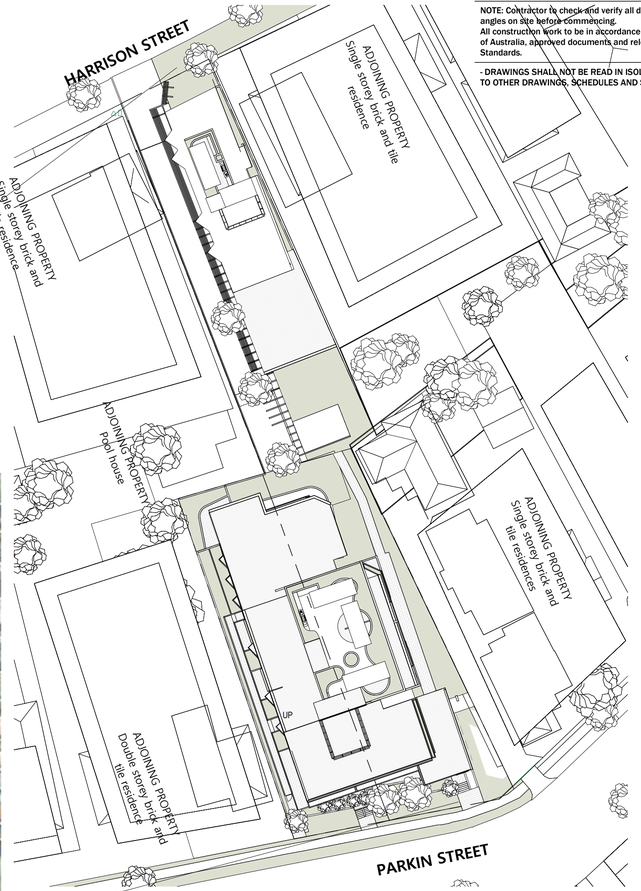
www.mngsurvey.com.au
ABN 90 009 363 311

Project Mngr | Sub Rhodes | Datum | PCGN / AHD

104045 - DE - 001 - A
Job Number | Type | Plan Number | Revision





PROPOSED DEVELOPMENT CONTEXT

SCALE 1 : 500



APARTMENTS
3-STOREY



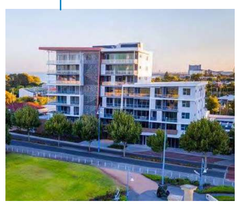
MIXED-USE
4-STOREY



MIXED-USE
10-STOREY



MIXED-USE
10-STOREY



APARTMENTS
8-STOREY



HOTEL
7-STOREY



MIXED-USE
6-STOREY



MIXED-USE
7-STOREY

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P1	08.03.22	PRELODGE ISSUE	DMG	TLM

PLANNING APPLICATION

DMG
ARCHITECTURE
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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

SITE PLAN CONTEXT

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.01	P3

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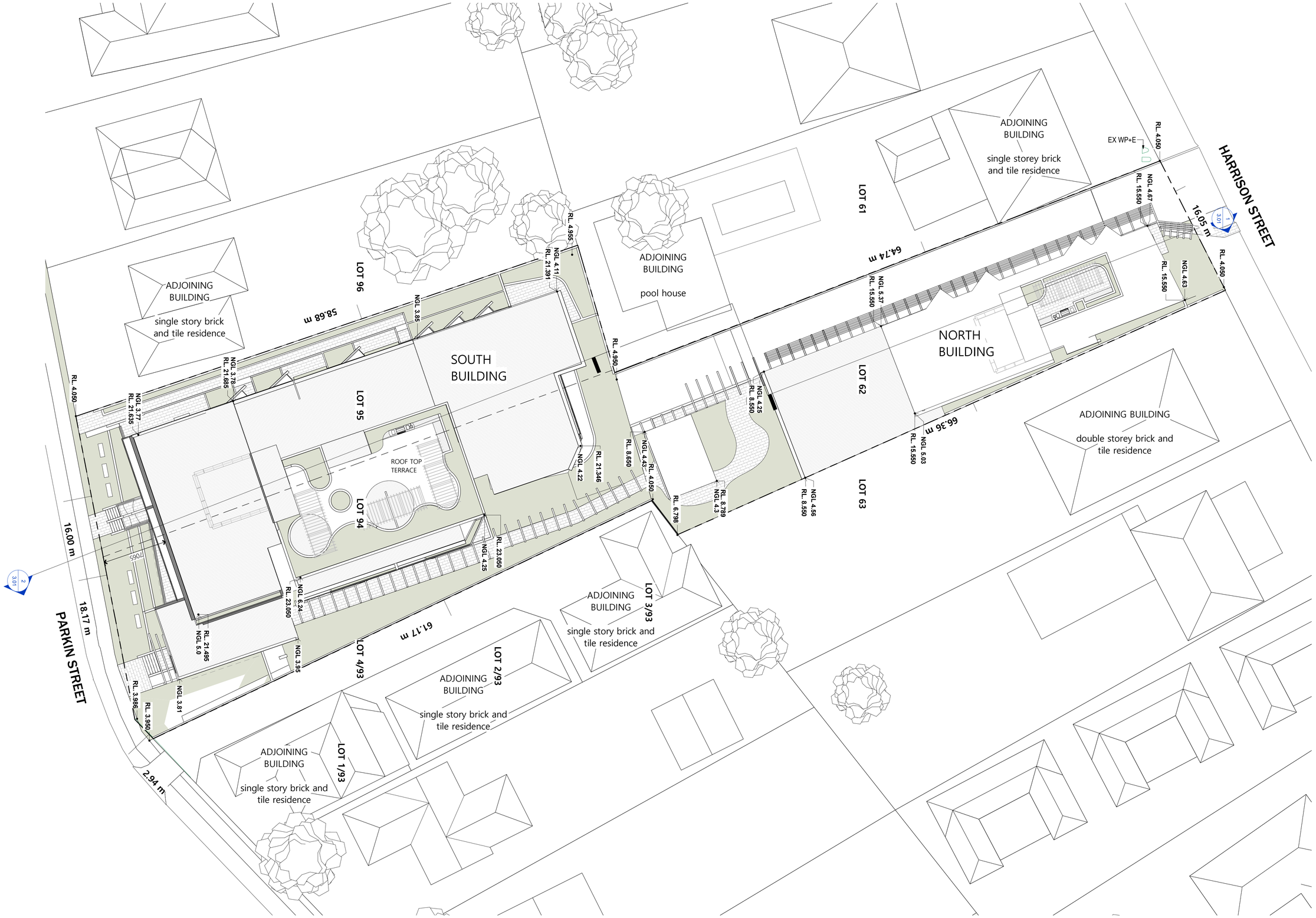
DATE 08.08.22



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SITE	3154 m²	
DEEP PLANTING	435 m²	14%

89 HARRISON STREET + 142-144 PARKIN STREET, ROCKINGHAM WA 6168

CITY OF ROCKINGHAM
Lot 94 on P 5742;
Lot 95 on P 5742;
Lot 62 on P 5742

SITE AREAS:
Lot 94-1067m²;
Lot 95-928m²;
Lot 62-1166m²;
TOTAL:3161m²

RAC-0

NORTH BUILDING
GF = 1 APARTMENT (1*1B)
L1 = 2 APARTMENTS (2*2B)
L2 = 2 APARTMENTS (2*2B)
L3 (ROOF)
NORTH TOTAL = 5 APARTMENTS

SOUTH BUILDING
PODIUM = 8 APARTMENTS (4*1B, 3*2B, 1*3B)
L1 = 9 APARTMENTS (2*1B, 6*2B, 1*3B)
L2 = 9 APARTMENTS (2*1B, 6*2B, 1*3B)
L3 = 8 APARTMENTS (2*1B, 5*2B, 1*3B)
L4 = 8 APARTMENTS (2*1B, 5*2B, 1*3B)
L5 (ROOF)
SOUTH TOTAL = 42 APARTMENTS

DEVELOPMENT TOTAL = 47 APARTMENTS

ONE BED - 13	23%	
TWO BED - 29	66%	
THREE BED - 5	11%	

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
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P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
SITE PLAN

SCALE	DRAWN	CHECKED
1 : 200 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.02	P5

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0 10m
SCALE 1:200

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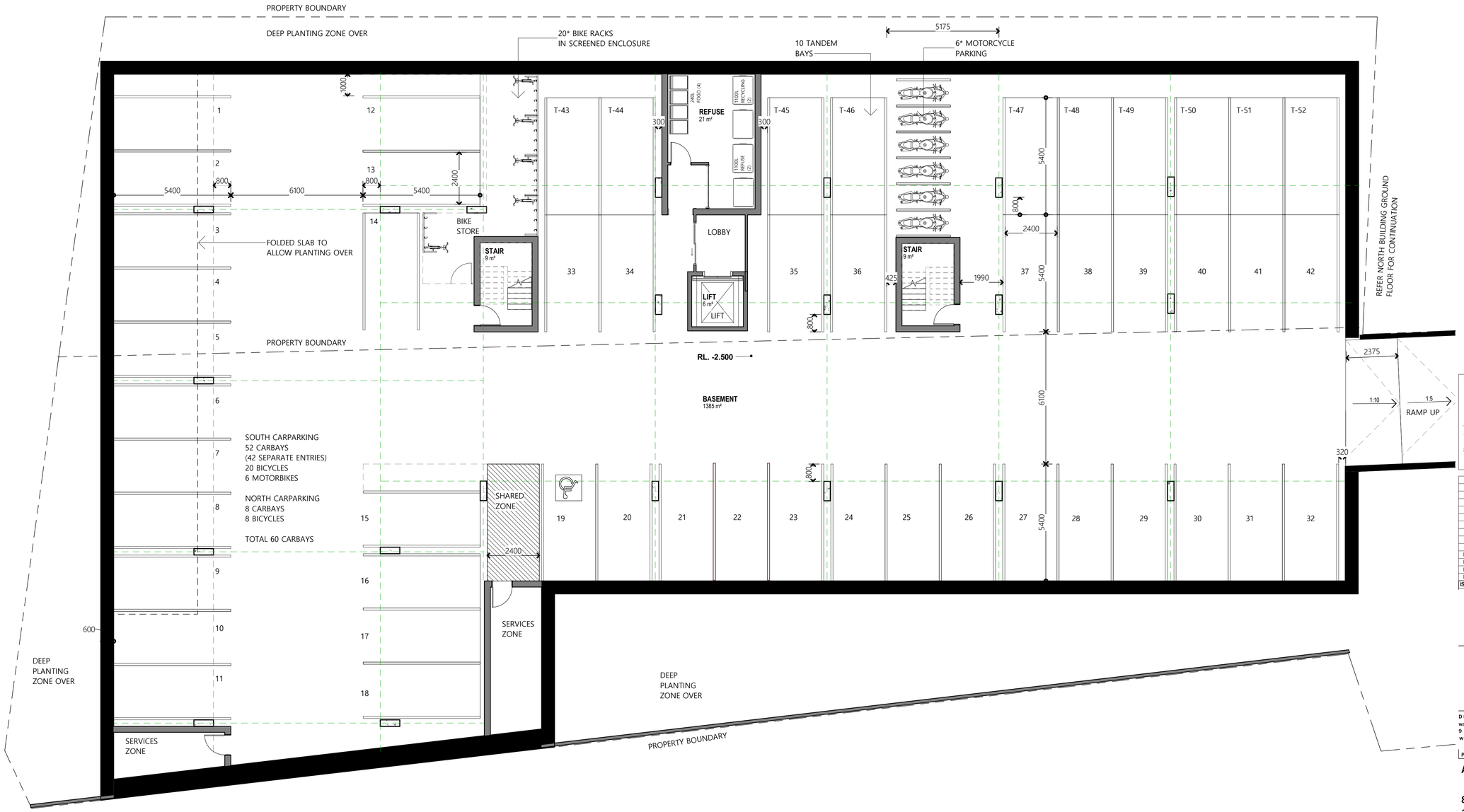

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m² ← FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P4	08.08.22	PLANNING APPLICATION	DMG	TLM
P3	26.07.22	CONSULTANT UPDATE	DMG	TLM
P2	14.04.22	PRELODGE ISSUE	DMG	TLM
P1	06.04.22	PRELODGE ISSUE	DMG	TLM

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
BASEMENT - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.10	P4

0 5m
SCALE 1:100

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ROOM SCHEDULE - SOUTH BDG - PODIUM

NUMBER	NAME	AREA
S.4.03 BALC	TERRACE	17 m²
S.P.01	2 BED 2 BATH	85 m²
S.P.01 BALC	TERRACE	30 m²
S.P.01 ST	STORE	5 m²
S.P.02	2 BED 2 BATH	66 m²
S.P.02 BALC	TERRACE	34 m²
S.P.02 ST	STORE	4 m²
S.P.03	1 BED 1 BATH	67 m²
S.P.03 ST	STORE	3 m²
S.P.04	1 BED 1 BATH	68 m²
S.P.04 BALC	TERRACE	17 m²
S.P.04 ST	STORE	4 m²
S.P.05	3 BED 2 BATH	120 m²
S.P.05 BALC	TERRACE	38 m²
S.P.05 ST	STORE	5 m²
S.P.06	2 BED 2 BATH	86 m²
S.P.06 BALC	TERRACE	36 m²
S.P.06 ST	STORE	4 m²
S.P.07	1 BED 1 BATH	62 m²
S.P.07 BALC	TERRACE	18 m²
S.P.07 ST	STORE	4 m²
S.P.08	1 BED 1 BATH	63 m²
S.P.08 ST	STORE	4 m²
S.P.08. BALC	TERRACE	19 m²
S.P.09	CORRIDOR	88 m²
S.P.10	STAIR	9 m²
S.P.12	EXIT	6 m²
S.P.13	LIFT	6 m²
S.P.14	STAIR	9 m²
S.P.15	EXIT	6 m²
S.P.16	RESIDENT FITNESS	41 m²

SITE	3154 m²	
DEEP PLANTING	435 m²	14%

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name — ROOM NAME
m² — FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P7	08.08.22	PLANNING APPLICATION	DMG	TLM
P6	26.07.22	CONSULTANT UPDATE	DMG	TLM
P5	14.04.22	PRELODGE ISSUE	DMG	TLM
P4	06.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
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P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

PODIUM FLOOR PLAN - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.11	P7

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ROOM SCHEDULE - SOUTH BDG - LEVEL 1

NUMBER	NAME	AREA
N.B.18	STORE	3 m²
S.1.01	2 BED 2 BATH	86 m²
S.1.01 BALC	BALCONY	16 m²
S.1.01 ST	STORE	4 m²
S.1.02	2 BED 2 BATH	85 m²
S.1.02 BALC	BALCONY	25 m²
S.1.02 ST	STORE	5 m²
S.1.03	2 BED 2 BATH	91 m²
S.1.03 BALC	BALCONY	20 m²
S.1.03 ST	STORE	4 m²
S.1.04	1 BED 1 BATH	66 m²
S.1.04 BALC	BALCONY	10 m²
S.1.05	1 BED 1 BATH	66 m²
S.1.05 BALC	BALCONY	10 m²
S.1.05 ST	STORE	4 m²
S.1.06	3 BED 2 BATH	109 m²
S.1.06 BALC	BALCONY	15 m²
S.1.06 ST	STORE	5 m²
S.1.07	2 BED 2 BATH	86 m²
S.1.07 BALC	BALCONY	14 m²
S.1.07 ST	STORE	4 m²
S.1.08	2 BED 2 BATH	84 m²
S.1.08 BALC	BALCONY	18 m²
S.1.08 ST	STORE	4 m²
S.1.09	2 BED 2 BATH	85 m²
S.1.09 BALC	BALCONY	22 m²
S.1.09 ST	STORE	4 m²
S.1.10	CORRIDOR	58 m²
S.1.11	STAIR	9 m²
S.1.12	LIFT	6 m²
S.1.13	STAIR	9 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m²
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
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PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 1+2 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.12	P5

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DATE 08.08.22

SCALE 1:100



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ROOM SCHEDULE - SOUTH BDG - LEVEL 3

NUMBER	NAME	AREA
S.3.01	2 BED 2 BATH	85 m²
S.3.01 BALC1	BALCONY	25 m²
S.3.01 BALC2	TERRACE	20 m²
S.3.01 ST	STORE	5 m²
S.3.02	2 BED 2 BATH	91 m²
S.3.02 BALC	BALCONY	20 m²
S.3.02 ST	STORE	4 m²
S.3.03	1 BED 1 BATH	66 m²
S.3.03 BALC	BALCONY	10 m²
S.3.03 ST	STORE	3 m²
S.3.04	1 BED 1 BATH	66 m²
S.3.04 BALC	BALCONY	10 m²
S.3.04 ST	STORE	4 m²
S.3.05	3 BED 2 BATH	109 m²
S.3.05 BALC	BALCONY	15 m²
S.3.05 ST	STORE	5 m²
S.3.06	2 BED 2 BATH	86 m²
S.3.06 BALC	BALCONY	15 m²
S.3.06 ST	STORE	4 m²
S.3.07	2 BED 2 BATH	84 m²
S.3.07 BALC	BALCONY	18 m²
S.3.07 ST	STORE	4 m²
S.3.08	2 BED 2 BATH	85 m²
S.3.08 BALC	BALCONY	22 m²
S.3.08 ST	STORE	4 m²
S.3.09	CORRIDOR	51 m²
S.3.10	STAIR	9 m²
S.3.11	LIFT	6 m²
S.3.12	STAIR	9 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m²
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
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PLANNING APPLICATION

DMG
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 3 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.13	P5

0 5m
SCALE 1:100

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DATE 08.08.22



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ROOM SCHEDULE - SOUTH BDG - LEVEL 4

NUMBER	NAME	AREA
S.4.01	2 BED 2 BATH	86 m²
S.4.01 BALC 1	TERRACE	30 m²
S.4.01 BALC 2	BALCONY	6 m²
S.4.01 ST	STORE	5 m²
S.4.02	2 BED 2 BATH	90 m²
S.4.02 BALC	BALCONY	10 m²
S.4.02 ST	STORE	4 m²
S.4.03	1 BED 1 BATH	65 m²
S.4.03 BALC	BALCONY	10 m²
S.4.03 ST	STORE	3 m²
S.4.04	1 BED 1 BATH	63 m²
S.4.04 BALC	BALCONY	10 m²
S.4.04 ST	STORE	4 m²
S.4.05	3 BED 2 BATH	105 m²
S.4.05 BALC	BALCONY	15 m²
S.4.05 ST	STORE	5 m²
S.4.06	2 BED 2 BATH	86 m²
S.4.06 BALC	BALCONY	14 m²
S.4.06 ST	STORE	4 m²
S.4.07	2 BED 2 BATH	84 m²
S.4.07 BALC	BALCONY	18 m²
S.4.07 ST	STORE	4 m²
S.4.08	2 BED 2 BATH	84 m²
S.4.08 BALC	BALCONY	21 m²
S.4.08 ST	STORE	4 m²
S.4.09	CORRIDOR	51 m²
S.4.10	STAIR	9 m²
S.4.11	LIFT	6 m²
S.4.12	STAIR	9 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m² ← FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 4 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.14	P5

0 5m
SCALE 1:100

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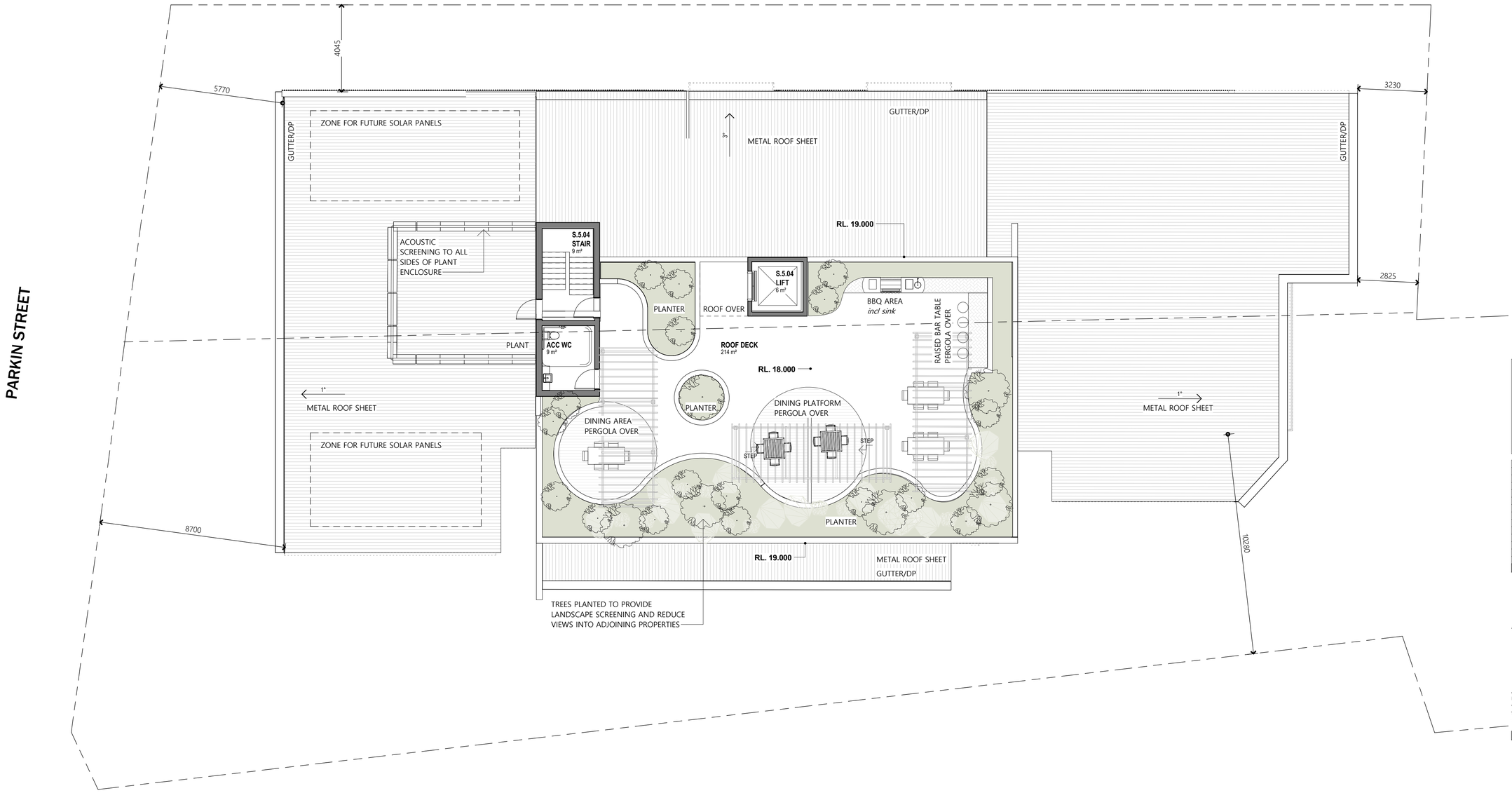
ROOM SCHEDULE - SOUTH BDG - LEVEL 5		
NUMBER	NAME	AREA
S.5.04	STAIR	9 m²
S.5.04	LIFT	6 m²



ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m² ← FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P4	08.08.22	PLANNING APPLICATION	DMG	TLM
P3	14.04.22	PRELODGE ISSUE	DMG	TLM
P2	08.03.22	PRELODGE ISSUE	DMG	TLM
P1	03.02.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 5 (ROOF) - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.15	P4

0 5m
SCALE 1:100

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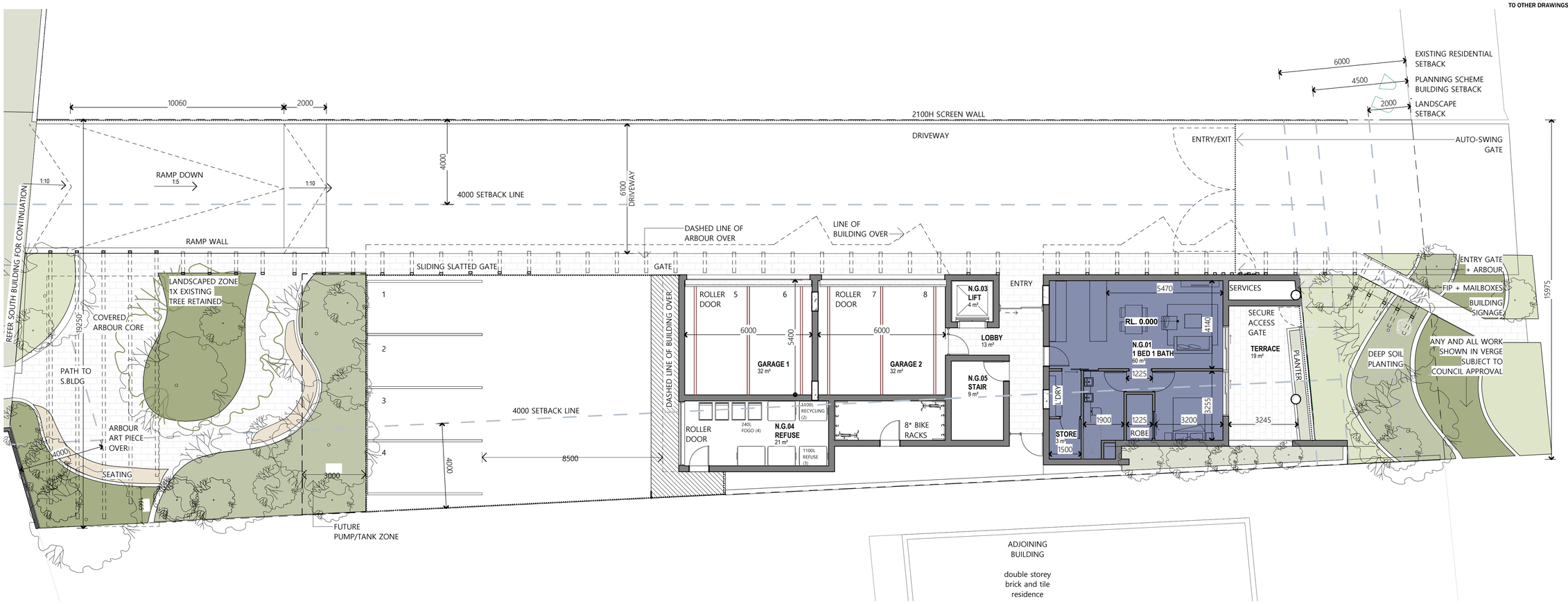

ROOM SCHEDULE - NORTH BDG -...		
NUMBER	NAME	AREA
N.G.01	1 BED 1 BATH	60 m²
N.G.01	STORE	3 m²
N.G.01	TERRACE	19 m²
N.G.03	LIFT	4 m²
N.G.04	REFUSE	21 m²
N.G.05	STAIR	9 m²

SITE	3154 m²	
DEEP PLANTING	435 m²	14%

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name
 # m²
ROOM NAME
FLOOR AREA OF ROOM

0 5m
SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P7	08.08.22	PLANNING APPLICATION	DMG	TLM
P6	26.07.22	CONSULTANT UPDATE	DMG	TLM
P5	14.04.22	PRELODGE ISSUE	DMG	TLM
P4	06.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

GROUND FLOOR PLAN - NORTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.16	P7

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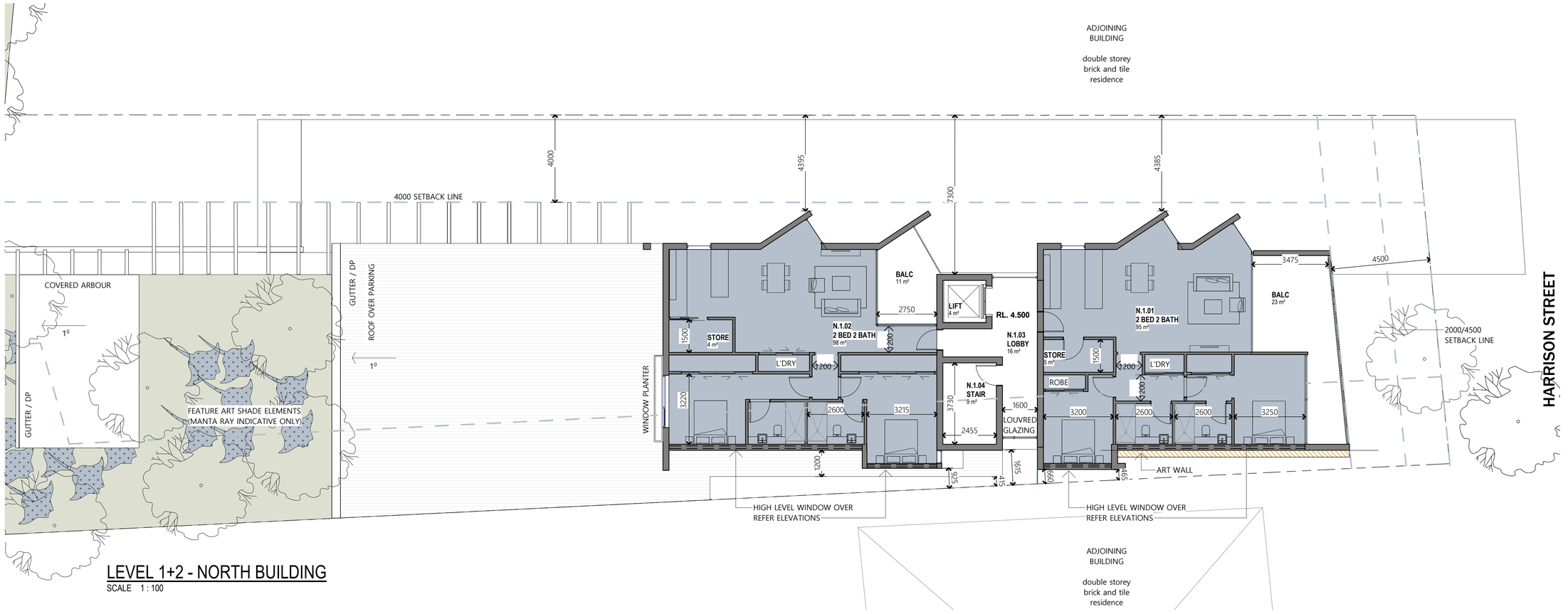
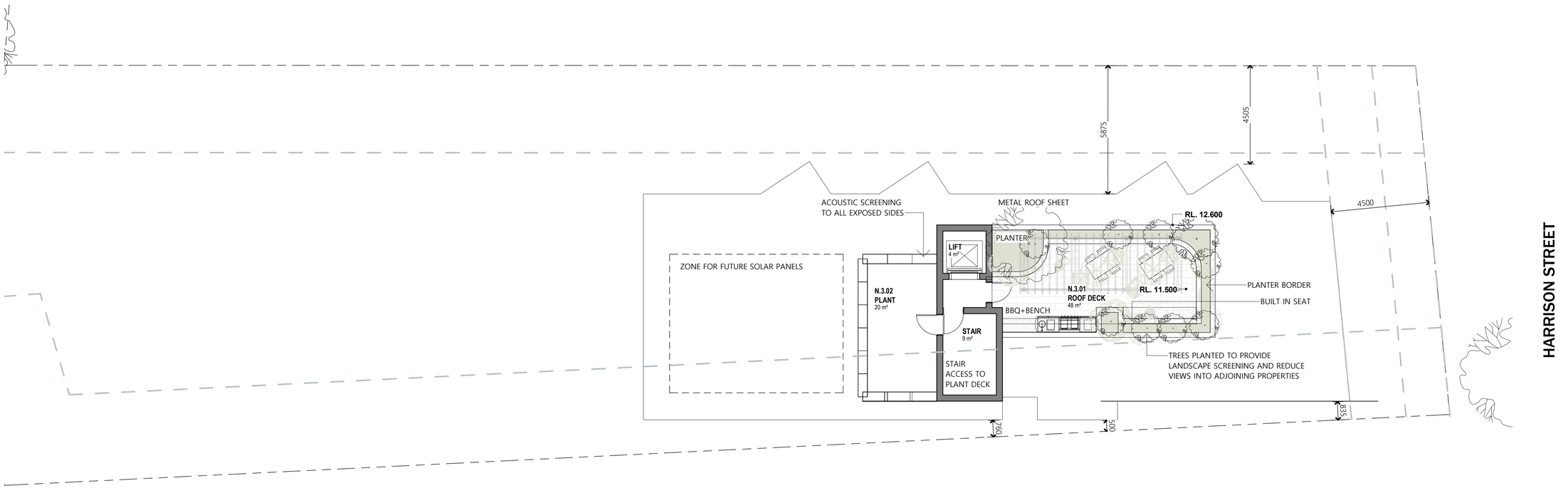
DATE 08.08.22



LEVEL 1+2 - NORTH BUILDING

SCALE 1 : 100



LEVEL 3(ROOF) - NORTH BUILDING

SCALE 1 : 100

0 5m

SCALE 1:100

NOTE: Contractor to check and verify all dimensions, levels, and angles on site before commencing.
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ROOM SCHEDULE - NORTH BDG - LEVEL 1

NUMBER	NAME	AREA
N.1.01	2 BED 2 BATH	95 m²
N.1.01	BALC	23 m²
N.1.01 ST	STORE	5 m²
N.1.02	2 BED 2 BATH	98 m²
N.1.02	BALC	11 m²
N.1.02 ST	STORE	4 m²
N.1.03	LOBBY	16 m²
N.1.04	STAIR	9 m²
N.1.05	LIFT	4 m²

ROOM SCHEDULE - NORTH BDG - LEVEL 3

NUMBER	NAME	AREA
N.3.01	ROOF DECK	48 m²
N.3.02	PLANT	20 m²
N.3.03	STAIR	9 m²
N.3.04	LIFT	4 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m²
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 1+2+ROOF - NORTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.17	P5

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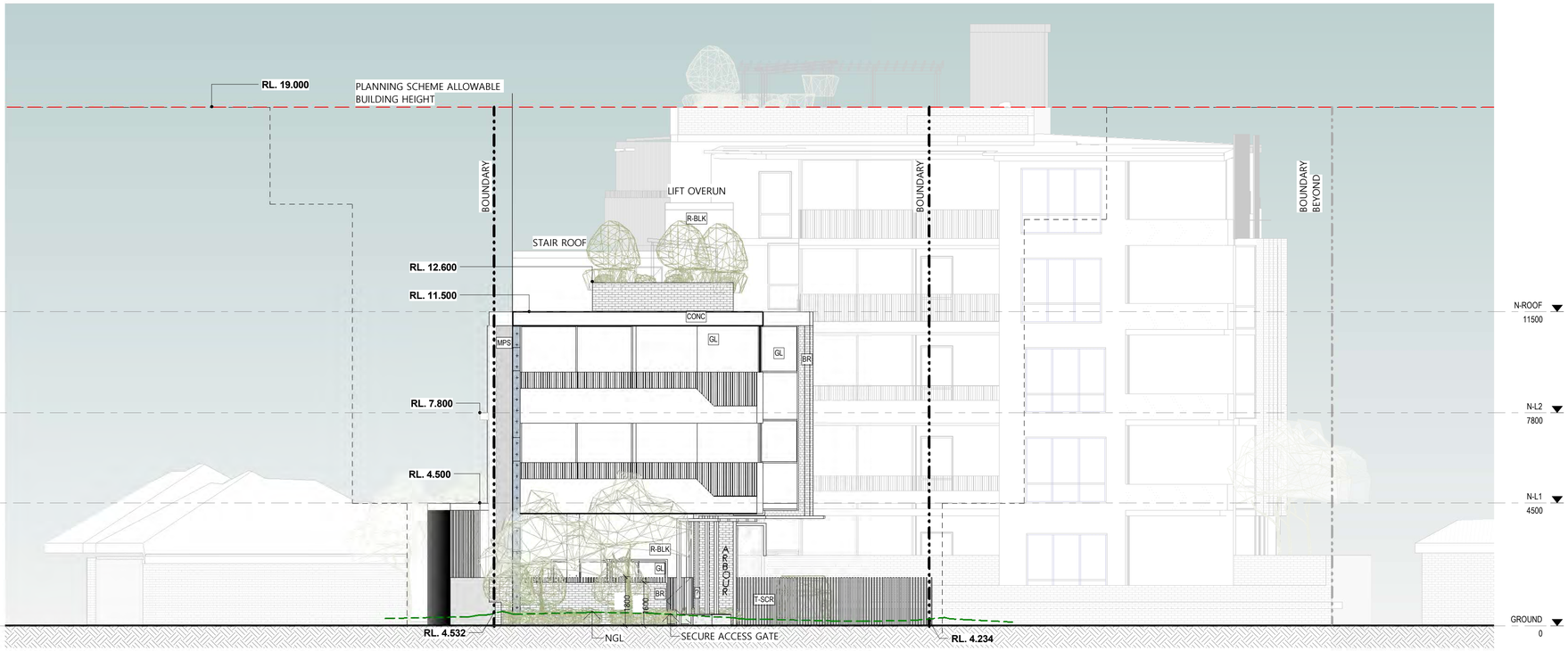
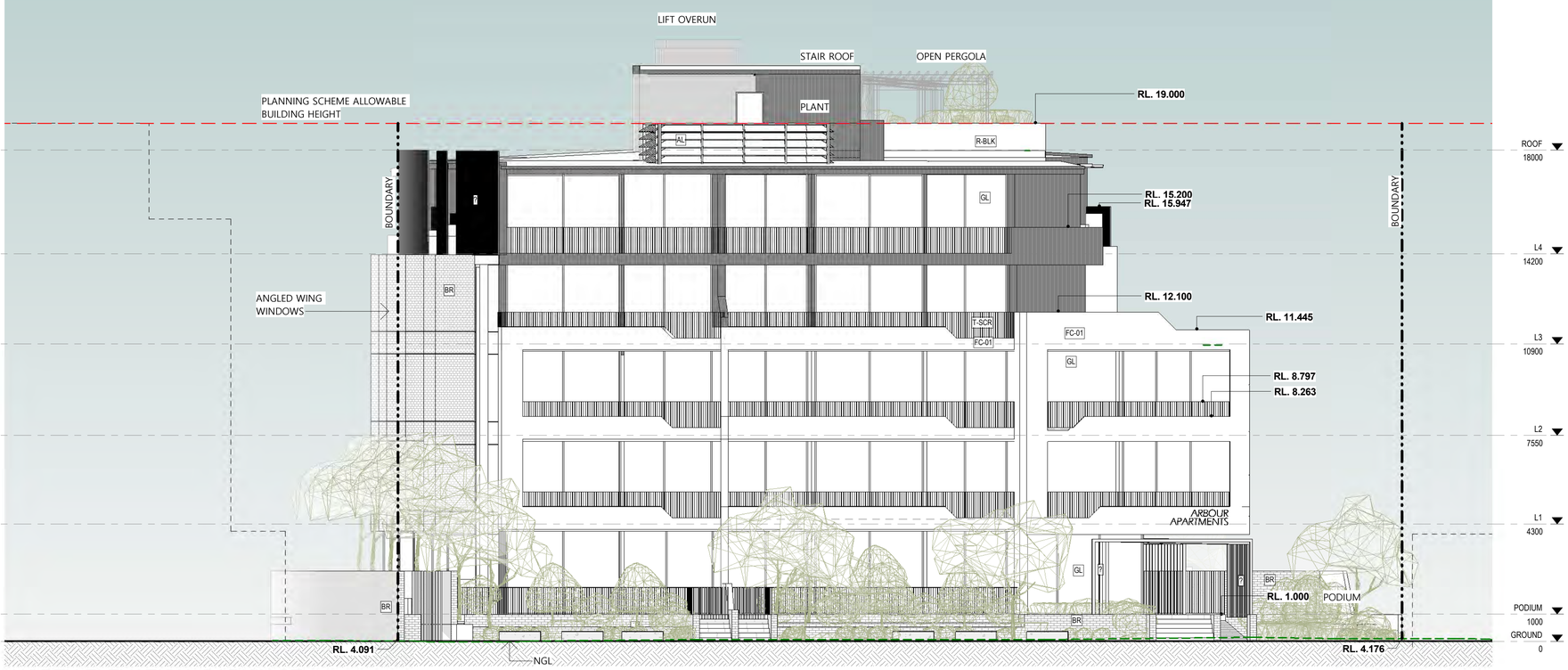


SOUTH ELEVATION (HARRISON ST)

SCALE 1 : 100



NORTH ELEVATION (PARKIN ST)

SCALE 1 : 100

CODE	IMAGE	DESCRIPTION
AL		ANODIZED ALUMINUM
ART		ART/MURAL (INDICATIVE ONLY)
BLK		MASONRY BLOCK - PAINTED
BR		FACE BRICK
CONC		CONCRETE - EXPOSED AGG
FC-01		FIBERCEMENT CLADDING - PAINT FINISH
GL		GLASS - LOW REFLECTANCE BRONZE TINT
MF-1		METAL FINISH - 1
MPS		METAL PAN WALL CLADDING
MRS		METAL ROOF SHEET
PF		PAINT FINISH
R-BLK		RENDER FINISHED MASONRY BLOCK
T		<varies>
T-CONC		TEXTURED CONCRETE RENDERED MASONRY
T-SCR		TIMBER LOOK ALUMINIUM SCREEN

0 5m
SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P4	08.08.22	PLANNING APPLICATION	DMG	TLM
P3	14.04.22	PRELODGE ISSUE	DMG	TLM
P2	06.04.22	PRELODGE ISSUE	DMG	TLM
P1	08.03.22	PRELODGE ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
ELEVATIONS - NORTH + SOUTH

SCALE	DRAWN	CHECKED
1 : 100 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	2.01	P4

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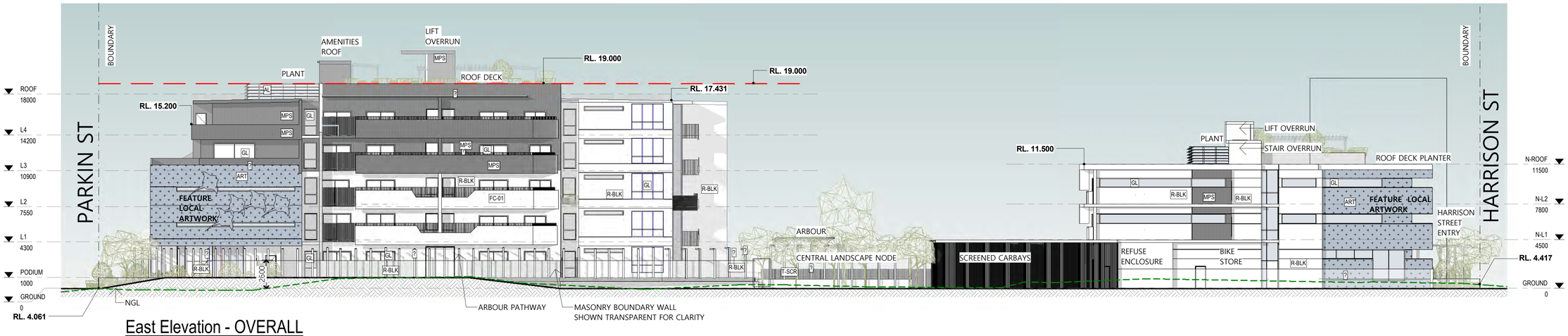
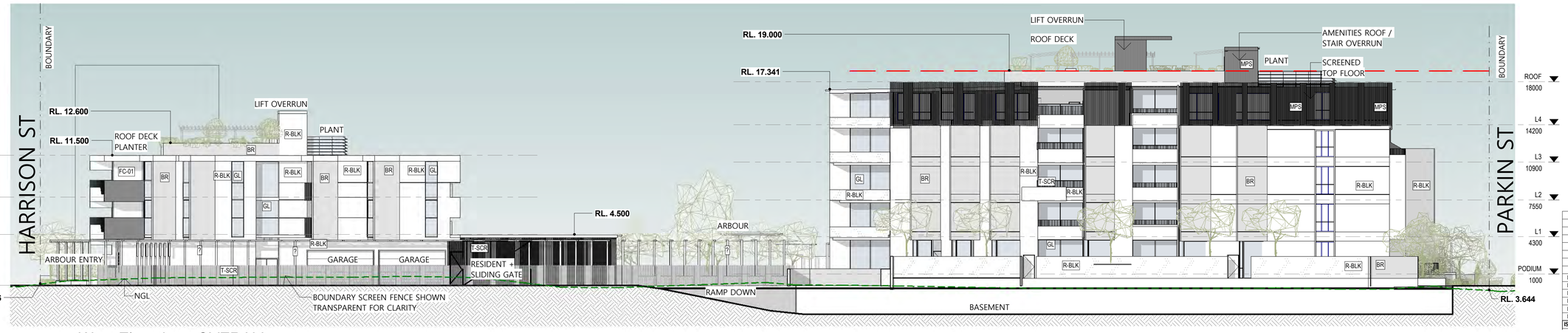


East Elevation - OVERALL

SCALE 1 : 200



West Elevation - OVERALL

SCALE 1 : 200

CODE	IMAGE	DESCRIPTION
AL		ANODIZED ALUMINUM
ART		ART/MURAL (INDICATIVE ONLY)
BLK		MASONRY BLOCK - PAINTED
BR		FACE BRICK
CONC		CONCRETE - EXPOSED AGG
FC-01		FIBERCEMENT CLADDING - PAINT FINISH

CODE	IMAGE	DESCRIPTION
GL		GLASS - LOW REFLECTANCE BRONZE TINT
MF-1		METAL FINISH - 1
MPS		METAL PAN WALL CLADDING
MRS		METAL ROOF SHEET
PF		PAINT FINISH

CODE	IMAGE	DESCRIPTION
R-BLK		RENDER FINISHED MASONRY BLOCK
T		<varies>
T-CONC		TEXTURED CONCRETE RENDERED MASONRY
T-SCR		TIMBER LOOK ALUMINIUM SCREEN

0 5m
SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	08.08.22	PLANNING APPLICATION	DMG	TLM
P5	14.04.22	PRELODGE ISSUE	DMG	TLM
P4	06.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
ELEVATIONS - EAST + WEST

SCALE	DRAWN	CHECKED
1 : 200 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	2.02	P6

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DATE 08.08.22



SITE winter 12noon - RESIDENTIAL

SCALE 1 : 500



SITE winter 12noon - WATERFRONT

SCALE 1 : 500

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TOTAL APARTMENT #47

DUAL ASPECT + NORTH/WEST/EAST
FACING APARTMENTS = 44
=93.6% MIN 2 HRS SUN
BETWEEN 9AM-3PM 21ST JUNE

SINGLE ASPECT SOUTH
FACING APARTMENTS = 3
= 6.38% NO DIRECT SUN
BETWEEN 9AM-3PM 21ST JUNE

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P1	08.08.22	PLANNING APPLICATION	DMG	TLM

PLANNING APPLICATION

DMG
ARCHITECTURE

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

SHADOW DIAGRAM

SCALE	DRAWN	CHECKED
1 : 500 @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	9.01	P1

0 25m
SCALE 1:500

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HARRISON STREET









ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG
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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

3D - HARRISON ST

SCALE	DRAWN	CHECKED
@ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	10.01	P5

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PARKIN STREET









ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG
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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

3D - PARKIN ST

SCALE	DRAWN	CHECKED
@ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	10.02	P5

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DATE 08.08.22

B. DRP RESPONSES

City of Rockingham
Design Review Panel Meeting Notes
Notes of the Design Review Panel held on 30 May 2022

		Design Response
Panel Members:	Mr Sam Klopper Mr Trent Woods Mr Tom Griffiths	**N/A**
City Officers:	Mr David Banovic - A/Manager Major Planning Projects (Chair) Mr Mike Ross - Manager Statutory Planning Mr David Waller - Coordinator Statutory Planning Mr Chris Parlane - Senior Planning Officer Mrs Casey Gillespie - Senior Planning Officer	
A/Panel Coordinator:	Mrs Melinda Wardle - EA to Director Planning and Development Services	
Proponents:	Item 1 - Mr David Read (Element), Ms Tiffany Molloy and Mr Greg Ewart	
Declarations of Interest:	Nil	
Agenda Item 1		
Proposed Development	Pre-Lodgement Concept Design (First Review) - Multiple Dwelling Development	**NORTH BUILDING** **GF = 1 apartment (1*1B) *DA[1]** **L1 = 2 apartments (2*2B) *DA[2]** **L2 = 2 apartments (2*2B) *DA[2]** **L3 (roof)** **North total = 5 apartments** **SOUTH BUILDING** **Podium = 8 apartments** **(4*1B, 3*2B, 1*3B) *DA[4]** **L1 = 9 apartments** **(2*1B, 6*2B, 1*3B) *DA[5]** **L2 = 9 apartments** **(2*1B, 6*2B, 1*3B) *DA[5]** **L3 = 8 apartments** **(2*1B, 5*2B, 1*3B) *DA[4]** **L4 = 8 apartments** **(2*1B, 5*2B, 1*3B) *DA[4]** **L5 (roof)** **South total = 42 apartments** **Development total = 47 apartments** **One bed - 13 23%** **Two bed - 29 66%** **Three bed - 5 11%**
Property Address	This conceptual proposal involves the development of two (2) apartment buildings on an amalgamated site with a total land area of 3,161m2 .	
Proposal	Lot 89 Harrison Street and Lots 94 and 95 Parkin Street, Rockingham	
	The proposal is summarised as follows:	
	A total of 50 apartments, comprising a mix of one, two and three bedroom dwellings;	
	Southern building - 5 residential storeys (7 storeys total); building height of 22.1m and 32 apartments;	
	Communal areas adjacent to the eastern aspect of the southern building and a roof top communal area only;	
	Full movement, singular vehicular access point from Harrison Street;	
	13 car parking spaces at ground level under the northern building and basement car park under the southern building, with 55 parking spaces, comprising of 29 single bays and 13 tandem bays;	
	This conceptual proposal involves the development of two (2) apartment buildings on an amalgamated site with a total land area of 3,161m2 .	
	The proposal is summarised as follows:	
	A total of 50 apartments, comprising a mix of one, two and three bedroom dwellings;	

(DMG)	Northern building - 5 residential storeys (7 storeys total); building height of 22.75m and 18 apartments;	**Southern Building:** • **Basement carparking comprising 52 bays, 10 tandem entries, 42 separate entries.** • **Lockable screened enclosure for 20 bicycles** • **Zone for 6 motorbikes** **Northern Building:** • **On-grade carparking comprising 8 carbays; 4 within 2 private garages** • **Locakable enclosure for 8 bicycles** • **Wait zone for automated gate and ample space for refuse truck entry; 3-point turn and exit.**
	Southern building - 5 residential storeys (7 storeys total); building height of 22.1m and 32 apartments;	
	Communal areas adjacent to the eastern aspect of the southern building and a roof top communal area only;	
	Full movement, singular vehicular access point from Harrison Street;	
	13 car parking spaces at ground level under the northern building and basement car park under the southern building, with 55 parking spaces, comprising of 29 single bays and 13 tandem bays	
Background	The subject land is currently occupied as follows: Lot 89 Harrison Street - single detached dwelling; Lot 94 Parkin Street - single detached dwelling; and Lot 95 Parkin Street - vacant land.	
Proponent deputation to the Panel	Ms Tiffany Molloy, DMG, provided an overview of the site in terms of the site context, development concept and design elements.	
Officer presentation to the Panel	Mrs Casey Gillespie provided a high-level overview of the planning assessment of the proposed development.	

Principle 1 Context and Character	**Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.**	
	Further analysis required to inform the local form and character *Contextual analysis should demonstrate an understanding of the Rockingham Foreshore area, mainly surrounding context, the heights and historical context.*	**Local context analysis informs the design thread including references to native aquatic forms , coastal topography & maritime history.**
	Street elevations and perspectives showing the local context and existing development would help to understand the context and character. Plotting the development within the local context would help to understand the scale and bulk of the proposal.	**Street elevations and 3D mapping are provided to demonstrate built form in context**
	Softening the entrances is required. Acknowledge the terracing, however, the collective visual impact presents as walls.	**Entrances have been modified and simplified to include curvilinear built and soft-scape forms to soften street address and to distinguish common entry points from private terraces**
	The size and scale of the entrances to be reviewed to address the street character with respect to the residential zone/locality.	**Portals have been reduced in height to provide human scale entries at street level.**
	The built form could be stepped to address the interface.	**South builing form uses a podium to the first three levels and steps back above to emphasise the lower levels as distinct from the upper 2 levels.**
	Overshadowing needs to be addressed and details provided	**Confirmed compliance with R-Code**
	It is difficult to understand the bulk and scale as the street interfa	**Street elevations and 3D mapping are provided to demonstrate built form in context**
	The length of the site, whilst narrow, needs to address the break in wall lengths.	**Building is further articulated with additional breaks across the elevation. North building reduced to 3 stories**
	Concern with proposed height and the justifications for the proposal is not apparent or clear.	**Building sits within the allowable height**
	Blade walls are an acceptable design option.	**Noted**
	Southern elevation presents well, further depth, however, is required.	**This façade form has been adjusted with the addition of a 3rd balcony for increased shadowing and articulation**
	Podium to three storeys with a nil setback to be explored.	**Side setbacks have been reduced however nil setback was explored and was found to create additional privacy issues and shadowing at neighbour boundaries.**
	A Landscape Architect should be engaged to assist with landscape outcomes and plant selections commensurate of sites context.	**Refer landscape package as part of resubmission**
Design Principle Commentary	**Character: The Rockingham area has a distinct coastal character. DPP 3.2.5's seven sub-precincts vary in character according to their predominant use. Village West is primarily a residential area, which has a mixed character. While some of the original holiday and post-war austerity cottages remain, most streets are predominated by large contemporary homes or grouped dwellings. These houses have been built in a range of architectural styles and use a range of materials and styles. There is an even mix of light coloured coastal homes and darker contemporary coloured homes with darker roofs. The development responds to the area's varied character by including a broad range of materials, textures and patterns. The façade features both light and dark colours, mirroring the streetscape. Given most fences within the street are constructed with brick or limestone, the development has used brick for the fencing, and terraces and limestone for the seating areas.** **A predominant characteristic of the area is the relatively large front gardens and tree canopy in the rear of homes. The development has responded to this character element by having relatively large setbacks that will accommodate extensive and high-quality landscaping and tree canopy. Importantly the trees proposed along each frontage are AGONIS FLEXUOSA which are quintessential West Australian coastal street trees. These trees along with the landscaping will contribute to the sense of place.** **Context: The development has been designed to take into account:** **• Northern winter sun** **• Prevailing breezes** **• Views of significance** **• Existing residential properties.** **• Precedent development within the area** **The development meets Design Principle 1.**	

Principle 2 Landscape Quality	**Good design recognises that together, landscape and buildings cooperate as an integrated and sustainable system, within a broader ecological context.**	
	Landscape Architect should be engaged in the project to strengthen the story of the landscaping.	**Refer landscape package as part of resubmission**
	Arbour spine to be further detailed. Appears to be the primary landscape feature of the development.	
	Existing trees and retention objectives need to be clearly realised and included.	
	Protecting existing trees and integrating them into the design should be explored further.	
	The renders are difficult to understand the context of the proposal.	**Street elevations and 3D mapping are provided to demonstrate built form in context**
	Alignment of the arbour has pinch point at the refuse store area.	**Corner landscape note has been adjsuted to allow clear sightlines and well lit pathways to addredd security concerns**
	An existing tree central to the site - can this tree be retained or included in the design?	**1 existing feature tree to be retained**
	Deep soil, coupled with tree planting and tree retention will maximise the benefit of the landscaping.	**Deep soil has been maximised for better landscape outcomes**
	Calculations for landscaping are required.	**Refer landscape package as part of resubmission**
	Amenity areas attributed to 1 zone in 1 building only. How will this work for all residents of the development?	**Dedicated landscaped amenity zones for each building are now proposed**
	Multiple user functionality of the communal areas to be considered and the ground floor area better utilised.	**Communal roof top areas now proposed for residents of each building**
	The arbour provides good connection, however, the height of the feature vs impacts to neighbouring development should be reconsidered.	**Screening planting and relocating arbour away from boundary wall addresses this point.**
	Success planting for the proposed arbour at height of 5m is questionable.	**Arbour has been reduced in height throughout, landscaping to be ground based with arbour as feature only**
Design Principle Commentary	**The landscape plan has been designed with the architectural design. The overarching intent of the landscape plan is to reinforce the landscape character of the area and improve the amenity of future apartments. The scale of the north building has been minimised so that a large area of green space is provided in the middle of the site to:** **• Retain the large existing tree** **• Break up the bulk of the proposal** **• Provide an attractive communal open space area** **• Provide an attractive outlook for the north and south facing apartments.** **With 37 trees and canopy cover equalling 660.8m2 the development will improve canopy cover and reduce the urban heat island effect. The large areas of deep soil and planting on-structure will reduce rainfall runoff. The streetscape upgrades to both frontages will positively contribute to the area's amenity.** **The development meets Design Principle 2.**	

Principle 3 Built Form and Scale	**Good design ensures that the massing and height of development is appropriate to its setting & successfully negotiates between existing built form & the intended future character of the local area.**	
	The built form conflicts with the local context.	**Street elevations and 3D mapping are provided to demonstrate built form in context**
	An overall section of the development from one street through to the next street is required.	**Street elevations and 3D mapping are provided to demonstrate built form in context**
	The impact of the development will be more significant than shown in the drawings.	**Full site elevation of entire development has be provided to address this point.**
	Gap between the two buildings could be key to addressing the massing and scale.	**Northern building has been significantly reduced in length, form and scale to address this point.**
	Built form presents amenity i.e. bulk and scale and visual privacy impacts.	**Northern building has been significantly reduced in length, form and scale to address this point.**
	Justifications for bulk and scale has not been adequately justified.	**Bulk and scale of both buildings have been adjusted on southern building and significantly reduced on northern building**
	Detailed sections and elevations are required.	**Street elevations and 3D mapping are provided to demonstrate built form in context**
	Overdevelopment of site - consider the arrangement over yield.	**Yield has been reduced by 6.4% over all and the northern building is now 50% of the previous bulk proposed**
Design Principle Commentary	**The building's form responds to the differing street characters of Harrison Street and Parkin Street. The bulk of the building is massed toward the busier Parkin Street frontage, and presents as a three storey building on the quieter Harrison Street. The development recognises the scale differences between it and adjoining development and has sought to minimise the scale impact by locating the bulk away from the side boundaries, with significant tree and landscaping provided along the side boundaries and in the middle of the site.** **To reduce the appearance of bulk and scale, the building's form is highly articulated by:** **• Contrasting colour palette above the podium;** **• Angled windows on the western elevation;** **• Lightly framed side elevation balconies;** **• Expansive public art on the side elevations; and** **• Large areas of separation between the north and south building.** **The development meets Design Principle 3.**	

Principle 4 Functionality and Build Quality	**Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.**	
	Justification showing compliance with the requirements is required.	**Refer Townplanning Report as part of resubmission**
	Space planning and screening is weak.	**Planning & screening has been reviewed and modified to address this point**
	Proposal has diluted a sense of entry.	**Entry elements have been adjusted in scale and incorporate landscaping to soften street address and to distinguish common entry points from private terraces**
	Consider separation of buildings and core of each. Reduction in the number of lifts and stairwells should be explored.	**Core has been split as suggested and been moved to the centre of the built form to de-emphasise the verticality at the building edges. Northern building has been significantly reduced to improve separation**
	Further consideration on how waste collection and services will be appropriately managed.	**This item is being further addressed with waste engineer**
	Parkin Street living area ratios to be confirmed.	**Planning has been reviewed and confirmed as R-Code compliant**
	Screening to balconies to be further reviewed.	**Screening has been reviewed and reduced overall to address this point**
	Functionality of the communal areas to be reviewed. Disposition across the development, access, usability, welcoming to all residents?	**Communal rooftop areas now proposed for residents of each building; additionally a communal central landscpae node is provided at ground level.**
Design Principle Commentary	**Utilities and services are fully integrated into the design of the building, minimising their impact on the amenity of the residents and adjoining properties.** **The proposal includes two waste storerooms for ease of access.** **The development meets Design Principle 4.**	
Principle 5 Sustainability	**Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.**	
Design Principle Commentary	**The development has been designed with passive design principles in mind. The design has aimed to maximise apartments access to direct sunlight, and prevailing breezes. Generous room sizes and ceiling heights will ensure these apartments are liveable and functional.** **To reduce water usage, the development will include water efficient appliances and water efficient irrigation methods.** **To reduce the carbon footprint of the building, the development will include rooftop solar panels that will generate renewable energy for the building and for the electricity grid.** **The development meets Design Principle 5.**	

Principle 6 Amenity	**Good design optimises internal and external amenity for occupant, visitors and neighbours, provding environments that are comfortable, prductive and healthy.**	
	Privacy and separation of areas does not appear to have been addressed appropriately.	**This has now been reconsidered and adjusted in the design to improve amenity**
	Neighbouring amenity impacts and occupant amenity and privacy impacts are of concern.	**Apartment layouts have been adjusted using planters and screening to alleviate overlooking**
	The extent and over-reliance of screening indicates there are issues and does not indicate that these matters have been successfully addressed.	**Screening has been reviewed and modified to incorporate planters to address this point**
	Pedestrian movement and safety at ground level to be further explored.	**The pedestrian spine to the northern site now has a pedestrianised driveway, southern site access ways now have clear line of sight to avoid hidden corners.**
	Further analysis required for the semi basement. Applicant should consider cost vs site layout/planning.	**Semi-basement has been reduced by 500mm. Design team felt that vertical separation from street level to private apartments provides a positive design resolution.**
	Presents as two identities, two addresses. Increase the separation of buildings and amenity offerings.	**Each building has its own distinct character relevant to it street context. Communal rooftop areas now proposed for residents of each building and separation between is increased significantlyby a central landscape zone.**
	Communal areas to be further reviewed. Could the rooftop area be split between the two buildings? Appears to be a long transition to access the roof top, especially for occupants of the northern building. This space does not appear to be welcoming to all occupants of the development.	**Communal rooftop areas now proposed for residents of each building; additionally a communal central landscpae node is provided at ground level.**
	Shared areas, easily accessible at ground level to be explored between two buildings.	**Communal rooftop areas now proposed for residents of each building; additionally a communal central landscpae node is provided at ground level.**
Design Principle Commentary	**Internal Amenity** **The apartments are generously sized, with high ceiling heights and designed to optimise daylight and ventilation.** **The development is oriented and sited to maximise outlook and provide an attractive setting for apartment's habitable rooms and balconies.** **Amenities and facilities, including the two rooftop terraces, fitness room, and ground floor green space within the development will provide excellent recreation facilities for residents.** **External Amenity** **The development has been designed and sited to minimise the impact of the proposal on adjoining properties. The extent of overshadowing has been minimised through large setbacks of the north building, recessed upper floors and large separation provided between the north and south building.** **Despite complying with the intended setback and separation controls of DPP 3.2.5, the development has provided further visual privacy measures to ensure the privacy of adjoining residents are not unreasonably impacted by the development. Together, screening and the balcony planter boxes will satisfy the need for outlook with the neighbour's need for privacy.** **The bulk and scale measures have been outlined in the assessment of The development meets Design Principle 3.** **The development meets Design Principle 6**	

Principle 7 Legibility	**Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.**	
	The arbour walkway suggests use of a walkway, however, the sightlines are of a concern.	**The pedestrian spine to the northern site now has a pedestrianised driveway, southern site access ways now have clear line of sight to avoid hidden corners.**
	Pedestrian and vehicle separation is generally achieved.	**Noted**
	Enhancements for way finding and safety to be demonstrated.	**Design incorporates well lit communal zones with clear sight lines throughout the site.**
	Northern street entry seems acceptable, the southern entry is concealed.	**Legibility of entries have been modified and simplified to include curvilinear built and soft-scape forms to soften street address and to distinguish common entry points from private terraces**
	Consider providing one entry to the buildings, as opposed to multiple lobby entries. Site planning/arrangement will influence this.	
	Southern street entry provides two entries - public and private.	**Public entry now more articulated to signal as main entry**
	These need to be further delineated or distinguished for use.	**Public entry now more articulated to signal as main entry**
Design Principle Commentary	**The development's pedestrian entries are clearly identifiable by statement arbours, landscaping and paths. The vehicle access point is identified by the automatic gate. All parking areas are clearly marked and easily accessed.** **The development meets Design Principle 7**	

Principle 8 Safety	**Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.**	
	The arbour pedestrian link does not present as a safe	**The spine to the northern site now has a pedestrianised driveway, southern site access ways now have incorporates well lit communal zones with clear sight lines throughout the site to avoid hidden corners.**
	Eastern aspect of the northern building is too narrow, presents real concern for safety.	**Eastern/ northern footpath now relocated to integrated with the pedestrianised drive way.**
	Better connectivity, use of lighting, way finding etc. to be explored.	**The spine to the northern site now has a pedestrianised driveway, southern site access ways now have incorporates well lit communal zones with clear sight lines throughout the site to avoid hidden corners.**
Design Principle Commentary	**The development has been designed with CPTED principles in mind. Circulation and common areas are generally open, providing good lines of sight, minimising areas capable of concealment.** **Pedestrian entries are gated, accessed via intercoms.** **Entries will have lighting along the external paths.** **The building is oriented to the street, providing excellent passive surveillance.** **The development meets Design Principle 8**	
Principle 9 Community	**Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.**	
	The design requires further evolvement to ensure development contributes to the street and its local context.	**Street elevations & sections to be provided to demonstrate built form in context**
	Opportunity to consider public art contribution now, rather than later in the design phase.	**Discussions with a local artist have been undertaken to start this process**
	Interface with the public realm to be further explored.	**Street integration has been further considered toinclude active spaces such as wellness rooms.**
Design Principle Commentary	**The development seeks to contribute to the dwelling diversity of the area and cater to the growing demand for smaller household sizes.** **The development seeks to upgrade the verge with endemic tree canopy, quality hard and soft landscaping, ensuring the development will sit comfortably in the streetscape.** **The overall tree canopy cover from the proposed development will provide an exemplar for similar development in the future. The trees will improve the urban heat island effect and provide an attractive example of high density for the area.** **The development meets Design Principle 9**	

10. Aesthetics	**Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.**	
	Blade walls are a good feature.	**Noted**
	Southern composition is appropriate.	**Noted**
	Northern building frontage in terms of scale and massing required is generally not appropriate.	**Northern building now presents as 3 storeys to the street to provide better transition to neighbouring context.**
	Indicate curved brick walls features - can the curve be at the top not the bottom?	**Brick curves removed.**
	Material palette is generally appropriate.	**Noted**
	Massing of the proposal to be further refined with respect to scale.	**Northern building now presents as 3 storeys to the street to provide better transition to neighbouring context. Southern building presentes as 3-storey podium to the street; with top floors set back and clad in recessive darker material palette to reduce apparent height.**
	Southern building including landscaping will better resolve the design.	**Landscaping design has been incorporated across the site.**
	Consider reflecting on the local context and locality to inform the character of the development.	**Local context analysis will inform the design thread including references to native aquatic forms , coastal topography & maritime history**
	Justification for any increase on height has not been presented and is weak.	**No variation to height reqested.** **Over all built form within allowable envelope.**
	Summary (Key Issues) *There are design and site planning concerns more or less with each of the 10 Design Principles and this generally is resultant from the overdevelopment of the site, by virtue of scale and massing.* *Primarily:* *Development does not respond or demonstrate an understanding of place and scale.* *Impact on amenity of adjoining neighbours is unresolved. For example, the extent of screening proposed indicates that this has not been properly considered.* *Stepping/articulation of the buildings (including podium) and the* *Street frontages – reduce podium to 1m maximum.* *Landscaping outcomes throughout are not acceptable.* *Functionality and security of the arbour is unresolved.* *Building and landscaping design should be better integrated to provide a cohesive environment.* *It has not been demonstrated building separation is in proportion to the building height.* *Disposition of communal areas is weak. Communal areas need to cater for the overall amenity and usability of all occupants of both buildings.* *Provide a full set of detailed plans to properly comprehend amenity impacts.*	**These items are variously addressed in responses above**
Design Principle Commentary	**The design is considered high-quality. The material, patterns, and colour selections befit the area's amenity and proximity to the foreshore area. The design aesthetic was iteratively developed with feedback from the DRP. The development has been designed to include residential features such as street facing entries to ground floor apartments, balconies, large landscaped street setback areas, so as to seamlessly fit within the streetscape.** **The development meets Design Principle 10.**	
D22/95019		

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PARKIN STREET









ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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ARCHITECTURE

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

3D - PARKIN ST

SCALE	DRAWN	CHECKED
@ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	10.02	P5

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HARRISON STREET









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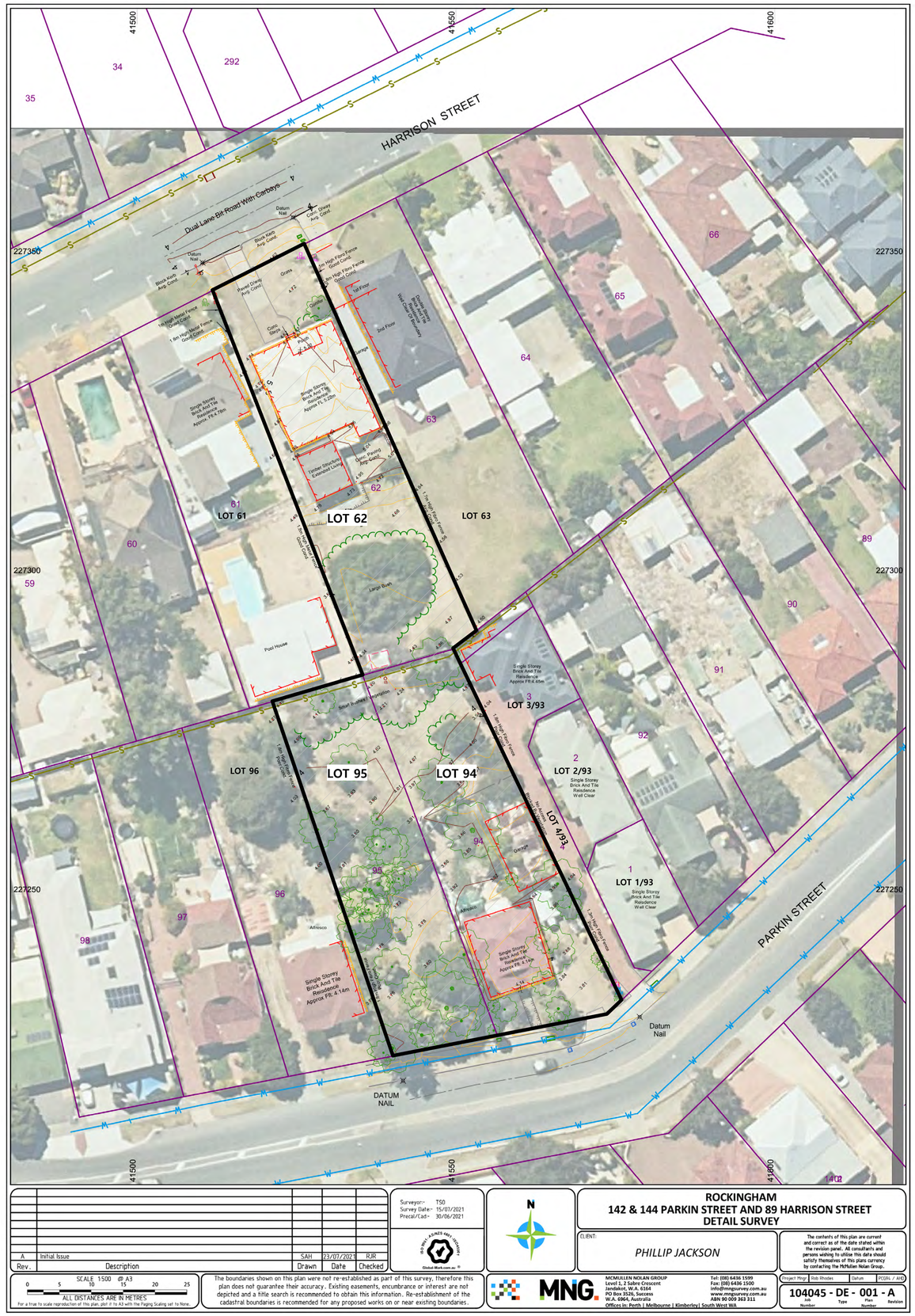

SUBJECT LOTS

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PROJECT

ARBOUR APARTMENTS

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TITLE

SURVEY PLAN

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21049	0.01	P1

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Rev.	Description	Drawn	Date	Checked
A	Initial Issue	SAH	23/07/2021	RJR

Surveyor:- TSO
Survey Date:- 15/07/2021
Precal/Cad:- 30/06/2021

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N

ROCKINGHAM
142 & 144 PARKIN STREET AND 89 HARRISON STREET
DETAIL SURVEY

CLIENT:
PHILLIP JACKSON

The contents of this plan are current and correct as of the date stated within the revision panel. All consultants and persons wishing to utilise this data should satisfy themselves of this plans currency by contacting the McMullen Nolan Group.

SCALE 1:500 @ A3
0 5 10 15 20 25
ALL DISTANCES ARE IN METRES
For a true to scale reproduction of this plan, plot it to A3 with the Paging Scaling set to None.

The boundaries shown on this plan were not re-established as part of this survey, therefore this plan does not guarantee their accuracy. Existing easements, encumbrance or interest are not depicted and a title search is recommended to obtain this information. Re-establishment of the cadastral boundaries is recommended for any proposed works on or near existing boundaries.

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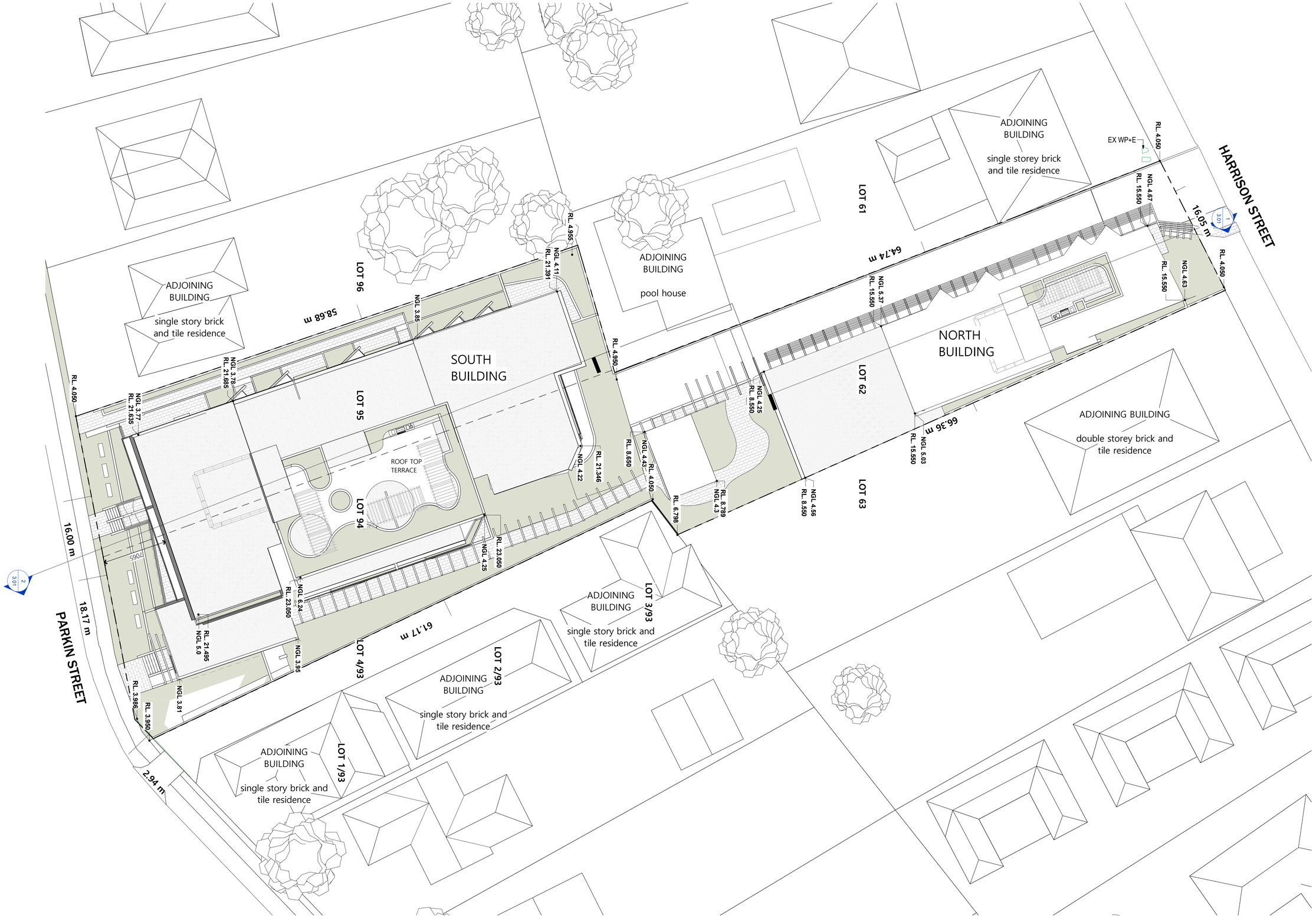
ABN 90 009 363 311

Project Mngr | Sub Rhodes | Datum | PCGN / AHD

104045 - DE - 001 - A
Job Number | Type | Plan Number | Revision



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SITE	3154 m²	
DEEP PLANTING	435 m²	14%

89 HARRISON STREET + 142-144 PARKIN STREET, ROCKINGHAM WA 6168

CITY OF ROCKINGHAM
Lot 94 on P 5742;
Lot 95 on P 5742;
Lot 62 on P 5742

SITE AREAS:
Lot 94-1067m²;
Lot 95-928m²;
Lot 62-1166m²;
TOTAL:3161m²

RAC-0

NORTH BUILDING
GF = 1 APARTMENT (1*1B)
L1 = 2 APARTMENTS (2*2B)
L2 = 2 APARTMENTS (2*2B)
L3 (ROOF)
NORTH TOTAL = 5 APARTMENTS

SOUTH BUILDING
PODIUM = 8 APARTMENTS (4*1B, 3*2B, 1*3B)
L1 = 9 APARTMENTS (2*1B, 6*2B, 1*3B)
L2 = 9 APARTMENTS (2*1B, 6*2B, 1*3B)
L3 = 8 APARTMENTS (2*1B, 5*2B, 1*3B)
L4 = 8 APARTMENTS (2*1B, 5*2B, 1*3B)
L5 (ROOF)
SOUTH TOTAL = 42 APARTMENTS

DEVELOPMENT TOTAL = 47 APARTMENTS

ONE BED - 13	23%	
TWO BED - 29	66%	
THREE BED - 5	11%	

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PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
SITE PLAN

SCALE	DRAWN	CHECKED
1 : 200 @ A1	TLM	GIE

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21049	1.02	P5

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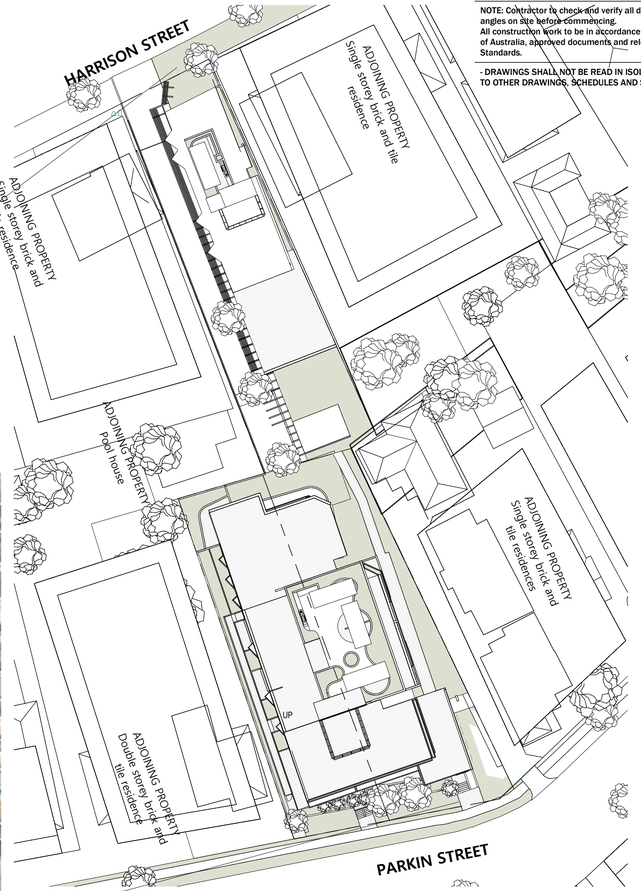
SCALE 1:200





PROPOSED DEVELOPMENT CONTEXT

SCALE 1 : 500



APARTMENTS
3-STOREY



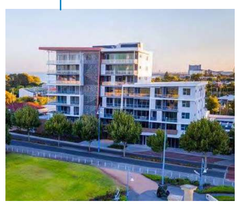
MIXED-USE
4-STOREY



MIXED-USE
10-STOREY



MIXED-USE
10-STOREY



APARTMENTS
8-STOREY



HOTEL
7-STOREY



MIXED-USE
6-STOREY



MIXED-USE
7-STOREY

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PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

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TITLE

SITE PLAN CONTEXT

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

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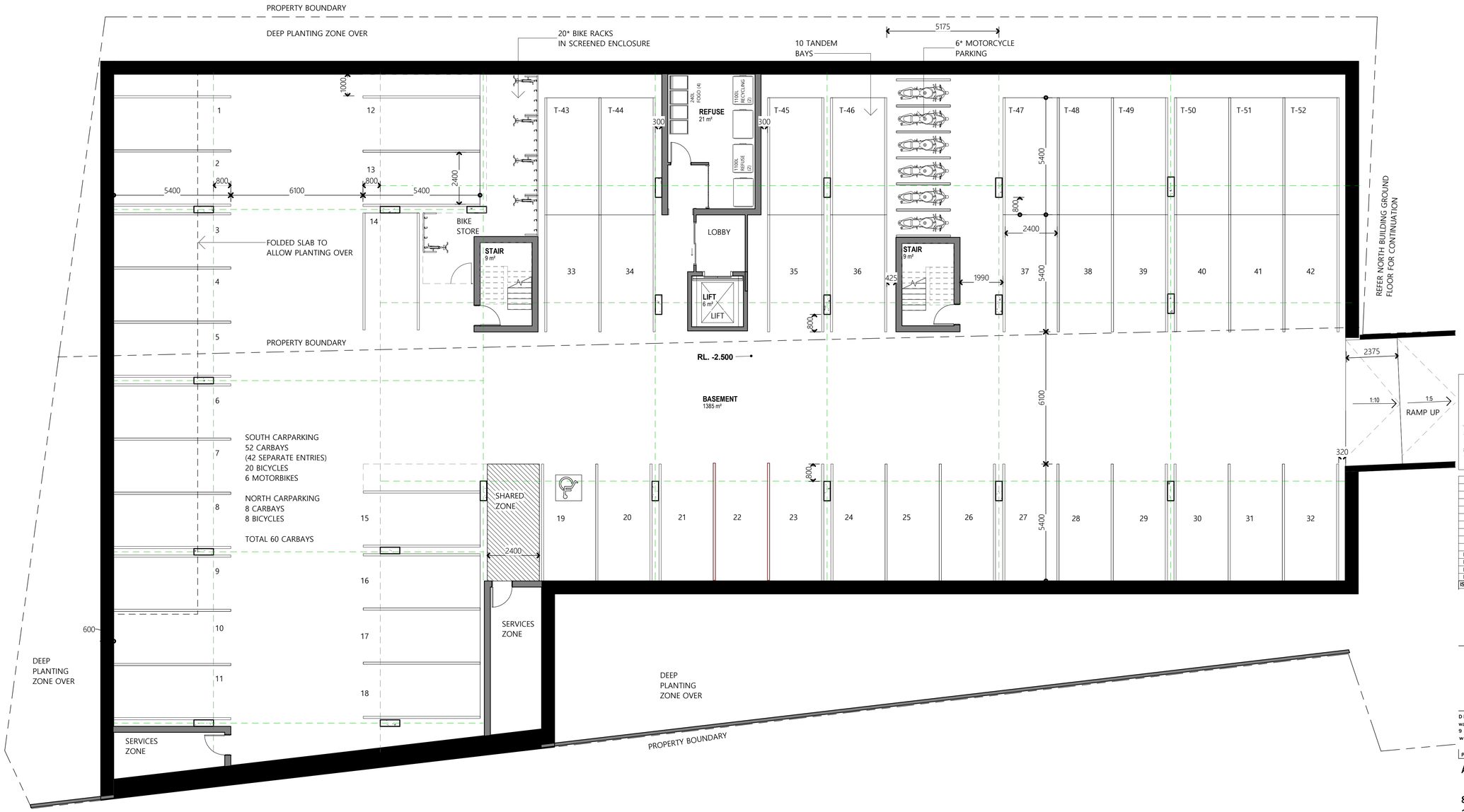

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m² ← FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P4	08.08.22	PLANNING APPLICATION	DMG	TLM
P3	26.07.22	CONSULTANT UPDATE	DMG	TLM
P2	14.04.22	PRELODGE ISSUE	DMG	TLM
P1	06.04.22	PRELODGE ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
BASEMENT - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.10	P4

0 5m
SCALE 1:100

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DATE 08.08.22



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ROOM SCHEDULE - SOUTH BDG - PODIUM

NUMBER	NAME	AREA
S.4.03 BALC	TERRACE	17 m²
S.P.01	2 BED 2 BATH	85 m²
S.P.01 BALC	TERRACE	30 m²
S.P.01 ST	STORE	5 m²
S.P.02	2 BED 2 BATH	66 m²
S.P.02 BALC	TERRACE	34 m²
S.P.02 ST	STORE	4 m²
S.P.03	1 BED 1 BATH	67 m²
S.P.03 ST	STORE	3 m²
S.P.04	1 BED 1 BATH	68 m²
S.P.04 BALC	TERRACE	17 m²
S.P.04 ST	STORE	4 m²
S.P.05	3 BED 2 BATH	120 m²
S.P.05 BALC	TERRACE	38 m²
S.P.05 ST	STORE	5 m²
S.P.06	2 BED 2 BATH	86 m²
S.P.06 BALC	TERRACE	36 m²
S.P.06 ST	STORE	4 m²
S.P.07	1 BED 1 BATH	62 m²
S.P.07 BALC	TERRACE	18 m²
S.P.07 ST	STORE	4 m²
S.P.08	1 BED 1 BATH	63 m²
S.P.08 ST	STORE	4 m²
S.P.08. BALC	TERRACE	19 m²
S.P.09	CORRIDOR	88 m²
S.P.10	STAIR	9 m²
S.P.12	EXIT	6 m²
S.P.13	LIFT	6 m²
S.P.14	STAIR	9 m²
S.P.15	EXIT	6 m²
S.P.16	RESIDENT FITNESS	41 m²

SITE	3154 m²	
DEEP PLANTING	435 m²	14%

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name — ROOM NAME
m² — FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P7	08.08.22	PLANNING APPLICATION	DMG	TLM
P6	26.07.22	CONSULTANT UPDATE	DMG	TLM
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P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

PODIUM FLOOR PLAN - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.11	P7

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ROOM SCHEDULE - SOUTH BDG - LEVEL 1

NUMBER	NAME	AREA
N.B.18	STORE	3 m²
S.1.01	2 BED 2 BATH	86 m²
S.1.01 BALC	BALCONY	16 m²
S.1.01 ST	STORE	4 m²
S.1.02	2 BED 2 BATH	85 m²
S.1.02 BALC	BALCONY	25 m²
S.1.02 ST	STORE	5 m²
S.1.03	2 BED 2 BATH	91 m²
S.1.03 BALC	BALCONY	20 m²
S.1.03 ST	STORE	4 m²
S.1.04	1 BED 1 BATH	66 m²
S.1.04 BALC	BALCONY	10 m²
S.1.05	1 BED 1 BATH	66 m²
S.1.05 BALC	BALCONY	10 m²
S.1.05 ST	STORE	4 m²
S.1.06	3 BED 2 BATH	109 m²
S.1.06 BALC	BALCONY	15 m²
S.1.06 ST	STORE	5 m²
S.1.07	2 BED 2 BATH	86 m²
S.1.07 BALC	BALCONY	14 m²
S.1.07 ST	STORE	4 m²
S.1.08	2 BED 2 BATH	84 m²
S.1.08 BALC	BALCONY	18 m²
S.1.08 ST	STORE	4 m²
S.1.09	2 BED 2 BATH	85 m²
S.1.09 BALC	BALCONY	22 m²
S.1.09 ST	STORE	4 m²
S.1.10	CORRIDOR	58 m²
S.1.11	STAIR	9 m²
S.1.12	LIFT	6 m²
S.1.13	STAIR	9 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m²
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 1+2 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.12	P5

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SCALE 1:100



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ROOM SCHEDULE - SOUTH BDG - LEVEL 3

NUMBER	NAME	AREA
S.3.01	2 BED 2 BATH	85 m²
S.3.01 BALC1	BALCONY	25 m²
S.3.01 BALC2	TERRACE	20 m²
S.3.01 ST	STORE	5 m²
S.3.02	2 BED 2 BATH	91 m²
S.3.02 BALC	BALCONY	20 m²
S.3.02 ST	STORE	4 m²
S.3.03	1 BED 1 BATH	66 m²
S.3.03 BALC	BALCONY	10 m²
S.3.03 ST	STORE	3 m²
S.3.04	1 BED 1 BATH	66 m²
S.3.04 BALC	BALCONY	10 m²
S.3.04 ST	STORE	4 m²
S.3.05	3 BED 2 BATH	109 m²
S.3.05 BALC	BALCONY	15 m²
S.3.05 ST	STORE	5 m²
S.3.06	2 BED 2 BATH	86 m²
S.3.06 BALC	BALCONY	15 m²
S.3.06 ST	STORE	4 m²
S.3.07	2 BED 2 BATH	84 m²
S.3.07 BALC	BALCONY	18 m²
S.3.07 ST	STORE	4 m²
S.3.08	2 BED 2 BATH	85 m²
S.3.08 BALC	BALCONY	22 m²
S.3.08 ST	STORE	4 m²
S.3.09	CORRIDOR	51 m²
S.3.10	STAIR	9 m²
S.3.11	LIFT	6 m²
S.3.12	STAIR	9 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m²
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
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P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 3 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.13	P5

0 5m
SCALE 1:100

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ROOM SCHEDULE - SOUTH BDG - LEVEL 4

NUMBER	NAME	AREA
S.4.01	2 BED 2 BATH	86 m²
S.4.01 BALC 1	TERRACE	30 m²
S.4.01 BALC 2	BALCONY	6 m²
S.4.01 ST	STORE	5 m²
S.4.02	2 BED 2 BATH	90 m²
S.4.02 BALC	BALCONY	10 m²
S.4.02 ST	STORE	4 m²
S.4.03	1 BED 1 BATH	65 m²
S.4.03 BALC	BALCONY	10 m²
S.4.03 ST	STORE	3 m²
S.4.04	1 BED 1 BATH	63 m²
S.4.04 BALC	BALCONY	10 m²
S.4.04 ST	STORE	4 m²
S.4.05	3 BED 2 BATH	105 m²
S.4.05 BALC	BALCONY	15 m²
S.4.05 ST	STORE	5 m²
S.4.06	2 BED 2 BATH	86 m²
S.4.06 BALC	BALCONY	14 m²
S.4.06 ST	STORE	4 m²
S.4.07	2 BED 2 BATH	84 m²
S.4.07 BALC	BALCONY	18 m²
S.4.07 ST	STORE	4 m²
S.4.08	2 BED 2 BATH	84 m²
S.4.08 BALC	BALCONY	21 m²
S.4.08 ST	STORE	4 m²
S.4.09	CORRIDOR	51 m²
S.4.10	STAIR	9 m²
S.4.11	LIFT	6 m²
S.4.12	STAIR	9 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m² ← FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
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P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
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ROCKINGHAM WA 6168

TITLE
LEVEL 4 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.14	P5

0 5m
SCALE 1:100

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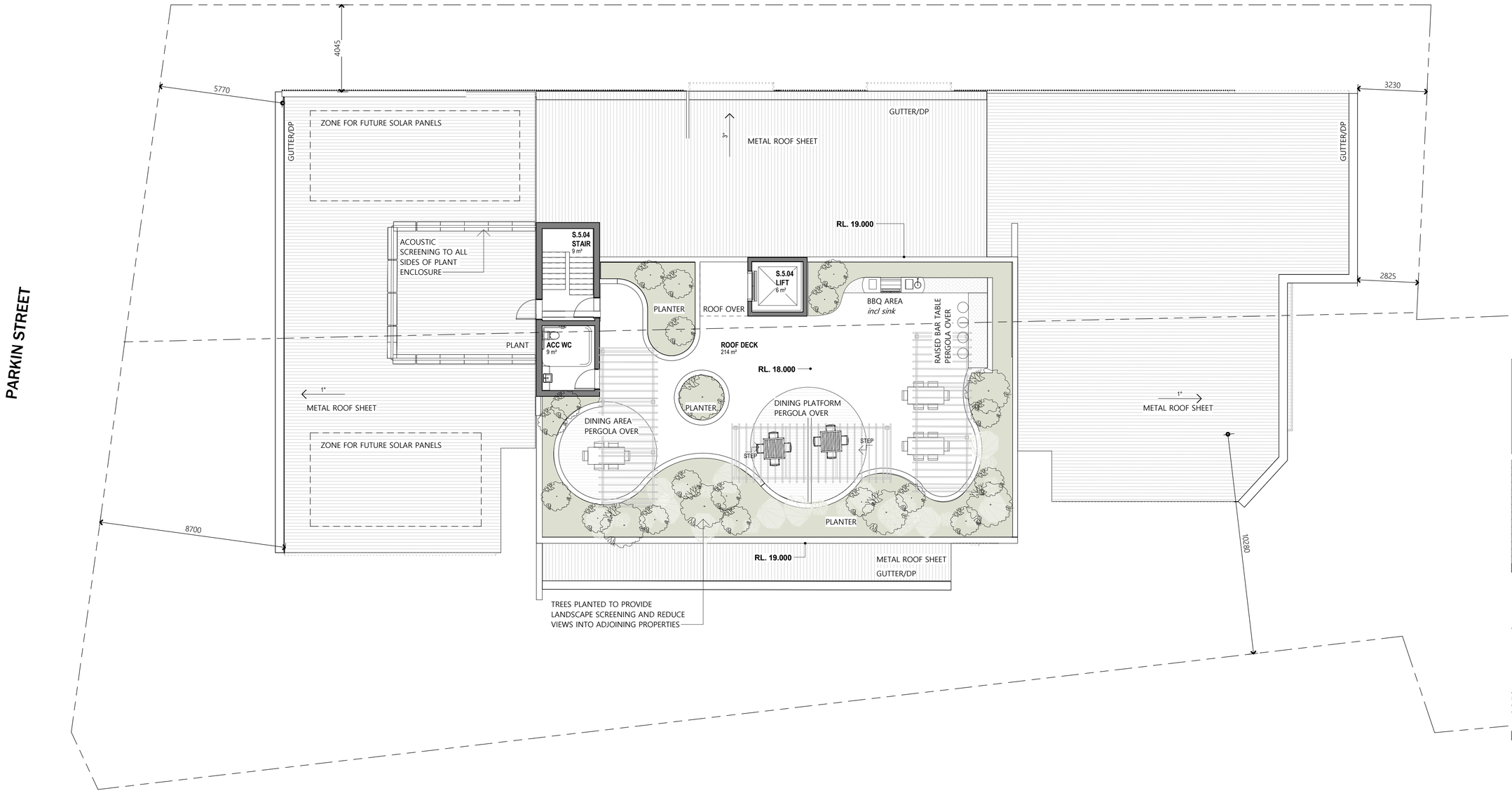
ROOM SCHEDULE - SOUTH BDG - LEVEL 5		
NUMBER	NAME	AREA
S.5.04	STAIR	9 m²
S.5.04	LIFT	6 m²



ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m² ← FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P4	08.08.22	PLANNING APPLICATION	DMG	TLM
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 5 (ROOF) - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.15	P4

0 5m
SCALE 1:100

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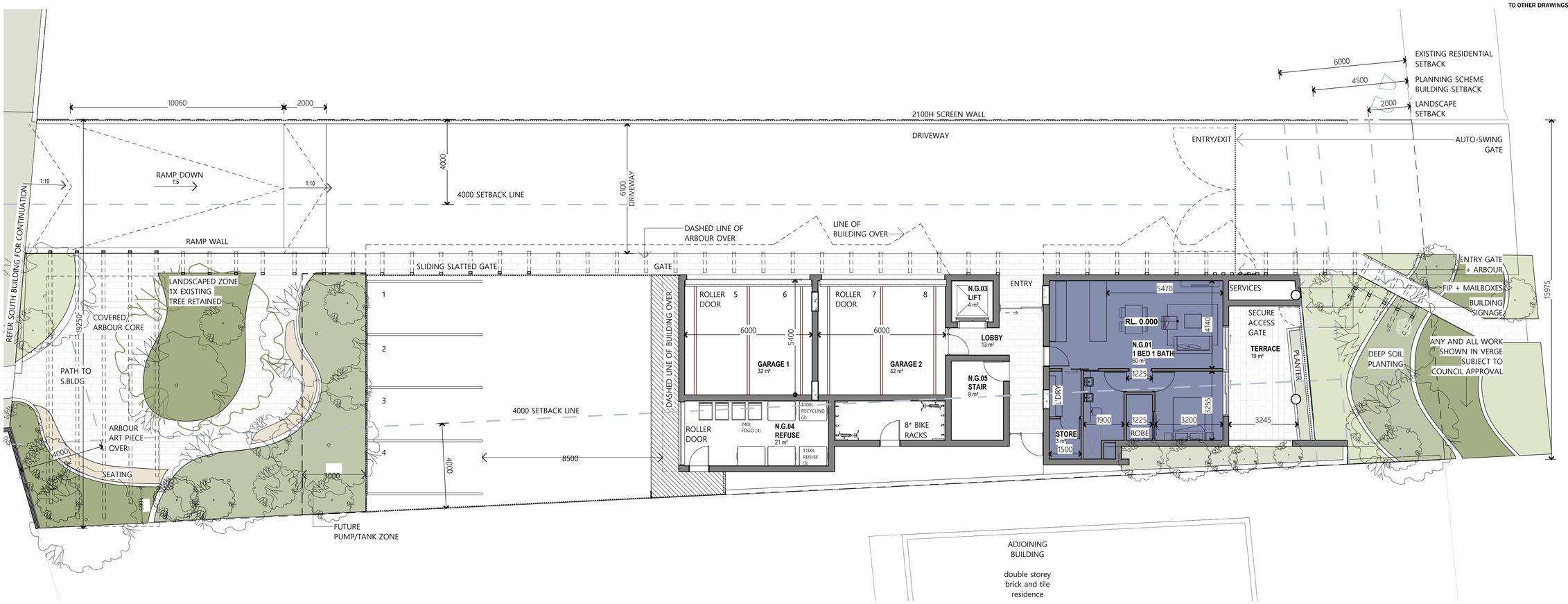

ROOM SCHEDULE - NORTH BDG -...		
NUMBER	NAME	AREA
N.G.01	1 BED 1 BATH	60 m²
N.G.01	STORE	3 m²
N.G.01	TERRACE	19 m²
N.G.03	LIFT	4 m²
N.G.04	REFUSE	21 m²
N.G.05	STAIR	9 m²

SITE	3154 m²	
DEEP PLANTING	435 m²	14%

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name
 # m²
ROOM NAME
FLOOR AREA OF ROOM

0 5m
SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P7	08.08.22	PLANNING APPLICATION	DMG	TLM
P6	26.07.22	CONSULTANT UPDATE	DMG	TLM
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PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

GROUND FLOOR PLAN - NORTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.16	P7

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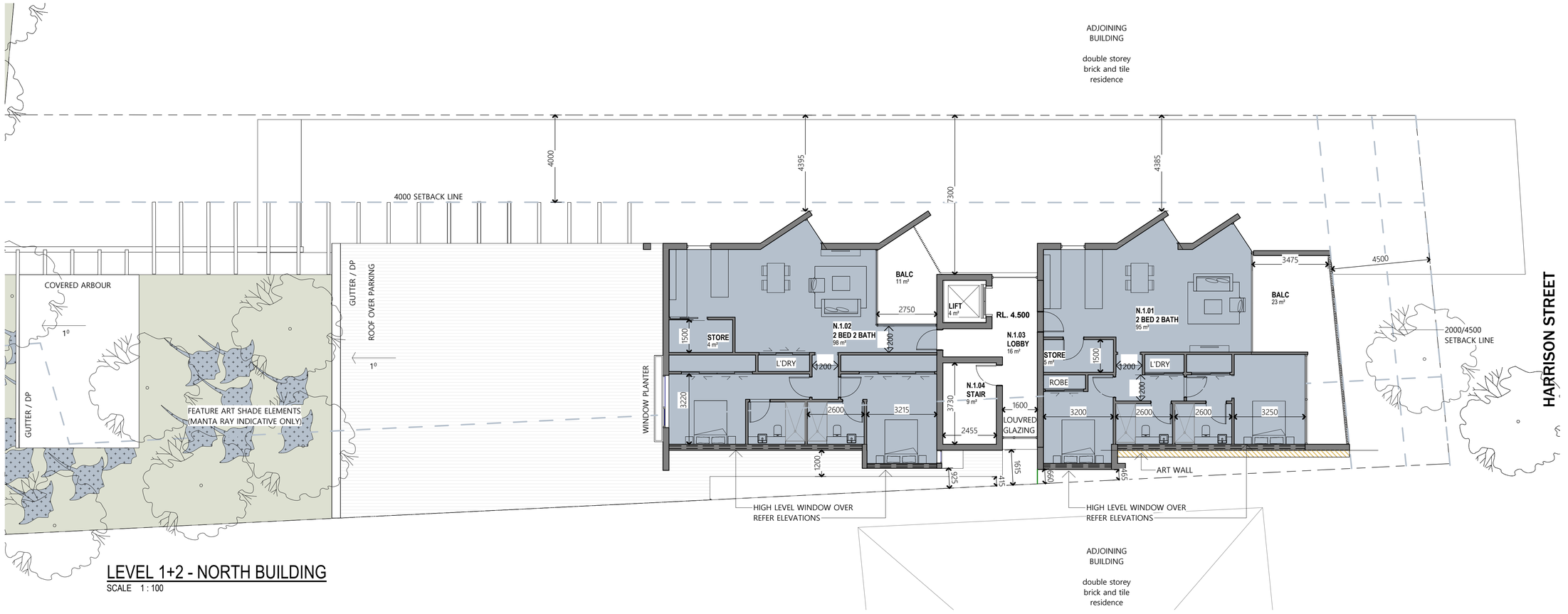
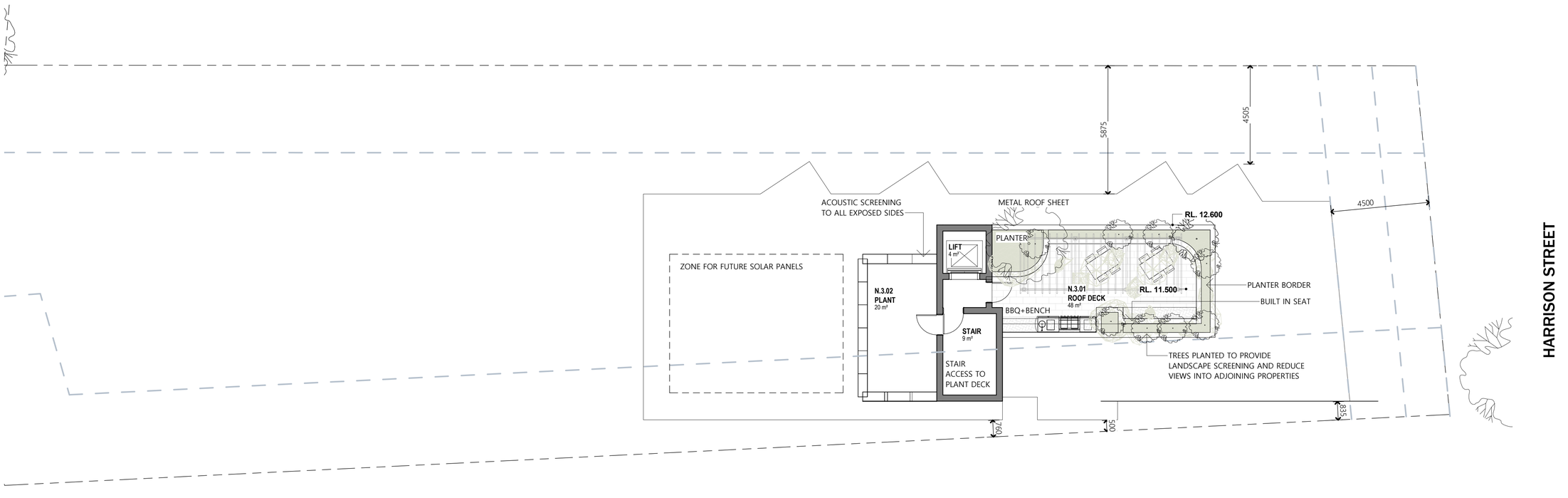
DATE 08.08.22



LEVEL 1+2 - NORTH BUILDING

SCALE 1 : 100



LEVEL 3(ROOF) - NORTH BUILDING

SCALE 1 : 100

0 5m

SCALE 1:100

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ROOM SCHEDULE - NORTH BDG - LEVEL 1

NUMBER	NAME	AREA
N.1.01	2 BED 2 BATH	95 m²
N.1.01	BALC	23 m²
N.1.01 ST	STORE	5 m²
N.1.02	2 BED 2 BATH	98 m²
N.1.02	BALC	11 m²
N.1.02 ST	STORE	4 m²
N.1.03	LOBBY	16 m²
N.1.04	STAIR	9 m²
N.1.05	LIFT	4 m²

ROOM SCHEDULE - NORTH BDG - LEVEL 3

NUMBER	NAME	AREA
N.3.01	ROOF DECK	48 m²
N.3.02	PLANT	20 m²
N.3.03	STAIR	9 m²
N.3.04	LIFT	4 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m²
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
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PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 1+2+ROOF - NORTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.17	P5

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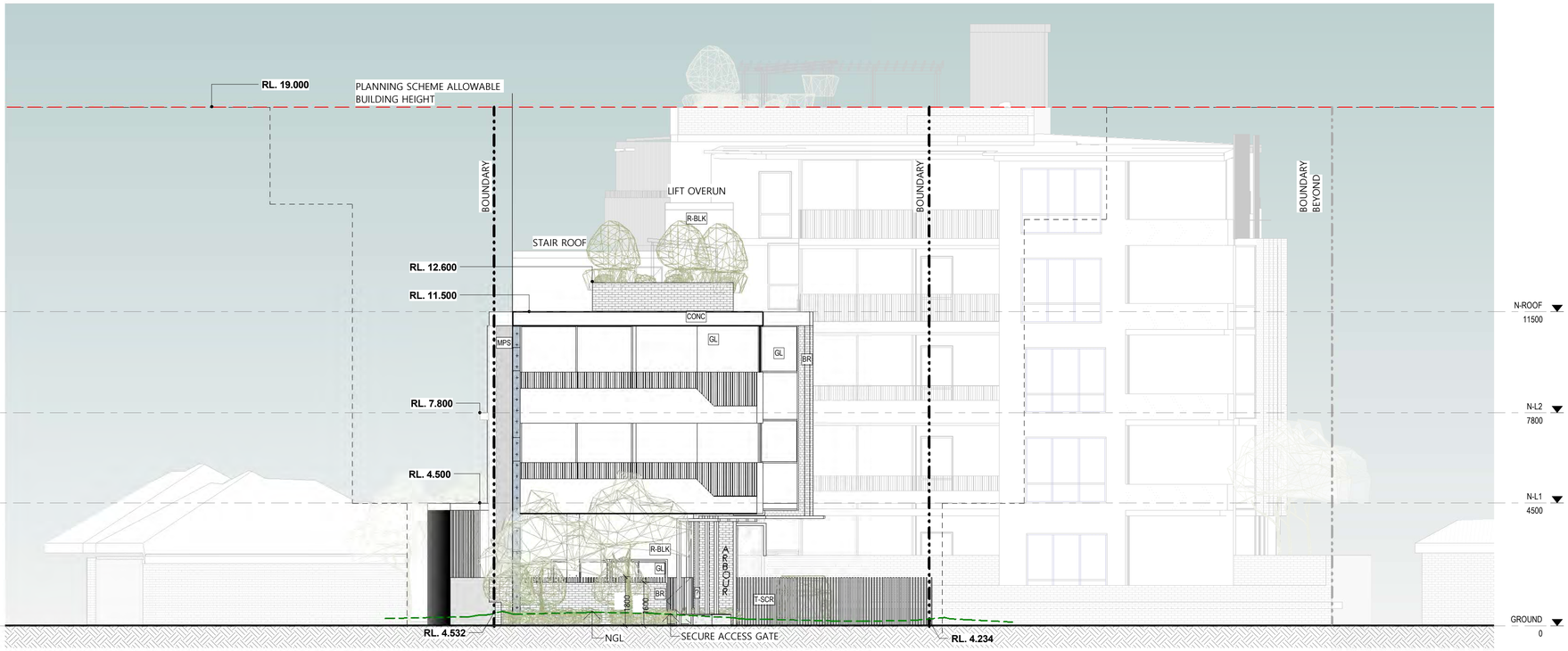
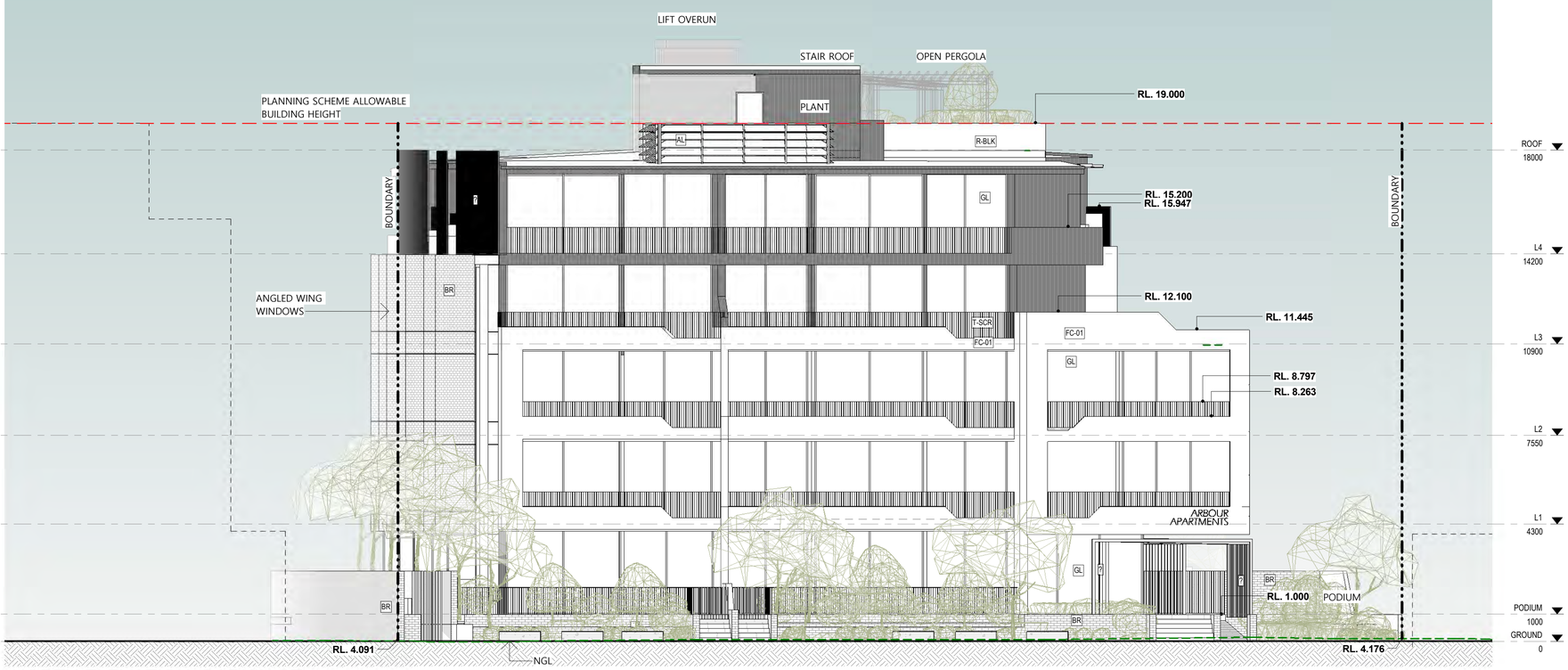


SOUTH ELEVATION (HARRISON ST)

SCALE 1 : 100



NORTH ELEVATION (PARKIN ST)

SCALE 1 : 100

CODE	IMAGE	DESCRIPTION
AL		ANODIZED ALUMINUM
ART		ART/MURAL (INDICATIVE ONLY)
BLK		MASONRY BLOCK - PAINTED
BR		FACE BRICK
CONC		CONCRETE - EXPOSED AGG
FC-01		FIBERCEMENT CLADDING - PAINT FINISH
GL		GLASS - LOW REFLECTANCE BRONZE TINT
MF-1		METAL FINISH - 1
MPS		METAL PAN WALL CLADDING
MRS		METAL ROOF SHEET
PF		PAINT FINISH
R-BLK		RENDER FINISHED MASONRY BLOCK
T		<varies>
T-CONC		TEXTURED CONCRETE RENDERED MASONRY
T-SCR		TIMBER LOOK ALUMINIUM SCREEN

0 5m
SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P4	08.08.22	PLANNING APPLICATION	DMG	TLM
P3	14.04.22	PRELODGE ISSUE	DMG	TLM
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P1	08.03.22	PRELODGE ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
DESIGN MANAGEMENT GROUP twenty-three railway road subiaco wa 6000 telephone +61 8 9212 8888 | facsimile +61 8 9212 8822 info@dmgaustralia.com.au | www.dmgaustralia.com.au

PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
ELEVATIONS - NORTH + SOUTH

SCALE	DRAWN	CHECKED
1 : 100 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	2.01	P4

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DATE 08.08.22

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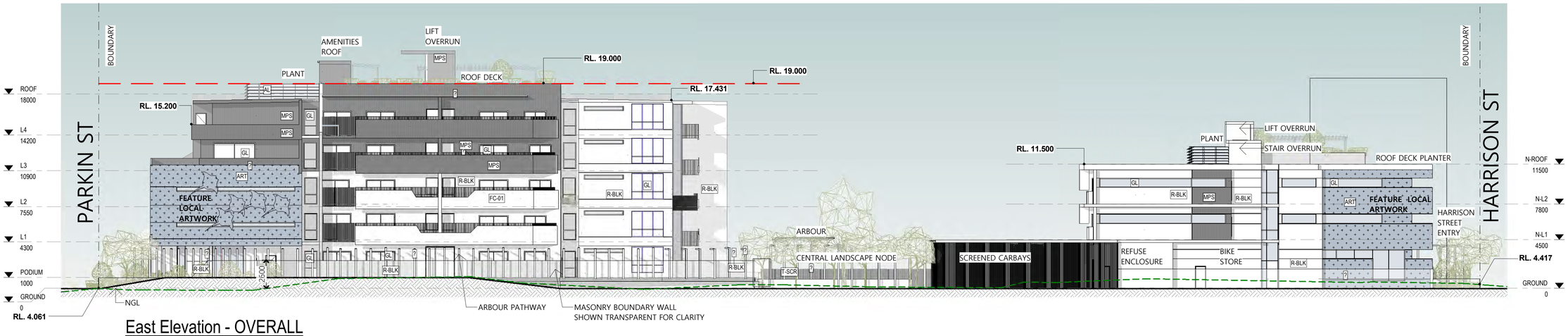
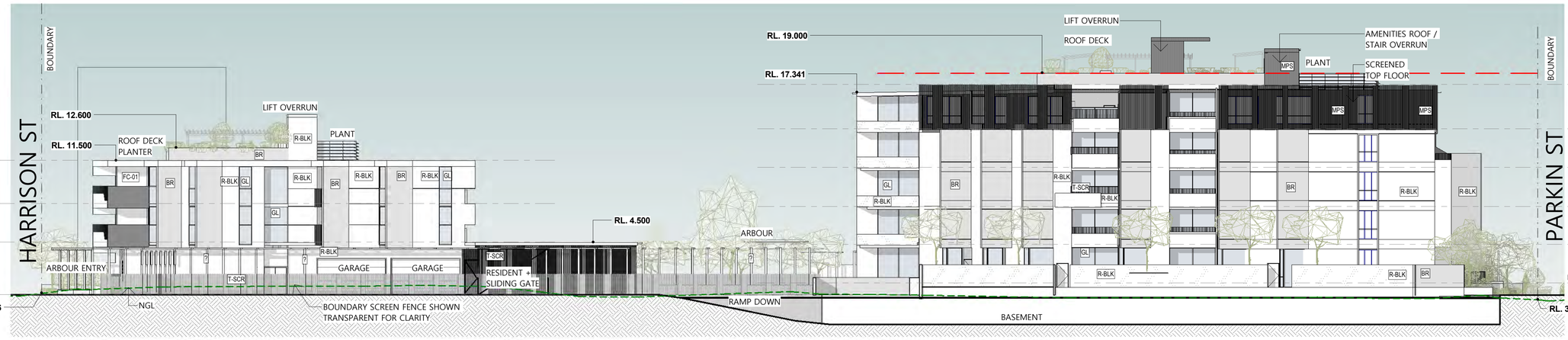


East Elevation - OVERALL

SCALE 1 : 200



West Elevation - OVERALL

SCALE 1 : 200

CODE	IMAGE	DESCRIPTION
AL		ANODIZED ALUMINUM
ART		ART/MURAL (INDICATIVE ONLY)
BLK		MASONRY BLOCK - PAINTED
BR		FACE BRICK
CONC		CONCRETE - EXPOSED AGG
FC-01		FIBERCEMENT CLADDING - PAINT FINISH

CODE	IMAGE	DESCRIPTION
GL		GLASS - LOW REFLECTANCE BRONZE TINT
MF-1		METAL FINISH - 1
MPS		METAL PAN WALL CLADDING
MRS		METAL ROOF SHEET
PF		PAINT FINISH

CODE	IMAGE	DESCRIPTION
R-BLK		RENDER FINISHED MASONRY BLOCK
T		<varies>
T-CONC		TEXTURED CONCRETE RENDERED MASONRY
T-SCR		TIMBER LOOK ALUMINIUM SCREEN

0 5m
SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	08.08.22	PLANNING APPLICATION	DMG	TLM
P5	14.04.22	PRELODGE ISSUE	DMG	TLM
P4	06.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
ELEVATIONS - EAST + WEST

SCALE	DRAWN	CHECKED
1 : 200 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	2.02	P6

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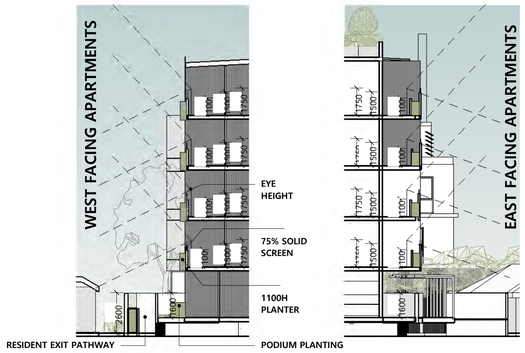

SHORT SECTION - PLANTERS+WALKWAY

SCALE 1 : 200

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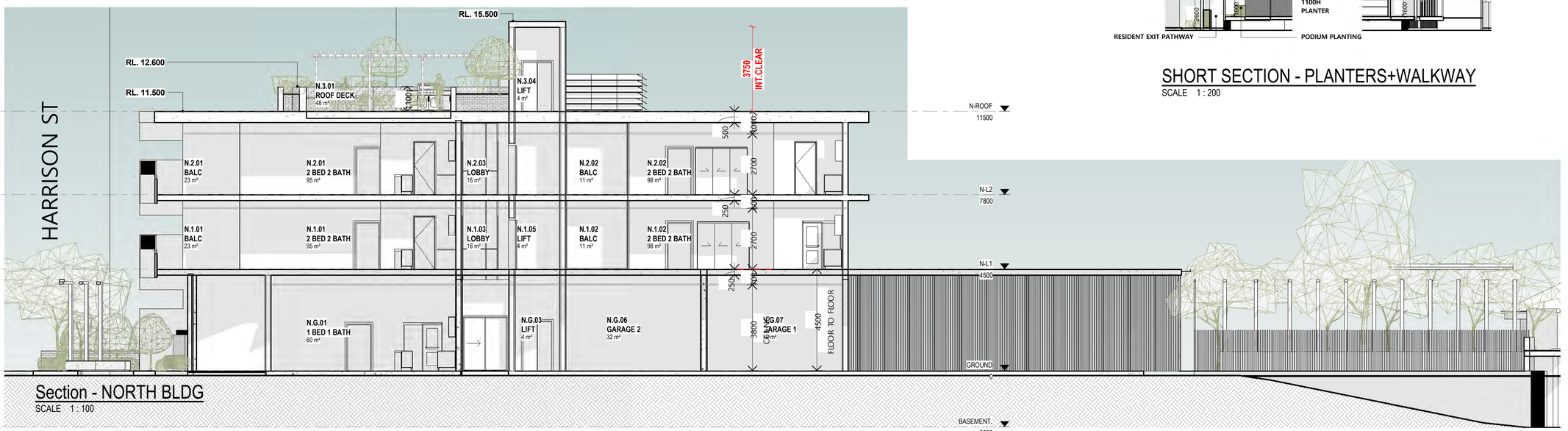

Section - NORTH BLDG

SCALE 1 : 100



Section - SOUTH BLDG

SCALE 1 : 100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P1	08.08.22	PLANNING APPLICATION	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

BUILDING SECTIONS

SCALE	DRAWN	CHECKED
As indicated @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	3.01	P1

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SITE winter 12noon - RESIDENTIAL

SCALE 1 : 500



SITE winter 12noon - WATERFRONT

SCALE 1 : 500

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TOTAL APARTMENT #47

DUAL ASPECT + NORTH/WEST/EAST
FACING APARTMENTS = 44
=93.6% MIN 2 HRS SUN
BETWEEN 9AM-3PM 21ST JUNE

SINGLE ASPECT SOUTH
FACING APARTMENTS = 3
= 6.38% NO DIRECT SUN
BETWEEN 9AM-3PM 21ST JUNE

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P1	08.08.22	PLANNING APPLICATION	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

SHADOW DIAGRAM

SCALE	DRAWN	CHECKED
1 : 500 @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	9.01	P1

0 25m
SCALE 1:500

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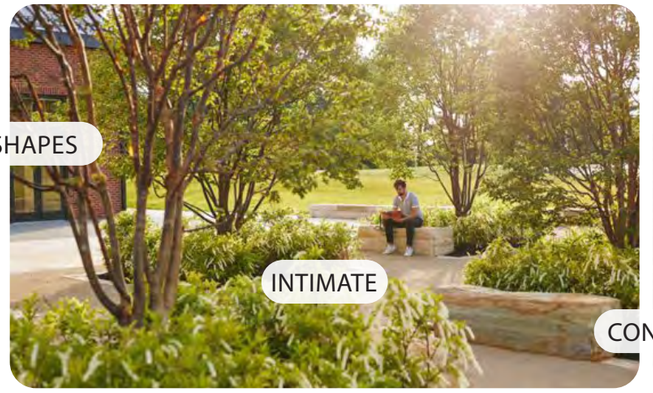
DATE 08.08.22


CURVY


ORGANIC SHAPES


INTIMATE

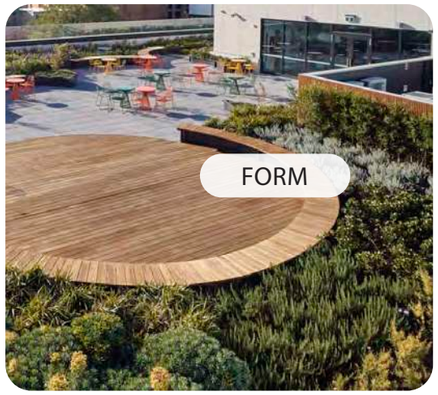

CONTRAST


COASTAL



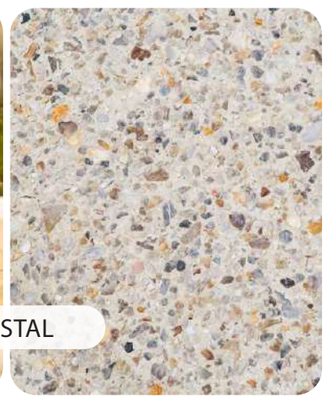

TEXTURE



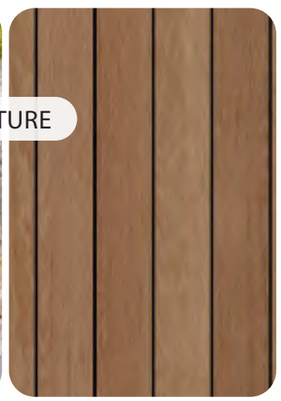

FORM

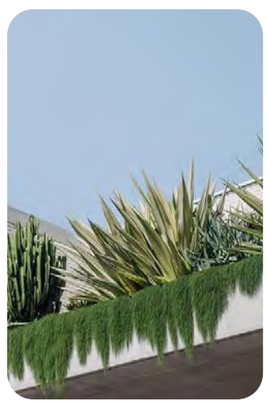

WARM TONES




COASTAL


TEXTURE





ARBOUR APARTMENTS

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THEMING & MATERIALITY

AUGUST 2022

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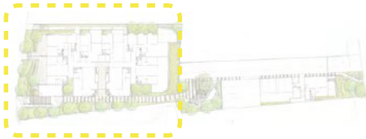
PARKIN STREET

01
02
03
04
05
06
07
08

LOCATION MAP



LEGEND

01 PROPOSED NEW TREES

02 CONCRETE TERRACING RETAINING WALLS

03 SEATING NODE IN COMPACTED SUMMERSTONE FINES

04 COASTAL AND NATIVE PLANTING MIXES

05 1M HIGH PRIVATE PLANTER

06 CREEPING PLANTING TO ARBOUR BY ARCHITECTS

07 FEATURE TILE PAVING - WARM TONES



142-144 PARKIN STREET

PREPARED FOR DMG ARCHITECTS

LANDSCAPE CONCEPT GROUND FLOOR

AUGUST 2022

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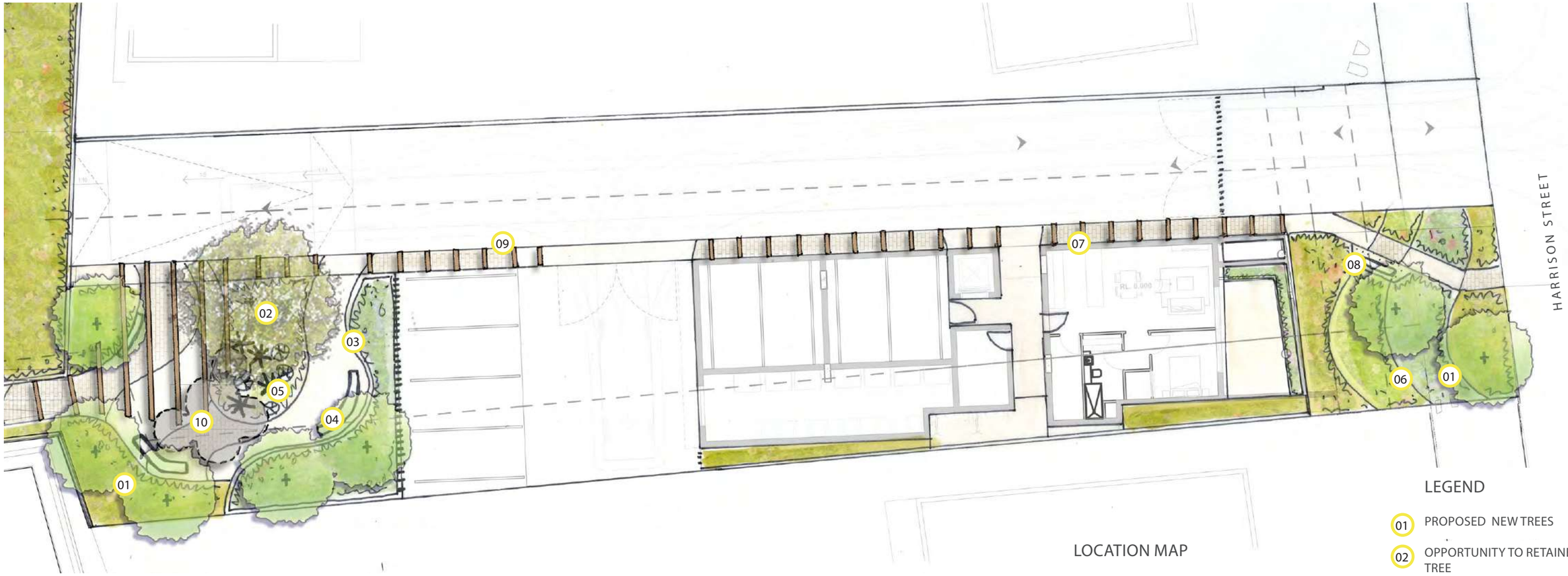
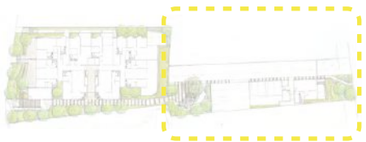


LOCATION MAP



LEGEND

01 PROPOSED NEW TREES

02 OPPORTUNITY TO RETAINED EXISTING TREE

03 0.5M HIGH CONCRETE PLANTER TO SCREEN PARKING BAYS

04 CONTEMPLATIVE SEATING BENCH

05 FEATURE COASTAL GARDEN WITH BOULDERS AND FEATURE SHURBS AND

06 COASTAL AND NATIVE PLANTING MIXES

07 ARBOUR BY ARCHITECTS

08 SEATING NODE IN COMPACTED SUMMERSTONE FINES

09 FEATURE TILE PAVING - WARM TONES

10 ARBOUR WITH FEATURE 'MANTRA RAY' ART ELEMENTS SHOWN DASHED AND INTEGRATED LIGHTING BY ARCHITECTS



89 HARRISON STREET

PREPARED FOR DMG ARCHITECTS

LANDSCAPE CONCEPT GROUND FLOOR

AUGUST 2022

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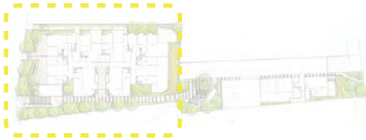
LOCATION MAP



LEGEND

01 PROPOSED NEW TREES

02 1M HIGH GARDEN BED WITH TREES AND CASCADING PLANTING

03 0.5M HIGH GARDEN BED TO ALLOW FOR OCEAN VIEWS

04 SUN DECK

05 SEMI-PRIVATE DINING

06 MOVABLE FURNITURE

07 HIGH BREAKFAST BENCH

08 BBQ FACILITIES

09 MOVABLE POT PLANTING

10 FEATURE TILE PAVING - WARM TONES

11 ARBOUR STRUCTURE WITH CREEPER PLANTING OVER











142-144 PARKIN STREET

PREPARED FOR DMG ARCHITECTS

LANDSCAPE CONCEPT LEVEL 5

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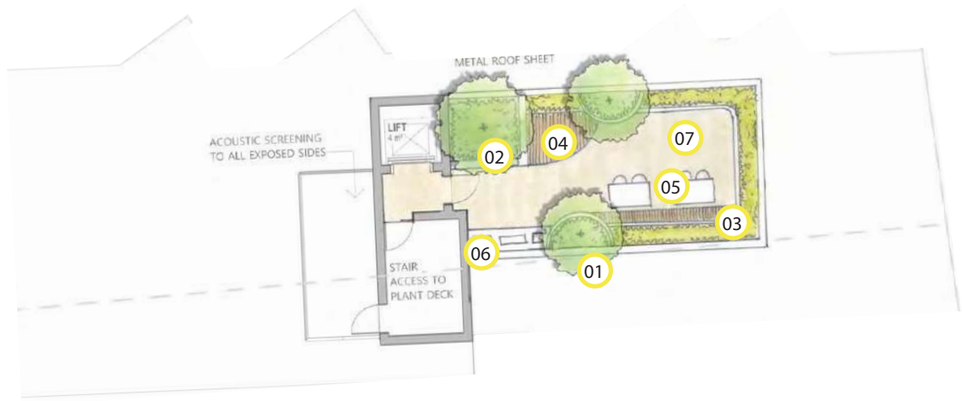


LEGEND

01 PROPOSED NEW TREES

02 1M HIGH GARDEN BED WITH TREE AND CASCADING PLANTING

03 IN-BUILT SEATING BENCH TO 0.5M HIGH GARDEN BED TO ALLOW FOR OCEAN VIEWS

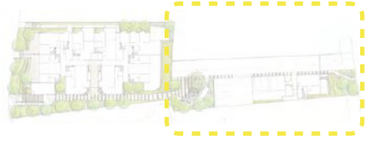
04 RAISED SUN DECK

05 MOVABLE FURNITURE

06 BBQ FACILITIES

07 FEATURE TILE PAVING - WARM TONES

LOCATION MAP









89 HARRISON STREET

PREPARED FOR DMG ARCHITECTS

LANDSCAPE CONCEPT LEVEL 3

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DESIGN WA COMPLIANCE ITEMS

ITEM 3.3A - TREE CANOPY & DEEP SOIL AREA

REQUIRED DEEP SOIL AREA: 220.9 SQ.M - BASED ON A SITE AREA OF 3156 SQ.M

PROPOSED DEEP SOIL AREA DOES NOT MEET THE MINIMUM REQUIRED PROVISION - REFER TABLES 01-02

REQUIRED TREE CANOPY AREA: 348 SQ.M - BASED ON A SITE AREA OF 3156 SQ.M

PROPOSED TREE CANOPY COVER EQUATES TO APPROX. 5 TIMES THE MINIMUM REQUIRED PROVISION - REFER TABLES 03-05

DEEP SOIL AREA & TREE CANOPY REQUIREMENTS - TABLE 01

THE DEVELOPMENT SEEKS TO RETAIN EXISTING TREES WITHIN THE ADJACENT STREETSCAPE, AND PROVIDE SIGNIFICANT TREE CANOPY THROUGH ALL LEVELS OF LANDSCAPE, INCLUDING EXTERNAL LANDSCAPE SPACES.

THE TABLE BELOW OUTLINES MINIMUM REQUIREMENTS FOR DEEP SOIL AREAS AS DEFINED IN DESIGNWA.

TABLE 01: DEEP SOIL ZONE REQUIREMENTS

	LOT AREA: 3156 SQ.M	MINIMUM REQUIREMENTS	PROJECT REQUIREMENT FOR PROVISION
WAPC DEEP SOIL AREA REQUIREMENTS	>1000 SQ.M	7% OF DEEP SOIL AREA ON SITE (220.9 SQ.M) AS 1 NO. EXISTING TREE RETAINED	PROVIDED DEEP SOIL AREA OF 368.3 SQ.M PROVIDED ADDITIONAL PLANTING ON STRUCTURE OF 449.9 SQ.M AS DEEP SOIL AREA (1M DEPTH)

LANDSCAPE AREA REQUIREMENTS - TABLE 02

THE DEVELOPMENT SEEKS TO EXCEED THE REQUIRED LANDSCAPE PROVISION FOR DEEP SOIL AREA AS DEFINED IN DESIGNWA THROUGH GENEROUSLY SCALED LANDSCAPE AREAS; ALLOWING SIGNIFICANT ROOTABLE DEEP SOIL AREAS ON STRUCTURE.

SOIL VOLUMES ARE CONSIDERED IN TREE PLACEMENT AND SELECTION OF TREE SPECIES.

THE TABLE BELOW SUMMARISES THE EXTENT OF LANDSCAPE AREAS, AND DEEP SOIL AREA OVER THE VARIOUS LANDSCAPE LEVELS.

TABLE 02: LANDSCAPE AREAS / DEEP SOIL AREAS

	DEEP SOIL AREA (IN GROUND)	PLANTING ON STRUCTURE (1M DEPTH) AS DEEP SOIL AREA	PLANTING ON STRUCTURE (LESS THAN 1 M DEPTH)	SOFT LANDSCAPE GARDEN AREA
GROUND FLOOR	368.3 SQ.M	361.6 SQ.M	0 SQ.M	729.9 SQ.M
LEVEL 3	-	7.7 SQ.M	9.3 SQ.M	17 SQ.M
LEVEL 5	-	80.6 SQ.M	17.5 SQ.M	98.1 SQ.M
TOTAL	368.3 SQ.M	449.9 SQ.M	26.8 SQ.M	845 SQ.M

DEEP SOIL ZONE & TREE CANOPY REQUIREMENTS - TABLES 03-05

THE DEVELOPMENT SEEKS TO RETAIN 1 NO. EXISTING TREE ON SITE AND PROVIDE SIGNIFICANT DEEP SOIL AREA, ROOTABLE SPACE, AND SOFT LANDSCAPE AREA THROUGH ALL LEVELS OF LANDSCAPE, INCLUDING EXTERNAL LANDSCAPE SPACES.

TABLE 03: TREE POT SIZES

SPECIES	POT SIZE	HEIGHT AT DAY ONE	MATURE HEIGHT
AGONIS FLEXUOSA	500L	4M	10M
BANKSIA INTEGRIFOLIA	200L	3M	10M
CUPANIOPSIS ANACARDIOIDES 'TUCKEROO'	200L	3M	6M
METROSIDEROS EXCELSA 'NZ CHRISTMAS TREE'	500L	4M	6M
TRISTANIOPSIS LAURINA 'LUSCIOUS WATER GUM'	200L	4M	7M
WATERHOUSEA FLORIBUNDA 'WEEPING LILLY PILLY'	200L	3M	6M
MELALEUCA LANCEOLATA	200L	3M	6M
CITRUS 'EUREKA LEMON'	100L	2M	5M
CITRUS 'TAHITIAN LIME'	100L	2M	4M

THE TABLE BELOW OUTLINES MINIMUM REQUIREMENTS FOR TREE CANOPY COVER AS DEFINED IN DESIGNWA.

TABLE 04: TREE CANOPY REQUIREMENTS

	LOT AREA: 3156 SQ.M	MINIMUM REQUIREMENTS	PROJECT REQUIREMENT FOR PROVISION
WAPC TREE CANOPY REQUIREMENTS	>1000 SQ.M	5 LARGE TREES & 5 MEDIUM TREES (OR SMALL TREES TO SUIT AREA)	MINIMUM OF 348 SQ.M OF TREE CANOPY COVER WHICH EQUATES TO APPROX. 3.5% CANOPY COVER OF THE DEVELOPMENT SITE AREA

TABLE 05: TREE CANOPY COVER

	SMALL TREES: 2M DIAMETER 3.2SQ.M CANOPY COVER AT MATURITY	MEDIUM TREES: 5M DIAMETER 19.6 SQ.M CANOPY COVER AT MATURITY	LARGE TREES: 8M DIAMETER 50 SQ.M CANOPY COVER AT MATURITY	TOTAL CANOPY COVER (NOT INCLUDING EXISTING TREES)
GROUND FLOOR	7	14	5	546.8 SQ.M
LEVEL 3	2	5	-	104.4 SQ.M
LEVEL 5	3	-	-	9.6 SQ.M
TOTAL	38.4 SQ.M CANOPY COVER AT MATURITY	372.4 SQ.M CANOPY COVER AT MATURITY	250 SQ.M CANOPY COVER AT MATURITY	660.8 SQ.M PROPOSED TREE CANOPY COVER

IRRIGATION REQUIREMENTS

A FULLY AUTOMATIC IRRIGATION SYSTEM WILL BE INSTALLED FOR THE 89 HARRISON STREET, ROCKINGHAM, PROJECT. THE SCOPE WILL INCLUDE:
- IRRIGATION TO ALL LANDSCAPE AREAS
- MOISTURE SENSORS THROUGHOUT, TO ENSURE WATER USE IS MINIMISED
- USE OF LOW WATER USE EMITTERS TO ENSURE ONLY SUFFICIENT WATER IS PROVIDED TO IRRIGATE PLANTING AREAS
- IN-LINE FERTILISATION UNIT TO ENSURE FERTILISING AND MOISTURE RETENTION IS CONTROLLED
- USE OF POP - UP FLOOD BUBBLERS TO SUIT SIZE OF GARDEN BEDS TO ENSURE ANY OVER-SPRAY AND WASTAGE IS MITIGATED, AND;
- A DETAILED DESIGN AND SPECIFICATION WILL BE PROVIDED AT BUILDING LICENSE APPLICATION STAGE.

89 HARRISON STREET

PREPARED FOR DMG ARCHITECTS

DESIGN WA COMPLIANCE ITEMS

AUGUST 2022

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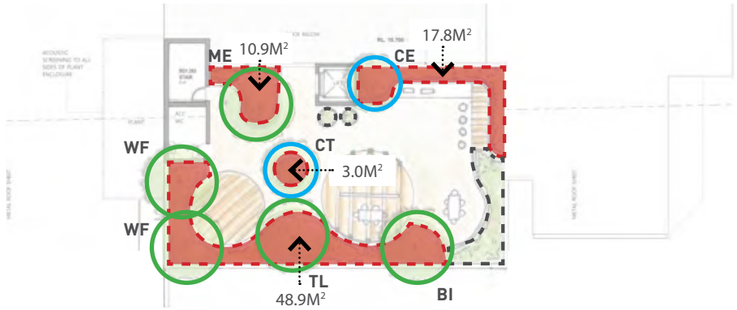
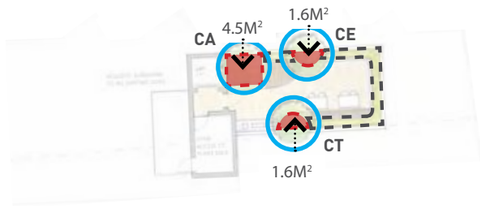
GROUND LEVEL



LEVEL C



LEVEL 3



LEGEND

DEEP SOIL AREAS

- DEEP SOIL AREA - IN GROUND PLANTING
- ON STRUCTURE PLANTING (1M DEPTH)
- ON STRUCTURE PLANTING (LESS THAN 1M DEPTH)

TREE CANOPY

- LARGE TREES- 8M+ DIAMETER
- MEDIUM TREES- 5M DIAMETER
- SMALL TREES- 2M DIAMETER

SUGGESTED TREE SPECIES



AGONIS FLEXUOSA



BANKSIA INTEGRIFOLIA



CUPANIOPSIS ANACARDIOIDES 'TUCKEROO'



METROSIDEROS EXCELSA



TRISTANIOPSIS LAURINA



WATERHOUSEA FLORIBUNDA



MELALEUCA LANCEOLATA



CITRUS 'EUREKA LEMON'



CITRUS 'TAHITIAN LIME'

89 HARRISON STREET

PREPARED FOR DMG ARCHITECTS

DESIGN WA COMPLIANCE ITEMS - DSA BREAKDOWN & TREE SPECIES

AUGUST 2022

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ACOUSTIC REPORT: DEVELOPMENT APPLICATION

Lot 62 (#89) Harrison Street, Rockingham

Reference: 21086626-02 Acoustic DA

Prepared for:
Aria Project Development C/o- DMG Architecture

Report: 21116864-01

Lloyd George Acoustics Pty Ltd

ABN: 79 125 812 544

PO Box 717
Hillarys WA 6923

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14-Dec-21	-	Issued to Client as Draft	Daryl Thompson	-

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EXECUTIVE SUMMARY

It is proposed to construct a multi-storey residential development across an amalgamation of Lot 62 (#89) Harrison Street, and Lots 94 (#144) and 95 (#142) Parkin Street in Rockingham - refer *Figure 1-1*. The development includes:

- Ground floor - car parking, lobby and the like;
- Levels 1 – 4 – 12 x 1-Bed and 2-Bed apartments and public lift lobby;
- Level 5 – Outdoor terrace area and two individual 3-Bed penthouse apartments;

This report addresses the main acoustic aspects suitable for DA Stage and as summarised below:

ENVIRONMENTAL NOISE EMISSIONS

Environmental noise in Western Australia is governed by the *Environmental Protection Act 1986*, through the *Environmental Protection (Noise) Regulations 1997* (EPNR). Surrounding noise sensitive premises (NSPs) are determined to have assigned noise levels (ANLs) of:

47 dB L_{A10}	7.00am – 7.00pm Monday - Saturday
42 dB L_{A10}	9.00am – 10.00pm Sundays/Public Holidays
	7.00pm – 10.00pm Monday – Saturday
37 dB L_{A10}	10.00pm – 7.00am Monday - Saturday
	10.00pm – 9.00am Sundays/Public Holidays

The main noise source from the proposed development will be from outdoor air-conditioning units. Based on preliminary findings, this plant will require consideration of the following items to comply with the ANLs at the nearest Noise Sensitive Premises (NSPs) 1 – 4 as identified herein:

- Where AC units are to be screened from view from street level, balcony-located CUs are to be installed behind ventilated enclosures using close-blade louvers;
- Internal lining with acoustically absorbent material;
- Plant must be selected with “night-mode” operation as integral functionality, programmed to operate during night hours of 10PM – 7AM.
- All plant is to be suitably vibration isolated from the structure; and,

As the project progresses, the mechanical plant is to be reviewed and assessed by a suitably qualified acoustical consultant, being a member firm of the Association of Australasian Acoustical Consultants (AAAC).

EXTERNAL (ROAD TRAFFIC) NOISE IMPACTS

The development is outside of the trigger distance areas associated with State-recognised road transport infrastructure at Read Street and Patterson Street, hence an assessment against State Planning Policy 5.4 is not strictly required. In this instance, ambient noise assessment via noise survey has been undertaken at the site identifying primary noise source contributions on Parkin Street as road traffic noise

A general assessment has been undertaken adopting the State Planning Policy assessment methodology and criteria of Outdoor Noise Criteria of $L_{Aeq(Day)}$ <55dB(A); And where exceeded. with *Indoor Noise Criteria* targets of 40 dB $L_{Aeq(Day)}$ and 35 dB $L_{Aeq(Night)}$ in Living Rooms and Bedrooms respectively.

Processing noise measurement data predicts a range of Daytime noise levels across the building:

- Level 5 Outdoor Roof Terrace, and at most areas at the North Building facade(s) are below 55dB $L_{Aeq(Day)}$ due to building screening and geometry;
- Levels of up to 61dB $L_{Aeq(Day)}$ are anticipated at the most exposed façade of the development notably at the Parkin Street façade of the South Building.

61dB(A) is not an onerous external level. In all cases, the minimum recommended glazing performance is $R_w + C_{tr}$ 26, requiring minimum 6mm thick glass in fixed/awning style windows and same in sliding doors fitted with acoustic seals.

Note that for all apartment developments generally, this specification is recommended due to close proximity living. Surrounding wall construction is to be rated at minimum Rw+Ctr 45dB – construction methodology to be confirmed during Detailed Design.

BCA PART F5 COMPLIANCE

For walls, where a *sole occupancy unit* (*SOU*) adjoins another *SOU*, the BCA requires $R_w + C_{tr}$ 50 and in addition, discontinuous construction is mandatory between habitable rooms and wet areas (including kitchens). For this project, it is recommended that all party walls be of discontinuous construction for a higher than minimum performance. Where an *SOU* adjoins a public corridor, the BCA requires R_w 50. Where an *SOU* adjoins a lift/stairs, the same applies as well as discontinuous construction.

The acoustic requirement for floors are the same in all cases, being $R_w + C_{tr} \geq 50$ (airborne) and $L_{n,w} \leq 62$ (impact), noting the impact requirement only applies when received in an *SOU*. Carpeted floors are to be encouraged for their superior impact performance. Where modern aesthetics or market expectations drive the need for hard floors, these shall incorporate an impact isolation mat and insulated dropped ceilings.

Minimum acoustic wall performance requirements are provided in wall mark ups in *Appendix B*.

Acceptable forms of construction are provided in the Code and are adequate for this early stage of the project. As the design progresses, the final construction will be reviewed to ensure compliance is achieved.

FUTURE WORKS

The project has been assessed based upon the available preliminary design details and can comply with the applicable Standards and Codes. With the project being at DA Stage, detailed design has not occurred and therefore it is expected that the elements in this report will be reviewed as the project progresses.

1 INTRODUCTION

It is proposed to construct a multi-storey residential development across an amalgamation of Lot 62 (#89) Harrison Street, and Lots 94 (#144) and 95 (#142) Parkin Street in Rockingham - refer *Figure 1-1*. The development includes:

- Ground floor - car parking, lobby and the like;
- Levels 1 – 4 – 12 x 1-Bed and 2-Bed apartments and public lift lobby;
- Level 5 – Outdoor terrace area and two individual 3-Bed penthouse apartments;



Figure 1-1 Project Locality

With regard to acoustics, the following will need to be addressed as the design progresses:

- *Environmental Protection (Noise) Regulations 1997* relating to noise emissions from this project to neighbouring developments;
- *State Planning Policy No. 5.4 Road and Rail Noise* for areas within the trigger distances of this Policy; and
- *National Construction Code – Building Code of Australia*. The Code provides the minimum standards for noise transfer between apartments.

With the project only at DA Stage, much of the design aspect is yet to occur. With regard to environmental noise, assumptions are made for typical air-conditioning units. For compliance with NCC, the focus is on the criteria with generic advice given for the more significant aspects. The assessment with regard to road traffic noise is the most advanced since this can be more readily quantified at this early stage.

Plans of the proposed development are provided in *Appendix A*.

Appendix C contains a description of some of the terminology used throughout this report.

2 CRITERIA

Each of the relevant criteria are provided in the following sections. Compliance with these (*Section 2.1* and *Section 2.3*) will be worked through during detailed design.

2.1 Environmental Protection (Noise) Regulations 1997

Environmental noise in Western Australia is governed by the *Environmental Protection Act 1986*, through the *Environmental Protection (Noise) Regulations 1997* (EPNR). The regulations that will be applicable to this project are as follows:

- Mechanical plant is to comply with regulations 7, 8 & 9 at neighbouring properties and noise sensitive parts of this development;
- Waste and General Cleaning Activities to comply with regulation 14A; and
- Noise during construction is to comply with regulation 13.

Each of these regulations are explained in *Section 2.1.1* and *Section 2.1.3*.

2.1.1 Regulations 7, 8 & 9

Regulation 7 defines the prescribed standard for noise emissions as follows:

"7. (1) Noise emitted from any premises or public place when received at other premises –

(a) Must not cause or significantly contribute to, a level of noise which exceeds the assigned level in respect of noise received at premises of that kind; and

(b) Must be free of –

i. Tonality;
ii. Impulsiveness; and
iii. Modulation".

A *"…noise emission is taken to significantly contribute to a level of noise if the noise emission exceeds a value which is 5 dB below the assigned level…"*

Tonality, impulsiveness and modulation are defined in Regulation 9. Noise is to be taken to be free of these characteristics if:

(a) The characteristics cannot be reasonably and practicably removed by techniques other than attenuating the overall level of noise emission; and

(b) The noise emission complies with the standard prescribed under regulation 7 after the adjustments of Table 2-1 are made to the noise emission as measured at the point of reception.

Table 2-1 EPNR Adjustments Where Characteristics Cannot Be Removed

Where Noise Emission is Not Music			Where Noise Emission is Music	
Tonality	Modulation	Impulsiveness	No Impulsiveness	Impulsiveness
+ 5 dB	+ 5 dB	+ 10 dB	+ 10 dB	+ 15 dB

Note: The above are cumulative to a maximum of 15dB.

The baseline assigned levels (prescribed standards) are specified in Regulation 8 and are shown in *Table 2-2*. The Assigned Noise Level (ANL) varies depending on a premises' proximity to commercial and industrial zoned land and significant roads as described in *Section 2.1.1.1*.

Table 2-2 EPNR Baseline Assigned Noise Levels

Premises Receiving Noise	Time Of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
Noise sensitive premises: highly sensitive area[1]	0700 to 1900 hours Monday to Saturday (Day)	45 + influencing factor	55 + influencing factor	65 + influencing factor
	0900 to 1900 hours Sunday and public holidays (Sunday)	40 + influencing factor	50 + influencing factor	65 + influencing factor
	1900 to 2200 hours all days (Evening)	40 + influencing factor	50 + influencing factor	55 + influencing factor
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays (Night)	35 + influencing factor	45 + influencing factor	55 + influencing factor

1. ***highly sensitive area*** means that area (if any) of noise sensitive premises comprising —
   (a) a building, or a part of a building, on the premises that is used for a noise sensitive purpose; and
   (b) any other part of the premises within 15 metres of that building or that part of the building.

2.1.1.1 Calculation of Influencing Factor

Where a noise sensitive premises (NSP) is near significant roads or commercial or industrial zoned land, there is to be an expectation of higher ambient noise levels. The Regulations allow for this by applying an influencing factor (IF) to the baseline ANL of *Table 2-2*. The calculation of the IF is undertaken using the equation provided on the following page and is to be determined as per Schedule 3 Part 2.

The process involves drawing two concentric circles having 100 metre (inner circle) and 450 metre (outer circle) radii, centred on the receiving NSP. The percentage of commercial and industrial land are then calculated. Where land is categorised with mixed use permitted, the land type that results in the highest IF is to be used in the determination of the IF.

A transport factor (TF) is then also applied where:

- A major road is estimated to have an average daily traffic count of more than 15,000 vehicles per day (vpd). Where the road reserve is within the inner circle, the TF is + 6 dB;
- Where the road reserve of a major road is within the outer circle, the TF is + 2 dB;
- A secondary road is estimated to have an average daily traffic count of 6,000 to 15,000 vpd. Where the road reserve is within the inner circle, the TF is + 2 dB

2.1.1.2 Identification of Surrounding NSPs

The nearest surrounding NSPs (refer *Figure 2-1*) are:

- NSP 1 - 87 Harrison St – existing single-storey residence;
- NSP 2 - 91 Harrison St – existing double-storey residence;
- NSP 3 - 146 Parkin St – existing single-storey residence;
- NSP 4 - 140 Parkin St – existing single-storey residence;

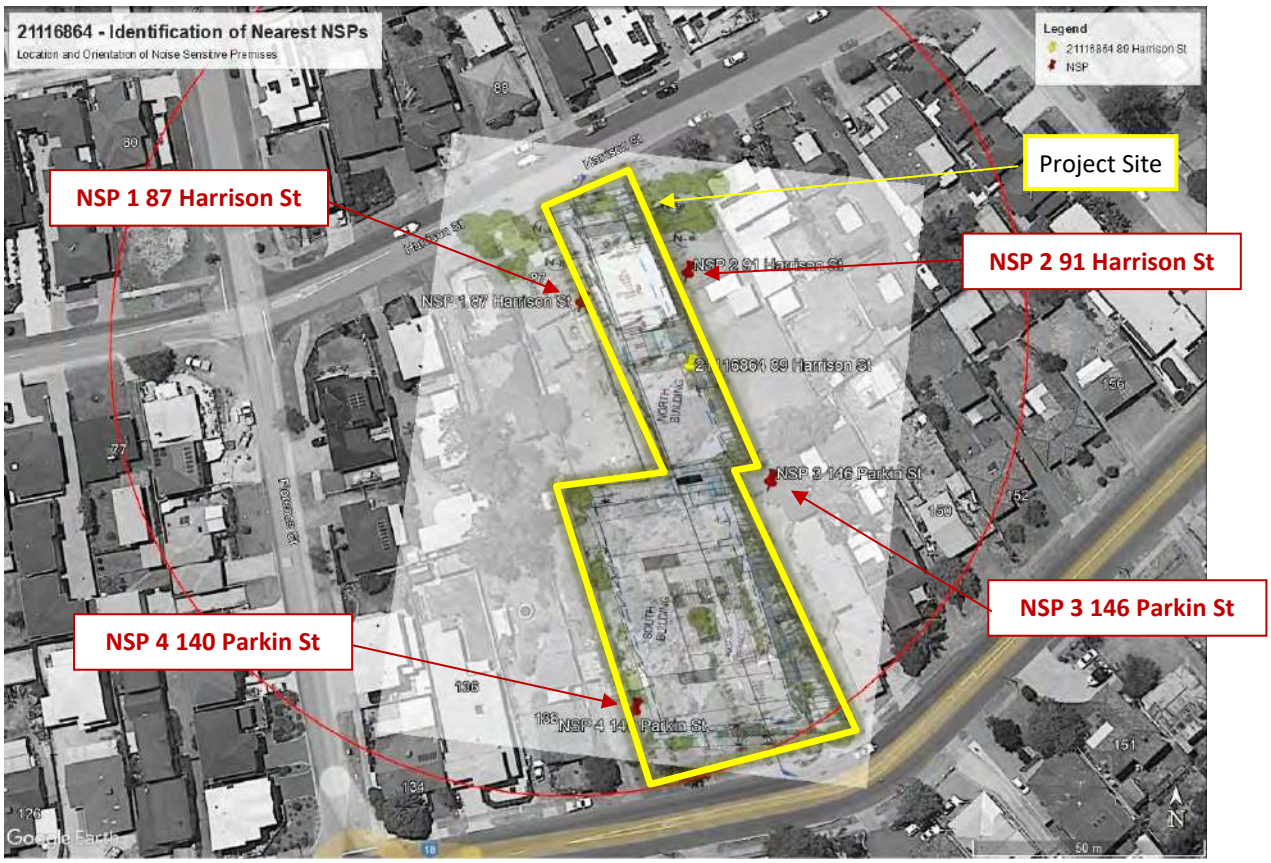


Figure 2-1 Neighbouring Properties (Source: PlanWA)

Concentric circles were drawn around each NSP, with *Figure 2-2* showing the zoning for NSP 1 87 Harrison St, with the calculated percentages shown in *Table 2-3*. The other NSPs result in a similar outcome with minor variations due to extent of Outer calculation radius and resulting incorporated Commercial land use at the town centre.

Table 2-3 Influencing Factor Calculation

Description	Within 100 metre Radius	Within 450 metre Radius	Total
Industrial Land	0 %	0 %	0 dB
Commercial Land	0 %	8 %	0.40 dB

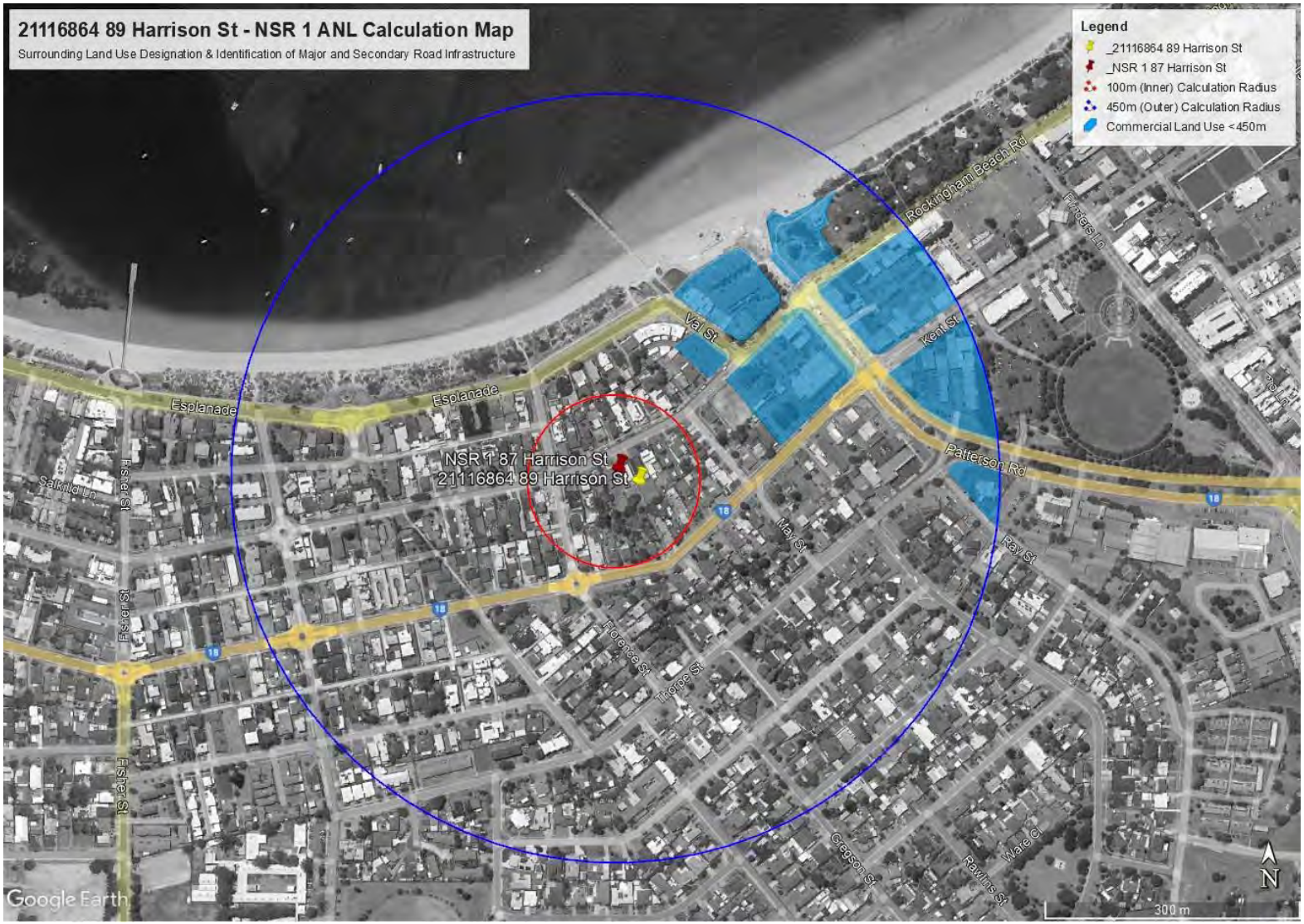


Figure 2-2 Land Use Identification Around NSP 1

2.1.1.3 Roads Surrounding NSP

With reference to Main Roads WA Traffic Map, the most recent count for Parkin St in the vicinity of the NSPs is 6,440 vpd in 2021/22 (east of Safety Bay Rd). NSPs are within 100m of this "Secondary" road and therefore a TF of 2 dB is applicable.

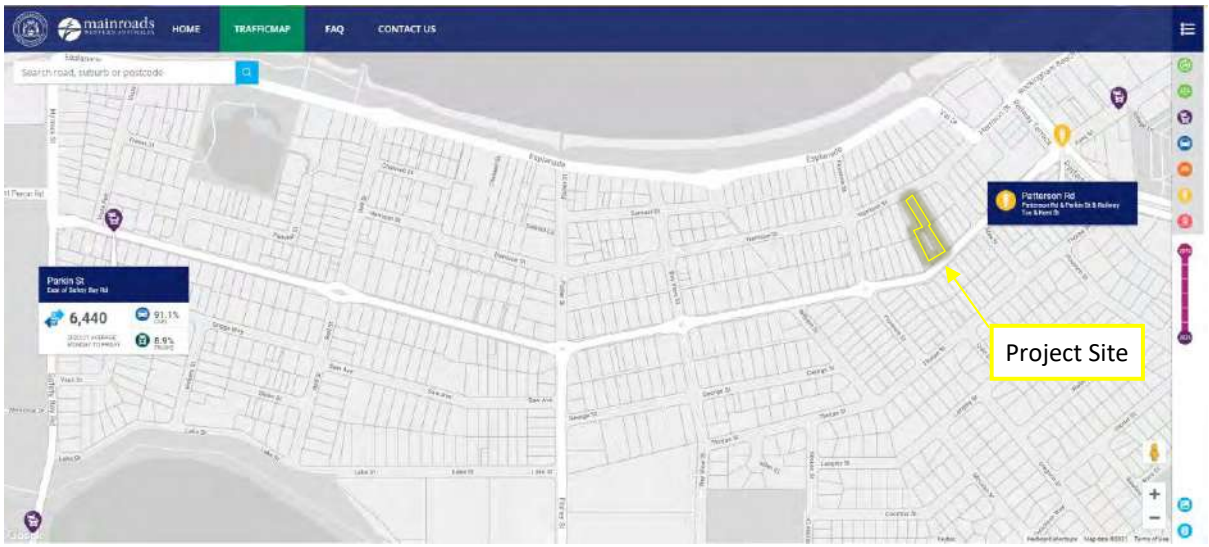


Figure 2-3 Road Traffic Noise Data (Source: MRWA Traffic map)

2.1.1.4 Resulting Assigned Noise Levels

Combining the zoning IF of *Table 2-3* and TF if *Section 2.1.1.3*, *Table 2-4* provides the ANLs.

Table 2-4 EPNR Assigned Noise Levels

Premises Receiving Noise	Time Of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
All NSPs Noise sensitive premises: highly sensitive area[1]	0700 to 1900 hours Monday to Saturday (Day)	47	57	67
	0900 to 1900 hours Sunday and public holidays (Sunday)	42	52	67
	1900 to 2200 hours all days (Evening)	42	52	57
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays (Night)	37	47	57

1. ***highly sensitive area*** means that area (if any) of noise sensitive premises comprising —
   (a) a building, or a part of a building, on the premises that is used for a noise sensitive purpose; and
   (b) any other part of the premises within 15 metres of that building or that part of the building.

It should be noted the assigned noise levels above apply outside the NSP and at a point at least 3 metres away from any substantial reflecting surfaces. Where this was not possible to be achieved due to the close proximity of existing buildings and/or fences, the noise emissions were assessed at a point within 1 metre from building facades and a -2 dB adjustment was made to the predicted noise levels to account for reflected noise.

2.1.1.5 Representative Assessment Period

It is noted the ANLs are statistical levels and therefore the period over which they are determined is important. The Regulations define the Representative Assessment Period (RAP) as *a period of time of not less than 15 minutes, and not exceeding 4 hours*, which is determined by an *inspector* or *authorised person* to be appropriate for the assessment of a noise emission, having regard to the type and nature of the noise emission.

An *inspector* or *authorised person* is a person appointed under Sections 87 & 88 of the *Environmental Protection Act 1986* and include Local Government Environmental Health Officers and Officers from the Department of Environment Regulation. Acoustic consultants or other environmental consultants are not appointed as an *inspector* or *authorised person*. Therefore, whilst this assessment is based on a 4 hour RAP, which is assumed to be appropriate given the nature of the operations, this is to be used for guidance only.

2.1.2 Application of Regulation 14A

Regulation 14A provides requirements for such activities as the collection of waste, landscaped area maintenance and car park cleaning. Such activities can also be exempt from having to comply with regulation 7, provided they are undertaken in accordance with regulation 14A(2) as follows:

- during daytime hours, defined as:
  - 7:00am to 7:00pm Monday to Saturday (excluding public holiday), or
  - 9:00am to 7:00pm on a Sunday or public holiday
- in the quietest reasonable and practicable manner and using the quietest equipment reasonably available.

In the case where specified works are to be undertaken outside daytime hours and their noise emissions are likely not to comply with regulation 7, the works also need to be carried out according to a Noise Management Plan which has been approved by the local government authority CEO.

2.1.3 Application of Regulation 13

Construction noise must comply with regulation 13, which states the following:

Regulation 7 does not apply to … construction work carried out between 7:00am *and* 7:00pm *on any day which is not a Sunday or public holiday if the occupier of the premises … shows that –*

a) The construction work was carried out in accordance with control of environmental noise practices set out in section 6 of AS 2436-1981 Guide to Noise Control on Construction, Maintenance and Demolition Sites;

b) The equipment used on the premises was the quietest reasonably available; and

c) If the occupier was required to prepare a noise management plan … in respect of the construction site –

i. The noise management plan was prepared and given in accordance with the requirement, and approved by the Chief Executive Officer; and

ii. The construction work was carried out in accordance with the management plan.

Regulation 7 does not apply to … construction work carried out other than between the [above] hours if the occupier of the premises … shows that –

a) *The construction work was carried out in accordance with control of environmental noise practices set out in section 6 of AS 2436-1981 Guide to Noise Control on Construction, Maintenance and Demolition Sites;*

b) *The equipment used on the premises was the quietest reasonably available;*

c) *The construction work was carried out in accordance with a noise management plan in respect of the construction site –*

   i. *Prepared and given to the Chief Executive Officer not later than 7 days before the construction work commenced; and*

   ii. *Approved by the Chief Executive Officer;*

d) *At least 24 hours before the construction work commenced, the occupier of the construction site gave written notice of the proposed construction work to the occupiers of all premises at which noise emissions received were likely to fail to comply with the standard prescribed under regulation 7; and*

e) *It was reasonably necessary for the construction work to be carried out at that time.*

2.2 State Planning Policy 5.4 – Road Traffic Noise

Intrusion from external road traffic noise is assessed against the requirements of *State Planning Policy No. 5.4 Road and Rail Noise* (hereafter referred to as SPP 5.4) produced by the Western Australian Planning Commission (WAPC). The objectives of SPP 5.4 are to:

- Protect the community from unreasonable levels of transport noise;
- Protect strategic and other significant freight transport corridors from incompatible urban encroachment;
- Ensure transport infrastructure and land-use can mutually exist within urban corridors;
- Ensure that noise impacts are addressed as early as possible in the planning process; and
- Encourage best practice noise mitigation design and construction standards

Table 2-5 sets out noise targets that are to be achieved by proposals under which SPP 5.4 applies. Where the targets are exceeded, an assessment is required to determine the likely level of transport noise and management/mitigation required.

Table 2-5 Noise Targets for Noise-Sensitive Land-Use

Outdoor Noise Target		Indoor Noise Target	
55 dB $L_{Aeq(Day)}$	50 dB $L_{Aeq(Night)}$	40 dB $L_{Aeq(Day)}$ (Living and Work Areas)	35 dB $L_{Aeq(Night)}$ (Bedrooms)

Notes:

- Day period is from 6am to 10pm and night period from 10pm to 6am.
- The outdoor noise target is to be measured at 1-metre from the most exposed, habitable[1] facade of the noise sensitive building.
- Outdoor targets are to be met at all outdoor areas as far as is reasonable and practicable to do so using the various noise mitigation measures outlined in the Guidelines.

The application of SPP 5.4 is to consider anticipated traffic volumes for the next 20 years from when the noise assessment is undertaken.

In the application of the noise targets, the objective is to achieve:

- indoor noise levels specified in *Table 2-5* in noise-sensitive areas (e.g. bedrooms and living rooms of apartments); and
- a reasonable degree of acoustic amenity for outdoor living areas on each residential lot.

SPP 5.4 provides trigger distances which are shown spatially in *Figure 2-3*. Note that the development is outside of the trigger distance areas associated with State-recognised road transport infrastructure at Read Street and Patterson Street, hence an assessment against SPP 5.4 is not strictly required.

However in this instance, ambient noise assessment via noise survey has been undertaken at the site identifying the primary noise contributions on Parkin Street as road traffic noise, hence a general assessment has been undertaken adopting the State Planning Policy requirements.

[1] A habitable room is defined in State Planning Policy 3.1 as a room used for normal domestic activities that includes a bedroom, living room, lounge room, music room, sitting room, television room, kitchen, dining room, sewing room, study, playroom, sunroom, gymnasium, fully enclosed swimming pool or patio.



Figure 2-4 Site Locality in Relation to Road and Rail (Source: PlanWA)

2.3 Building Code of Australia (BCA)

It is a requirement under the *National Construction Code* (NCC) for sound transmission and insulation to be considered. In this case, the relevant volume of the NCC is Volume One of the *Building Code of Australia, Class 2 to Class 9 Buildings* (BCA) and specifically Part F5.

The Objective of Part F5 as stated in *Guide to NCC Volume One* is to:

"…safeguard occupants from illness or loss of amenity as a result of undue sound being transmitted –

a) Between adjoining sole-occupancy units; and

b) From common spaces to sole-occupancy units; and

c) From parts of different classifications to sole-occupancy units."

The BCA separates the performance requirements into floors and walls for Class 2 and 3 buildings as follows:

FP5.1

Floors separating –

a) sole-occupancy units: or

b) a sole occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby, or the like, or a part of a different classification,

must provide insulation against the transmission of airborne and impact generated sound sufficient to prevent illness or loss of amenity to the occupants.

FP5.2

Walls separating sole-occupancy units or a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby, or the like, or parts of a different classification, must provide insulation against the transmission of –

a) airborne sound; and

b) impact generated sound, if the wall is separating a bathroom, sanitary compartment, laundry or kitchen in one sole-occupancy unit from a habitable room (other than a kitchen) in an adjoining unit,

sufficient to prevent illness or loss of amenity to the occupants.

FP5.3

The required sound insulation of a floor or a wall must not be compromised by -

a) The incorporation or penetration of a pipe or other service element; or

b) A door assembly.

In order to satisfy FP5.1 to FP5.3, building elements are to satisfy the minimum acoustic performances nominated in *Table 2-6*, being a summary of the Deemed-to-Satisfy Provisions provided in F5.1 to F5.7.

Table 2-6 BCA Deemed-to-Satisfy Provisions

Partition	Deemed-to-Satisfy Provisions	
	Laboratory	On-Site
Floors (F5.4a)		
Separating SOU's or SOU from plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification.	$R_w + C_{tr} \geq 50$ $L_{n,w} \leq 62$	$D_{nT,w} + C_{tr} \geq 45$ $L_{nT,w} \leq 62$
Walls (F5.5a)		
Separating SOU's (Habitable to Habitable)	$R_w + C_{tr} \geq 50$	$D_{nT,w} + C_{tr} \geq 45$
Separating SOU's (Habitable to bathroom, sanitary compartment, laundry or kitchen)	$R_w + C_{tr} \geq 50$ & D.C.	$D_{nT,w} + C_{tr} \geq 45$
Separating SOU to Plant room or lift shaft	$R_w \geq 50$ & D.C.	$D_{nT,w} \geq 45$
Separating SOU to Stairway, public corridor, public lobby, or parts of a different classification	$R_w \geq 50$	$D_{nT,w} \geq 45$
Doors (F5.5b)		
Separating SOU to Stairway, public corridor, public lobby or the like.	$R_w \geq 30$	$D_{nT,w} \geq 25$
Services (F5.6)		
SOU (Habitable) to duct, soil, waste, water supply or storm water (not associated with the SOU)	$R_w + C_{tr} \geq 40$	N/A
SOU (Non-Habitable) to duct, soil, waste, water supply or storm water (not associated with the SOU)	$R_w + C_{tr} \geq 25$	N/A

Notes:
SOU – Sole Occupancy Unit
D.C. Discontinuous Construction

2.4 Additional Criteria: Association of Australasian Acoustical Consultants (AAAC)

The Association of Australasian Acoustical Consultants (AAAC) *Guideline for Apartment and Townhouse Acoustic Rating* (Version 1.0) was developed to provide a tool to determine an accepted, or expected, acoustical result related to residential developments, since it was identified that simply satisfying the BCA would not satisfy all purchasers (e.g. those of 'high-end' or luxury apartments). The values relevant to the BCA are provided in *Table 2-7*.

Table 2-7 AAAC Summary of Star Rating

Separating Element	Acoustic Performance				
	2 Star	3 Star	4 Star	5 Star	6 Star
Airborne Sound Insulation for Walls and Floors					
Between Separate Tenancies, $D_{nT,w} + C_{tr} \geq$	35	40	45	50	55
Between a Lobby/Corridor and Bedroom, $D_{nT,w} + C_{tr} \geq$	30	40	40	45	50
Between a Lobby/Corridor and Living Area, $D_{nT,w} + C_{tr} \geq$	25	40	40	40	45
Corridor, Foyer to Living Area via Door(s) , $D_{nT,w} + C_{tr} \geq$	20	25	30	35	40
Impact Isolation of Floors					
Between Tenancies, $L_{nt,w} \leq$	65	55	50	45	40
Between Other Spaces and Tenancies, $L_{nt,w} \leq$	65	55	50	45	40
Impact Isolation of Walls					
Between Tenancies	Not required	Required	Required	Required	Required
Between Tenancies and Common Areas	Not required	Not required	Not required	Required	Required

Note: R_w (laboratory) is considered to be 5 dB higher than $D_{nT,w}$ (field) and $L_{n,w}$ (laboratory) is considered equivalent to $L_{nT,w}$ (field).

With regards to party floors, the NCC minimum requirement relates to 4 Star for Airborne performance and 2 Star for Impact performance. The poor impact performance rating aligns with the general opinion of AAAC member firms that $L_{n,w}$ 62 is an inadequate standard, even for budget apartments and a more appropriate minimum standard is considered to be $L_{n,w}$ 55 (3 Star).

With regards to party walls, the NCC minimum requirement relates to 4 Star for Airborne performance. As impact isolation is not required for all party walls, those where it is not required would rate as 2 Star. Once discontinuous construction is provided, this then improves to 6 Star performance.

3 ENVIRONMENTAL NOISE

3.1 Identification of Sources

As the project is in its early stages, details of the mechanical plant are unknown, therefore noise from AC and anticipated building services plant were modelled based on file data for similar projects. AC is currently understood to be as 2 x nominated plant enclosures at 5th Floor Level on the South Building, as identified in Figure 3-1.

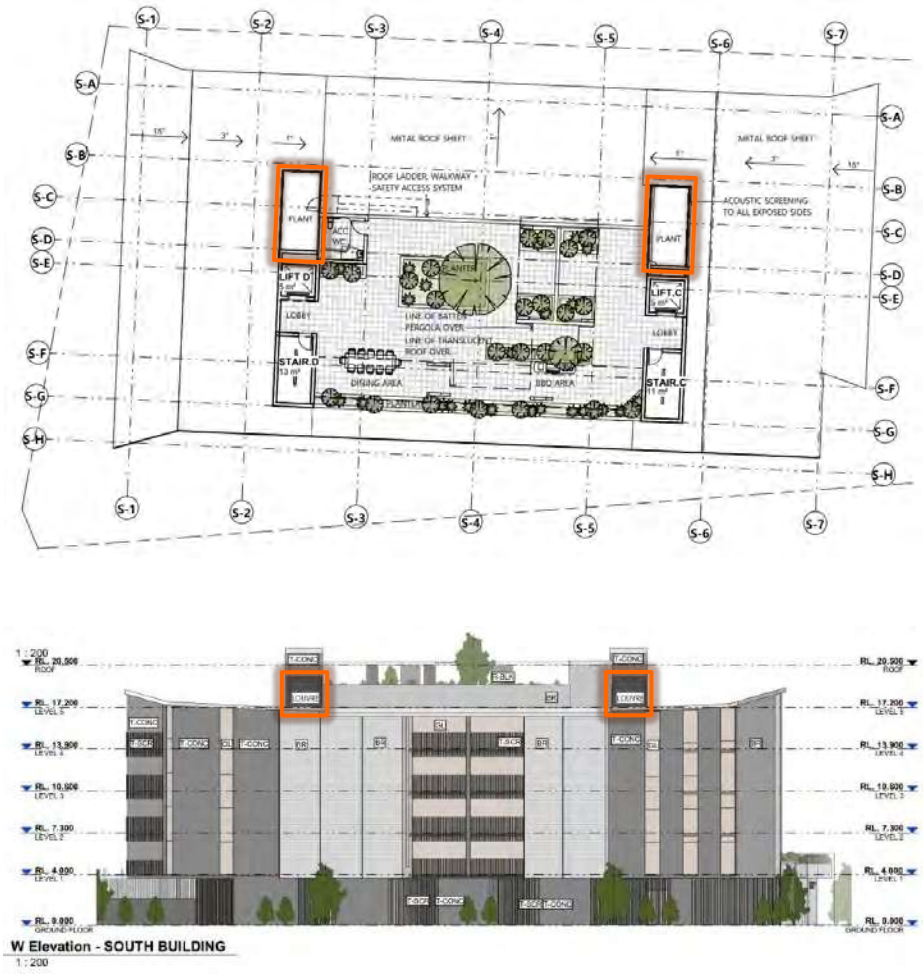


Figure 3-1 Identified Plant Enclosure Areas – South Building

Remainder AC plant for North building is assumed to be on individual balconies

The modelling methodology and results are presented in the following sections. The software used was *SoundPLAN 8.2* with the ISO 9613 (ISO 17534-3 improved method) algorithms selected. These algorithms have been selected as they include the influence of wind. Input data required in the model are:

- Meteorological Information;
- Topographical data;
- Ground Absorption; and
- Source sound power levels.

3.2 Meteorological Information

Meteorological information utilised is provided in *Table 3-1* and is considered to represent worst-case conditions for noise propagation. At wind speeds greater than those shown, sound propagation may be further enhanced, however background noise from the wind itself and from local vegetation is likely to be elevated and dominate the ambient noise levels.

Table 3-1 Modelling Meteorological Conditions

Parameter	Night (1900-0700)
Temperature (°C)	15
Humidity (%)	50
Wind Speed (m/s)	Up to 5
Wind Direction*	All

It is generally considered that compliance with the assigned noise levels needs to be demonstrated for 98% of the time, during the day and night periods, for the month of the year in which the worst-case weather conditions prevail. In most cases, the above conditions occur for more than 2% of the time and therefore must be satisfied.

3.3 Topographical Data

Topographical data was based on that publicly available from *Google* in the form of spot heights. This was combined with the plans of the proposed building to create a 3D noise model – refer *Figure 3-1*.

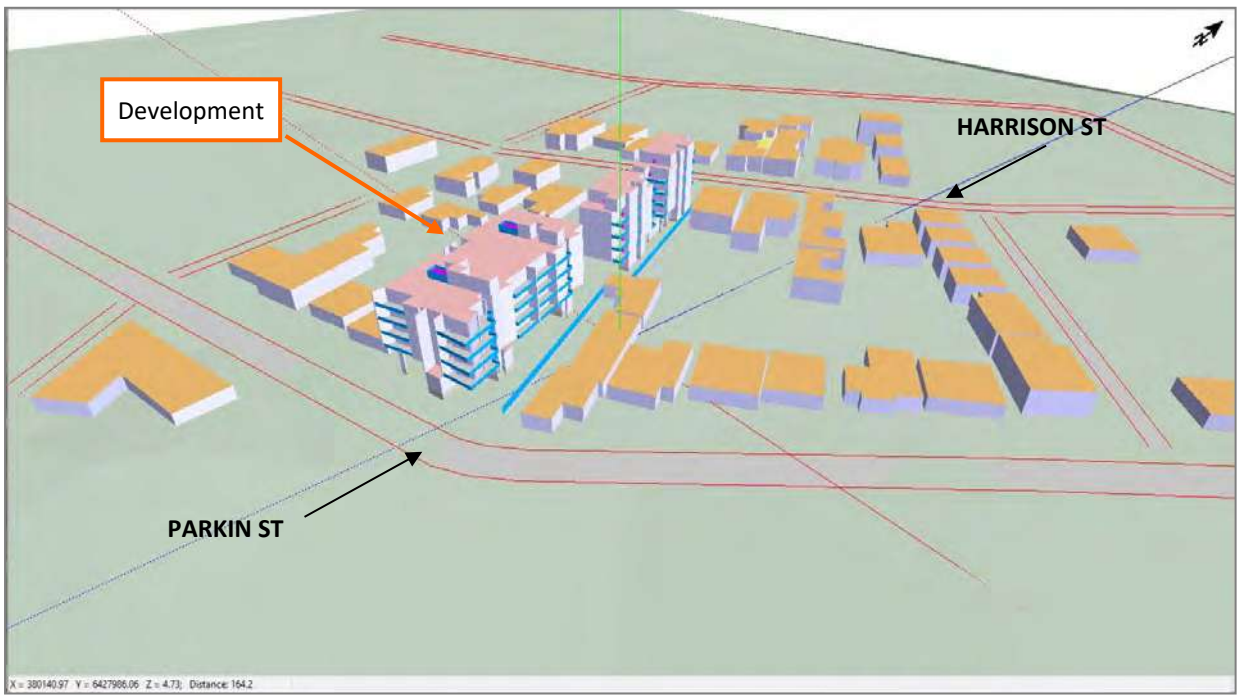


Figure 3-2 Noise Model Image

3.4 Ground Absorption

Ground absorption varies from a value of 0 to 1, with 0 being for an acoustically reflective ground (e.g. water or bitumen) and 1 for acoustically absorbent ground (e.g. grass). In this instance, a value of 0.0 has been used across the study area to be conservative.

3.5 Source Sound Levels

Overall, 52 outdoor condensing units were assumed; One per apartment, located as described in *Section 3.1* – South building units in Level 5 plant enclosures, North building units on balconies.

Sound power levels used in the modelling are provided in *Table 3-2*.

Table 3-2 Source Sound Power Levels, dB

Description	Octave Band Centre Frequency (Hz)								Overall dB(A)
	63	125	250	500	1k	2k	4k	8k	
Typical Apartment AC Unit	78	72	68	67	66	61	56	53	**70**

3.6 Results

Noise levels were predicted to surrounding NSPs with the results presented in *Table 3-3* and *Figure 3-2*. Noise from air-conditioning, particularly at night-time may be considered tonal and subject to a + 5 dB adjustment.

Table 3-3 Predicted Noise Levels, dB L_{A10}

Receiver	Predicted AC Noise	Adjusted AC Noise	Night-time Assigned Level	Exceedance
NSP 1 87 Harrison St	28	33	37	*Complies*
NSP 2 91 Harrison St GF	31	36	37	*Complies*
NSP 2 91 Harrison St 1F	35	40	37	*Exceeds*
NSP 3 146B Parkin St	37	42	37	*Exceeds*
NSP 4 140 Parkin St	29	24	37	*Complies*

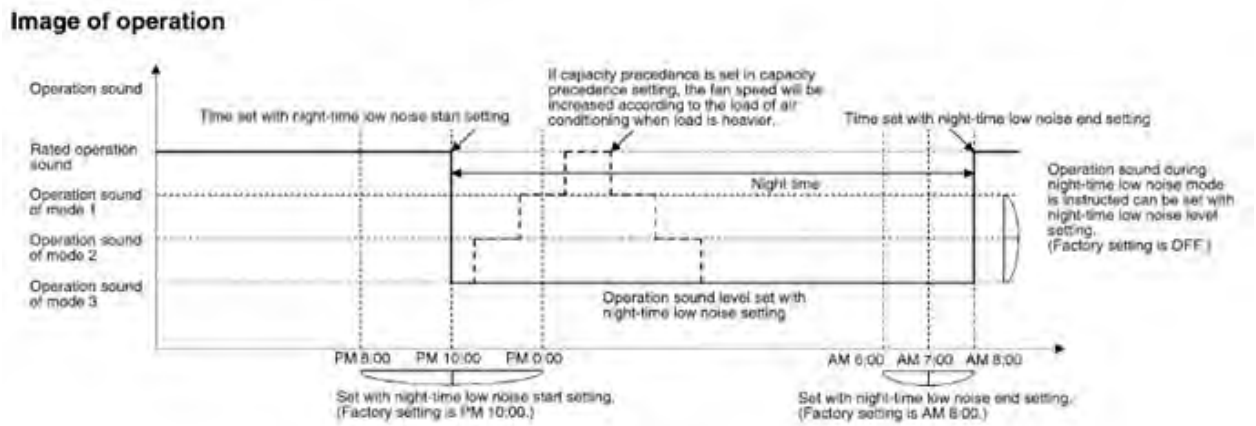
The above preliminary modelling shows that based on the current proposed equipment locations and assumed sound levels, the Assigned Noise Level limits are able to be met at NSP 1 and NSP 4, though are exceeded at NSP 2 (1st Flr) and NSP 3 during night-time period, inclusive of Tonality adjustment.

This is predicted to be due to the orientation and location(s) of the nearest NSPs to assumed AC CU plant equipment in combination with example AC CU units' Sound Power Level of 70 dB(A) in free space with no surrounding enclosure. Sound Pressure Level reductions of 3 and 5 dB are required to demonstrate compliance.

3.6.1 Recommended Minimum Noise Controls (Preliminary)

To reduce cumulative AC CU output by this order of magnitude, the following is to be integrated into the detailed design:

- Where City development guidelines dictate AC units to be screened from view from street level, a ventilated enclosure is expected as minimum consideration for any balcony located CUs. Balcony located CUs enclosed in ventilated enclosures using close-blade louvers can reduce noise emission by ~5dB(A) local to the enclosure;
- Where internal surfaces are lined with acoustically absorbent material, additional noise reductions of up to 4dB(A) can be achieved;
- Plant must be selected with "night-mode" operation as integral functionality, which shall be programmed to the unit during night hours of 10PM – 7AM. 'Night Mode' enables a reduction in maximum output capacity (e.g. heating/cooling) typically during winter when the peak load occurs at night-time (early mornings), able to be managed by each CU selection having been sized to deliver the required heating (and cooling loads) at less than 100% capacity.
- Most major manufacturers (e.g. Daikin, Panasonic, LG, Mitsubishi) offer residential-grade models with "night-mode" – performance graph below shows a schematic of "Night-Mode" operating settings for a Daikin VRV unit, showing the application of "Night-Mode" in steps, which correspond to 2-3dB(A) reduction each step:



- In addition, all plant is to be the quietest reasonably available. Where equivalent items of plant are being compared, noise levels shall also be considered, with preference given to the quieter model;
- Any exhaust fans should be axial type fans so that in duct attenuation can be incorporated on the outside air side of the fans if necessary;
- All plant is to be suitably vibration isolated from the structure; and,
- An environmental noise assessment is to be undertaken during detailed design in regards to mechanical plant noise to confirm eventual selections are able to comply with the *Environmental Protection (Noise) Regulations 1997*.

3.7 Communal Space

A communal roof terrace space is shown on Fifth Floor/Roof of the South Building facing Parkin Street. This area is screened from nearest neighbouring premises given the geometry of the Fifth Floor building heights in relation to Ground Floor existing property heights. It is also screened from the North building Fifth Floor by the lift shaft, stairwell and plat louver screening walls.

For the most part, these are not used significantly and generate negligible noise. However, to assist in minimising noise impacts, a Noise Management Plan is recommended as part of the Strata Agreement, containing the following provisions:

- Clear signage should be put in place so that residents are aware to not occupy the area between 10pm and 7am Monday to Saturday and 10pm to 9am Sundays and public holidays;
- Opportunities to maximise soft floor finish should be considered for such areas in order to reduce the potential for noise emissions and/or rubber pads to chairs;
- At no time is amplified music (or musical instruments) or ball games permitted.

4 ROAD TRAFFIC NOISE

Noise measurements and modelling have been undertaken generally in accordance with the assessment procedures outlined in *SPP 5.4* and associated Guidelines[2] as described in *Section 4.1* and *Section 4.2*.

4.1 Road Traffic Noise Measurements

Noise monitoring was undertaken on site using a Bruel and Kjaer Type 2250 (S/N: 3011946) sound level meter (refer *Figure 3-1*). This meter complies with the instrumentation requirements of *Australian Standard 2702-1984 Acoustics – Methods for the Measurement of Road Traffic Noise*. The meter was field calibrated before and after the measurement session and found to be accurate to within +/- 1 dB. Lloyd George Acoustics also holds current laboratory calibration certificate for the meter.

The microphone was approximately 1.4 metres above existing ground level at two locations, approximately 2 metres from Parkin Street carriageway edge, and approximately 1m from Harrison Street carriageway edge, adjacent to the subject site. The measurements were recorded on 14 December 2021, between 9.00am and 11.00am.



Figure 4-1 Sound Level Meter on Site

[2] Road and Rail Noise Guidelines, September 2019

The results of the hourly noise level measurements, in free-field conditions, were:

- 14 December 2021: 10.00am to 11.00am – Harrison St 53.1 dB $L_{Aeq,1hour}$.
- 14 December 2021: 9.00am to 10.00am – Parkin St 65.3 dB $L_{Aeq,1hour}$.

Harrison Street is a quiet residential street and carries negligible road traffic volume. Measured noise levels are attributable to incidental pedestrian and residential activity, environmental noise and birdsong only. Resulting outdoor noise levels meet *SPP5.4* Outdoor Noise Criteria of <55dB(A) therefore no recommendations are made regards building facade design construction.

Parkin Street carries approx. 6,400 vehicles per day (vpd) which is below the threshold for mandatory assessment, however the existing noise climate was observed to be clearly dominated by intermittent passing vehicle hence a general assessment of building façade construction has been undertaken adopting the State Planning Policy criteria.

Combining measured noise levels with the hourly traffic volumes (See *Section 4.2.2*) as shown in *Figure 4-2*, the $L_{Aeq(Day)}$ and $L_{Aeq(Night)}$ have been determined to be 66.3 dB $L_{Aeq(Day)}$ and 59.0 dB $L_{Aeq(Night)}$. Based on these results, a prediction of the highest (i.e. worst case) noise conditions can be extrapolated from road traffic volumes, and hence used to determine appropriate building facade construction for internal noise amenity.

Based on this relationship, it can be seen that $L_{Aeq(Day)}$ is more critical than the $L_{Aeq(Night)}$ since their difference is greater than 5 dB.

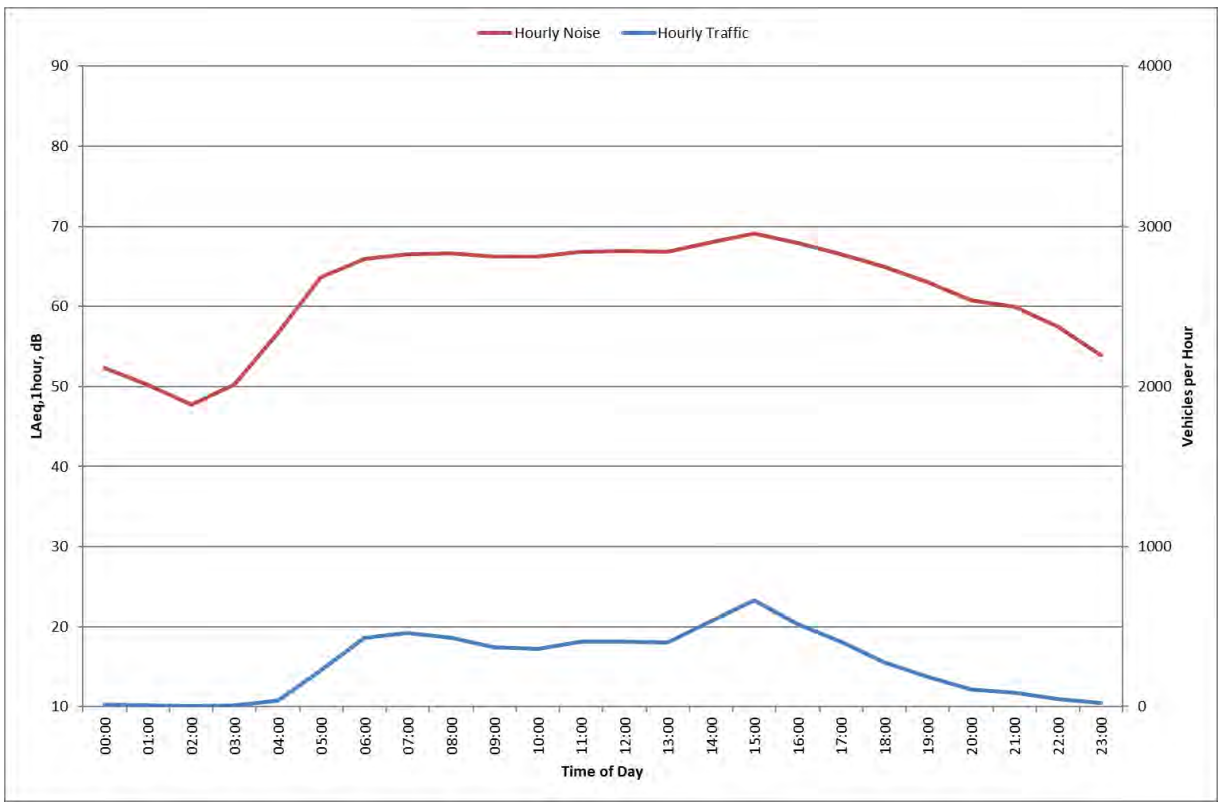


Figure 4-2 Noise Level Relationship to Hourly Traffic Volumes

4.2 Road Traffic Noise Modelling

The computer programme *SoundPLAN 8.2* was utilised incorporating the *Calculation of Road Traffic Noise* (CoRTN) algorithms, modified to reflect Australian conditions. The modifications included the following:

- Vehicles were separated into heavy (Austroads Class 3 upwards) and non-heavy (Austroads Classes 1 & 2) with non-heavy vehicles having a source height of 0.5 metres above road level and heavy vehicles having two sources, at heights of 1.5 metres and 3.6 metres above road level, to represent the engine and exhaust respectively. By splitting the noise source into three, allows for less barrier attenuation for high level sources where barriers are to be considered.
- Note that a -8.0 dB correction is applied to the exhaust and -0.8 dB to the engine (based on Transportation Noise Reference Book, Paul Nelson, 1987), so as to provide consistent results with the CoRTN algorithms for the no barrier scenario;

Predictions are made at heights of 1.4 metres above floor level and at 1-metre from the window of each habitable room, resulting in a + 2.5 dB correction due to reflected noise.

Various input data are included in the modelling such as ground topography, road design, traffic volumes etc. These model inputs are discussed in the following sections.

4.2.1 Ground Topography

Topographical and road design data for this project was taken from publicly available data e.g. *Google*. This was combined with the proposed development and existing neighbouring dwellings to create a 3D noise model as shown in *Figure 3-1*.

4.2.2 Traffic Data

Traffic data includes:

- Road Surface – The noise relationship between different road surface types is shown in *Table 4-1*.

Table 4-1 Noise Relationship Between Different Road Surfaces

Road Surfaces							
Chip Seal				Asphalt			
14mm	10mm	5mm	Slurry	Dense Graded	Novachip	Stone Mastic	Open Graded
+3.5 dB	+2.5 dB	+1.5 dB	+1.0 dB	0.0 dB	-0.2 dB	-1.5 dB	-2.5 dB

The existing road surface is dense graded asphalt and is expected to remain unchanged into the future.

- Vehicle Speed – The existing and future posted speed is 60km/hr.
- Traffic Volumes – Existing (2021) traffic volumes were obtained from Main Roads WA traffic map (https://trafficmap.mainroads.wa.gov.au/map). *Table 4-2* provides the traffic volume input data in the model.

Table 4-2 Traffic Information Used in the Prediction Modelling

Parameter	Scenario	
	Existing – 2021/22	
	Northbound	Westbound
24 Hour Volume	3,271	3,169
% Heavy	8.9	8.9

4.2.3 Ground Attenuation

As described in *Section 3.3*, the ground attenuation has been conservatively assumed to be 0.1 (reflective) throughout the study area.

4.2.4 Receiver Location Layout

Figure 4-3 shows the modelled environment with main development shown from Parkin Street façade, with nearest existing properties adjacent.

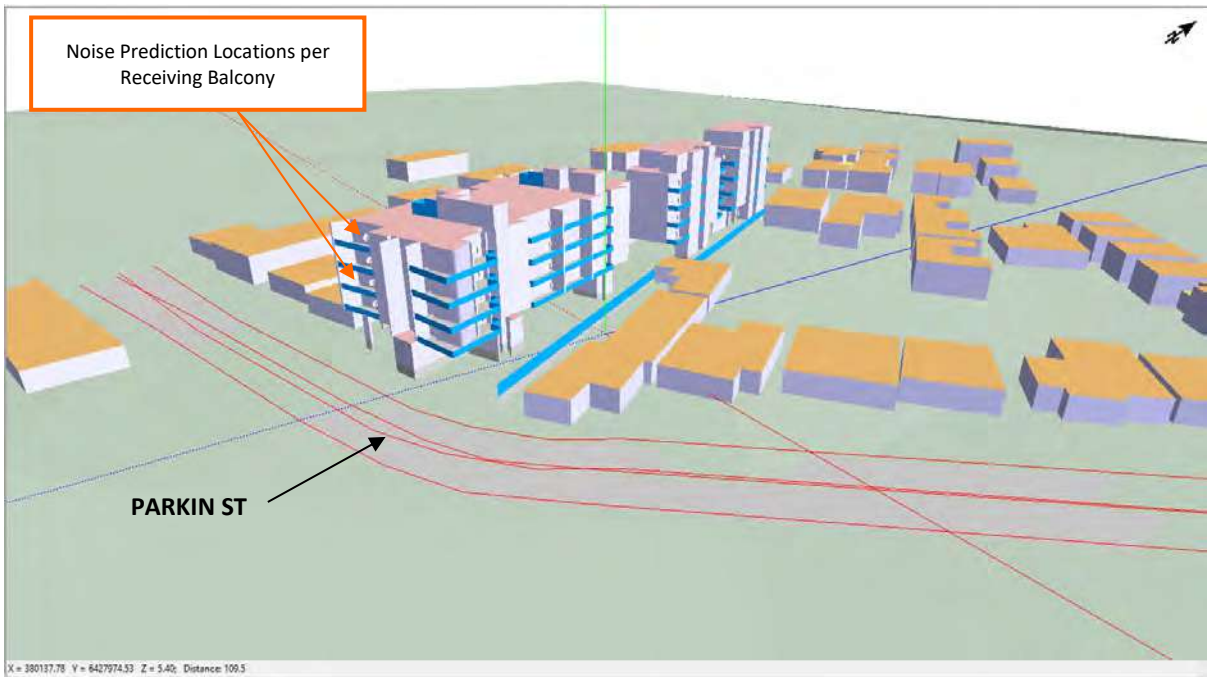


Figure 4-3 SoundPLAN Model Layout Showing Receiver Locations

4.3 Road Traffic Results

The noise model was set-up for existing conditions and calibrated to the noise measurement location. The model is then updated to include the proposed building plans using the CoRTN noise prediction assessment to determine façade noise levels during peak hour, and corresponding building façade construction means to achieve appropriate internal sound levels based on existing road traffic conditions.

Table 4-3 provides the predicted $L_{Aeq(Day)}$ noise levels to the glazed facade of each habitable room above *SPP5.4 Outdoor Noise Criteria* of 55dB(A). Note, levels below 55dB(A) are not recorded as where *Outdoor Noise Criteria* targets of *Table 2-5* are achieved, no noise controls are necessary:

Table 4-3 Predicted Future (2041) $L_{Aeq(Day)}$ Outdoor Façade Noise Levels

Apartment	Room	Level ($L_{eq,Day}$ dB(A))
1st Floor South Bldg, Parkin St South Facade Balcony	Living / Bedroom	60.3
2nd Floor South Bldg, Parkin St South Facade Balcony	Living / Bedroom	57.3
2nd Floor South Bldg, Parkin St East Façade Balcony	Bedroom	57.1
1st Floor South Bldg, Parkin St South-East Corner Balcony	Living Room	57.1
3rd Floor South Bldg, Parkin St East Façade Balcony	Bedroom	56.5
4th Floor South Bldg, Parkin St East Façade Balcony	Bedroom	55.8
2nd Floor South Bldg, Parkin St South-East Corner Balcony	Living Room	55.8
1st Floor South Bldg, Parkin St East Façade Balcony	Bedroom	55.8

Noise levels to the Level 5 Outdoor Sitting area are 51.5 dB $L_{Aeq(Day)}$ and therefore below the outdoor noise target.

4.4 Building Façade Recommendations re: Road Traffic Noise

The objectives of *SPP 5.4* are to achieve:

- indoor noise levels specified in *Table 2-1* in noise-sensitive areas (e.g. bedrooms and living rooms of houses and school classrooms); and
- a reasonable degree of acoustic amenity for outdoor living areas on each residential lot.

In all cases, the minimum recommended glazing performance is $R_w + C_{tr}$ 26, requiring minimum 6mm thick glass in fixed/awning style windows and same in sliding doors fitted with acoustic seals.

Note that for all apartment developments generally, this specification is recommended due to close proximity living,

Surrounding wall construction is to be rated at minimum Rw+Ctr 45dB – construction methodology to be confirmed during Detailed Design.

5 NATIONAL CONSTRUCTION CODE

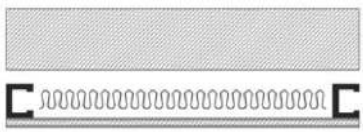
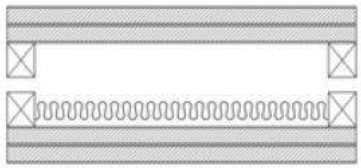
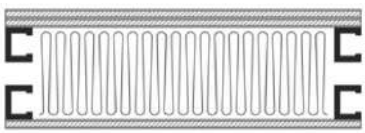
At this stage of the project, specifics are unknown such that advice provided herein is subject to change and further detail will be provided during detailed design, however the below discusses the key elements.

5.1.1 Walls Separating Sole-Occupancy Units

Where an SOU adjoins another SOU, the BCA requires $R_w + C_{tr}$ 50 (orange line) and in addition, discontinuous construction is mandatory (blue line) between habitable rooms and wet areas (including kitchens) – referred to as party walls. In this project, whilst not shown on *Figure 5-1*, it is recommended all such walls be of discontinuous construction.

With this in mind, *Table 5-1* provides the acceptable forms of construction within the Code to assist in the detailed design process.

Table 5-1 BCA Volume One Acceptable Forms of Construction: Party Walls

Description	Construction	Acoustic Rating	Discontinuous Construction
125mm thick concrete panel with – - a row of 64mm steel studs spaced 20mm from concrete panel; and - 70mm polyester insulation with a density of 9 kg/m^3, positioned between studs; and - one layer of 13mm plasterboard fixed to the outside face of the studs		$R_w + C_{tr} \geq 50$ $R_w \geq 50$	Yes, where clear air gap between studs is ≥20mm
Two rows of 90 x 35mm timber studs or two rows of 64mm steel studs at 600mm centres with - - An air gap not less than 20mm between the rows of studs; and - 50mm thick glasswool insulation or 60mm thick polyester insulation with a density of 11kg/m^3, positioned between one row of studs; and - two layers of 13mm fire-protective grade plasterboard or one layer of 6mm fibre cement sheet and one layer of 13mm fire-protective grade plasterboard, fixed to outside face of studs.		$R_w + C_{tr} \geq 50$ $R_w \geq 50$	Yes, where clear air gap between studs is ≥20mm
Two rows of 64mm steel studs at 600mm centres with - - An air gap not less than 80mm between the rows of studs; and - 200mm thick polyester insulation with a density of 14kg/m^3, positioned between studs; and		$R_w + C_{tr} \geq 50$ $R_w \geq 50$	Yes, where clear air gap between studs is ≥20mm

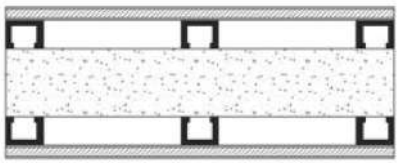
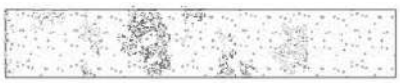
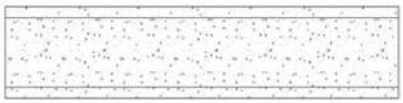
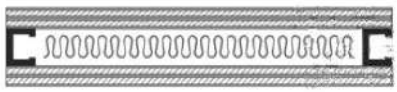
Description	Construction	Acoustic Rating	Discontinuous Construction
- two layers of 13mm fire-protective grade plasterboard on one outside face and one layer of 13mm fire-protective grade plasterboard on the other outside face.			

Care must also be taken when finishing concrete walls. Skimming and painting maintains the acoustic performance. Direct stick plasterboard or furring channels has the ability to downgrade the performance. As such, the final system must be reviewed.

5.1.2 Walls Separating Sole Occupancy Unit to Public Corridor

Where an SOU adjoins a public corridor, the BCA requires R_w 50 (pink line) – referred to as common walls. *Table 5-2* provides the acceptable forms of construction within the Code to assist in the detailed design process.

Table 5-2 BCA Volume One Acceptable Forms of Construction: Common Walls

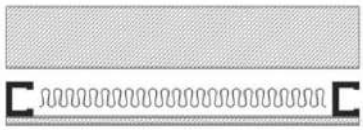
Description	Construction	Acoustic Rating
150mm thick concrete panel with one layer of 10mm plasterboard fixed to 28mm metal furring channels on each face.		$R_w \geq 50$
125mm thick concrete panel.		$R_w \geq 50$
100mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face.		$R_w \geq 50$
One row of 92 mm steel studs at 600 mm centres with - - 50mm thick glasswool insulation or 60mm thick polyester insulation with a density of 11kg/m^3, positioned between studs; and - two layers of 13mm fire-protective grade plasterboard or one layer of 6mm fibre cement sheet and one layer of 13mm fire-protective grade plasterboard, fixed to each face.		$R_w \geq 50$

5.1.3 Walls Separating Sole Occupancy Unit to Lift/Stairs

Where an SOU adjoins a lift, the BCA requires R_w 50 and discontinuous construction (green line). The Code mandates the same airborne requirement for stairs and it is recommended discontinuous construction also be applied. These walls are referred to as core walls. *Table 5-3* provides the acceptable forms of construction within the Code to assist in the detailed design process.

Lifts in particular can cause significant annoyance, such that the detailed design report will provide further advice for the lift supplier, to form part of their specification.

Table 5-3 BCA Volume One Acceptable Forms of Construction: Core Walls

Description	Construction	Acoustic Rating	Discontinuous Construction
125mm thick concrete panel with – - a row of 64mm steel studs spaced 20mm from concrete panel; and - 50mm thick glass wool insulation with a density of 11kg/m^3, positioned between studs; and - one layer of 13mm plasterboard fixed to the outside face of the studs		$R_w + C_{tr} \geq 50$ $R_w \geq 50$	Yes, where clear air gap between studs is ≥20mm

5.1.4 Wall Mark Ups

A typical Floor Plan wall mark-up is provided in *Appendix B*. These show the minimum performance requirements in accordance with the Code, however it should be noted that for higher end developments, the performances should be exceeded.

5.1.5 Wall Construction Deemed to Satisfy

Within Specification F5.2, installation details are provided and these must also be adhered to as part of good practice as follows:

b) ***Concrete*** *– Joints between concrete slabs or panels and any adjoining construction must be filled solid.*

c) ***Sheeting materials*** *–*

i. *If one layer is required on both sides of a wall, it must be fastened to the studs with joints staggered on opposite sides; and*

ii. *If two layers are required, the second layer must be fastened over the first layer so that the joints do not coincide with those of the first layer; and*

iii. *Joints between sheets or between sheets and any adjoining construction must be taped and filled solid.*

d) ***Timber or steel-framed construction*** *– perimeter framing members must be securely fixed to the adjoining structure and –*

i. *Bedded in resilient compound; or*

ii. *the joints must be caulked so that there are no voids between the framing members and the adjoining structure.*

In addition flanking paths and penetrations must also be controlled for walls. Again, this will form part of detailed design.

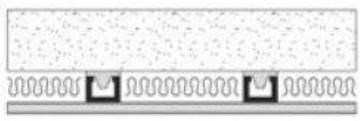
5.2 Floors

The acoustic requirement for floors are the same in all cases, being $R_w + C_{tr} \geq 50$ (airborne) and $L_{n,w} \leq 62$ (impact), noting the impact requirement only applies when received in an SOU.

5.2.1 Floors Separating Sole-Occupancy Units

Table 5-4 provides the acceptable forms of construction within the Code with regard to party floors.

Table 5-4 BCA Volume One Acceptable Form of Construction: Party Floors

Description	Construction	Acoustic Rating	
		Airborne	Impact
150mm thick concrete slab with – - 28mm metal furring channels and isolation mounts fixed to underside of slab, at 600mm centres; and - 65 thick polyester insulation with a density of 8kg/m^3, positioned between furring channels; and - one layer of 13mm plasterboard fixed to furring channels.		$R_w + C_{tr} \geq 50$	$L_{n,w} \leq 62$

Description	Construction	Acoustic Rating	
		Airborne	Impact
200mm thick concrete with carpet on underlay.		$R_w + C_{tr} \geq 50$	$L_{n,w} \leq 62$

Where the floor finish is carpet, the $L_{n,w}$ is nominally 45 dB and thus significantly below that required in the Code. Impact performance is often directly linked to perception of quality and privacy and achieving $L_{n,w}$ 62 is considered acoustically poor. A more appropriate minimum standard is considered to be $L_{n,w}$ 55, which exceeds (i.e. improves upon) the NCC minima, to align with potential expectations of quality representing "3 Star" performance when considered under the *AAAC Guideline for Apartment and Townhouse Ratings*.

Modern aesthetics and market expectations may imply use of hard floor coverings (such as timber flooring, tiles and the like). However, it is extremely difficult for a hard floor finish to perform in a similar manner to carpet and it is therefore recommended that use of carpet on underlay be maximised throughout apartments. Where only kitchen and bathrooms are tiled, with all other finishes being carpet, impact noise is unlikely to create significant disturbance. If the living areas are also hard floor finish, then a better than minimum standard should be achieved to minimise the additional impact. Incorporating hard floor finishes to bedrooms as well, or having hard floors above bedrooms (particularly master bedroom) is not recommended.

Where hard floor coverings are applied, additional treatments to the floor substrate (impact isolation mats) are required. The recommended approach is the inclusion of an impact isolation mat and insulated, suspended plasterboard ceiling below.

5.2.2 Apartment Balconies

Where balconies are located above the inside of an apartment, these must be treated the same as an apartment floor – refer *Section 5.2.1*.

In this project, balconies are typically vertically stacked. A common interpretation of the Code by Building Certifiers is understood to be that where vertically stacked balconies are entirely external of internal building space(s) and do not share a floor with an apartment below, these are not strictly assessed against the Code and as such, no impact isolation would be mandatory.

Practically speaking, the nature of impact noise is such that transfer occurs horizontally and diagonally down through connected structural elements. Therefore in these cases impact isolation treatment is still recommended.

5.2.3 Floor Construction Deemed to Satisfy

The following deemed to satisfy provisions of the Code are also applicable to this project:

b) ***Concrete slabs*** *– Joints between concrete slabs or panels and any adjoining construction must be filled solid.*

c) ***Sheeting materials*** *–*

i. Joints between sheets or between sheets and any adjoining construction must be taped and filled solid.

In addition flanking paths and penetrations must also be controlled for floors. Again, this will form part of detailed design.

5.2.4 Floors Separating Sole-Occupancy Unit to Parts of Different Classification

First floor apartments are located above various ground floor areas such as car park, lobby and bin store. The airborne requirement is $R_w + C_{tr} \geq 50$, which is achieved provided the slab is minimum 200mm thick. Impact noise from the apartments to the spaces below does not require control, however it does from the spaces below to the apartments above and as such, the following general advice is provided:

- Car Park Entry Gate:
  - Is to be a hinged type door, fitted with a 'slow-down device'.
  - Is to be supported via its own structure.
  - Motors are to be vibration isolated to achieve minimum 97% isolation efficiency with guidance provided by a mount supplier such as Embelton's.
  - Closing latches to be quiet in operation.
  - Noise levels must comply with the prescribed standards of the *Environmental Protection (Noise) Regulations 1997*.
- Car Park Floor
  - Shall be constructed so that there are no significant gaps in construction or where these exist, are to be filled with non-hardening mastic.
  - Drainage grates are to be plastic or metal with rubber gasket and secure to avoid excess banging.
  - Brushed concrete finish to avoid tyre squeal. Where the concrete is to be sealed, a product such as Aquron 1000 by Markham is understood to be suitable and not contribute to tyre squeal.

5.3 Services

Under F5.6, sound insulation rating of internal services is as follows:

a) *If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole occupancy unit, the duct or pipe must be separated from the rooms of any sole occupancy unit by construction with an $R_w + C_{tr}$ (airborne) not less than –*

   i. *40 if the adjacent room is a habitable room ([including] … a kitchen); or*

   ii. *25 if the adjacent room is a … non-habitable room.*

b) *If a stormwater pipe passes through a sole occupancy unit it must be separated in accordance with (a)(i) and (ii).*

Within Specification F5.2, installation details are provided and these must also be adhered to as part of good practice as follows:

e) ***Services*** *–*

   i. *Services must not be chased in concrete or masonry elements.*

   ii. *A door or panel required to have a certain $R_w + C_{tr}$ that provides access to a duct, pipe or other service must –*

      i. *Not open into any habitable room (other than a kitchen); and*

      ii. *Be firmly fixed so as to overlap the frame or rebate of the frame by not less than 10mm, be fitted with a sealing gasket along all edges and be constructed of –*

         aa) *Wood, particleboard or blockboard not less than 33mm thick; or*
         bb) *Compressed fibre reinforced cement sheeting not less than 9mm thick; or*
         cc) *Other suitable material with a mass per unit area not less than 24.4kg/m^2.*

   iii. *A water supply pipe must –*

      i. *Only be installed in the cavity of discontinuous construction; and*

      ii. *In the case of a pipe that serves only one sole occupancy unit, not be fixed to the wall leaf on the side adjoining any other sole occupancy unit and have a clearance not less than 10mm to the other wall leaf.*

   iv. *Electrical outlets must be offset from each other –*

      A. *In masonry walling, not less than 100mm; and*

      B. *In timber or steel framed walling, not less than 300mm.*

As per F5.7 of the deemed to satisfy provisions, “a flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.”

There are numerous ways for the project to satisfy the services requirements and these will be explored in detailed design.

Appendix A

Development Plans

Appendix B

NCC Minimum Wall Compliance Mark up

PROJECT No: 21116864
PROJECT Name: #89 HARRISON ST, ROCKINGHAM

DETAILED DESIGN NCC SECTION F5:
WALL TYPE MINIMUM REQUIREMENTS

AIRBORNE SOUND INSULATION KEY:

NB: DASH = RECOMMENDED

>Rw+Ctr 50dB	
>Rw+Ctr 50dB PLUS D.C.	
>Rw 50dB	
>Rw 50dB PLUS D.C.	

SEPARATING FLOOR/CEILING CONSTRUCTIONS

CARPETED FLOOR COVERINGS

Carpeted floor coverings throughout bedrooms installed on foam underlay over minimum 200mm thick concrete slab meets the BCA minimum performance for both airborne sound separation (> Rw+Ctr 50dB), and impact sound isolation (< 62dB $L_{nT,w}$) without further treatment.

HARD FLOOR COVERINGS

Hard floor coverings over a minimum 200mm thick concrete slab meets the NCC minimum airborne sound separation performance of Rw+Ctr 50dB.
To meet the NCC minimum standard for impact sound isolation of < 62dB $L_{nT,w}$ a compliant isolation treatment must be incorporated, pending floor finish, as follows:

SUSPENDED CEILING BELOW
Incorporate resilient matting between any hard floor finish and the concrete substrate, with suspended plasterboard ceiling (nominal void depth 100mm) installed below, including 50mm thick fibrous insulation quilt (minimum density 11kgm^{-3}) within the formed cavity.

SKIM COAT CEILING BELOW
Where suspended ceilings are absent, a higher performance (thicker) resilient system may need to be installed between any hard floor finish and the concrete substrate, to acheive acceptable levels of impact sound amenity, which meet the NCC minimum requirements;

CONCEALED BUILDING SERVICES DUCT WALLS (inc CEILINGS)

>Rw+Ctr 40dB	
>Rw+Ctr 25dB	

SHARED SERVICES DUCT CONSTRUCTIONS

Shared service duct walls to "habitable" areas must achieve NCC minimum airborne sound separation performance of Rw+Ctr 40dB. This rating can be achieved with 2 x 13mm plasterboard on stud frame with 11kgm-3 fibrous insulation retained in the services duct; Where standard PVC pipework is used, pipes must be wrapped in Pyrotek 4525C;
Where acoustically-rated pipework is installed, e.g. REHAU - Raupiano Plus, pipe wrapping may be omitted, OR included and services duct wall reduced to 1 x 13mm FR plasterboard

Shared service duct walls to "non-habitable" areas must achieve the NCC minimum airborne sound separation performance of Rw+Ctr 25dB. This rating can be achieved with 1 x 13mm plasterboard on stud frame with 11kgm-3 fibrous insulation retained in the services duct;
Where standard PVC pipework is used, pipes must be wrapped in Pyrotek 4525C;
Where acoustically-rated pipework is installed, e.g. REHAU - Raupiano Plus, pipe wrapping may be omitted;

S-1 S-2 S-3 S-4 S-5 S-6 S-7
S-A S-B S-C S-D S-E S-F S-G S-H
2000/4500 SETBACK LINE
CARPARK SCREEN BELOW
8000 8000 8000 8000 8000 8000
4000 5000 6000 1600 6300 3000 3000 4955 2665
2980 3860 5360 4000 4060 2000 5129
BALC 20 m²
2.BDR.D 96 m²
BALC 13 m²
BALC 13 m²
3.BDR 118 m²
ST 6 m²
ST 5 m²
ST 5 m²
1.BDR.A 73 m²
1.BDR.B 73 m²
ST 5 m²
ST 5 m²
BALC 21 m²
ST 3 m²
BALC 24 m²
ST 6 m²
ST 6 m²
2.BDR.C 104 m²
ART WALL
2.BDR.E 103 m²
2.BDR.F 107 m²
ART WALL
2.BDR.G 73 m²
STAIR.D 13 m²
BALC 10 m²
BALC 20 m²
BALC 19 m²
OPEN TO LANDSCAPE BELOW
PLANTER
PLANTER
PLANTER
ROOF OVER PARKING BELOW
4000 SETBACK LINE
ARBOUR WALKWAY BELOW

SCALE	PROJECT TITLE
1 : 200 @ A3	LIME TREE ARBOUR APARTMENTS LEVEL 1 - SOUTH BUILDING

DESIGN MANAGEMENT GROUP twenty-three railway road subiaco wa 6000 telephone +61 8 9212 8888 | facsimile +61 8 9212 8822 info@dmgaustralia.com.au | www.dmgaustralia.com.au

dmg ARCHITECTURE

PROJECT # 21049
DRAWING # 1.13
REVISION # P1

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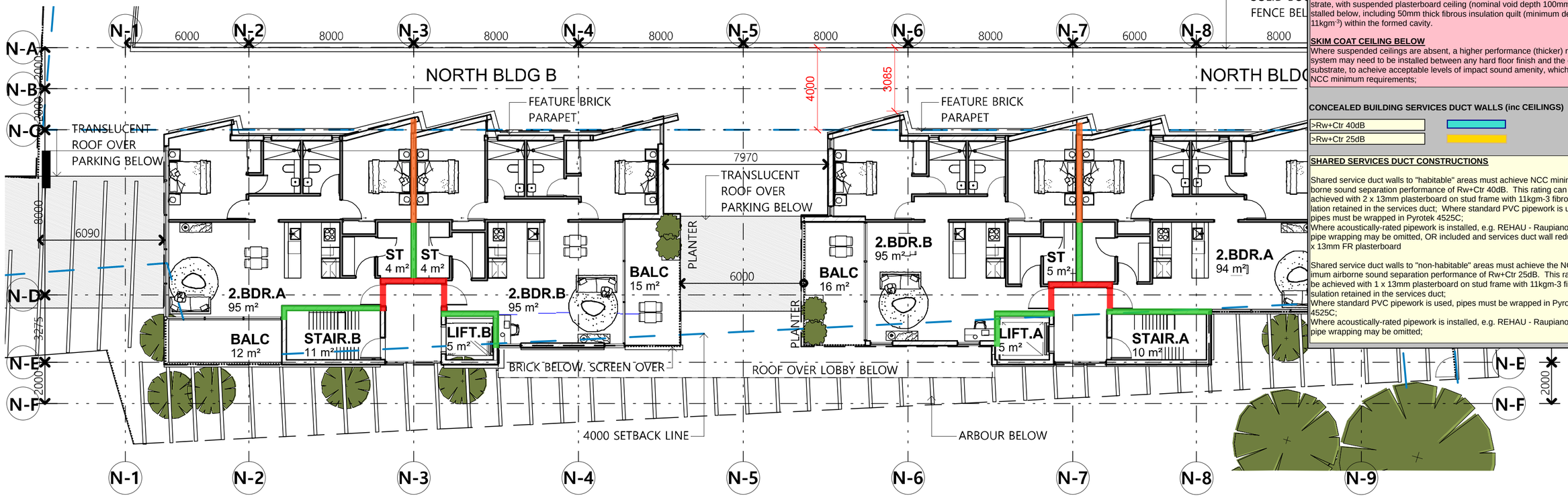

PROJECT No: 21116864
PROJECT Name: #89 HARRISON ST, ROCKINGHAM

LLOYD GEORGE Acoustics

DETAILED DESIGN NCC SECTION F5:
WALL TYPE MINIMUM REQUIREMENTS

AIRBORNE SOUND INSULATION KEY:

NB: DASH = RECOMMENDED

>Rw+Ctr 50dB	
>Rw+Ctr 50dB PLUS D.C.	
>Rw 50dB	
>Rw 50dB PLUS D.C.	

SEPARATING FLOOR/CEILING CONSTRUCTIONS

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HARD FLOOR COVERINGS

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To meet the NCC minimum standard for impact sound isolation of < 62dB $L_{nT,w}$ a compliant isolation treatment must be incorporated, pending floor finish, as follows:

SUSPENDED CEILING BELOW
Incorporate resilient matting between any hard floor finish and the concrete substrate, with suspended plasterboard ceiling (nominal void depth 100mm) installed below, including 50mm thick fibrous insulation quilt (minimum density 11kgm^{-3}) within the formed cavity.

SKIM COAT CEILING BELOW
Where suspended ceilings are absent, a higher performance (thicker) resilient system may need to be installed between any hard floor finish and the concrete substrate, to acheive acceptable levels of impact sound amenity, which meet the NCC minimum requirements;

CONCEALED BUILDING SERVICES DUCT WALLS (inc CEILINGS)

>Rw+Ctr 40dB	
>Rw+Ctr 25dB	

SHARED SERVICES DUCT CONSTRUCTIONS

Shared service duct walls to "habitable" areas must achieve NCC minimum airborne sound separation performance of Rw+Ctr 40dB. This rating can be achieved with 2 x 13mm plasterboard on stud frame with 11kgm-3 fibrous insulation retained in the services duct; Where standard PVC pipework is used, pipes must be wrapped in Pyrotek 4525C;
Where acoustically-rated pipework is installed, e.g. REHAU - Raupiano Plus, pipe wrapping may be omitted, OR included and services duct wall reduced to 1 x 13mm FR plasterboard

Shared service duct walls to "non-habitable" areas must achieve the NCC minimum airborne sound separation performance of Rw+Ctr 25dB. This rating can be achieved with 1 x 13mm plasterboard on stud frame with 11kgm-3 fibrous insulation retained in the services duct;
Where standard PVC pipework is used, pipes must be wrapped in Pyrotek 4525C;
Where acoustically-rated pipework is installed, e.g. REHAU - Raupiano Plus, pipe wrapping may be omitted;

SCALE
1 : 200 @ A3

PROJECT TITLE
LIME TREE ARBOUR APARTMENTS

LEVEL 1 - NORTH BUILDING

TYPICAL FLOOR PLATE LEVEL 1-4

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dmg ARCHITECTURE

PROJECT # 21049

DRAWING # 1.12

REVISION # P1

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Appendix C

Terminology

The following is an explanation of the terminology used throughout this report.

Decibel (dB)
The decibel is the unit that describes the sound pressure and sound power levels of a noise source. It is a logarithmic scale referenced to the threshold of hearing.

A-Weighting
An A-weighted noise level has been filtered in such a way as to represent the way in which the human ear perceives sound. This weighting reflects the fact that the human ear is not as sensitive to lower frequencies as it is to higher frequencies. An A-weighted sound level is described as L_A dB.

Sound Power Level (L_w)
Under normal conditions, a given sound source will radiate the same amount of energy, irrespective of its surroundings, being the sound power level. This is similar to a 1kW electric heater always radiating 1kW of heat. The sound power level of a noise source cannot be directly measured using a sound level meter but is calculated based on measured sound pressure levels at known distances. Noise modelling incorporates source sound power levels as part of the input data.

Sound Pressure Level (L_p)
The sound pressure level of a noise source is dependent upon its surroundings, being influenced by distance, ground absorption, topography, meteorological conditions etc and is what the human ear actually hears. Using the electric heater analogy above, the heat will vary depending upon where the heater is located, just as the sound pressure level will vary depending on the surroundings. Noise modelling predicts the sound pressure level from the sound power levels taking into account ground absorption, barrier effects, distance etc.

L_{ASlow}
This is the noise level in decibels, obtained using the A frequency weighting and the S (Slow) time weighting as specified in IEC 61672-1:2002. Unless assessing modulation, all measurements use the slow time weighting characteristic.

L_{AFast}
This is the noise level in decibels, obtained using the A frequency weighting and the F (Fast) time weighting as specified in IEC 61672-1:2002. This is used when assessing the presence of modulation only.

L_{APeak}
This is the greatest absolute instantaneous sound pressure in decibels using the A frequency weighting as specified in IEC 61672-1:2002.

L_{Amax}
An L_{Amax} level is the maximum A-weighted noise level during a particular measurement.

L_{A1}
An L_{A1} level is the A-weighted noise level which is exceeded for one percent of the measurement period and is considered to represent the average of the maximum noise levels measured.

L_{A10}
An L_{A10} level is the A-weighted noise level which is exceeded for 10 percent of the measurement period and is considered to represent the "*intrusive*" noise level.

L_{Aeq}
The equivalent steady state A-weighted sound level ("equal energy") in decibels which, in a specified time period, contains the same acoustic energy as the time-varying level during the same period. It is considered to represent the "average" noise level.

L_{A90}
An L_{A90} level is the A-weighted noise level which is exceeded for 90 percent of the measurement period and is considered to represent the "*background*" noise level.

One-Third-Octave Band
Means a band of frequencies spanning one-third of an octave and having a centre frequency between 25 Hz and 20 000 Hz inclusive.

L_{Amax} assigned level
Means an assigned level which, measured as a $L_{A\ Slow}$ value, is not to be exceeded at any time.

L_{A1} assigned level
Means an assigned level which, measured as a $L_{A\ Slow}$ value, is not to be exceeded for more than 1% of the representative assessment period.

L_{A10} assigned level
Means an assigned level which, measured as a $L_{A\ Slow}$ value, is not to be exceeded for more than 10% of the representative assessment period.

Tonal Noise
A tonal noise source can be described as a source that has a distinctive noise emission in one or more frequencies. An example would be whining or droning. The quantitative definition of tonality is:

the presence in the noise emission of tonal characteristics where the difference between -

(a) the A-weighted sound pressure level in any one-third octave band; and

(b) the arithmetic average of the A-weighted sound pressure levels in the 2 adjacent one-third octave bands,

is greater than 3 dB when the sound pressure levels are determined as $L_{Aeq,T}$ levels where the time period T is greater than 10% of the representative assessment period, or greater than 8 dB at any time when the sound pressure levels are determined as $L_{A\ Slow}$ levels.

This is relatively common in most noise sources.

Modulating Noise
A modulating source is regular, cyclic and audible and is present for at least 10% of the measurement period. The quantitative definition of modulation is:

a variation in the emission of noise that —

(a) is more than 3 dB $L_{A\ Fast}$ or is more than 3 dB $L_{A\ Fast}$ in any one-third octave band;

(b) is present for at least 10% of the representative.

Impulsive Noise
An impulsive noise source has a short-term banging, clunking or explosive sound. The quantitative definition of impulsiveness is:

a variation in the emission of a noise where the difference between $L_{A\ peak}$ and $L_{A\ Max\ slow}$ is more than 15 dB when determined for a single representative event;

Major Road
Is a road with an estimated average daily traffic count of more than 15,000 vehicles.

Secondary / Minor Road
Is a road with an estimated average daily traffic count of between 6,000 and 15,000 vehicles.

Influencing Factor (IF)

$$= \frac{1}{10}(\%\ \mathrm{TypeA}_{100} + \%\ \mathrm{TypeA}_{450}) + \frac{1}{20}(\%\ \mathrm{TypeB}_{100} + \%\ \mathrm{TypeB}_{450})$$

where:

$\%\ \mathrm{TypeA}_{100}$ = the percentage of industrial land within a 100m radius of the premises receiving the noise

$\%\ \mathrm{TypeA}_{450}$ = the percentage of industrial land within a 450m radius of the premises receiving the noise

$\%\ \mathrm{TypeB}_{100}$ = the percentage of commercial land within a 100m radius of the premises receiving the noise

$\%\ \mathrm{TypeB}_{450}$ = the percentage of commercial land within a 450m radius of the premises receiving the noise

+ Traffic Factor (maximum of 6 dB)

= 2 for each secondary road within 100m

= 2 for each major road within 450m

= 6 for each major road within 100m

Representative Assessment Period
Means a period of time not less than 15 minutes, and not exceeding four hours, determined by an inspector or authorised person to be appropriate for the assessment of a noise emission, having regard to the type and nature of the noise emission.

Background Noise
Background noise or residual noise is the noise level from sources other than the source of concern. When measuring environmental noise, residual sound is often a problem. One reason is that regulations often require that the noise from different types of sources be dealt with separately. This separation, e.g. of traffic noise from industrial noise, is often difficult to accomplish in practice. Another reason is that the measurements are normally carried out outdoors. Wind-induced noise, directly on the microphone and indirectly on trees, buildings, etc., may also affect the result. The character of these noise sources can make it difficult or even impossible to carry out any corrections.

Ambient Noise
Means the level of noise from all sources, including background noise from near and far and the source of interest.

Specific Noise
Relates to the component of the ambient noise that is of interest. This can be referred to as the noise of concern or the noise of interest.

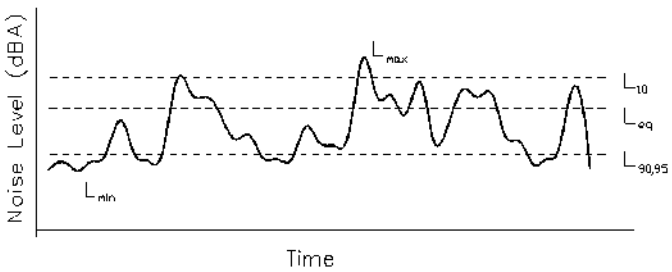
Peak Component Particle Velocity (PCPV)
The maximum instantaneous velocity in mm/s of a particle at a point during a given time interval and in one of the three orthogonal directions (x, y or z) measured as a peak response. Peak velocity is normally used for the assessment of structural damage from vibration.

Peak Particle Velocity (PPV)
The maximum instantaneous velocity in mm/s of a particle at a point during a given time interval and is the vector sum of the PCPV for the x, y and z directions measured as a peak response. Peak velocity is normally used for the assessment of structural damage from vibration.

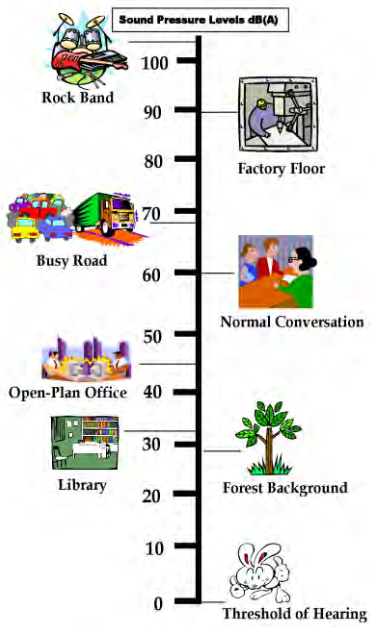
RMS Component Particle Velocity (PCPV)
The maximum instantaneous velocity in mm/s of a particle at a point during a given time interval and in one of the three orthogonal directions (x, y or z) measured as a root mean square (rms) response. RMS velocity is normally used for the assessment of human annoyance from vibration.

Peak Particle Velocity (PPV)
The maximum instantaneous velocity in mm/s of a particle at a point during a given time interval and is the vector sum of the PCPV for the x, y and z directions measured as a root mean square (rms) response. RMS velocity is normally used for the assessment of human annoyance from vibration.

Chart of Noise Level Descriptors



Typical Noise Levels



transport planning
traffic engineering
modelling

Proposed Residential Development, 142-144 Harrison Street, Rockingham

Transport Impact Statement

PREPARED FOR:
ARIA Project Development

Augugst 2022

Document history and status

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Vladimir Baltic	r01a	B Bordbar	21/02/2022	Final
Vladimir Baltic	r01b	B Bordbar	1/03/2022	1st Revision
Roger Bajwa	r01c	Vladimir Baltic	29/07/2022	2nd Revision
Roger Bajwa	r01d	Vladimir Baltic	02/08/2022	3rd Revision

File name: t21.343.rb.r01d

Author: Roger Bajwa

Project manager: Behnam Bordbar

Client: ARIA Project Development

Project: 142-144 Harrison Street, Rockingham

Document revision: r01d

Project number: t21.343

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1 Introduction

This Transport Impact Statement has been prepared by Transcore on behalf of ARIA Project Development with regard to the proposed residential development (i.e., "Lime Tree Arbour Apartments") at 89 Harrison Street and 142-144 Parkin Street in Rockingham, the City of Rockingham (hereafter the subject site).

The subject site is situated between Harrison Street and Parkin Street a short distance west of the Rockingham town centre, as shown in **Figure 1**.



Figure 1: Location of the subject site

The Transport Impact Assessment Guidelines (WAPC, Vol 4 – Individual Developments, August 2016) states: *"A Transport Impact Statement is required for those developments that would be likely to generate moderate volumes of traffic and therefore would have a moderate overall impact on the surrounding land uses and transport networks"*.

Section 6.0 of Transcore's report provides details of the estimated trip generation of the proposed development. Accordingly, as the peak hour vehicular trips are estimated to be significantly less than 100 trips, a *Transport Impact Statement* is deemed appropriate for assessment of the proposed development.

The subject site comprises three lots (Lot 62, 84 and 95) with a combined area of about 3,161m^2. The site is bound by Harrison Street to the north, Parkin Street to the south and the existing residential developments to the immediate east and west. The site is located within a predominantly residential setting.

The site currently accommodates two single-storey residential dwellings, one of which is fronting Harrison Street and the other on Parkin Street.

The Rockingham town centre with its retail/commercial uses is located less than 300m to the east with the Esplanade foreshore about 150m to the north.

2 Development Proposal

The development proposal contemplates the construction of a multi-storey, residential complex comprising two buildings (northern and southern) sharing a ground floor car park facility.

Specifically, the development proposal comprises a total of 47 residential apartments (mix of single-, double- and three-bed units) with communal areas at ground and roof deck on top of the building.

Parking for the residents will be accommodated on-site across the ground floor car parking which entails a single full-movement crossover on Harrison Street.

All visitor parking is proposed to take place off site, since public on-street and off-street parking is available within the immediate vicinity of the site.

The waste collection is proposed to take place from within ground floor car park.

Bicycle parking is provided in form of wall-mounted hooks. The total bike parking provided for the development is 32 bays provided at two locations.

Pedestrians will access the development from the external path network which is in place on both frontage roads (the opposite side along Harrison Street and the development side along Parkin Street). A pedestrian walkway along the eastern side of the site is proposed to provide a link between the two site frontages. Four ground-floor lobbies with lifts and staircases are accessed directly from this walkway.

Refer to **Appendix A** for proposed development plans.

3 Vehicle Access and Parking

As presented in the plans prepared by DMG Architecture, the proposed on-site car parking is provided in form of a single-floor ground car park facility totalling 60 parking bays.

The parking bays are provided in form of 40 single bays and 20 tandem bays.

The car park is accessed via a full-movement crossover on Harrison Street, at the northern end of the site. The access/egress point will be secured by a remotely controlled gate.

In addition to the car parking, a total of 32 bicycle bays and 6 motorbike parking bays are proposed within the car park, as well.

Parking is provided on-site only for the residents. The visitor parking is proposed to be accommodated off-site, as ample public parking opportunities in form of on-street and off-street parking are available in the immediate vicinity of the subject site.

4 Provision for Service Vehicles

The enclosed bin store is proposed within the ground floor car parking facility adjacent to the Harrison Street entry. The waste collection vehicle is proposed to enter the car park via Harrison Street entry, navigate the site, park into a suitable position using a 3-point turn and exit the site via the same crossover on Harrison Street, moving in the forward direction.

A turn path plan showing the movement of an 8.0m long waste collection truck through the car park is provided in **Appendix B**.

5 Hours of Operation

The proposed development is of residential type and as such hours of operations do not apply.

6 Daily Traffic Volumes and Vehicle Types

6.1 Trip Generation

The traffic volumes likely to be generated by the proposed development have been estimated based on *Transport Roads & Maritime Services Technical Direction TDT 2013/04a* document, which provides daily and peak hour trip rates.

The total weekday daily, AM and PM peak hour trip rates of 4.58, 0.53 and 0.32 trips/unit, respectively, were adopted for the proposed development.

Accordingly, it is estimated that the proposed development would generate a total of approximately **215** daily vehicle trips with about **25** and **16** trips during the weekday AM and PM peak hour periods.

The traffic distribution detailed in **Table 1** was based on the following directional split assumptions for peak hour periods:

- Morning (AM) peak split estimated at 25%/75% for inbound/outbound trips, respectively; and,
- Afternoon (PM) peak split estimated at 66%/34% for inbound/outbound trips, respectively.

Table 1: Peak hour trips for the development

Peak Period	Direction	Residents	Peak Hour Trips
AM Peak	Inbound	7	**25**
	Outbound	18	
PM Peak	Inbound	11	**16**
	Outbound	5	

6.2 Trip Distribution

Considering the location of the proposed development, the available access and egress routes to and from the development as well as location of key regional attractors, the anticipated directional trip distribution of the development-generated traffic is assumed to be as follows:

- 75% of trips to/from the east; and,
- 25% of trips to/from the south.

The directional morning, afternoon and total daily trip distribution of the development-generated traffic is illustrated in **Figure 2**.



Figure 2. Estimated traffic movements for the subject development – morning peak/afternoon peak/total daily

6.3 Impact on Surrounding Roads

The *WAPC Transport Impact Assessment Guidelines (2016)* provides guidance on the assessment of traffic impacts:

"As a general guide, an increase in traffic of less than 10 percent of capacity would not normally be likely to have a material impact on any particular section of road, but increases over 10 percent may. All sections of road with an increase greater than 10 percent of capacity should therefore be included in the analysis. For ease of assessment, an increase of 100 vehicles per hour for any lane can be considered as equating to around 10 percent of capacity. Therefore, any section of road where the development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis."

From **Figure 2** it can be seen that the most pronounced traffic increase estimated from the proposed development would be 25vph along Harrison Street (east of the site). This traffic increase is significantly less than the critical threshold (100vph per lane).

As detailed in **Section 6.2,** the proposed development will not increase traffic on any lanes on the surrounding road network by more than 100vph, therefore the impact of the development traffic on the surrounding road network will not be significant. It is therefore concluded that the surrounding road network has the capacity to accommodate this relatively low level of traffic generation of the proposed development.

It should be noted that this traffic assessment disregards the existing traffic generation of the site and is therefore conservative.

7 Traffic Management on Frontage Streets

7.1 Context

The subject site is located to the west of the Rockingham town centre, between Harrison and Parkin Streets and a short distance south of the Esplanade foreshore.

7.2 Existing Road Network

Harrison Street is generally a 7.0m wide, single-carriageway, two-way road which, in the vicinity of the subject site, widens to 11.0m to accommodate on-street parking along both sides. It entails a pedestrian path mostly along the northern side, with only a short section between Val Street and May Streets featuring paths on both sides.

Harrison Street operates under a default build-up area speed limit of 50km/h. Harrison Street is classified as an *Access Road* in the Main Roads WA Metropolitan Functional Road Hierarchy document and is under the care and control of the Local Government.

Traffic count data obtained from the City of Rockingham indicates that Harrison Street carried an average weekday traffic volume of 1,050 vehicles per day (vpd) in the immediate vicinity of the site in February 2019.

Parkin Street is approximately 12.0m wide, a single-carriageway, two-lane road with pedestrian paths on both sides of the road.

Parkin Street operates under a speed limit regime of 60km/h. It is classified as a *Distribution B* in Main Roads WA *Functional Road Hierarchy* document. The road is under the care and control of the Local Government.

Traffic count data obtained from the City of Rockingham indicates that Parkin Street carried an average weekday traffic volume of 10,050 vehicles per day (vpd) in the vicinity of the subject site in April 2021.

8 Public Transport Access

The site is well served by several bus services operating along Parkin Street (No. 551) or in a close proximity east of the site, along Patterson Road/Railway Terrace (No. 550 and 555), with bus stops located within comfortable walking distance from the site. All stops are accessible via the existing footpath system which is in place at this locality.

Among other localities, the bus services provide links to Rockingham Train Station thus providing access to Perth's greater railway network (refer **Table 2** for more details).

Table 2: Bus services operating in vicinity of the site

Bus Service	Route
550	Rockingham Train Station / Rockingham Beach
551	Rockingham Train Station / Shoalwater
555	Rockingham Train Station / Railway Terrace

As detailed in the bus route map in **Figure 3**, the existing bus services operating in the immediate vicinity of the site provide connectivity to the Perth-Mandurah train line.

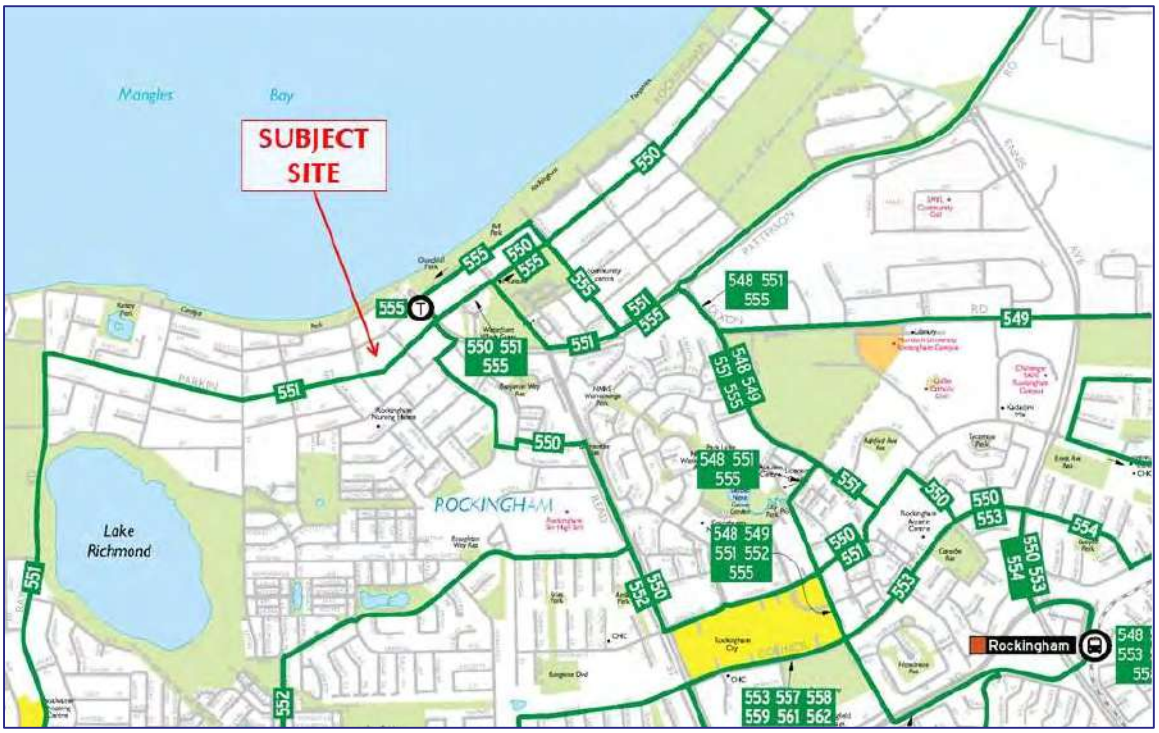

Figure 3: Public transport services (Transperth Map)

9 Pedestrian Access

Pedestrian access to the subject site is facilitated via the existing external footpath network comprising paved footpaths on roads adjacent to the subject site.

Pedestrian crossing facilities including drop kerbs and median refuges are currently provided on both Harrison and Parkin Streets at their respective intersections with Florence Street, some 60m and 100m west of the site.

With respect to the pedestrian access into the residential building, it is proposed that a pedestrian walkway along the eastern side of the building provide a link between two frontages facilitating access from both Harrison and Parking Street sides.

10 Cyclist Access

The Perth Bicycle Network Map (see **Figure 4**) indicates relatively good cyclist connectivity to the subject site.

Parkin Street, fronting the site on the southern side is classified as a "good road riding environment" that connects further to a network of paths comprising Continuous Signed Route, shared paths and roads classified as "good road riding environment".

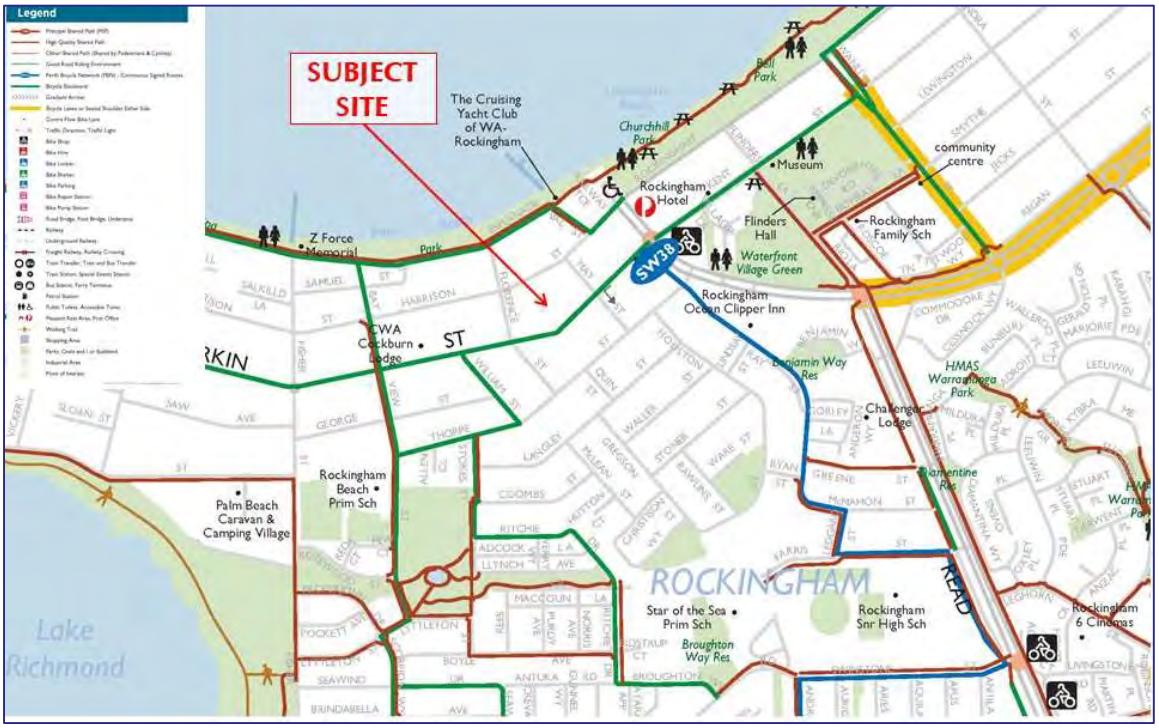

Figure 4: Extract from Perth Bicycle Network (Department of Transport)

11 Site Specific Issues

The proposed development does not propose any on-site visitor parking as ample off-site on and off-street public parking facilities are available. No other site-specific issues have been identified for this development.

12 Safety Issues

No safety issues were identified within the scope of this assessment.

13 Conclusions

This Transport Impact Statement has been prepared by Transcore on behalf of ARIA Project Development with regard to the proposed residential development (i.e., "Lime Tree Arbour Apartments") at 89 Harrison Street and 142-144 Parkin Street in Rockingham, City of Rockingham.

The development proposal contemplates the construction of a multi-storey, residential complex comprising two buildings (northern and southern) sharing a ground floor car park facility. A total of 47 residential apartments with associated communal spaces, amenities and car parking are proposed at the subject site.

The onsite parking bays are provided in form of 40 single bays and 20 tandem bays, totalling 60 bays. The car park is accessed via a full movement crossover at the northern end of the site. Both access/egress points will be secured by a remotely controlled gate. In addition to the car parking, a total of 32 bicycle bays and six motorbike parking bays are proposed within the car park as well.

The traffic modelling undertaken in this report shows that the traffic generation of the proposed development is estimated to be in the order of about 215 daily trips with about 25 morning and 16 afternoon weekday peak hour trips, respectively (both inbound and outbound).

The traffic analysis undertaken in this report demonstrates that the estimated development-generated traffic will have minimal impact on the surrounding road network.

The subject site has very good accessibility by the existing pedestrian and cyclist networks and enjoys public transport coverage through an existing bus service operating within the close proximity of the site.

In conclusion, the findings of this Transport Impact Statement are supportive of the proposed mixed-use development.

Appendix A

PROPOSED DEVELOPMENT PLANS

20 years anniversary
transcore
transport planning
traffic engineering
modelling



NOTE: Contractor to check and verify all dimensions, levels, and angles on site before commencing.
All construction work is to be in accordance with the Building Code of Australia, approved documents and relevant Australian Standards.

DRAWINGS SHALL NOT BE READ IN ISOLATION AS THEY REFER TO OTHER DRAWINGS, SCHEDULES AND SPECIFICATIONS

ROOM SCHEDULE - SOUTH BDG - PODIUM

NUMBER	NAME	AREA
S.P.01	2 BED 2 BATH UNIT	79 m²
S.P.01 BALC	TERRACE	Not Enclosed
S.P.01 ST	STORE	4 m²
S.P.02	2 BED 2 BATH UNIT	79 m²
S.P.02 BALC	TERRACE	47 m²
S.P.02 ST	STORE	5 m²
S.P.03	1 BED 1 BATH UNIT	63 m²
S.P.03 BALC	TERRACE	22 m²
S.P.03 ST	STORE	2 m²
S.P.04	1 BED 1 BATH UNIT	53 m²
S.P.04 BALC	TERRACE	21 m²
S.P.04 ST	STORE	4 m²
S.P.05	2 BED 2 BATH UNIT	108 m²
S.P.05 BALC	TERRACE	39 m²
S.P.05 ST	STORE	3 m²
S.P.06	2 BED 2 BATH UNIT	79 m²
S.P.06 BALC	TERRACE	35 m²
S.P.06 ST	STORE	5 m²
S.P.07	1 BED 1 BATH UNIT	60 m²
S.P.07 BALC	TERRACE	18 m²
S.P.07 ST	STORE	4 m²
S.P.08	1 BED 1 BATH UNIT	60 m²
S.P.08 ST	STORE	4 m²
S.P.08 BALC	TERRACE	18 m²
S.P.09	CORRIDOR	87 m²
S.P.10	STAIR	9 m²
S.P.12	EXIT	9 m²
S.P.13	LIFT	9 m²
S.P.14	STAIR	9 m²
S.P.15	EXIT	9 m²
S.P.16	RESIDENT FITNESS	81 m²

SITE	3154 m²	
DEEP PLANTING	488 m²	15%

ROOM TAG LEGEND

REV	DATE	DESCRIPTION	DRN	CHK
P6	28.07.22	CONSULTANT UPDATE	DMG	TGR
P5	14.04.22	PRELIMINARY ISSUE	DMG	TGR
P4	08.04.22	PRELIMINARY ISSUE	DMG	TGR
P3	30.03.22	PRELIMINARY ISSUE	DMG	TGR
P2	09.03.22	PRELIMINARY ISSUE	DMG	TGR
P1	04.01.22	PRELIMINARY ISSUE	DMG	TGR

PLANNING APPLICATION

dmg ARCHITECTURE

DEVELOPMENT GROUP

PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
PODIUM FLOOR PLAN - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	REV
21049	1.10	P6

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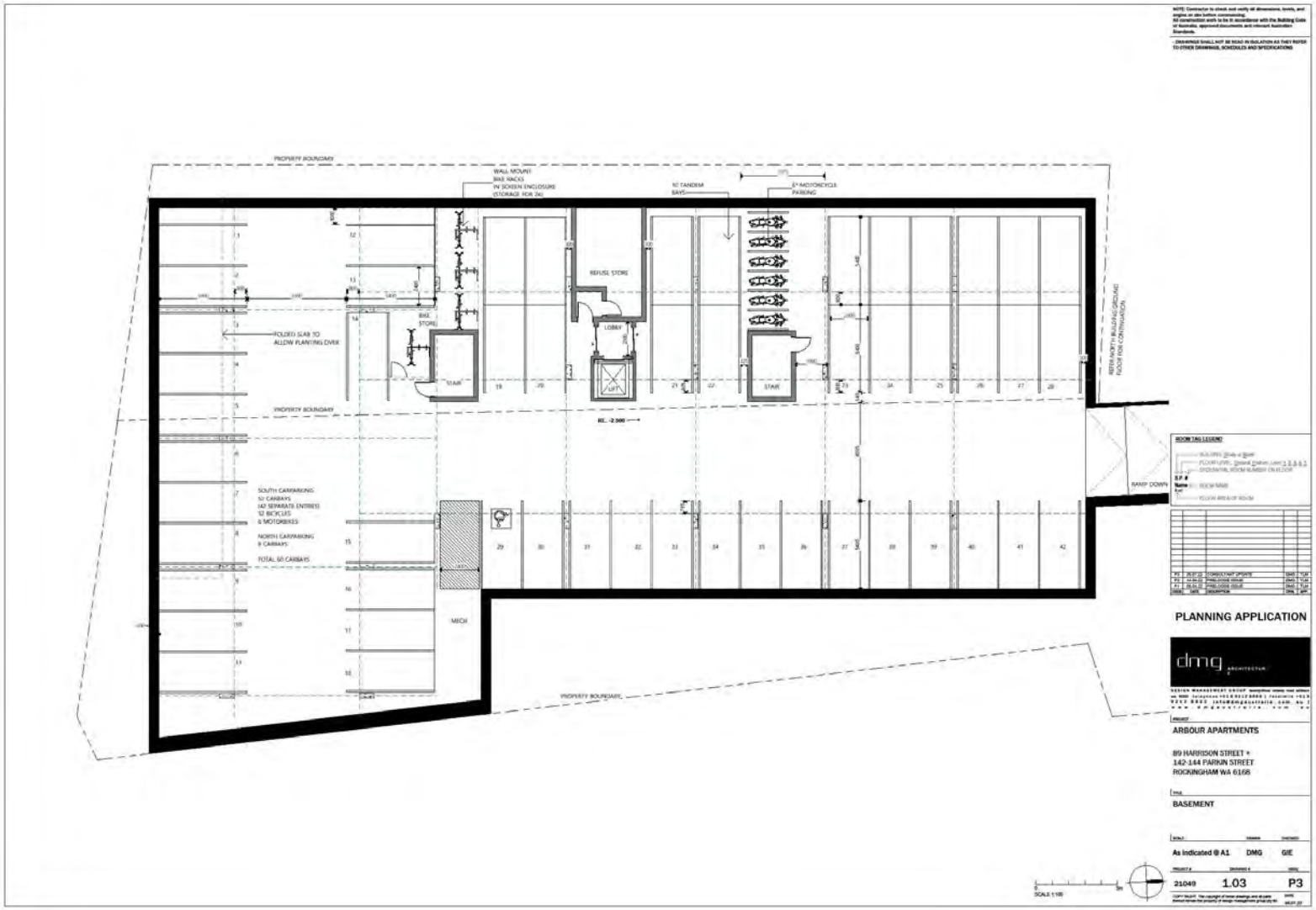
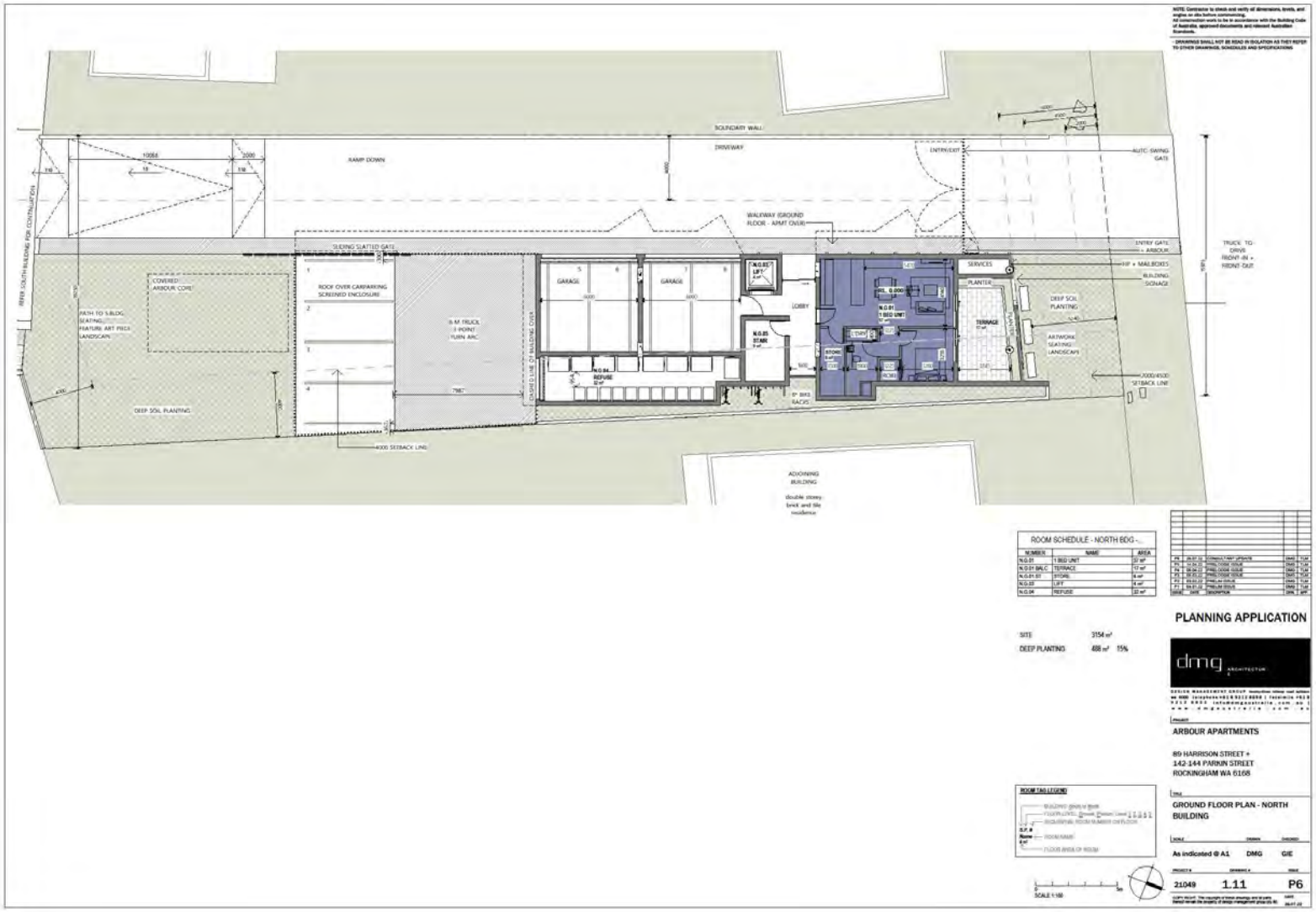

PROPERTY BOUNDARY
WALL MOUNT BIKE RACKS IN SCREEN ENCLOSURE (STORAGE FOR 24)
10 TANDEM BAYS
4* MOTORCYCLES PARKING
REFUSE STORE
LOBBY
LIFT
STAIR
BIKE STORE
FOLDED SLAB TO ALLOW PLANTING OVER
RETAIN PORTY BUILDING GROUND FLOOR FOR COMMERCIAL
RAMP DOWN
RL -2.500
SOUTH CARPARKING
37 CARBAYS
(42 SEPARATE ENTRIES)
12 BICYCLES
6 MOTORBIKES
NORTH CARPARKING
9 CARBAYS
TOTAL 50 CARBAYS
MECH
PROPERTY BOUNDARY
ROOM TAG LEGEND
PLANNING APPLICATION
dmg ARCHITECTURE
ARBOUR APARTMENTS
89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168
BASEMENT
As Indicated @ A1
DMG
GIE
21049
1.03
P3
SCALE 1:100



ROOM SCHEDULE - NORTH BDG -.		
NUMBER	NAME	AREA
N.G.01	1 BED UNIT	37 m²
N.G.01 BALC	TERRACE	17 m²
N.G.01.ST	STORE	4 m²
N.G.03	LIFT	4 m²
N.G.04	REFUSE	22 m²

SITE	3154 m²	
DEEP PLANTING	486 m²	15%

P6	29.07.22	CONSULTANT UPDATE	DMG TLM
P5	14.04.22	PANEL CODE ISSUE	DMG TLM
P4	08.04.22	PANEL CODE ISSUE	DMG TLM
P3	30.03.22	PANEL CODE ISSUE	DMG TLM
P2	09.03.22	PANEL ISSUE	DMG TLM
P1	04.01.22	PANEL ISSUE	DMG TLM
ISSUE	DATE	DESCRIPTION	DRN APP

PLANNING APPLICATION

dmg ARCHITECTURE

DESIGN MANAGEMENT GROUP

PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

GROUND FLOOR PLAN - NORTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	111	P6

DATE 29.07.22

ROOM TAG LEGEND

SCALE 1:100

Appendix B

SERVICE VEHICLE TURN PATH PLANS

20 years anniversary
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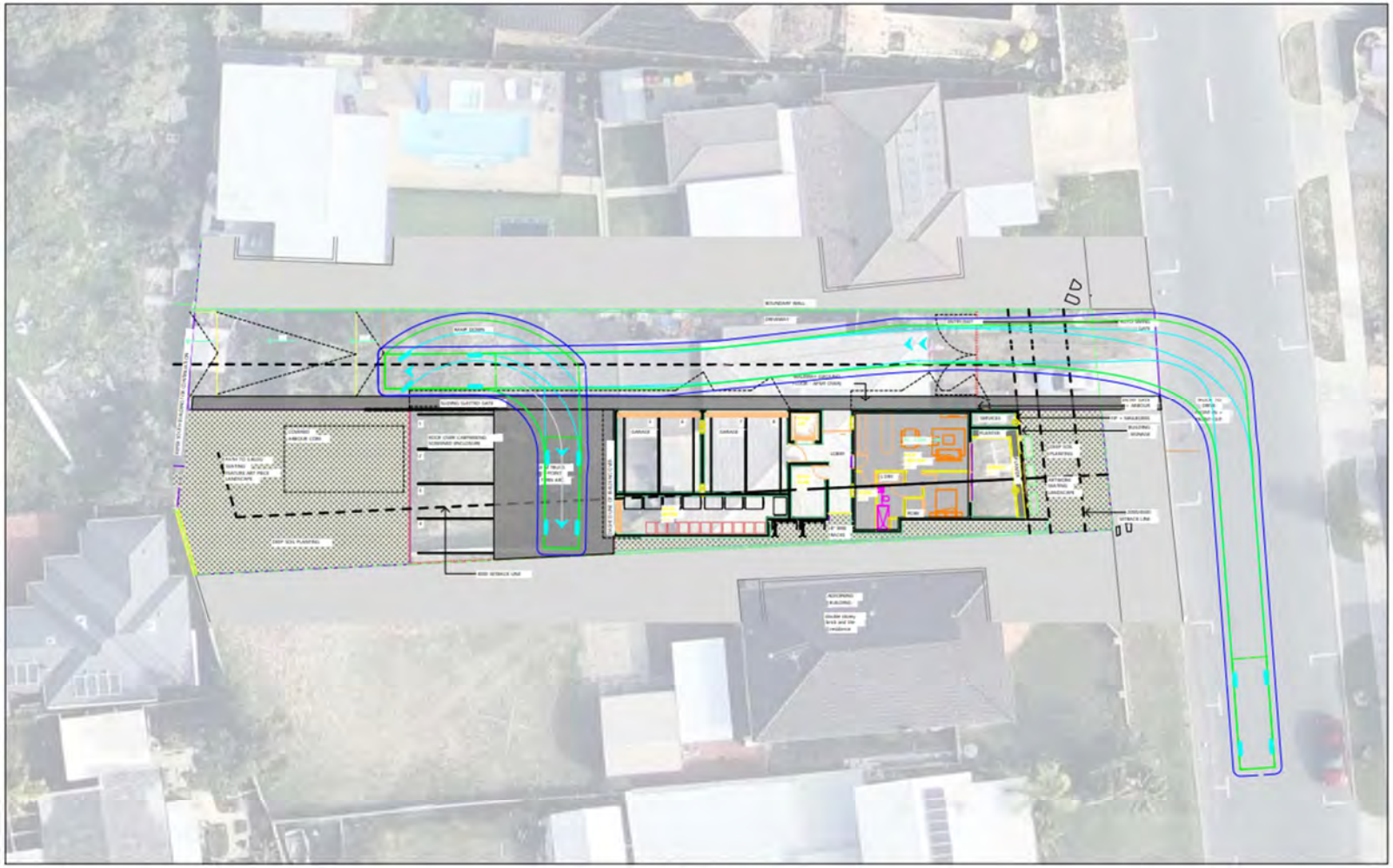
transport planning
traffic engineering
modelling



Harrison Street, Rockingham

8m Service Vehicle

Service Vehicle Entry

LEGEND

Vehicle Body

Wheel Path

500mm Clearance

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01/08/2022

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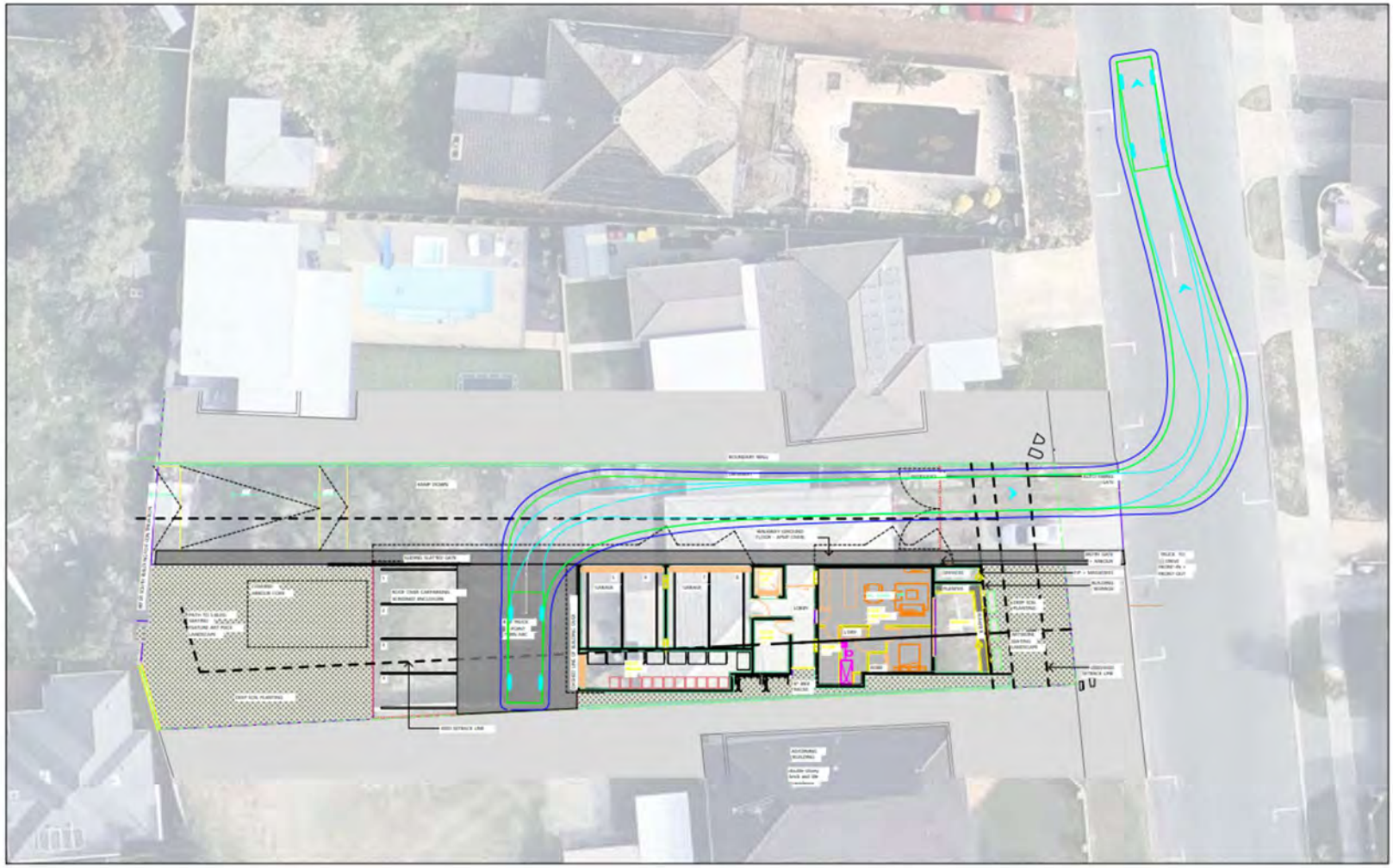

Harrison Street, Rockingham

8m Service Vehicle

Service Vehicle Exit

LEGEND

Vehicle Body

Wheel Path

500mm Clearance

t21.343.sk06a

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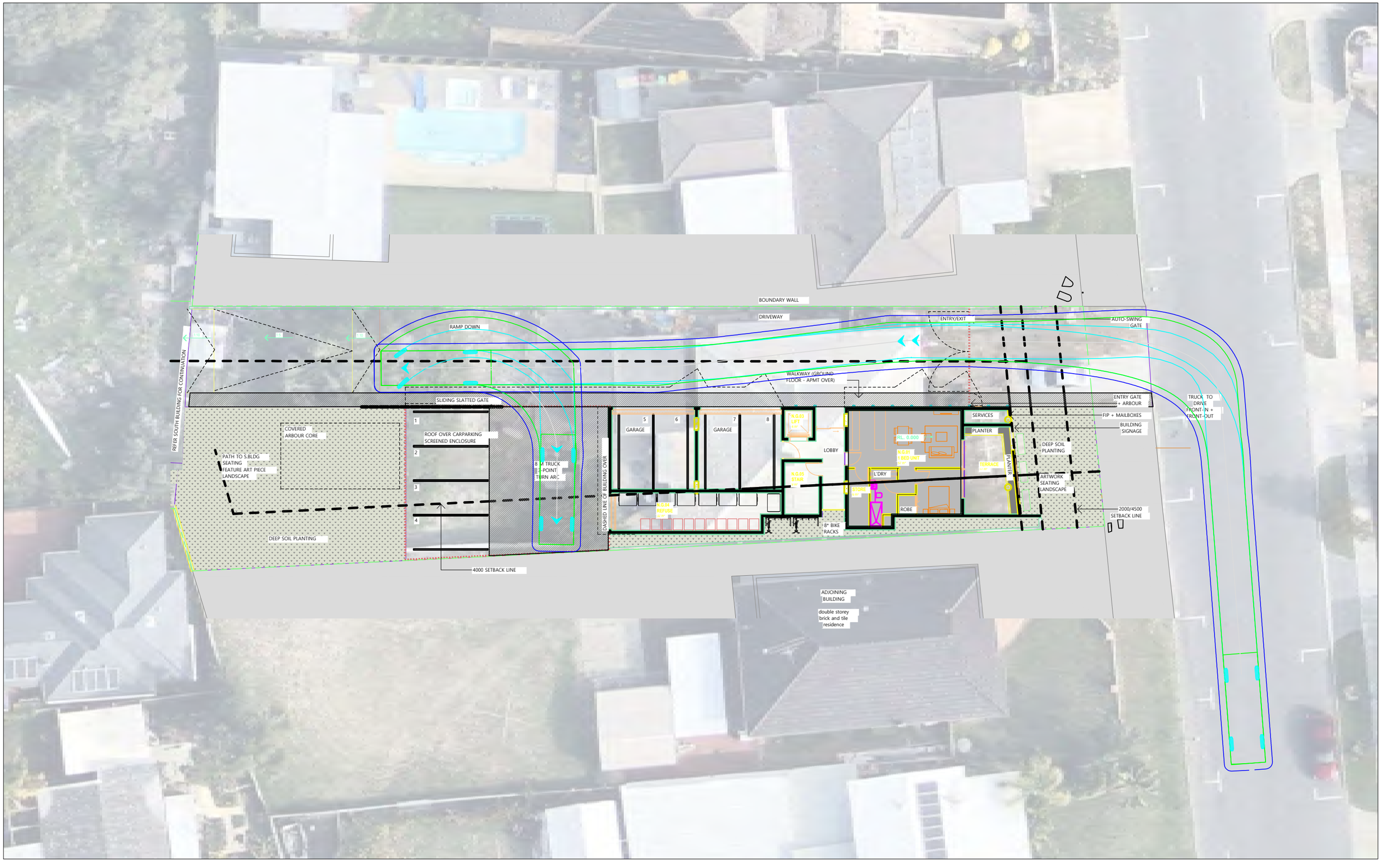


Harrison Street, Rockingham

8m Service Vehicle

Service Vehicle Entry

LEGEND

Vehicle Body

Wheel Path

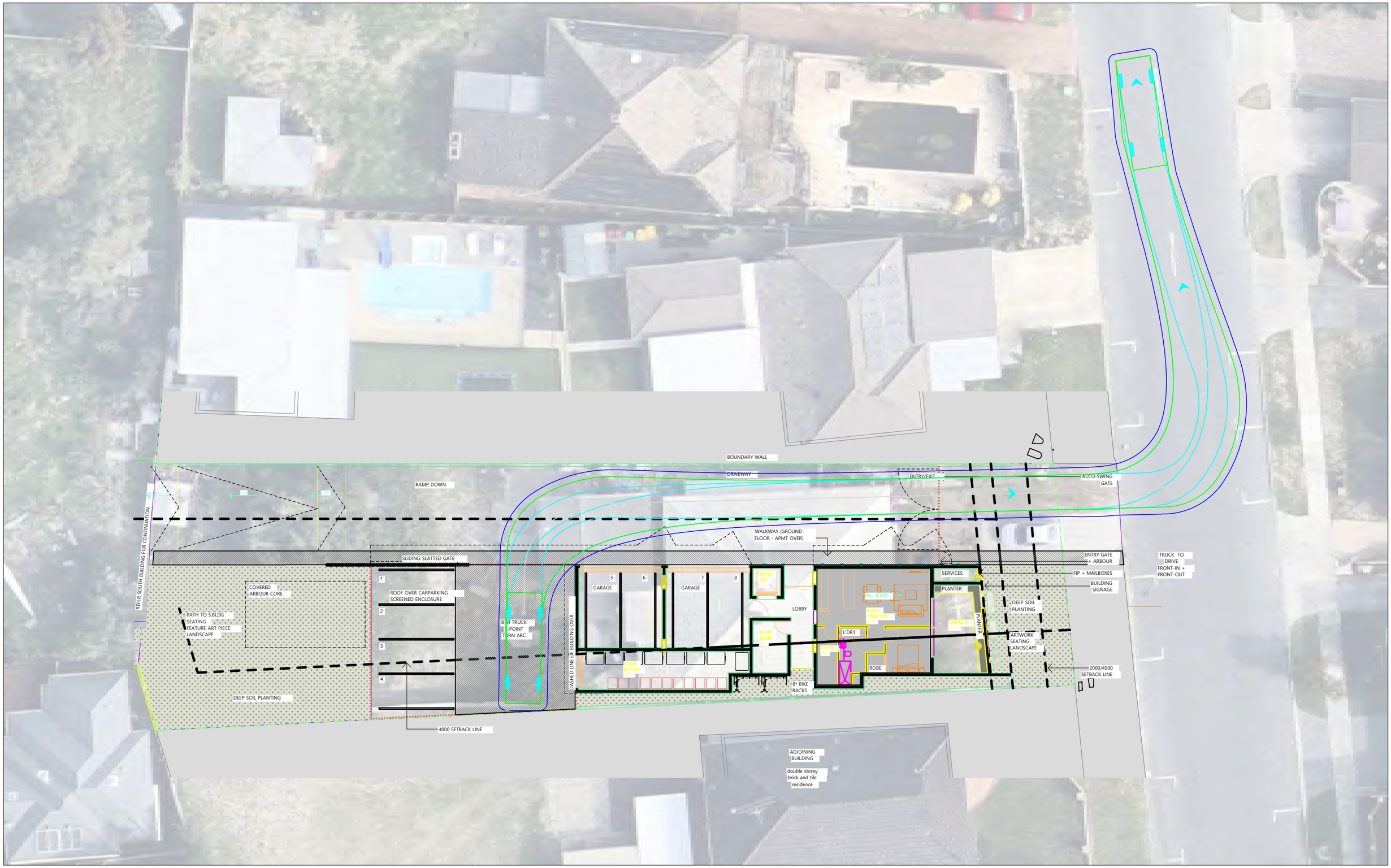
500mm Clearance

t21.343.sk05a

01/08/2022

Scale: 1:250 @ A3

transcore



Harrison Street, Rockingham

8m Service Vehicle

Service Vehicle Exit

LEGEND

Vehicle Body

Wheel Path

500mm Clearance

t21.343.sk06a

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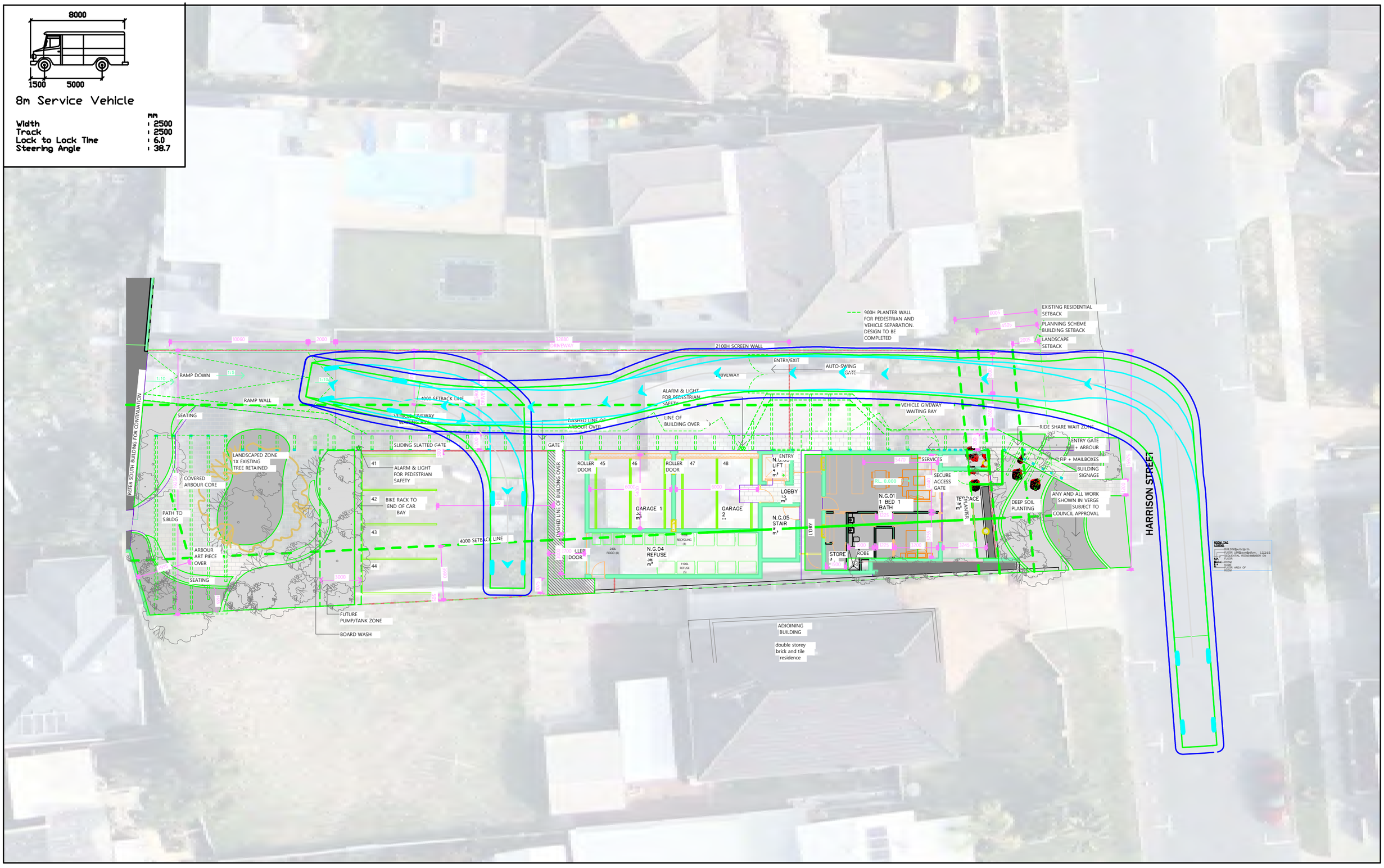

Harrison Street, Rockingham

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Wheel Path

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10/10/2022

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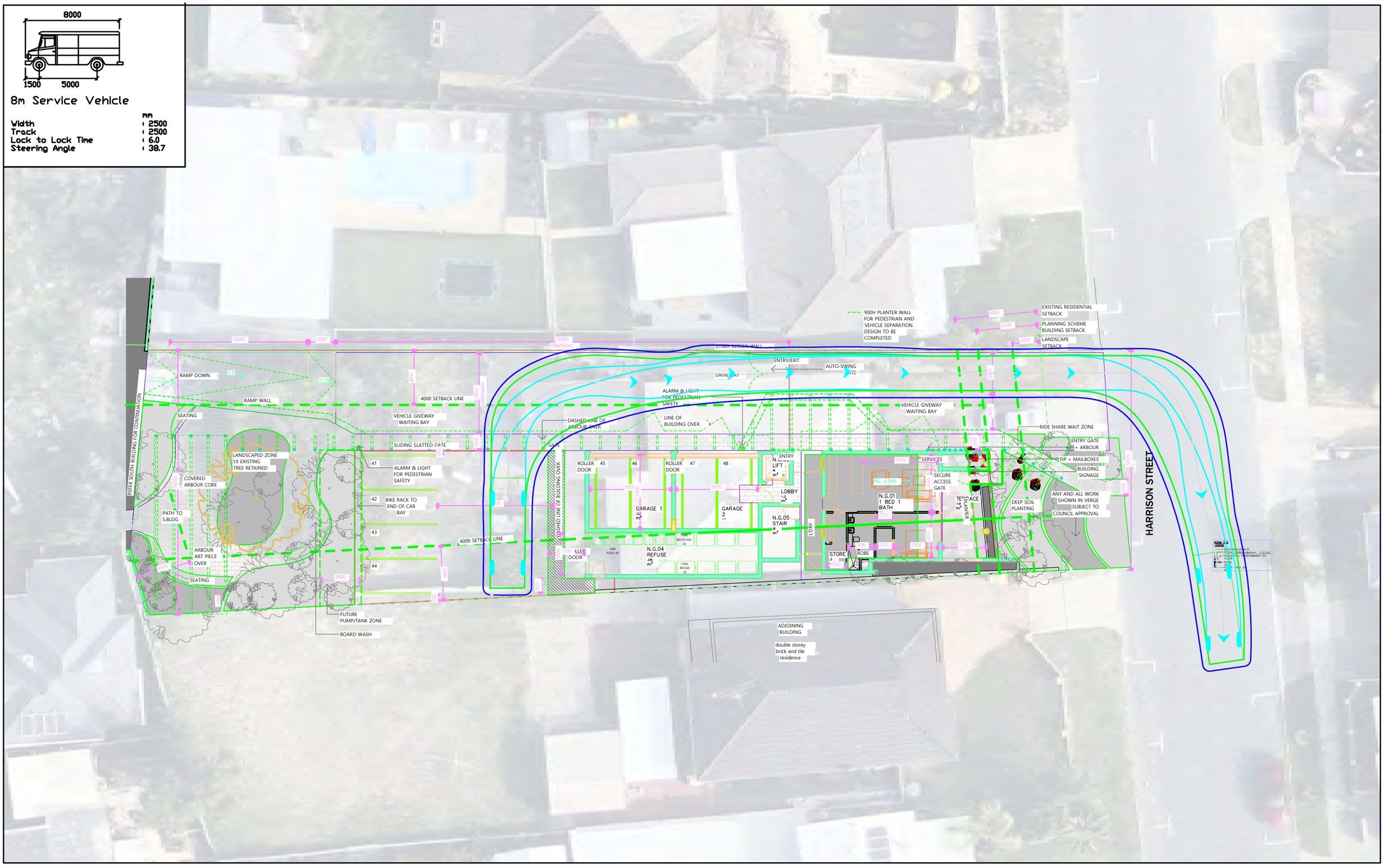

Harrison Street, Rockingham

8m Service Vehicle

Service Vehicle Exit

LEGEND

Vehicle Body

Wheel Path

500mm Clearance

t21.343.sk06b

10/10/2022

Scale: 1:250 @ A3

transcore

Waste Management Plan

89 Harrison Street, Rockingham

Prepared for DMG Architecture

12 August 2022

Project Number: TW21169

DOCUMENT CONTROL					
Version	**Description**	**Date**	**Author**	**Reviewer**	**Approver**
1.0	First Approved Release	8/03/2022	DP	RH	DP
2.0	Second Approved Release	10/08/2022	DP	AB	DP
3.0	Third Approved Release	12/08/2022	DP	AB	DP

Approval for Release

Name	**Position**	**File Reference**
Dilan Patel	Project Manager – Waste Management Consultant	TW21169-02_Waste Management Plan_3.0
Signature		

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Executive Summary

DMG Architecture is seeking development approval for the proposed residential development located at 89 Harrison Street, Rockingham (the Proposal).

To satisfy the conditions of the development application the City of Rockingham (the City) requires the submission of a Waste Management Plan (WMP) that will identify how waste is to be stored and collected from the Proposal. Talis Consultants has been engaged to prepare this WMP to satisfy the City's requirements.

A summary of the bin size, numbers, collection frequency and collection method is provided in the below table.

Proposed Waste Collection Summary

Waste Type	Generation (L/week)	Bin Size (L)	Number of Bins	Collection Frequency	Collection
Refuse	5,220	1,100	Five	Once each week	City of Rockingham
Recycling	2,040	1,100	Four	Fortnightly	City of Rockingham
FOGO	1,740	240	Eight	Once each week	City of Rockingham

The City will collect refuse, recyclables and FOGO from the Proposal. The City's waste collection vehicle will service the bins directly from the Bin Collection Area located in the ground floor carpark adjacent to the North Building Bin Storage Area accessed via Parkin Street.

Strata management will oversee the relevant aspects of waste management at the Proposal.

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3.2 Bin Sizes 4
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Diagram 2: South Buidling Bin Storage Area
Diagram 3: Bin Collection Point

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Figure 1: Locality Plan

1 Introduction

DMG Architecture is seeking development approval for the proposed residential development located at 89 Harrison Street, Rockingham (the Proposal).

To satisfy the conditions of the development application the City of Rockingham (the City) requires the submission of a Waste Management Plan (WMP) that will identify how waste is to be stored and collected from the Proposal. Talis Consultants has been engaged to prepare this WMP to satisfy the City's requirements.

The Proposal is bordered by Harrison Street to the north, Parkin Street to the South, and residential developments to the east and to the west, as shown in Figure 1.

1.1 Objectives and Scope

The objective of this WMP is to outline the equipment and procedures that will be adopted to manage waste (refuse, recyclables and FOGO) at the Proposal. Specifically, the WMP demonstrates that the Proposal is designed to:

- Adequately cater for the anticipated volume of waste to be generated;
- Provide adequately sized Bin Storage Areas, including appropriate bins; and
- Allow for efficient collection of bins by appropriate waste collection vehicles.

To achieve the objective, the scope of the WMP comprises:

- Section 2: Waste Generation;
- Section 3: Waste Storage;
- Section 4: Waste Collection;
- Section 5: Waste Management; and
- Section 6: Conclusion.

2 Waste Generation

The following section shows the waste generation rates used and the estimated waste volumes to be generated at the Proposal.

2.1 Proposed Tenancies

The anticipated volume of refuse, recyclables and FOGO is based on the 47 residential apartments at the Proposal. The Proposal consists of the following:

- One Bedroom Apartments – 12;
- Two Bedroom Apartments – 30; and
- Three Bedroom Apartments – 5.

2.2 Waste Generation Rates

In order to achieve an accurate projection of waste volumes for the Proposal, consideration was given to the Western Australian Local Government Association's (WALGA) *Multi Dwelling Development Waste Management Plan Guidelines* (2014). Table 2-1 shows the waste generation rates which have been applied to the Proposal.

Table 2-1: Waste Generation Rates

Type	WALGA Guideline Reference	Refuse Generation Rate	Recycling Generation Rate	FOGO Generation Rate
One Bedroom Apartments	1 Bedroom Dwelling	60L/week	20L/week	20L/week
Two Bedroom Apartments	2 Bedroom Dwelling	120L/week	40L/week	40L/week
Three Bedroom Apartments	3 Bedroom Dwelling	180L/week	120L/week	60L/week

2.3 Waste Generation Volumes

Waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown in Table 2-2. It is estimated that the Proposal will generate 5,220L of refuse, 2,040L of recyclables and 1,740L of FOGO each week.

Table 2-2: Estimated Waste Generation

Residential Apartments	Number of Apartments	Waste Generation Rate (L/week)	Waste Generation (L/week)
Refuse			
One Bedroom Apartments	12	60	720
Two Bedroom Apartments	30	120	3,600
Three Bedroom Apartments	5	180	900
		Total	**5,220**
Recyclables			
One Bedroom Apartment	12	20	240
Two Bedroom Apartments	30	40	1,200
Three Bedroom Apartments	5	120	600
		Total	**2,040**

Residential Apartments	Number of Apartments	Waste Generation Rate (L/week)	Waste Generation (L/week)
FOGO			
One Bedroom Apartment	12	20	240
Two Bedroom Apartments	30	40	1,200
Three Bedroom Apartments	5	60	300
		Total	**1,740**

3 Waste Storage

Waste materials generated within the Proposal will be collected in the bins located in the Bin Storage Areas, as shown in Diagram 1 and Diagram 2, and discussed in the following sub-sections.

3.1 Internal Transfer of Waste

To promote positive recycling behaviour and maximise diversion from landfill, the residential apartments will have room to accommodate two under counter/kitchen bins for the separate disposal of refuse and recyclables and kitchen caddies would be used to collect FOGO.

These internal bins will be transferred by residents to the respective Buildings Bin Storage Area for consolidation into the appropriate bins.

All bins will be colour coded and labelled in accordance with Australian Standards (AS 4123.7) to assist residents to dispose of their separate waste materials in the correct bins.

3.2 Bin Sizes

Table 3-1 gives the typical dimensions of standard bins sizes that may be utilised at the Proposal. It should be noted that these bin dimensions are approximate and can vary slightly between suppliers.

Table 3-1: Typical Bin Dimensions

Dimensions	Bin Sizes		
	240L	660L	1,100L
Depth (mm)	730	780	1,070
Width (mm)	585	1,260	1,240
Height (mm)	1,060	1,200	1,300

Reference: SULO Bin Specification Data Sheets

3.3 Bin Storage Area Size

To ensure sufficient area is available for storage of the bins, the amount of bins required for the Bin Storage Areas was modelled utilising the estimated waste generation in Table 2-2, bin sizes in Table 3-1 and based on collection of refuse and FOGO once each week and recyclables fortnightly.

Based on the results shown in Table 3-2 the total number of bins required at the Proposal are as follows:

- Five 1,100L refuse bins;
- Four 1,100L recycling bins; and
- Eight 240L FOGO bins.

Table 3-2: Bin Requirements for Bin Storage Area

Waste Stream	Waste Generation (L/week)	Number of Bins Required		
		240L	660L	1,100L
Refuse	5,220	22	8	5
Recycling	2,040	12	7	4
FOGO	1,740	8	-	-

The configuration of these bins within the Bin Storage Areas is shown in Diagram 1 and Diagram 2. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 1 and Diagram 2 represents the maximum requirements assuming one collection each week of refuse and FOGO and fortnightly collections of recyclables.

The breakdown of bins for each Buildings Bin Storage Area is as follows:

North Building Bin Storage Area

- Three 1,100L refuse bins;
- Two 1,100L recycling bins; and
- Four 240L FOGO bins.

South Building Bin Storage Area

- Two 1,100L refuse bins;
- Two 1,100L recycling bins; and
- Four 240L FOGO bins.

Diagram 1: North Building Bin Storage Area

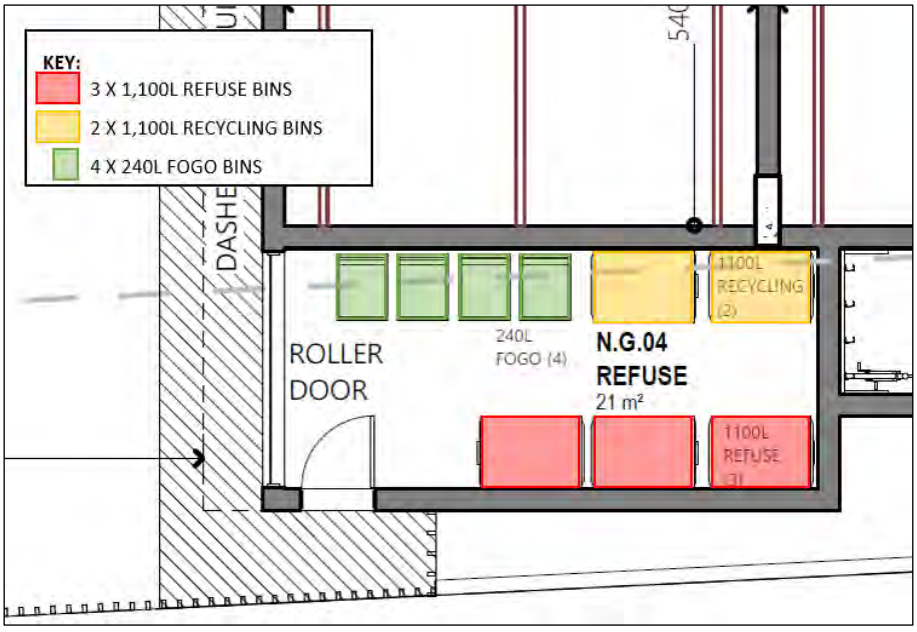
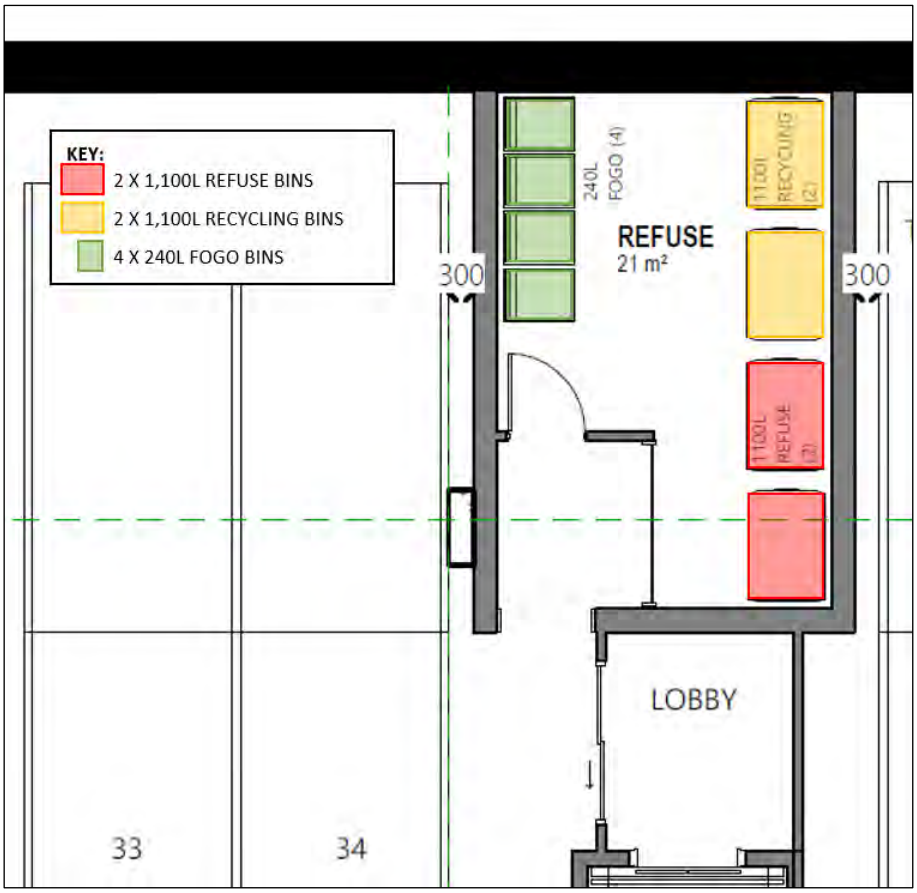


Diagram 2: South Buidling Bin Storage Area



3.4 Bin Storage Area Design

The design of the Bin Storage Areas will take into consideration:

- Smooth impervious floor sloped to a drain connected to the sewer system;
- Taps for washing of bins and Bin Storage Area;
- Adequate aisle width for easy manoeuvring of bins;
- Doors to the Bin Storage Area self-closing and vermin proof;
- Doors to the Bin Storage Area wide enough to fit bins through;
- Ventilated to a suitable standard;
- Appropriate signage;
- Undercover where possible and be designed to not permit stormwater to enter into the drain;
- Located behind the building setback line;
- Bins not to be visible from the property boundary or areas trafficable by the public; and
- Bins are reasonably secured from theft and vandalism.

Bin numbers and storage space within the Bin Storage Areas will be monitored by the strata management during the operation of the Proposal to ensure that the number of bins and collection frequency is sufficient.

4 Waste Collection

The City will service the Proposal and provide five 1,100L bins for refuse, four 1,100L bins for recyclables and eight 240L bins for FOGO. The City will collect refuse and FOGO once each week and recyclables fortnightly utilising a rear loader waste collection vehicle.

The City's rear loader waste collection vehicle will service the bins onsite, directly from the North Building Bin Storage Area from the Bin Collection Point. The City's waste collection vehicle will travel with left hand lane traffic flow on Parkin Street and turn into the Proposal in forward gear and pull up directly opposite the North Building Bin Storage Area for servicing, refer Diagram 3.

There is adequate clearance to service the bins using the City's rear loader waste collection vehicle with ceiling height exceeding the waste collection truck operational height (3.4m operational height).

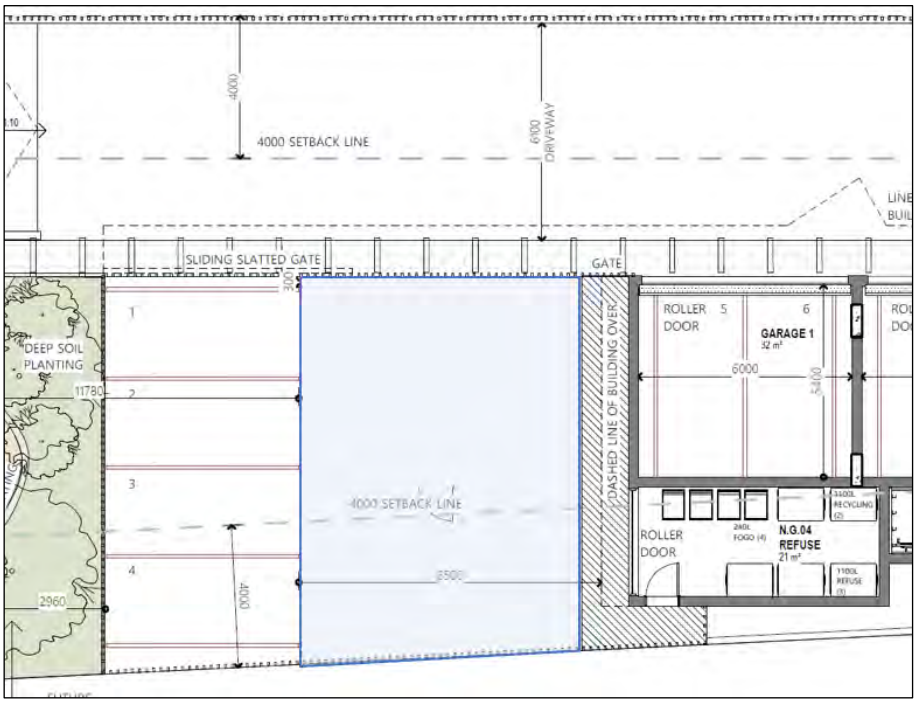
Strata management will ferry bins from the South Bin Storage Area to and from the North Buidling Bin Storage Areas/Bin Collection Point on collection days.

The City's staff will ferry bins to and from the rear loader waste collection vehicle and the Bin Storage Areas during servicing. The City will be provided with key/PIN code access to the Bin Storage Areas and security access gates to facilitate servicing, if required.

Once servicing is complete the City's waste collection vehicle will reverse back into the driveway and continue to exit in a forward motion, turning back onto Parkin Street moving with traffic flow.

The above servicing method will preserve the amenity of the area by removing the requirement for bins to be presented to the street on collection days. In addition, servicing of bins onsite will reduce the noise generated in the area during collection. Noise from waste vehicles must comply with the Environmental Protection (Noise) Regulations and such vehicles should not service the site before 7.00am or after 7.00pm Monday to Saturday, or before 9.00am or after 7.00pm on Sundays and Public Holidays.

Diagram 3: Bin Collection Point



4.1 Bulk Waste

Bulk waste materials will be removed from the Proposal as they are generated. Removal of bulk waste will be monitored by strata management, who will liaise with residents to assist with the removal of bulk waste, as required. A car bay could be utilised for the ad-hoc use of temporary skip bins for the collection of bulky wastes, if required.

5 Waste Management

Strata management will be engaged to complete the following tasks:

- Monitoring and maintenance of bins and the Bin Storage Areas;
- Cleaning of bins and Bin Storage Areas, when required;
- Ferry bins from the South Bin Storage Area to and from the Bin Collection Point on collection days;
- Monitoring and maintenance of bins and the Bin Storage Areas;
- Rotation of empty and full bins in the Bin Storage Areas to ensure residents will always have access to forward facing bins for easy disposal of waste;
- Ensure all residents at the Proposal are made aware of this WMP and their responsibilities thereunder;
- Monitor resident behaviour and identify requirements for further education and/or signage;
- Monitor bulk and speciality waste accumulation and assist with its removal, as required;
- Regularly engage with residents to develop opportunities to reduce waste volumes and increase resource recovery; and
- Regularly engage with the City to ensure efficient and effective waste service is maintained.

6 Conclusion

As demonstrated within this WMP, the Proposal provides sufficiently sized Bin Storage Areas for storage of refuse, recyclables and FOGO, based on the estimated waste generation volumes and suitable configuration of bins. This indicates that adequately designed Bin Storage Areas have been provided, and collection of refuse, recyclables and FOGO can be completed from the Proposal.

The above is achieved using:

- Five 1,100L refuse bins, collected once each week;
- Four 1,100L recycling bins, collected fortnightly; and
- Eight 240L recycling bins, collected once each week.

The City will collect refuse, recyclables and FOGO from the Proposal. The City's waste collection vehicle will service the bins directly from the Bin Collection Area located in the ground floor carpark adjacent to the North Building Bin Storage Area accessed via Parkin Street.

Strata management will oversee the relevant aspects of waste management at the Proposal.

Figures

Figure 1: Locality Plan

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LEGEND

- Site Layout
- Cadastre

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LOCALITY



0 1 2 3 4 km

LOCALITY PLAN

89 Harrison Street,
Rockingham, WA 6168

Aria Project Development Pty Ltd

N 0 10 20 30 40 m

Coordinate System: GCS GDA 1994, Datum: GDA 1994
Scale @ A3: 1:1,000

Prepared: W Robertson	Date: 7/12/2021
Reviewed: D Marchant	Revision: A
Project: TW21169	

talis consultants

Figure 1

Data source: Roads - Landgate, 2021; Cadastre - Landgate, 2021; Imagery: Nearmap, 2021.

Document Path: \\server\talis\SECTIONS\Waste\PROJECTS\TW2021\TW21169 - 89 Harrison Street, Rockingham WMP\GIS\Maps\TW21169_HarrisonStreet_WMP.aprx

Assets | Engineering | Environment | Noise | Spatial | Waste

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SPP7.3 R-CODES
VOLUME 2 - APARTMENTS
ASSESSMENT TEMPLATE

<table>
<tr><th colspan="2">ELEMENT 2.2</th><th colspan="2">BUILDING HEIGHT</th></tr>
<tr><td colspan="2">ELEMENT OBJECTIVES
Development is to achieve the following Element Objectives</td><td>APPLICANT COMMENT</td><td>ASSESSOR COMMENT</td></tr>
<tr><td colspan="2"></td><td colspan="2">Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.</td></tr>
<tr><td colspan="2">Acceptable Outcome Assessment</td><td>
<table>
<tr><th>DPP Provision</th><th>Assessment</th></tr>
<tr><td>3.6(a)</td><td>Given the residential nature of the existing area, the development has adopted greater setbacks than the policy anticipates.

The podium form is provided by the setting back of Level 3 and above and is further articulated through contrasting materiality and colour palette.</td></tr>
<tr><td>3.6(b)</td><td>The upper floors above the podium have been setback</td></tr>
<tr><td>3.6(c)</td><td>N/A</td></tr>
<tr><td>3.6(d)</td><td>Solar access of adjoining properties is maintained</td></tr>
<tr><td>3.6(e)

19m / 5 storeys</td><td>Noting that the policy excludes lift overruns, plant rooms and other utility / servicing buildings and structures, the building is 5 storeys with an additional floor comprising rooftop amenities and service buildings.</td></tr>
<tr><td>3.6(f)</td><td>The lift overrun is required to be approximately 4m high. The difference in height is negligible and will not be visible from the street or adjoining properties.</td></tr>
</table>
</td><td></td></tr>
<tr><td colspan="2">O2.2.1 – The height of development responds to the desired future scale and character of the street and local area, including existing buildings that are unlikely to change.</td><td>Proposed at five storeys of residential apartments with an additional floor for rooftop service and amenities, the proposed south buildings is consistent with the anticipated building height. The north tower is proposed at three storeys with an additional floor for rooftop services and amenities, which is below the anticipated height.

<u>Future Character</u>
The development is consistent with the desired future character of the street and area.</td><td></td></tr>
</table>

	The desired future character of this area is established by DPP 3.2.5 which is as follows: *This Precinct forms part of the western boundary of the Rockingham Strategic Metropolitan Centre. Medium to high density residential development is preferred.* Underpinning the desired future character, is the City and State's strategic framework which designates the area as a Strategic Metropolitan Centre, which is to deliver a significant proportion of the City's infill dwelling target, employment opportunities and community facilities. The framework settings were established to ensure the area achieves density around areas with high levels of amenity, serves and facilities, existing and planned public transport routes and employment. The importance of this area to the City's future dwelling yield and suitability for medium to high density is demonstrated by the minimum development size and yield provisions contained within DPP 3.2.5. The Policy seeks to prevent low-scaled development from sterilising lots and reducing the area's potential growth. Design Response to the Existing Buildings Within the Street and Surrounding Area *Precedent development* There are many precedent buildings within the local area which have been built in accordance with DPP 3.2.5 including but not limited to: • 9 storeys on Lot 76 Rockingham Road; 315m from the subject site on the same street alignment • 9 storeys on Lot 100 Rockingham Beach Road; 400m away from the subject site on the same street alignment • 7 storeys on Lot 374 Kent Street; 450m from the subject site. Importantly DPP 3.2.5 encourages height up to 5 storeys, subject to precinct-specific guidelines. The proposed height of the development directly responds to the desired future scale of the area under DPP 3.2.5. Importantly the additional bulk and scale beyond the 5 storeys and 19 metre control is set back and massed away from adjoining properties. The development includes large areas of landscaping at ground level and on-structure. The extensive landscaping at the building's edges will provide an attractive interface to	

	adjoining properties and will reduce the building's scale impact. The building's form responds to the different street characters. The bulk of the building is massed toward the busier Parkin Road frontage, and presents as a three storey building on the quieter Harrison Road. The development recognises the scale differences between it and adjoining development and has sought to minimise the scale impact by pulling the bulk away from the side boundaries, despite a three storey boundary wall being anticipated. The development meets the element objective.	
O2.2.2 – The height of buildings within a development responds to changes in topography.	The subject site is generally flat with less than one (1) metre fall from north to south across the site. The development meets the element objective.	
O2.2.3 – Development incorporates articulated roof design and/or roof top communal open space where appropriate.	The development features a concealed roof form, with rooftop communal open space comprising a high quality recreation facilities and amenities. The development contains large areas of communal open space co-located with high-quality landscaping. The development meets the element objective.	
O2.2.4 – The height of development recognises the need for daylight and solar access to adjoining and nearby residential development, communal open space and in some cases, public spaces.	The site is oriented north-south, with minimal overshadowing to adjoining lots. The development meets the element objective.	
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*		
A2.2.1 – Development complies with the building height limit (storeys) set out in Table 2.1, except where modified by the local planning framework, in which case development complies with the building height limit set out in the applicable local planning instrument. *(Excerpt from table 2.1)*		

Streetscape contexts and character *refer A2*	Low-rise		Medium-rise		Higher density residential		Neighbourhood centre	Mid-rise urban centres	High density urban centres		Planned areas
Site R-Coding	**R40**	**R50**	**R60**	**R80**	**R100**	**R160**	**R-AC4**	**R-AC3**	**R-AC2**	**R-AC1**	**R-AC0**
Building height (storeys) *refer 2.2*	2	3	3	4	4	5	3	6	7	9	

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	The City of Rockingham DPP3.2.5 - Development Policy Plan - Waterfront Village Sector, Section 3.6 replaces A2.2.1 of the R-Codes and as such, the maximum height for this site is 5 storeys and 19 metres. See full list of augmented provision above.

<table>
<tr><th colspan="2">ELEMENT 2.3</th><th colspan="3">STREET SETBACKS</th></tr>
<tr><td colspan="2">ELEMENT OBJECTIVES
Development is to achieve the following Element Objectives</td><td colspan="2">APPLICANT COMMENT</td><td>ASSESSOR COMMENT</td></tr>
<tr><td colspan="2"></td><td colspan="3">Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.</td></tr>
<tr><td colspan="2">Acceptable Outcome Assessment</td><td>Type 3:
A moderate level of frontage activation with a mix of small-scale commercial tenancies and residential apartments at ground level and a 2 to 3 storey façade positioned behind a 2 metre, green scaped setback. At the ground level, the facades of mixed-use buildings would address the street with a commercial shopfront, primary business entrance and/or residential entry lobby that is transparent over at least 60% of the façade. Residential dwellings are to have at least 30% of its facade transparent.

4.5m setback for development from 12.5m to 19m high</td><td>Minor structures such as retaining walls are proposed within the front setback area, however, structures such as these are expected elements of a landscape setback.

<u>Harrison Street</u>
Site specific front setbacks are provided:
Ground (podium): 2m landscaped setback
Level 1-5: the building is setback 4.5m setback or greater.
30% façade is comprised of glazing.

<u>Parkin Street</u>
Ground: 2m landscape setback
Level 1-3: Development above ground floor is generally setback 4.5m or greater.
50% of the façade is comprised of glazing</td><td></td></tr>
<tr><td colspan="2">O2.3.1 – The setback of the development from the street reinforces and/or complements the existing or proposed landscape character of the street.</td><td colspan="2">As demonstrated above the proposal is consistent with the front setback requirements of DPP 3.2.5.

<u>Existing landscape Character</u>
Many properties along both streetscapes have gardens with significant areas of lawn and some contain trees. The development will positively contribute to the existing and future landscape character by providing meaningful tree canopy, significant areas of landscaping, and direct points of access.</td><td></td></tr>
</table>

	To complement the existing coastal landscape of the area, The proposed landscape plan features *AGONIS FLEXUOSA*, which is an iconic West Australian endemic coastal tree species that thrive in the sandy beach soils of the coast. The development meets the element objective.	
O2.3.2 – The street setback provides a clear transition between the public and private realm.	The entry arbors, walls, hard landscaping, and tree canopy provide a clear delineation between the private and public realm. The development meets the element objective.	
O2.3.3 – The street setback assists in achieving visual privacy to apartments from the street.	The upper floors of the building have sought to balance the need for privacy with the need for passive surveillance. The building achieves greater average setbacks than what DPP 3.2.5 anticipates, while being close enough to provide 'eyes on the street'. The development meets the element objective.	
O2.3.4 – The setback of the development enables passive surveillance and outlook to the street.		

ACCEPTABLE OUTCOMES
Acceptable Outcome pathway may not be applicable where a performance solution is provided

A3.2.1 – Development complies with the street setback set out in Table 2.1, except where modified by the local planning framework, in which case development complies with the street setback set out in the applicable local planning instrument

(Excerpt from table 2.1)

Streetscape contexts and character *refer A2*	Low-rise		Medium-rise		Higher density residential		Neighbourhood centre	Mid-rise urban centres	High density urban centres		Planned areas
Site R-Coding	R40	R50	R60	R80	R100	R160	R-AC4	R-AC3	R-AC2	R-AC1	R-AC0
Minimum primary and secondary street setbacks *refer 2.3*	4m [4]	2m	2m		2m		2m or Nil [5]	2m or Nil [5]	2m or Nil [5]		

(4) Minimum secondary street setback 1.5m

(5) Nil setback applicable if commercial use at ground floor

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	The City of Rockingham DPP3.2.5 - Development Policy Plan - Waterfront Village Sector, Section 3.7 replaces A2.3.1 of the R-Codes.

ELEMENT 2.4	SIDE AND REAR SETBACKS	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**	**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Acceptable Outcome Assessment	Sections 3.4 - 3.7 and 4.4.5, Figures 3.3 and 3.3.6 DPP 3.2.5 identifies site specific side setback requirements of: Nil to 2 or 3 storey podium height. Minimum 4m above podium height.	Minor shortfalls to the minimum setback are proposed in respect of the following apartment walls: • S3.05 and S4.05 Level 3 – setback • Level 3 and 4 planters and windows on western elevations.
O2.4.1 – Building boundary setbacks provide for adequate separation between neighbouring properties.	The desired levels of separation are governed by the lot boundary setback settings of DPP 3.2.5. As demonstrated above the proposed development generally meets or exceeds the side setback requirements of DPP 3.2.5. Small shortfalls are proposed, however, these are largely associated with small design features or as a result of the unusual lot configuration. Taking into account average setbacks, the building exceeds the intended separation. The development meets the element objective.	
O2.4.2 – Building boundary setbacks are consistent with the existing streetscape pattern or the desired streetscape character**.**	The desired streetscape pattern is for a podium and upper level 'tower' set back from the lot boundaries. The development has been iteratively modified to achieve the appearance of a podium to align with the desired form of DPP 3.2.5. Further to this, the design responds to the residential nature of the area and proposes greater side setbacks at lower levels than what the policy prescribes to accommodate substantial landscaping and tree canopy. Together the setbacks of the development to the side boundaries and landscaping reinforce the rhythm of the streetscape. The development meets the element objective.	
O2.4.3 – The setback of development from side and rear boundaries enables retention of existing trees and provision of deep soil areas that reinforce the landscape character of the area, support tree canopy and assist with stormwater management.	The side setbacks are designed to accommodate trees in the large areas of deep soil areas located along the site boundaries. Significant areas of landscaping are achieved through the building's form., contributing to the landscape character of the area, supporting tree canopy, reducing the urban heat island effect and assisting with rainfall runoff.	

	The development meets the element objective.	
O2.4.4 –The setback of development from side and rear boundaries provides a transition between sites with different land uses or intensity of development.	Transition of the built form can be achieved in a number of ways. The development has achieved this through greater side setbacks, recessed upper floors, landscape screening and framing and an articulated form. The development meets the element objective.	

ACCEPTABLE OUTCOMES
Acceptable Outcome pathway may not be applicable where a performance solution is provided

A2.4.1 - Development complies with the side and rear setbacks set out in Table 2.1, except where:

a) modified by the local planning framework, in which case development complies with the side and rear setbacks set out in the applicable local planning instrument

AND /OR

b) a greater setback is required to address *3.5 Visual privacy*.

(Excerpt from table 2.1)

Streetscape contexts and character *refer A2*	**Low-rise**		**Medium-rise**		**Higher density residential**		**Neighbourhood centre**	**Mid-rise urban centres**	**High density urban centres**		**Planned areas**
Site R-Coding	**R40**	**R50**	**R60**	**R80**	**R100**	**R160**	**R-AC4**	**R-AC3**	**R-AC2**	**R-AC1**	**R-AC0**
Boundary wall height (storeys)[1,2] *refer 2.4*	1[3]		1[3]	2[3]	2[3]		2	3	4		
Minimum side setbacks[6] *refer 2.4*	2m	3m	3m		3m		Nil				
Minimum rear setback *refer 2.4*	3m		3m		6m		6m	Nil	Nil		
Average side setback where building length exceeds 16m *refer 2.4*	2.4m	3.5m	3.5m	3.5m	3.5m	4.0m	NA	NA	NA		

(1) Wall may be built up to a lot boundary, where it abuts an existing or simultaneously constructed wall of equal or greater proportions

(2) Where the subject site and an affected adjoining site are subject to different density codes, the length and height of any boundary wall on the boundary between them is determined by reference to the lower density code

(3) Boundary wall only permitted on one boundary, and shall not exceed 2/3 length.

(6) Boundary setbacks will also be determined by provisions for building separation and visual privacy within this SPP and building separation provisions of the NCC.

A2.4.2 – Development is setback from the boundary in order to achieve the Objectives outlined in *2.7 Building separation*, *3.3 Tree canopy and deep soil areas*, *3.5 Visual privacy* and *4.1 Solar and daylight access*.	
LOCAL PLANNING FRAMEWORK	**REQUIREMENT**
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	The City of Rockingham DPP3.2.5 - Development Policy Plan - Waterfront Village Sector, Section 4.4.5 replaces A2.4.1 of the R-Codes.

ELEMENT 2.5	PLOT RATIO		
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**		**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.		
Acceptable Outcome Assessment	Section 3.5 – Min 60 dwellings per hectare Max: 160 dwellings per hectare	47 apartments are proposed on a site area of 3,154sqm. Therefore, the density proposed is 148 dwellings per hectare, which is within the target range of 80-160 dwellings.	
O2.5.1 – The overall bulk and scale of development is appropriate for the existing or planned character of the area.	The proposal has been carefully and iteratively designed with input from the City's Design Review Panel to achieve an acceptable level of building bulk and scale that delivers a quality residential apartment building with the anticipated number of dwellings for this location. <u>Planned and Emerging Character</u> As noted in the assessment of Building Height, the City's DPP 3.2.5 articulates a strong desire for medium density development in this location and has built form settings to facilitate that desired character. The surrounding area has a number of high-density precedent developments built in accordance with DPP 3.2.5. The number and scale of these developments demonstrates that the precinct is in transition. The development is consistent with the planned and emerging character of the area. The development meets the element objective.		
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*			
A2.5.1 – Development complies with the plot ratio requirements set out in Table 2.1, except where modified by the local planning framework, in which case development complies with the plot ratio set out in the applicable local planning instrument. *(Excerpt from table 2.1)*			

Streetscape contexts and character *refer A2*	Low-rise		Medium-rise		Higher density residential		Neighbourhood centre	Mid-rise urban centres	High density urban centres		Planned areas
Site R-Coding	**R40**	**R50**	**R60**	**R80**	**R100**	**R160**	**R-AC4**	**R-AC3**	**R-AC2**	**R-AC1**	**R-AC0**
Plot ratio [7] *refer 2.5*	0.6	0.7	0.8	1.0	1.3	2.0	1.2	2.0	2.5	3.0	

(6) Refer to Definitions for calculation of plot ratio

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	The City of Rockingham DPP3.2.5 - Development Policy Plan - Waterfront Village Sector, Section 3.5 replaces A2.5.1 of the R-Codes and as such, the maximum yield for this site is 160 dwellings per hectare. See full list of augmented provision above.

ELEMENT 2.6	BUILDING DEPTH		
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**		**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.		
Acceptable Outcome Assessment	A2.6.1	The South building includes single aspect apartments on either side of hallway. The total width of this section of the building is 22m, which is consistent with the anticipated width of 20m. These single aspect apartments have been designed with living spaces that do not exceed 9m, which will ensure the apartments receive appropriate light and ventilation.	
O2.6.1 – Building depth supports apartment layouts that optimise daylight and solar access and natural ventilation.	The majority of apartments are dual aspect and only 3 (6.38%) south-facing single-aspect apartments are proposed. The development maximises solar access with 93.6% of apartments receiving direct sunlight. The development includes 60% of apartments that achieve cross ventilation. The development meets the element objective.		
O2.6.2 – Articulation of building form to allow adequate access to daylight and natural ventilation where greater building depths are proposed.	The development has been designed to maximise light, and ventilation. The angled windows on the western elevation maximise northern solar access and airflow to those apartments. The development meets the element objective.		
O2.6.3 – Room depths and / or ceiling heights optimise daylight and solar access and natural ventilation.	The generous floor to finished ceiling height will ensure apartments receive an appropriate amount of light and ventilation. The development meets the element objective.		
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*			
A2.6.1 – Developments that comprise single aspect apartments on each side of a central circulation corridor shall have a maximum building depth of 20m. All other proposals will be assessed on their merits with particular consideration to *4.1 Solar and daylight access* and *4.2 Natural ventilation*.			
LOCAL PLANNING FRAMEWORK	**REQUIREMENT**		
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:			

ELEMENT 2.7	BUILDING SEPARATION	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**	**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Acceptable Outcome Assessment	2.7.1 The setbacks of DPP 3.2.5 set out the desired setback separation standards for the precinct. The assessment of side setbacks has been provided in Element 2.4.	
O2.7.1 – New development supports the desired future streetscape character with spaces between buildings.	DPP 3.2.5 establishes the future character of the area, and the lot boundary setback provisions underpin the City's desired streetscape type. The policy seeks to have minimal setback at lower levels and greater setbacks above the podium. The proposed development is consistent with the side setback requirements of DPP 3.2.5. Larger setbacks are proposed for the first three storeys, and sufficient setback is provided at the top three storeys. The development meets the element objective.	
O2.7.2 – Building separation is in proportion to building height.	<u>North Building</u> The North building is a low-rise development, with generous separation provided to the western side boundary. Although minimal, the separation to the eastern side boundary exceeds the anticipated setbacks under DPP 3.2.5. <u>South Building</u> The South building is a mid-rise development with generous average setbacks to both boundaries. The top floor is recessed slightly, ensuring the development is set back appropriately when viewed from the street. The development meets the element objective.	
O2.7.3 – Buildings are separated sufficiently to provide for residential amenity including visual and acoustic privacy, natural ventilation, sunlight and daylight access and outlook.	The building has been designed to ensure that the adjoining properties maintain good solar access and are not unreasonably overshadowed. The framework has established what the necessary setback is to maintain the amenity of new development. Given that the development largely exceeds the anticipated setbacks, the development meets the element objective.	

O2.7.4 – Suitable areas are provided for communal and private open space, deep soil areas and landscaping between buildings	The north and south buildings exceeds the required areas of deep soil, communal and private open space, and provides a quality landscaping response. Due to the significant separation between the north and south building, a tree is able to be retained and green space provided. The development meets the element objective.	

ACCEPTABLE OUTCOMES
Acceptable Outcome pathway may not be applicable where a performance solution is provided

A2.7.1 – Development complies with the separation requirements set out in Table 2.7.

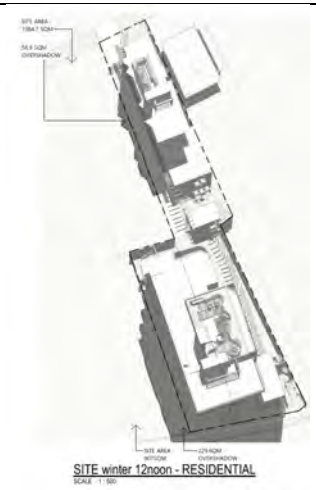
Table 2.7 Building separation

	Separation between:	Building height		
		≤ 4 storeys (up to 15m)	5-8 storeys (up to 28m)	≥ 9 storeys (over 28m)
Within site boundary	Habitable rooms/balconies	12m	18m	24m
	Habitable and non-habitable rooms	7.5m	12m	18m
	Non-habitable rooms	4.5m	6m	9m
To adjoining property boundaries	Habitable rooms/balconies and boundary	Refer 2.4 *Side and rear setbacks* (Table 2.1) and 3.5 *Visual privacy* (Table 3.5)	9m	12m
Distances apply from major openings of rooms, or the inside of balustrading of balconies. Average dimensions may be applied subject to major openings meeting other requirements for privacy, daylight and the like.				

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	The setbacks of Section 4.4.5 of DPP 3.2.5 set out the desired separation standards for the precinct and replace A2.7.1.

ELEMENT 3.2	**ORIENTATION**		
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*		**APPLICANT COMMENT**	**ASSESSOR COMMENT**
		Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Assessment of Acceptable Outcome and Design Guidance	A3.2.1	On each floor between 2-3 apartments are oriented to Parkin Street and one apartment is oriented to Harrison Street.	
	A3.2.2	N/A	

	A3.2.3 Due to the applied dwelling density, the site adjoining lots are effectively coded R80, and therefore has a nil requirement. A3.2.4 As above.	
O3.2.1 – Building layouts respond to the streetscape, topography and site attributes while optimising solar and daylight access within the development.	Both the North and South Buildings are orientated to their respective street frontages. At ground level, the South Building includes two apartments with private terraces that are directly accessible from Parkin Street. The North Building incorporates a dwelling that is oriented to and gains access directly from Harrison Street. The orientation and design of the building and dwellings have minimised the number of single aspect, south facing apartments. All apartments benefit from either a northern, western or eastern aspect optimising solar and daylight access. The building responds to its northern aspect and the ocean views by featuring angled windows on the western elevation that provides views to the ocean without causing adverse amenity impacts on the adjoining properties. The development meets the element objective.	
O3.2.2 – Building form and orientation minimises overshadowing of the habitable rooms, open space and solar collectors of neighbouring properties during mid-winter.	Notwithstanding the nil overshadowing requirement, the development proposes minimal overshadowing to adjoining properties. This is achieved through significant separation between the two buildings and the height and setbacks of the development. Due to the north building's low height and setbacks, just 56.9m^2 or 5.2% of Lot 61 is overshadowed at midday during the winter solstice. While the south building will cast shadow over just 229.6m2 or 25.3% of the site.	

	 Refer to the overshadowing diagram in Appendix C. The development meets the element objective.	

ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*
A3.2.1 – Buildings on street or public realm frontages are oriented to face the public realm and incorporate direct access from the street.
A3.2.2 – Buildings that do not have frontages to streets or public realm are oriented to maximise northern solar access to living areas.
A3.2.3 – Development in climate zones 4, 5 and 6 shall be designed such that the shadow cast at midday on 21st June onto any adjoining property does not exceed: - adjoining properties coded R25 and lower – 25% of the site area[1] - adjoining properties coded R30 – R40 - 35% of the site area[1] - adjoining properties coded R50 – R60 – 50% of the site area[1] - adjoining properties coded R80 or higher – Nil requirements. (1) Where a development site shares its southern boundary with a lot, and that lot is bound to the north by other lot(s), the limit of shading at A3.2.3 shall be reduced proportionally to the percentage of the affected properties northern boundary that abuts the development site. (Refer to Figure A7.2 in Appendix 7)
A3.2.4– Where adjoining sites are coded R40 or less, buildings are oriented to maintain 4 hours per day solar access on 21 June for existing solar collectors on neighbouring sites.

LOCAL PLANNING FRAMEWORK	**REQUIREMENT**
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 3.3	TREE CANOPY AND DEEP SOIL AREAS	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**	**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Assessment of Acceptable Outcome and Design Guidance	A3.3.1 / A3.3.2: Due to the separation between the North and South building, a large tree is proposed to be retained. A3.3.3: The development does not adversely overshadow the neighbouring properties. A3.3.4: With 368.3m^2 of DSA proposed, the site is afforded with 11.7% deep soil area, exceeding the anticipated proportion of DSA by 4.7%. A3.3.5: In addition to the retained tree, the development will add: • 5 medium/large trees • 19 small/medium trees • 12 small trees At maturity, the development will have 660.8m^2 of canopy cover, far exceeding the anticipated area. A3.3.6: N/A A3.3.7: Despite exceeding the required DSA, the proposal will add 845m^2 of planting area on-structure, of which 449.9m^2 has a planting depth of 1m.	
O3.3.1 – Site planning maximises retention of existing healthy and appropriate and protects the viability of adjoining trees.	The separation provided between the North and South building allows for the retention of a large tree in the middle of the site. Adjoining trees are sufficiently set back from their respective boundary so as not to be adversely impacted by the development. The development meets the element objective.	
O3.3.2 – Adequate measures are taken to improve tree canopy (long term) or to offset reduction of tree canopy from pre-development condition.	The development will add a total of 660.8m^2 of canopy cover to the site. The number and extent of canopy cover will positively contribute to the streetscape and landscape character of the area. The development meets the element objective.	
O3.3.3 – Development includes deep soil areas, or other infrastructure to support planting on structures, with sufficient area and volume to sustain healthy plant and tree growth.	The basement footprint is set in from the site boundaries to provide good opportunities for deep soil planting. Large areas of deep soil and planting areas on-structure will ensure the viability of all trees and plantings. The landscape plan has carefully considered the available soil depth, area and dimension when selecting tree species. The development meets the element objective.	

ACCEPTABLE OUTCOMES
Acceptable Outcome pathway may not be applicable where a performance solution is provided

A3.3.1 – Retention of existing trees on the site that meet the following criteria:

- healthy specimens with ongoing viability **AND**
- species is not included on a State or local area weed register **AND**
- height of at least 4m **AND/OR**
- trunk diameter of at least 160mm, measured 1m from the ground **AND/OR**
- average canopy diameter of at least 4m.

A3.3.2 – The removal of existing trees that meet any of the criteria at A3.3.1 is supported by an arboriculture report.

A3.3.3 – The development is sited and planned to have no detrimental impacts on, and to minimise canopy loss of adjoining trees.

A3.3.4 – Deep soil areas are provided in accordance with Table 3.3a. Deep soil areas are to be co-located with existing trees for retention and/or adjoining trees, or alternatively provided in a location that is conducive to tree growth and suitable for communal open space.

Table 3.3a Minimum deep soil area and tree provision requirements

Site Area	Minimum deep soil area	Minimum requirement for trees [1]
Less than 700m²	10% **OR** 7% if existing tree(s) retained on site (% site area)	1 medium tree and small trees to suit area
700 – 1,000m²		2 medium trees **OR** 1 large tree and small trees to suit area
› 1,000m²		1 large tree and 1 medium tree for each additional 400m² in excess of 1000m² **OR** 1 large tree for each additional 900m² in excess of 1000m² and small trees to suit area

[1] Minimum requirement for trees includes retained or new trees Refer Table 3.3b for tree sizes

A3.3.5 – Landscaping includes existing and new trees with shade producing canopies in accordance with Tables 3.3a and 3.3b.

Table 3.3b Tree sizes

Tree size	Indicative canopy diameter at maturity	Nominal height at maturity	Required DSA per tree	Recommended minimum DSA width	Minimum DSA width where additional rootable soil zone (RSZ) width provided[1] (min 1m depth)	Indicative pot size at planting
Small	4-6m	4-8m	9m²	2m	1m (DSA) + 1m (RSZ)	100L
Medium	6-9m	8-12m	36m²	3m	2m (DSA) + 1m (RSZ)	200L
Large	>9m	>12m	64m²	6m	4.5m (DSA) + 1.5m (RSZ)	500L

[1] Rootable areas are for the purposes of determining minimum width only and do not have the effect of reducing the required DSA.

A3.3.6 – The extent of permeable paving or decking within a deep soil area does not exceed 20 per cent of its area and does not inhibit the planting and growth of trees.

A3.3.7 – Where the required deep soil areas cannot be provided due to site restrictions, planting on structure with an area equivalent to two times the shortfall in deep soil area provision is provided.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 3.4	COMMUNAL OPEN SPACE		
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**		**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.		
Assessment of Acceptable Outcome and Design Guidance	A3.4.1	The proposal provides 327.29m2 of Communal Open Space (COS) which exceeds the maximum COS anticipated for an apartment building.	
	A3.4.2	Communal open space areas are level and accessible via lift.	
	A3.4.3	The rooftop COS areas will receive the maximum amount of light during the day.	
	A3.4.4	The COS area are co-located with quality on-structure landscaping	
	A3.4.5	Rooftop plant rooms that generate noise are designed with acoustic treatments to reduce noise transfer to the adjoining COS areas and dwellings.	
	A3.4.6	The COS will be appropriately lit and	
	A3.4.7	COS has been designed to limit the potential amenity impacts. The rooftop COS areas have wide planter boxes with dense landscape screening to limit overlooking. It is anticipated that management plans will form part of the conditions of approval to ensure these areas do not adversely impact the adjoining properties.	
O3.4.1 – Provision of quality communal open space that enhances resident amenity and provides opportunities for landscaping, tree retention and deep soil areas.	327.29m^2 of Communal open space is provided at both ground level and in a roof top area on the South Building. The ground floor communal open space is located on the eastern side of the building and will receive access to sunlight, as will the roof top space. Good opportunities for deep soil planting area provided at ground level.		
O3.4.2 – Communal open space is safe, universally accessible and provides a high level of amenity for residents.	The development's communal open space is accessible, and designed in accordance with CEPTD principles in mind. Individual lift access is provided to both the indoor and outdoor communal areas. The design of the communal areas provides an attractive outlook for future residents and for neighbouring properties. The development meets the element objective.		

O3.4.3 – Communal open space is designed and oriented to minimise impacts on the habitable rooms and private open space within the site and of neighbouring properties.	Communal open space has been designed with visual and acoustic separation to habitable rooms and private open spaces. Both rooftop areas are contained within a line of sight as viewed from the street and adjoining properties. Neither area will adversely impact the visual amenity of the locality. The development meets the element objective.	

ACCEPTABLE OUTCOMES
Acceptable Outcome pathway may not be applicable where a performance solution is provided

A3.4.1 – Developments include communal open space in accordance with Table 3.4

Table 3.4 Provision of communal open space

Development size	Overall communal open space requirement	Minimum accessible / hard landscape area (included in overall area requirement)	Minimum open space dimension
Up to 10 dwellings	Informal seating associated with deep soil or other landscaped areas	NA	NA
More than 10 dwellings	Total: 6m² per dwelling up to maximum 300m²	At least 2m² per dwelling up to 100m²	4m

A3.4.2 – Communal open space located on the ground floor or on floors serviced by lifts must be accessible from the primary street entry of the development.

A3.4.3 – There is 50 per cent direct sunlight to at least one communal open space area for a minimum of two hours between 9am and 3pm on 21 June.

A3.4.4– Communal open space is co-located with deep soil areas and/or planting on structure areas and/ or co-indoor communal spaces.

A3.4.5 – Communal open space is separated or screened from adverse amenity impacts such as bins, vents, condenser units, noise sources and vehicle circulation areas.

A3.4.6 – Communal open space is well-lit, minimises places for concealment and is open to passive surveillance from adjoining dwellings and/or the public realm.

A3.4.7 – Communal open space is designed and oriented to minimise the impacts of noise, odour, light-spill and overlooking on the habitable rooms and private open spaces within the site and of neighbouring properties.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 3.5	VISUAL PRIVACY	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*	**ASSESSOR COMMENT**
Assessment of Acceptable Outcome and Design Guidance	A3.5.1 Privacy shortfalls are proposed in respect of the balconies on each floor of the South building's north, east and west elevation. Each of these terraces and balconies are provided with an appropriate screening device that maintains the adjoining properties privacy and outlook to the horizon or landscaping areas. . A3.5.2 Ground floor apartments have been screened to maintain privacy, where proximate to circulation areas or lot boundaries. Upper level apartments maintain outlook through the design of the proposed planter boxes, which will provide an attractive landscaping area to each balcony while maintaining views to the horizon. A3.5.3 Ground floor apartments have been screened to maintain privacy, where proximate to circulation areas or lot boundaries. A3.5.4 The setbacks and design of the major openings and balconies balance the need for privacy both internally and externally, and the need for outlook.	
O3.5.1 – The orientation and design of buildings, windows and balconies minimises direct overlooking of habitable rooms and private outdoor living areas within the site and of neighbouring properties, while maintaining daylight and solar access, ventilation and the external outlook of habitable rooms.	The majority of rooms and private open space meet the required side setback requirements of DPP 3.2.5, which establishes sufficient separation. The South Building's western elevation, from Podium to Level 3, is provided with a 4m setback, which meets the setback requirements of DPP 3.2.5. The narrow, angled winged windows allow northern light and views to the ocean whilst minimising the privacy impact of adjoining properties. The ground floor balconies are screened at their edges or by the adjacent dividing fence to provide visual separation from circulation areas and adjoining properties. While not meeting A3.5.2 and 3.5.3, the setting of these apartments amongst landscaping and tree canopy and the generous size of the balconies will provide a high-amenity outcome for these apartments. Upper floor balconies that are not set back 6m from the adjoining lot boundary, feature balcony screening and 1.4m high planter boxes that will provide attractive landscape screening. The height and depth of these planter boxes have	

	been carefully designed to ensure that views from these balconies do not allow direct overlooking, while maintaining outlook to the horizon. The element objective has been met.	

ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*
A3.5.1 – Visual privacy setbacks to side and rear boundaries are provided in accordance with Table 3.5.
A3.5.2 – Balconies are unscreened for at least 25 per cent of their perimeter (including edges abutting a building).
A3.5.3 - Living rooms have an external outlook from at least one major opening that is not obscured by a screen.
A3.5.4 – Windows and balconies are sited, oriented, offset or articulated to restrict direct overlooking, without excessive reliance on high sill levels or permanent screening of windows and balconies.

LOCAL PLANNING FRAMEWORK	**REQUIREMENT**
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	**DPP 3.2.5 does not contain any specific visual privacy controls for this site.**

ELEMENT 3.6	PUBLIC DOMAIN INTERFACE		
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*		**ASSESSOR COMMENT**
Assessment of Acceptable Outcomes and Design Guidance	A3.6.1	Ground floor dwellings in both the north and south block are accessible from the street	
	A3.6.2	Car parking is mainly located at basement level, or sleaved by the ground floor dwelling in the north building.	
	A3.6.3	All dwellings that are oriented to the street have balconies and windows that address the street.	
	A3.6.4	Most balconies include a balance of solid and permeable balustrading.	
	A3.6.5	The ground floors of both the south and north building are relatively level with the natural ground level. The FFL of the south building is 0.5 m above the natural ground level and the north building is 1m above the natural ground level.	
	A3.6.6	Where above 1.2m, the front fence of the south building is visually permeable. The North building's ground floor apartment features a 1.73m high front fence. The height of the fence is needed to	
	A3.6.7	The landscaping provides clear sightlines through the communal walkways.	
	A3.6.8	Bins are service internally, with no bin stores located within the street setback.	
	A3.6.9	Services are fully integrated into the development.	
O3.6.1 – The transition between the private and public domain enhances the privacy and safety of residents.	The apartments from Parkin Street in the South Building are provided with direct points of access from the street. Upper level balconies overlook both street frontages. Balcony balustrades will be comprised of solid and visually permeable materials.		
O3.6.2 – Street facing development and landscape design retains and enhances the amenity and safety of the adjoining public domain, including the provision of shade.	All services fronting the street are integrated into the design of the development consistent with A3.6.9. The development meets the element objective.		

ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*	
A3.6.1 – The majority of ground floor dwellings fronting onto a street or public open space have direct access by way of a private terrace, balcony or courtyard.	
A3.6.2 – Car-parking is not located within the primary street setback; and where car parking is located at ground level behind the street setback it is designed to integrate with landscaping and the building façade (where part of the building).	
A3.6.3 – Upper level balconies and/or windows overlook the street and public domain areas.	
A3.6.4 – Balustrading includes a mix of visually opaque and visually permeable materials to provide residents with privacy while maintaining casual surveillance of adjoining public domain areas.	
A3.6.5 – Changes in level between private terraces, front gardens and the ground floor level of the building and the street level average less than 1m and do not exceed 1.2m.	
A3.6.6 – Front fencing includes visually permeable materials above 1.2m and the average height of solid walls or fences to the street does not exceed 1.2m.	
A3.6.7 – Fencing, landscaping and other elements on the frontage are designed to eliminate opportunities for concealment.	
A3.6.8 – Bins are not located within the primary street setback or in locations visible from the primary street.	
A3.6.9 – Services and utilities that are located in the primary street setback are integrated into the design of the development and do not detract from the amenity and visual appearance of the street frontage.[1] (1) Firefighting and access to services such as power and water meters require careful consideration in the design of the front façade. Consult early with relevant authorities to resolve functional requirements in an integrated design solution.	
LOCAL PLANNING FRAMEWORK	**REQUIREMENT**
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 3.7	PEDESTRIAN ACCESS AND ENTRIES	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**	**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Assessment of Acceptable Outcomes and Design Guidance	A3.7.1 Pedestrian entries are well defined and accessed directly from the street. A3.7.2 Internally, both residential entry points offer weather protection. A3.7.3 Both entries will be clearly lit, will be within view of the upper floor apartments. A3.7.4 The North building's pedestrian path is delineated via an arbor that runs the length of the path. A3.7.5 Services and utilities within lobby areas are concealed from view. A3.7.6 Bin storage areas are located proximate to car parking areas or the right-of-way, away from entry points.	
O3.7.1 – Entries and pathways are universally accessible, easy to identify and safe for residents and visitors.	Legible entrances are provided to building lobbies using clearly defined paths. The development meets the element objective.	
O3.7.2 – Entries to the development connect to and address the public domain with an attractive street presence.	Footpaths to ground floor apartments, quality arbour walkways and the attractive landscape setting for the entry areas will provide well-designed and legible points of entry. The development meets the element objective.	

ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*
A3.7.1 – Pedestrian entries are connected via a legible, well-defined, continuous path of travel to building access areas such as lift lobbies, stairs, accessways and individual dwelling entries.
A3.7.2 – Pedestrian entries are protected from the weather.
A3.7.3 – Pedestrian entries are well-lit for safety and amenity, visible from the public domain without opportunity for concealment, and designed to enable casual surveillance of the entry from within the site.
A3.7.4 – Where pedestrian access is via a shared zone with vehicles, the pedestrian path is clearly delineated and/or measures are incorporated to prioritise the pedestrian and constrain vehicle speed.
A3.7.5 – Services and utilities that are located at the pedestrian entry are integrated into the design and do not detract from the amenity of the entry.
A3.7.6 – Bins are not located at the primary pedestrian entry.

LOCAL PLANNING FRAMEWORK	**REQUIREMENT**

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 3.8	VEHICLE ACCESS		
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*		**APPLICANT COMMENT**	**ASSESSOR COMMENT**
		Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Assessment of Acceptable Outcomes and Design Guidance	A3.8.1	Vehicle access is provided via on crossover. The development will rationalise the existing crossovers to three properties.	
	A3.8.2	The vehicle access point is integrated into the building design and the driveway has been utilised to mass the north building away from the western lot boundary.	
	A3.8.3	The vehicle access points are set back from the street intersection in accordance with AS	
	A3.8.4	The ground floor dwelling in the North Building has incorporated a wall along its balcony edge to reduce the impact of light from cars accessing and egressing the site.	
	A3.8.5 A3.8.6	The vehicle access point is minimally designed for a two way access point.	
	A3.8.7	The setback of the development from the street will provide ample sightlines.	
O3.8.1 – Vehicle access points are designed and located to provide safe access and egress for vehicles and to avoid conflict with pedestrians, cyclists and other vehicles.		The front setback area is open, providing clear sightlines to the street and vice versa. Gated access will alert pedestrian and cyclists to vehicles leaving the site. The development meets this element objective	
O3.8.2 – Vehicle access points are designed and located to reduce visual impact on the streetscape.		Only one vehicle access point is provided, minimising the impact of crossovers on the streetscape. The development meets the element objective.	
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*			
A3.8.1 – Vehicle access is limited to one opening per 20m street frontage that is visible from the street.			
A3.8.2 – Vehicle entries are identifiable from the street, while being integrated with the overall façade design and/ or located behind the primary building line.			
A3.8.3 – Vehicle entries have adequate separation from street intersections.			
A3.8.4 – Vehicle circulation areas avoid headlights shining into habitable rooms within the development and adjoining properties.			
A3.8.5 – Driveway width is kept to a functional minimum, relative to the traffic volumes and entry/egress requirements.			
A3.8.6 – Driveways designed for two way access to allow for vehicles to enter the street in forward gear where:			

- the driveway serves more than 10 dwellings
- the distance from an on-site car parking to the street is 15m or more **OR**
- the public street to which it connects is designated as a primary distributor, district distributor or integrated arterial road.

A3.8.7 – Walls, fences and other structures truncated or reduced to no higher than 0.75m within 1.5m of where walls, fences, other structures adjoin vehicle access points where a driveway meets a public street and where two streets intersect (refer Figure 3.8a).

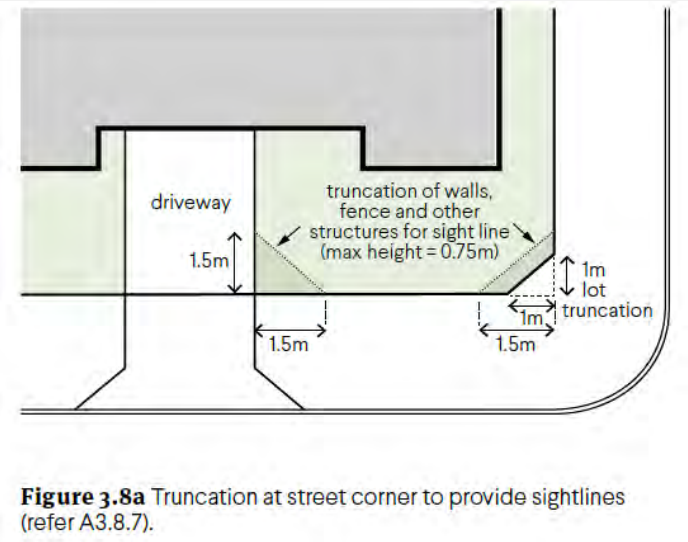


Figure 3.8a Truncation at street corner to provide sightlines (refer A3.8.7).

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 3.9	CAR AND BICYCLE PARKING	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**	**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Assessment of Acceptable Outcomes and Design Guidance	A3.9.1 A3.9.2	**Type** / **Required** / **Provided** Residential: 43 / 60 Visitor: 8 / Nil Motor cycle: 5 / 6 Residential Cycle: 24 / 28 Visitor Cycle: 5
	A3.9.3	The development does not exceed the maximum prescribed standard.
	A3.9.4	The development has been assessed by a traffic consultant and is supported by a TIA.
	A3.9.5	There are no parking bays proposed within the front setback area.
	A3.9.6	The parking areas are located at basement level or sleaved by residential apartments.
	A3.9.7 A3.9.8 A3.9.9	N/A
	A3.9.10	The basement parking area in the South building sits at 1m above the NGL
	3.8.1	The site is located in Area 'B'. The development is provided with surplus car parking bays. Subject to the City's approval, these bays can be designated as visitor bays and the balance requirement can be paid as cash-in-lieu for visitor parking bays.
	3.8.2	Parking to the development is via one crossover, which will rationalise the three existing ones. The parking areas are screened from view and facilitate a contiguous street front, which is
O3.9.1 – Parking and facilities are provided for cyclists and other modes of transport.	The development meets the anticipated number of cycle and motor cycle bays. The development provides cycle	

	infrastructure in convenient locations to encourage the use of non-motorised transport. The development achieves this element objective	
O3.9.2 – Car parking provision is appropriate to the location, with reduced provision possible in areas that are highly walkable and/or have good public transport or cycle networks and/or are close to employment centres.	The site is classified as Location A in accordance with the Regional Strategic Centre boundary noted below.  Appendix 1 of DPP 3.2.5 sates that residential car parking is to be in accordance with the R-codes Vol. 2. Due to the site's proximity to public transport and the amenities and facilities of the foreshore area, the lower parking ratios in Table 3.9a apply. The development provides 60 car parking bays, which exceeds the minimum number by 17.bays. No visitor parking is proposed given the provisions of DPP 3.2.5 requiring cash in lieu for these. The development achieves this element objective	
O3.9.3 – Car parking is designed to be safe and accessible.	The car parking area has been design in accordance with AS and reviewed by a qualified traffic consultant. The car parking layout is efficient, legible and universally accessible. The development is not required to provide a ACROD bay however, one bay has been provided. The development meets the element objective.	
O3.9.4 – The design and location of car parking minimises negative visual and environmental impacts on amenity and the streetscape.	Car parking is predominantly in the basement, concealed from view. The development meets the element objective.	
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*		

A3.9.1 – Secure, undercover bicycle parking is provided in accordance with Table 3.9 and accessed via a continuous path of travel from the vehicle or cycle entry point.

Table 3.9 Parking ratio

Parking types		Location A	Location B
Car parking[1]	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[1]	Resident	0.5 space per dwelling	
	Visitor	1 space per 10 dwellings	
Motorcycle/ Scooter parking[2]	Developments exceeding 20 dwellings provide 1 motorcycle/scooter space for every 10 car bays		

[1] Calculations of parking ratios shall be rounded up to the next whole number.
[2] For each five motorcycle/scooter parking bays provided in accordance with Table 3.9, car parking bays may be reduced by one bay.

Definitions:
Location A: 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.
Location B: not within Location A.

A3.9.2 – Parking is provided for cars and motorcycles in accordance with Table 3.9.

A3.9.3 – Maximum parking provision does not exceed double the minimum number of bays specified in Table 3.9

A3.9.4 – Car parking and vehicle circulation areas are designed in accordance with AS2890.1 (as amended) or the requirements of applicable local planning instruments.

A3.9.5 – Car parking areas are not located within the street setback and are not visually prominent from the street.

A3.9.6 – Car parking is designed, landscaped or screened to mitigate visual impacts when viewed from dwellings and private outdoor spaces.

A3.9.7 – Visitor parking is clearly visible from the driveway, is signed 'Visitor Parking' and is accessible from the primary entry or entries.

A3.9.8 – Parking shade structures, where used, integrate with and complement the overall building design and site aesthetics and have a low reflectance to avoid glare into apartments.

A3.9.9 – Uncovered at-grade parking is planted with trees at a minimum rate of one tree per four bays.

A3.9.10 – Basement parking does not protrude more than 1m above ground, and where it protrudes above ground is designed or screened to prevent negative visual impact on the streetscape.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	**Yes, DPP 3.2.5 imposes 3.8.1requires a cash-in-lieu payment for visitor car parking spaces.**

ELEMENT 4.1	SOLAR AND DAYLIGHT ACCESS	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*	**ASSESSOR COMMENT**
Assessment of Acceptable Outcomes and Design Guidance	A4.1.1 93.6% of apartments receive 2 hours or more of direct sun. A4.1.2 All apartments have one opening that exceeds the anticipated minimum size. A4.1.3 No apartment or habitable room relies on a lightwell for daylight. A4.1.4 Covered balconies provide the primary source of summer shading.	
O4.1.1 – In climate zones 4, 5 and 6: the development is sited and designed to optimise the number of dwellings receiving winter sunlight to private open space and via windows to habitable rooms.	The development has been designed as much as practicable to maximise daylight and solar access. The separation between the development's two buildings affords a greater number of dwellings to be dual aspect with good access to sunlight, thereby maximising solar access. 93.6% of dwellings receive at least 2 hours of sunlight on 21 June, and just 5.2% of dwellings are south facing. Apartments have expansive floor to ceiling windows that will capture ambient light, even for those rooms that don't benefit from direct sunlight. The development meets the element objective.	
O4.1.2 – Windows are designed and positioned to optimise daylight access for habitable rooms.	The building maximises the number of dwellings that are dual aspect, and receive light from the east, west, and north. Apartments on the western elevation include angled windows that take advantage of the northern aspect. The development meets the element objective.	
O4.1.3 – The development incorporates shading and glare control to minimise heat gain and glare: - from mid-spring to autumn in climate zones 4, 5 and 6 **AND** - year-round in climate zones 1 and 3.	The majority of apartments have balconies that will minimise the extent of unwanted heat gain and glare in the warmer months of the year. The development meets the element objective.	
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*		
A4.1.1 – In climate zones 4, 5 and 6 only:		

a) Dwellings with a northern aspect are maximised, with a minimum of 70 per cent of dwellings having living rooms and private open space that obtain at least 2 hours direct sunlight between 9am and 3pm on 21 June **AND** **b)** A maximum of 15 per cent of dwellings in a building receiving no direct sunlight between 9am and 3pm on 21 June.
A4.1.2 – Every habitable room has at least one window in an external wall, visible from all parts of the room, with a glazed area not less than 10 per cent of the floor area and comprising a minimum of 50 per cent of clear glazing.
A4.1.3 – Lightwells and/or skylights do not form the primary source of daylight to any habitable room.
A4.1.4 – The building is oriented and incorporates external shading devices in order to: - minimise direct sunlight to habitable rooms: ▪ between late September and early March in climate zones 4, 5 and 6 only **AND** ▪ in all seasons in climate zones 1 and 3 - permit winter sun to habitable rooms in accordance with A 4.1.1 (a).

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.2	NATURAL VENTILATION		
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**		**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.		
Assessment of Acceptable Outcomes and Design Guidance	A4.2.1	All habitable rooms have a door and window that are located in close proximity to one another to provide proper ventilation.	
	A4.2.2	60% of apartments are dual aspect and a further 17% are single aspect oriented to the prevailing breeze, are therefore naturally cross ventilated.	
	A4.2.3	N/A	
	A4.2.4	No lightwells are proposed.	
O4.2.1 – Development maximises the number of apartments with natural ventilation.	The proposal is consistent with the cross-ventilation requirements, demonstrating that the proposal maximises the number of dwellings capable of being naturally ventilated. Further, each apartment includes large windows that will maximise ventilation opportunity. The angled windows that are featured on the western elevation are designed to capture the prevailing wind. The development meets the element objective.		

O4.2.2 – Individual dwellings are designed to optimise natural ventilation of habitable rooms.	All habitable rooms have window to an external wall to ensure that no room relies on lightwells or other means for ventilation. The development meets the element objective.	
O4.2.3 – Single aspect apartments are designed to maximise and benefit from natural ventilation.	Single aspect apartments have been minimised, representing 40% of the total apartments. These dwellings have been purposefully designed to have a shallower depth; maximising natural airflow through and around the dwelling. The development meets the element objective.	

ACCEPTABLE OUTCOMES
Acceptable Outcome pathway may not be applicable where a performance solution is provided

A4.2.1 – Habitable rooms have openings on at least two walls with a straight line distance between the centre of the openings of at least 2.1m.

A4.2.2 –

- **(a)** A minimum 60 per cent of dwellings are, or are capable of, being naturally cross ventilated in the first nine storeys of the building
- **(b)** Single aspect apartments included within the 60 per cent minimum at (a) above must have:
  - ventilation openings oriented between 45° – 90° of the prevailing cooling wind direction **AND**
  - room depth no greater than 3 × ceiling height
- **(c)** For dwellings located at the 10th storey or above, balconies incorporate high and low level ventilation openings.

A4.2.3 – The depth of cross-over and cross-through apartments with openings at either end and no openings on side walls does not exceed 20m.

A4.2.4 – No habitable room relies on lightwells as the primary source of fresh-air.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.3	SIZE AND LAYOUT OF DWELLINGS	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*	**ASSESSOR COMMENT**
Assessment of Acceptable Outcomes and Design Guidance	A4.3.1 All apartments are consistent with the anticipated minimum floor area. A4.3.2 All apartments are consistent with the anticipated room area and dimension. A4.3.3 Ceiling heights exceed 2.7m A4.3.4 Single aspect apartments do not exceed 9m in length.	
O4.3.1 – The internal size and layout of dwellings is functional with the ability to flexibly accommodate furniture settings and personal goods, appropriate to the expected household size.	All apartments are provided with functional spaces relative to their size. Apartment areas are generous, reflecting the locality and allowing for intergenerational use. The floor plans demonstrate that living areas and bedrooms meet the minimum requirements. Furthermore, the plans include concept furnishings which confirms the areas provided are capable of being appropriately furnished. The development meets the element objective.	
O4.3.2 – Ceiling heights and room dimensions provide for well-proportioned spaces that facilitate good natural ventilation and daylight access.	The 3m ceiling heights will ensure all apartments maximise sunlight and ambient daylight. Single aspect apartments have been purposefully designed to have a shallower depth; maximising opportunities for solar access and natural airflow through and around the dwelling. The development meets the element objective.	

ACCEPTABLE OUTCOMES
Acceptable Outcome pathway may not be applicable where a performance solution is provided

A4.3.1 – Dwellings have a minimum internal floor area in accordance with Table 4.3a.

Table 4.3a Minimum floor areas for dwelling types

Dwelling type	Minimum internal floor area
Studio	37m²
1 bed	47m²
2 bed × 1 bath[1]	67m²
3 bed × 1 bath[1]	90m²

[1]An additional 3m² shall be provided for designs that include a second or separate toilet, and 5m² for designs that include a second bathroom.

A4.3.2 – Habitable rooms have minimum floor areas and dimensions in accordance with Table 4.3b.

Table 4.3b Minimum floor areas and dimensions for habitable rooms

Habitable room type	Minimum internal floor area	Minimum internal dimension
Master bedroom	10m²	3m
Other bedrooms	9m²	3m
Living room – studio and 1 bed apartments	N/A	3.6m
Living room – other dwelling types	N/A	4m

[1] Excluding robes

A4.3.3 – Measured from the finished floor level to finished ceiling level, minimum ceiling heights are:

- Habitable rooms – 2.7m
- Non-habitable rooms – 2.4m
- All other ceilings meet or exceed the requirements of the NCC.

A4.3.4 – The length of a single aspect open plan living area is equal to or less than 3 x the ceiling height. An additional 1.8m length may be provided for a kitchen, where the kitchen is the furthest point from the window in an open plan living area provided that the maximum length does not exceed 9m.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.4	PRIVATE OPEN SPACE AND BALCONIES	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*	**ASSESSOR COMMENT**
Assessment of Acceptable Outcomes and Design Guidance	A4.4.1 All balconies and private open space meet the minimum areas in Table 4.4. Several apartments (Level 1 and 2 S1.01,S1.09, S1.08, S1.07; Level 3 S3.08, S3.07 S3.06; Level 4 S4.06, S4.07 and S4.08) have slightly narrower dimensions than the minimum standard, however, maintain functionality. A4.4.2 All balconies have portions of their edges that are unscreened. A4.4.3 The development's balconies and associated framing and landscaping form key architectural elements of the proposal. A4.4.4 Services and fixtures are integrated into the building design, and not located in the private open space areas.	
O4.4.1 – Dwellings have good access to appropriately sized private open space that enhances residential amenity.	Balconies are generally consistent with or exceed the minimum area requirements and are functionally designed to allow flexible use. The development meets the element objective.	
O4.4.2 – Private open space is sited, oriented and designed to enhance liveability for residents.	All balconies have been oriented and sited to be accessed from one or more habitable room and are free of services and utilities. Balconies that address the street have excellent outlook. Apartments that address the side boundaries balance the need for outlook with adjoining properties privacy. The height and depth of the planter boxers have been designed to allow views to the horizon, but prevent views down to the properties' side boundaries and major openings. Vegetation in the planter boxes will further improve both outlook and privacy. The development meets the element objective.	
O4.4.3 – Private open space and balconies are integrated into the overall architectural form and detail of the building.	The balconies are designed to be open in nature to maximise opportunities for views, solar access and natural ventilation and to reduce bulk and scale as viewed from the street. The development meets the element objective.	
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*		
A4.4.1 – Each dwelling has private open space accessed directly from a habitable room with dimensions in accordance with Table 4.4.		

Table 4.4 Private open space requirements

Dwelling type	Minimum Area[1]	Minimum Dimension[1]
Studio apartment + 1 bedroom	8m²	2.0m
2 bedroom	10m²	2.4m
3 bedroom	12m²	2.4m
Ground floor / apartment with a terrace	15m²	3m

[1] Services and fixtures located within private open space, including but not limited to air-conditioner units and clothes drying, are not visible from the street and/or are integrated into the building design.

A4.4.2 – Where private open space requires screening to achieve visual privacy requirements, the entire open space is not screened and any screening is designed such that it does not obscure the outlook from adjacent living rooms.

A4.4.3 – Design detailing, materiality and landscaping of the private open space is integrated with or complements the overall building design.

A4.4.4 – Services and fixtures located within private open space, including but not limited to air-conditioner units and clothes drying, are not visible from the street and/or are integrated into the building design.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.5	CIRCULATION AND COMMON SPACES		
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*		**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*	**ASSESSOR COMMENT**
Assessment of Acceptable Outcomes and Design Guidance	A4.5.1	Circulation corridors are generally 1.7m wide or greater.	
	A4.5.2	All circulation corridors and common spaces are appropriately dimensioned, level and accessed via lifts.	
	A4.5.3	Circulation and common spaces have been designed with CPTED principles in mind.	
	A4.5.4	A lighting strategy will form part of the building permit.	
	A4.5.5	There are no habitable rooms that open directly onto a circulation space or corridor.	

O4.5.1 – Circulation spaces have adequate size and capacity to provide safe and convenient access for all residents and visitors.	Circulation areas are generally 1.7m, exceeding the widths required for universal access, providing safe and convenient access to residents and visitors. The development meets the element objective.	
O4.5.2 – Circulation and common spaces are attractive, have good amenity and support opportunities for social interaction between residents.	Circulation and common spaces are generously sized and have access to light. The circulation spaces are integrated into the landscape design, with common areas being co-located with soft and hard landscaping, bench seating and quality materials. Habitable rooms do not open directly onto circulation spaces. Where apartments are nearby to common areas, landscape screening has been successfully employed to protect the privacy of adjacent and nearby residents. The development meets the element objective.	

ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*
A4.5.1 – Circulation corridors are a minimum 1.5m in width.
A4.5.2 – Circulation and common spaces are designed for universal access.
A4.5.3 – Circulation and common spaces are capable of passive surveillance, include good sightlines and avoid opportunities for concealment.
A4.5.4 – Circulation and common spaces can be illuminated at night without creating light spill into the habitable rooms of adjacent dwellings.
A4.5.5 – Bedroom windows and major openings to living rooms do not open directly onto circulation or common spaces and are designed to ensure visual privacy and manage noise intrusion.

LOCAL PLANNING FRAMEWORK	**REQUIREMENT**
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.6	STORAGE	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*	**ASSESSOR COMMENT**
Assessment of Acceptable Outcomes and Design Guidance	A4.6.1 All stores meet or exceed the anticipated minimum dimensions sizes, however, the 3-bedroom apartment stores are 4m² in area. A4.6.2 Stores are accessible via level paths and a lift A4.6.3 Stores are screened from view.	
O4.6.1 – Well-designed, functional and conveniently located storage is provided for each dwelling.	Every apartment's storeroom is appropriately dimensioned and sized. The storerooms are proportional to the dwelling size and are accessible. The development meets the element objective.	

ACCEPTABLE OUTCOMES
Acceptable Outcome pathway may not be applicable where a performance solution is provided

A4.6.1 – Each dwelling has exclusive use of a separate, ventilated, weatherproof, bulky goods storage area. This can be located either internally or externally to the dwelling with dimensions in accordance with Table 4.6.

Table 4.6 Storage requirements

Dwelling type	Storage area[1]	Minimum dimension[1]	Minimum height[1]
Studio dwelling	3m²	1.5m	2.1m
1 bedroom dwelling	3m²		
2 bedroom dwellings	4m²		
3 bedroom dwellings	5m²		
[1] Dimensions exclusive of services and plant.			

A4.6.2 – Bulky good stores that are not directly accessible from the dwelling/private open space are located in areas that are convenient, safe, well-lit, secure and subject to passive surveillance.

A4.6.3 – Storage provided separately from dwellings or within or adjacent to private open space[1], is integrated into the design of the building or open space and is not readily visible from the public domain.

(1) Storage on/adjacent to private open space is additional to required open space area and dimensions.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.7	MANAGING THE IMPACT OF NOISE	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**	**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Assessment of Acceptable Outcomes and Design Guidance	A4.7.1 The development will incorporate the recommendations of the Acoustic Report and will meet the requirements of the NCC A4.7.2 The development will incorporate the recommendations of the Acoustic Report and potential noise sources will comply with the A4.7.3 Apartments are separated from noise sources.	
O4.7.1 – The siting and layout of development minimises the impact of external noise sources and provides appropriate acoustic privacy to dwellings and on-site open space.	The predicted noise emission levels from the plant rooms will comply subject to acoustic treatments being installed. Communal open space areas have been purposefully sited away from key noise sources. Where required management of noise sources such as the gym and rooftop will be incorporated into the development. It is anticipated that a condition of approval will be imposed that will require the recommendations of the acoustic report to be implemented. The development meets the element objective.	
O4.7.2 – Acoustic treatments are used to reduce sound transfer within and between dwellings and to reduce noise transmission from external noise sources.	The development will be built to the required Building standards to minimise noise transfer. The development meets the element objective.	
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*		
A4.7.1 – Dwellings exceed the minimum requirements of the NCC, such as a rating under the AAAC Guideline for Apartment and Townhouse Acoustic Rating (or equivalent).		
A4.7.2 – Potential noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open space and refuse bins are not located adjacent to the external wall of habitable rooms or within 3m of a window to a bedroom.		
A4.7.3 – Major openings to habitable rooms are oriented away or shielded from external noise sources.		
LOCAL PLANNING FRAMEWORK	**REQUIREMENT**	
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:		

ELEMENT 4.8	DWELLING MIX	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*	**ASSESSOR COMMENT**
Assessment of Acceptable Outcomes and Design Guidance	A4.8.1: 54% of dwellings are 3-bedrooms, 24% of dwellings are 1-bedroom 22% of dwellings are 2-bedroom. A4.8.2: All levels have a mix of dwelling sizes in the south building. The north building has less diversity due to the scale of that building.	
O4.8.1 – A range of dwelling types, sizes and configurations is provided that caters for diverse household types and changing community demographics.	Together, the north and south building will provide: • 13 one (1) bedrooms (27.6%); • 29 two (2) bedrooms (61.7%); and • 5 three (3) bedrooms (10.6%). Dwelling types are disbursed throughout the development, across most levels. The dwelling mix responds to demographic trends and local demand and will contribute to housing diversity in the local area. The development will provide quality housing for local residents in a range of dwelling sizes.	

ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*
A4.8.1 – **a)** Dwelling mix is provided in accordance with the objectives, proportions or targets specified in a local housing strategy or relevant local planning instrument **OR** **b)** Where there is no local housing strategy, developments of greater than 10 dwellings include at least 20 per cent of apartments of differing bedroom numbers.
A4.8.2 – Different dwelling types are well distributed throughout the development, including a mix of dwelling types on each floor.

LOCAL PLANNING FRAMEWORK	**REQUIREMENT**
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.9	UNIVERSAL DESIGN		
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*		**APPLICANT COMMENT**	**ASSESSOR COMMENT**
		Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Assessment of Acceptable Outcomes and Design Guidance		A4.9.1 The development will comply with the minimum requirements. It is anticipated that a condition of approval will be imposed to require the development to comply with A4.9.1.	
O4.9.1 – Development includes dwellings with universal design features providing dwelling options for people living with disabilities or limited mobility and/or to facilitate ageing in place.		At building permit stage, the required number of apartments will achieve silver level requirements of the Liveable Housing Design Guidelines. Although it is not required under the Building Code, an ACROD bay has been provided in the development. The development exceeds the minimum circulation widths and provides level access to dwellings, commercial premises and communal areas.	
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*			
A4.9.1 – **a)** 20 per cent of all dwellings, across a range of dwelling sizes, meet Silver Level requirements as defined in the Liveable Housing Design Guidelines (Liveable Housing Australia) **OR** **b)** 5 per cent of dwellings are designed to Platinum Level as defined in the Liveable Housing Design Guidelines (Liveable Housing Australia).			
LOCAL PLANNING FRAMEWORK		**REQUIREMENT**	
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:			

ELEMENT 4.10	FAÇADE DESIGN	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*	**ASSESSOR COMMENT**
Assessment of Acceptable Outcomes and Design Guidance	A4.10.1 The South Building achieves a podium design in accordance with the desired character outlined in DPP 3.2.5. The podium has three distinct vertical elements to ensure the building does not present as bulk from the street. The north building is scaled at a similar height to a large two storey home. The building seamlessly integrates with the streetscape. The design of both buildings are highly articulated, with varied setbacks, materials, patterns and colour. A4.10.2 The South building development has a clearly defined base (ground/podium), middle (Levels 1-3) and top (Levels 4-5). The top element is emphasised by the contrasting colour palette which reduces the bulk and scale of the proposal. The north building is less emphasised although the ground floor contrasts with the upper floors through varied materiality. A4.10.3 The podium height of 3 storeys and nil setback has been designed to correlate with the heights of newly constructure buildings in the town centre. A4.10.4 All services are integrated into the overall design of the building and will not detract from the streetscape. A4.10.5 N/A A4.10.6 N/A	
O4.10.1 – Building façades incorporate proportions, materials and design elements that respect and reference the character of the local area.	The proposed development carefully composes using textures concrete light coloured bricks and timber battens to provide a light, coastal aesthetic that reflects the character of the area.	
O4.10.2 – Building façades express internal functions and provide visual interest when viewed from the public realm.	In order to integrate into the existing residential character of the street, the development features increased side setbacks that accommodate significant deep soil and tree canopy, balconies that address the street, dwellings that can be access directly from the street via paths and steps that mimic a residential dwelling.	

	The development utilises high-quality materials that will positively contribute to the street.	

ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*
A4.10.1 – Façade design includes: - scaling, articulation, materiality and detailing at lower levels that reflect the scale, character and function of the public realm - rhythm and visual interest achieved by a combination of building articulation, the composition of different elements and changes in texture, material and colour.
A4.10.2 – In buildings with height greater than four storeys, façades include a defined base, middle and top for the building.
A4.10.3 – The façade includes design elements that relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights.
A4.10.4 – Building services fixtures are integrated in the design of the façade and are not visually intrusive from the public realm.
A4.10.5 – Development with a primary setback of 1m or less to the street includes awnings that: - define and provide weather protection to entries - are integrated into the façade design - are consistent with the streetscape character.
A4.10.6 – Where provided, signage is integrated into the façade design and is consistent with the desired streetscape character.

LOCAL PLANNING FRAMEWORK	**REQUIREMENT**
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.11	ROOF DESIGN	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*	**ASSESSOR COMMENT**
Assessment of Acceptable Outcomes and Design Guidance	A4.11.1 The concealed roof design is consistent with the recently constructed high density development in the precinct. A4.11.2 All services are either screened or located so as to be contained within the line of site. It is anticipated that a condition of approval will be imposed to that effect. A4.11.3 The rooftop communal areas are separated in accordance with the DPP 3.2.5 setbacks and feature adequate from neighbouring properties and will not adversely impact the visual or acoustic privacy of these properties.	
O4.11.1 – Roof forms are well integrated into the building design and respond positively to the street.	The roof forms have been designed as integrated elements of the building, with all services and fixtures screened from view or contained within a line of sight from the street and neighbouring properties. The development meets the element objective.	
O4.11.2 – Where possible, roof spaces are utilised to add open space, amenity, solar energy generation or other benefits to the development.	The communal roof terraces have been designed to minimise overlooking to adjoining neighbours through increased setback of the as a result of its location on the building. It is anticipated that management measures that limit the hours of use of the communal roof terrace will protect the amenity of residentials within the development or on surrounding sites.	

ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*
A4.11.1 – The roof form or top of building complements the façade design and desired streetscape character.
A4.11.2 – Building services located on the roof are not visually obtrusive when viewed from the street.
A4.11.3 – Useable roof space is safe for users and minimises overlooking and noise impacts on private open space and habitable rooms within the development and on adjoining sites.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.12	LANDSCAPE DESIGN	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*	**ASSESSOR COMMENT**
Assessment of Acceptable Outcomes and Design Guidance	A4.12.1 The landscape plan has been prepared by Plan / E, by qualified landscape designers. A4.12.2 Landscaping frames the rooftop terrace, providing an attractive outlook and amenity for the wider area. A4.12.3 The soil depth, area and dimensions are suitable for the trees and vegetation proposed A4.12.4 Building services fixtures are fully integrated into the building design.	
O4.12.1 – Landscape design enhances streetscape and pedestrian amenity; improves the visual appeal and comfort of open space areas; and provides an attractive outlook for habitable rooms.	In addition to the retained tree, the development will add: • 5 medium/large trees • 19 small/medium trees • 12 small trees At maturity, the development will have 660.8m^2 of canopy cover, far exceeding the anticipated area. The majority of the on-site trees will be planted at ground level, which has several benefits: landscape screening, improved outlook for internal and external residents and optimal growth conditions. One medium tree will be planted on the Harrison street frontage and 4 medium trees will be planted on the Parkin Street frontage, to reinforce and improve upon the landscape character in this locality. On-structure planting is proposed along the edges of the rooftop to provide an attractive setting and to reduce the perceived visual privacy impact. The development meets the element objective.	
O4.12.2 – Plant selection is appropriate to the orientation, exposure and site conditions and is suitable for the adjoining uses.	The plant selection is comprised of local, Australian and introduced species, suited the aspect, and micro-climates created by the development. Many of the trees planted on-structure are sub-tropical species that will thrive despite damp soils.	

	Endemic species such as *AGONIS FLEXUOSA* and *BANKSIA INTEGRIFOLIA.* will thrive in the sandy soils of the deep soil and planting areas. The development meets the element objective.	
O4.12.3 – Landscape design includes water efficient irrigation systems and where appropriate incorporates water harvesting or water re-use technologies.	The landscape plan proposed water efficient irrigation practices such as: • Moisture sensors throughout, to ensure water use is minimised • Use of low water use emitters to ensure only sufficient water is provided to irrigate planting areas • In-line fertilisation unit to ensure fertilising and moisture retention is controlled • Use of pop - up flood bubblers to suit size of garden beds to ensure any over-spray and wastage is mitigated, and; • A detailed design and specification will be provided at building license application stage. The development meets the element objective.	
O4.12.4 – Landscape design is integrated with the design intent of the architecture including its built form, materiality, key functional areas and sustainability strategies.	The architectural design is fully integrated into the landscape design. Landscaping elements frame the side elevations and the rooftop areas and form a key component of the design intent. Landscaping defines both entries and walkways, forms screening along the boundaries and will provide attractive outlook and settings particularly for lower level apartments. The tree canopy provided as part of the landscape plan are co-located with the main communal areas, and key to it's overall design intent, The development meets the element objective.	
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*		
A4.12.1 – Submission of a landscape plan prepared by a competent landscape designer. This is to include a species list and irrigation plan demonstrating achievement of Waterwise design principles.		
A4.12.2 – Landscaped areas are located and designed to support mature, shade-providing trees to open space and the public realm, and to improve the outlook and amenity to habitable rooms and open space areas.		
A4.12.3 – Planting on building structures meets the requirements of Table 4.12.		

Table 4.12 Planting on structure: minimum soil standards for plant types and sizes

Plant type	Definition	Soil volume	Soil depth	Soil area
Large tree	Over 12m high, crown spread at maturity	76.8m³	1,200mm	64m² with minimum dimension 7m
Medium tree	8-12m high, crown spread at maturity	36m³	1,000mm	36m² with minimum dimension 5m
Small tree	4-8m high, crown spread at maturity	7.2m³	800mm	3m × 3m
Small ornamentals	3-4m high, crown spread at maturity	3.2m³	800mm	2m × 2m
Shrubs	--	--	500-600mm	--
Ground cover	--	--	300-450mm	--
Turf	--	--	200mm	--

A4.12.4 – Building services fixtures are integrated in the design of the landscaping and are not visually intrusive.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.15	ENERGY EFFICIENCY	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**	**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Assessment of Acceptable Outcomes and Design Guidance	A4.15.1 — The development includes solar panels on the building's rooftop.	
O4.15.1 – Reduce energy consumption and greenhouse gas emissions from the development.	The development will include solar panels on the roof which will generate renewable electricity for the building. In addition, the development has been designed to achieve excellent levels of solar access and cross ventilation. There are no south-facing apartments, and most apartments have dual aspect. Where single aspect apartments are proposed, the length of the apartments has been designed to ensure appropriate ambient light. Passive designed apartments require less lighting and air conditioning, have less embodied energy, which over the course of the lifetime will reduce energy use. The development meets the element objective.	

ACCEPTABLE OUTCOMES
Acceptable Outcome pathway may not be applicable where a performance solution is provided

A4.15.1 –

a) Incorporate at least one significant energy efficiency initiative within the development that exceeds minimum practice (refer Design Guidance) **OR**

b) All dwellings exceed the minimum NATHERS requirement for apartments by 0.5 stars.[1]

Compliance with the NCC requires that development shall achieve an average star-rating across all dwellings that meets or exceeds a nominated benchmark, and that each unit meets or exceeds a slightly lower benchmark. Compliance with this Acceptable Outcome requires that each unit exceeds that lower benchmark by at least half a star.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.16	WATER MANAGEMENT AND CONSERVATION	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT** *Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.*	**ASSESSOR COMMENT**
Assessment of Acceptable Outcomes and Design Guidance	A4.16.1 – All dwellings will be individually metered A4.16.2 – All stormwater will be contained and managed on-site. A4.16.3 – The development will handle 1-in 100 year storm events. It is anticipated that a condition of approval will be imposed addressing this.	
O4.16.1 – Minimise potable water consumption throughout the development.	Each apartment will include a meter, water-efficient appliances, and irrigation practices such as: • Moisture sensors throughout, to ensure water use is minimised • Use of low water use emitters to ensure only sufficient water is provided to irrigate planting areas • In-line fertilisation unit to ensure fertilising and moisture retention is controlled • Use of pop - up flood bubblers to suit size of garden beds to ensure any over-spray and wastage is mitigated, and; • A detailed design and specification will be provided at building license application stage. The development meets the element objective.	
O4.16.2 – Stormwater runoff from small rainfall events is managed on-site, wherever practical.	The development has been designed to handle storm events. It is anticipated that a condition of approval will be imposed addressing this. The development meets the element objective.	
O4.16.3 – Reduce the risk of flooding so that the likely impacts of major rainfall events will be minimal.	In addition to handling a storm event, the building includes large areas of planting area that will assist in managing rainfall runoff. The development meets the element objective.	
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*		
A4.16.1 – Dwellings are individually metered for water usage.		
A4.16.2 – Stormwater runoff generated from small rainfall events is managed on-site.		
A4.16.3 – Provision of an overland flow path for safe conveyance of runoff from major rainfall events to the local stormwater drainage system.		
LOCAL PLANNING FRAMEWORK	**REQUIREMENT**	

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

ELEMENT 4.17	WASTE MANAGEMENT	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**	**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Assessment of Acceptable Outcomes and Design Guidance	A4.17.1 The waste storage facilities have been designed in accordance with the city's standards, commensurate with the predicted volume of waste generation and frequency of delivery. A4.17.2 A waste management plan (WMP) has been prepared in support of the application. A4.17.3 Waste facilities include FOGO, recycling and general waste. A4.17.4 Waste storage facilities are internally located, and screened from view.	
O4.17.1 – Waste storage facilities minimise negative impacts on the streetscape, building entries and the amenity of residents.	Enclosed waste storage areas adjoin the car parking areas, within the development. All dwellings are separated from the proposed bin rooms, maximising internal amenity. The development meets the element objective.	
O4.17.2 – Waste to landfill is minimised by providing safe and convenient bins and information for the separation and recycling of waste.	Waste facilities include FOGO, recycling and general waste. The bin storage areas are conveniently located for residents to utilise. The development meets the element objective.	
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*		
A4.17.1 – Waste storage facilities are provided in accordance with the Better Practice considerations of the *WALGA Multiple Dwelling Waste Management Plan Guidelines* (or local government requirements where applicable).		
A4.17.2 – A Level 1 Waste Management Plan (Design Phase) is provided in accordance with the *WALGA Multiple Dwelling Waste Management Plan Guidelines* - Appendix 4A (or equivalent local government requirements).		
A4.17.3 – Sufficient area is provided to accommodate the required number of bins for the separate storage of green waste, recycling and general waste in accordance with the *WALGA Multiple Dwelling Waste Management Plan Guidelines* - Level 1 Waste Management Plan (Design Phase) (or local government requirements where applicable).		
A4.17.4 – Communal waste storage is sited and designed to be screened from view from the street, open space and private dwellings.		
LOCAL PLANNING FRAMEWORK	**REQUIREMENT**	
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:		

ELEMENT 4.18	Utilities	
ELEMENT OBJECTIVES *Development is to achieve the following Element Objectives*	**APPLICANT COMMENT**	**ASSESSOR COMMENT**
	Outline the rationale demonstrating that the proposal has met the Element Objectives, through either a performance based solution or using the Acceptable Outcomes. The Design Guidance provided in the policy may be of assistance.	
Assessment of Acceptable Outcomes and Design Guidance	A4.18.1 All utilities are fully integrated into the design of the development and will not detract from the streetscape. A4.18.2 The development will be fibre-to premises ready. A4.18.3 Services are integrated into the design of the building, located away from private open space and areas of amenity. A4.18.4 Laundry facilities are either located in enclosed laundry rooms or within large habitable living areas of the dwelling, allowing convenient use and proper ventilation.	
O4.18.1 –The site is serviced with power, water, gas (where available), wastewater, fire services and telecommunications/broadband services that are fit for purpose and meet current performance and access requirements of service providers.	The development has been designed to be fully serviced by power, water, wastewater, telecommunications and fire services. The design also meets the requirements for servicing for each utility. The development meets the element objective.	
O4.18.2 – All utilities are located such that they are accessible for maintenance and do not restrict safe movement of vehicles or pedestrians.	Services are contained within lockable rooms. The service rooms are generally located away from vehicle manoeuvring areas, pedestrian and circulations areas. The development meets the element objective.	
O4.18.3 – Utilities, such as distribution boxes, power and water meters are integrated into design of buildings and landscape so that they are not visually obtrusive from the street or open space within the development.	Utilities are generally stored in lockable rooms within the building, and fully integrated into the overall design of the building. Consequently, utilities are not visible from the street or from the primary communal areas. The development meets the element objective.	
O4.18.4 – Utilities within individual dwellings are of a functional size and layout and located to minimise noise or air quality impacts on habitable rooms and balconies.	Utility and service rooms are separated from dwellings and located away from communal open space, to maintain internal amenity and minimise noise transfer. An acoustic report has been prepared as part of the subject application, the recommendations of which will be implemented at Building Permit stage. The development meets the element objective.	
ACCEPTABLE OUTCOMES *Acceptable Outcome pathway may not be applicable where a performance solution is provided*		

A4.18.1 – Utilities that must be located within the front setback, adjacent to the building entry or on visible parts of the roof are integrated into the design of the building, landscape and/or fencing such that they are accessible for servicing requirements but not visually obtrusive.	
A4.18.2 – Developments are fibre-to-premises ready, including provision for installation of fibre throughout the site and to every dwelling.	
A4.18.3 – Hot water units, air-conditioning condenser units and clotheslines are located such that they can be safely maintained, are not visually obtrusive from the street and do not impact on functionality of outdoor living areas or internal storage.	
A4.18.4 – Laundries are designed and located to be convenient to use, secure, weather-protected and well-vented; and are of an overall size and dimension that is appropriate to the size of the dwelling.	
LOCAL PLANNING FRAMEWORK	**REQUIREMENT**
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	

Modification	Planning Element	Planning merit
Changes to South building setback and reconfiguration of north facing South Building	Lot boundary setback, Visual Privacy, building separation	The increased northern setback of the South Building to the adjoining property to the north, from 3.25m to 6m, makes the development compliant with the side and rear lot boundary setbacks under LPP3.2.5 and consistent with the R-Codes Vol. 2 visual privacy setbacks in respect of apartments: • SP.05 and SP.06; • S1.06 and S1.07; • S2.06 and S2.07; • S3.05 and S3.06; and • S4.05 and S4.06 Given that LPP3.2.5 establishes the desired separation for the site, the development also complies with element 2.7 of the R-Codes Vol. 2.
Reduced street setback of North Building, enlarged terrace	Street setback	Minor changes to the street setback of the ground floor North Building and enlarged terrace to NG.01 – to address DRP comments. The development continues to balance the transition between the existing setbacks and streetscape and the future streetscape envisaged by the planning framework. Terrace angled to allow casual surveillance of street, looking away from the driveway entry (headlights)
Balcony treatments	Visual privacy	The west facing balconies of the South Building have been redesigned to limit direct views into adjoining properties and address concerns raised during public consultation. The planters have been widened to 0.8m wide and a ledge added to reduce view angle downward. Even when standing at the balcony edge the residents will not be able to look directly into the area subject to the privacy requirement, whilst still allowing a long distance outlook for the amenity of residents. The visual privacy impact of the balconies located on the eastern elevation is limited to a driveway. Given the variation is minor in nature and the nature of the area being overlooked, the current design is considered appropriate.
Lowered basement ceiling height	Visual Privacy	The lowered basement ceiling height reduces the height of the finished floor level of the podium level (ground floor), below 0.5m (to RL0.450) above the natural ground level. The podium level apartments now comply with the visual privacy requirements to adjoining properties.
Modified vehicle access	Vehicle access	To address the City's internal department comments the vehicle access point and entry into the basement are now single lane widths with space for passing bays to allow cars to safely access and egress the site. Permeable paving and a raised planter has been added to address DRP comments to soften the driveway with planting and to increase safety by separating pedestrian and vehicular movements.
Modifications to basement area	Parking and bicycle parking	Various minor changes to the basement area to comply with Australian Standards which result in a small reduction in the number of car parking bays (from 52 to 48 bays). However,

		parking supply at the developments continues to exceed the requirements of the R-Codes by 5 bays. Whist there has been a consolidation of bicycle parking into one enclosed zone; There are no changes proposed to the provision of bicycle or motorcycle bays and both remain compliant with the R-Codes Vol. 2.
Removal of second waste facility in south building and enlarged waste store in North Building.	Waste Management	The second waste store in the south building has been removed to address the City's internal department comments.
Modified pedestrian access	Pedestrian access and entries	Modified arbours and walkways, to address the City's internal department comments and the City's Design Review Panel's comments to both enhance framing and signal entries and incorporate timber elements from historical context into the design features of the development.
Improvement to central node	Communal areas	Further amenities including,, board wash and bicycle repair have been added to the central landscaped area.
Increased Deep soil area, tree canopy and landscaping	Deep soil area and tree canopy Landscaping	Deep soil areas have been increased from 729.9m^2 to 743.7m^2. As a result of the: • increased setbacks of the South Building to the adjoining property to the north; and • modified emergency exit path on the western side of the South Building. The landscaped area has increased from 845m^2 to 855.8m^2. Further information has been provided regarding soil volume. The proposal now provides 5 large trees, 19 medium trees and 12 small trees. Tree canopy has increased from 660.8m^2 to 673.6m^2.
Retention of Norfolk Pine/removed retained tree in central landscaping area	Deep Soil and Tree Canopy	The Norfolk Pine will be retained to address the City's DRP's comments. The tree that has previously been proposed for retention In the central nose is now being removed as it is not suitable based on the retention criteria in element 3.3 of the R-Codes Vol. 2.
Modified tree species	Landscaping	Tree species have been updated to better reflect the available soil volume and setting within the site.
Addition of timber seating along frontage	Public domain interface	Timber Seating to address DRP context comments and to provide community benefit.
Additional water tanks and drainage details	Water Management	Tanks will be installed under North Building car parking area. Drainage information has been added to the floor plans.
Lowered dividing fence height	Lot boundary setback	As a consequence of the podium level apartments being lowered and now complying with visual privacy setbacks to adjoining properties, screening is no longer required, removing the need for high dividing fences. The high dividing fence was a concern raised in public consultation.
Changes to storeroom access	Storerooms	Most storerooms will now be accessed internally, rather than from circulation areas to address the City's DRP comments.
Increased lobby area and changes to stairs	Circulation and common spaces	The lobby to the North Building has been made more generous and the stair design incorporated to demonstrate compliance with the BCA.

Additional apartments that meet Silver Level requirements under the Livable housing Design Guidelines	Universal Access	Eight apartments have now been redesigned to demonstrate design features that meet the requirements of the Livable Housing Design Guidelines.
Added windows to circulation areas	Ventilation	Operable windows to the circulation areas will greatly improve ventilation to the North and South Buildings particularly for the single aspect apartments. From a technical point of view, however, the Acceptable outcome for the element 4.2 of the R-Codes Vol. 2, remains unchanged and are compliant with element 4.2 of the R-Codes Vol. 2.
Solar panels	Energy efficiency	Solar panel details have been added to the development plans. The development now complies with element 4.17 of the R-Codes Vol. 2.

Waste Management Plan

89 Harrison Street, Rockingham

Prepared for DMG Architecture

13 October 2022

Project Number: TW21169

DOCUMENT CONTROL					
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Name	**Position**	**File Reference**
Dilan Patel	Project Manager – Waste Management Consultant	TW21169-02_Waste Management Plan_4.0
Signature		

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Executive Summary

DMG Architecture is seeking development approval for the proposed residential development located at 89 Harrison Street, Rockingham (the Proposal).

To satisfy the conditions of the development application the City of Rockingham (the City) requires the submission of a Waste Management Plan (WMP) that will identify how waste is to be stored and collected from the Proposal. Talis Consultants has been engaged to prepare this WMP to satisfy the City's requirements.

A summary of the bin size, numbers, collection frequency and collection method is provided in the below table.

Proposed Waste Collection Summary

Waste Type	Generation (L/week)	Bin Size (L)	Number of Bins	Collection Frequency	Collection
Refuse	5,220	1,100	Five	Once each week	City of Rockingham
Recycling	2,040	1,100	Four	Fortnightly	City of Rockingham
FOGO	1,740	240	Eight	Once each week	City of Rockingham

The City will collect refuse, recyclables and FOGO from the Proposal. The City's waste collection vehicle will service the bins directly from the Bin Collection Area located in the ground floor carpark adjacent to the Bin Storage Area accessed via Harrison Street.

Strata management will oversee the relevant aspects of waste management at the Proposal.

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1 Introduction

DMG Architecture is seeking development approval for the proposed residential development located at 89 Harrison Street, Rockingham (the Proposal).

To satisfy the conditions of the development application the City of Rockingham (the City) requires the submission of a Waste Management Plan (WMP) that will identify how waste is to be stored and collected from the Proposal. Talis Consultants has been engaged to prepare this WMP to satisfy the City's requirements.

The Proposal is bordered by Harrison Street to the north, Parkin Street to the South, and residential developments to the east and to the west, as shown in Figure 1.

1.1 Objectives and Scope

The objective of this WMP is to outline the equipment and procedures that will be adopted to manage waste (refuse, recyclables and FOGO) at the Proposal. Specifically, the WMP demonstrates that the Proposal is designed to:

- Adequately cater for the anticipated volume of waste to be generated;
- Provide adequately sized Bin Storage Areas, including appropriate bins; and
- Allow for efficient collection of bins by appropriate waste collection vehicles.

To achieve the objective, the scope of the WMP comprises:

- Section 2: Waste Generation;
- Section 3: Waste Storage;
- Section 4: Waste Collection;
- Section 5: Waste Management; and
- Section 6: Conclusion.

2 Waste Generation

The following section shows the waste generation rates used and the estimated waste volumes to be generated at the Proposal.

2.1 Proposed Tenancies

The anticipated volume of refuse, recyclables and FOGO is based on the 47 residential apartments at the Proposal. The Proposal consists of the following:

- One Bedroom Apartments – 12;
- Two Bedroom Apartments – 30; and
- Three Bedroom Apartments – 5.

2.2 Waste Generation Rates

In order to achieve an accurate projection of waste volumes for the Proposal, consideration was given to the Western Australian Local Government Association's (WALGA) *Multi Dwelling Development Waste Management Plan Guidelines* (2014). Table 2-1 shows the waste generation rates which have been applied to the Proposal.

Table 2-1: Waste Generation Rates

Type	WALGA Guideline Reference	Refuse Generation Rate	Recycling Generation Rate	FOGO Generation Rate
One Bedroom Apartments	1 Bedroom Dwelling	60L/week	20L/week	20L/week
Two Bedroom Apartments	2 Bedroom Dwelling	120L/week	40L/week	40L/week
Three Bedroom Apartments	3 Bedroom Dwelling	180L/week	120L/week	60L/week

2.3 Waste Generation Volumes

Waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown in Table 2-2. It is estimated that the Proposal will generate 5,220L of refuse, 2,040L of recyclables and 1,740L of FOGO each week.

Table 2-2: Estimated Waste Generation

Residential Apartments	Number of Apartments	Waste Generation Rate (L/week)	Waste Generation (L/week)
Refuse			
One Bedroom Apartments	12	60	720
Two Bedroom Apartments	30	120	3,600
Three Bedroom Apartments	5	180	900
		Total	**5,220**
Recyclables			
One Bedroom Apartment	12	20	240
Two Bedroom Apartments	30	40	1,200
Three Bedroom Apartments	5	120	600
		Total	**2,040**

Residential Apartments	Number of Apartments	Waste Generation Rate (L/week)	Waste Generation (L/week)
FOGO			
One Bedroom Apartment	12	20	240
Two Bedroom Apartments	30	40	1,200
Three Bedroom Apartments	5	60	300
		Total	**1,740**

3 Waste Storage

Waste materials generated within the Proposal will be collected in the bins located in the Bin Storage Areas, as shown in Diagram 1, and discussed in the following sub-sections.

3.1 Internal Transfer of Waste

To promote positive recycling behaviour and maximise diversion from landfill, the residential apartments will have room to accommodate two under counter/kitchen bins for the separate disposal of refuse and recyclables and kitchen caddies would be used to collect FOGO.

These internal bins will be transferred by residents to the Bin Storage Area for consolidation into the appropriate bins.

All bins will be colour coded and labelled in accordance with Australian Standards (AS 4123.7) to assist residents to dispose of their separate waste materials in the correct bins.

3.2 Bin Sizes

Table 3-1 gives the typical dimensions of standard bins sizes that may be utilised at the Proposal. It should be noted that these bin dimensions are approximate and can vary slightly between suppliers.

Table 3-1: Typical Bin Dimensions

Dimensions	Bin Sizes		
	240L	660L	1,100L
Depth (mm)	730	780	1,070
Width (mm)	585	1,260	1,240
Height (mm)	1,060	1,200	1,300

Reference: SULO Bin Specification Data Sheets

3.3 Bin Storage Area Size

To ensure sufficient area is available for storage of the bins, the amount of bins required for the Bin Storage Area was modelled utilising the estimated waste generation in Table 2-2, bin sizes in Table 3-1 and based on collection of refuse and FOGO once each week and recyclables fortnightly.

Based on the results shown in Table 3-2 the total number of bins required at the Proposal are as follows:

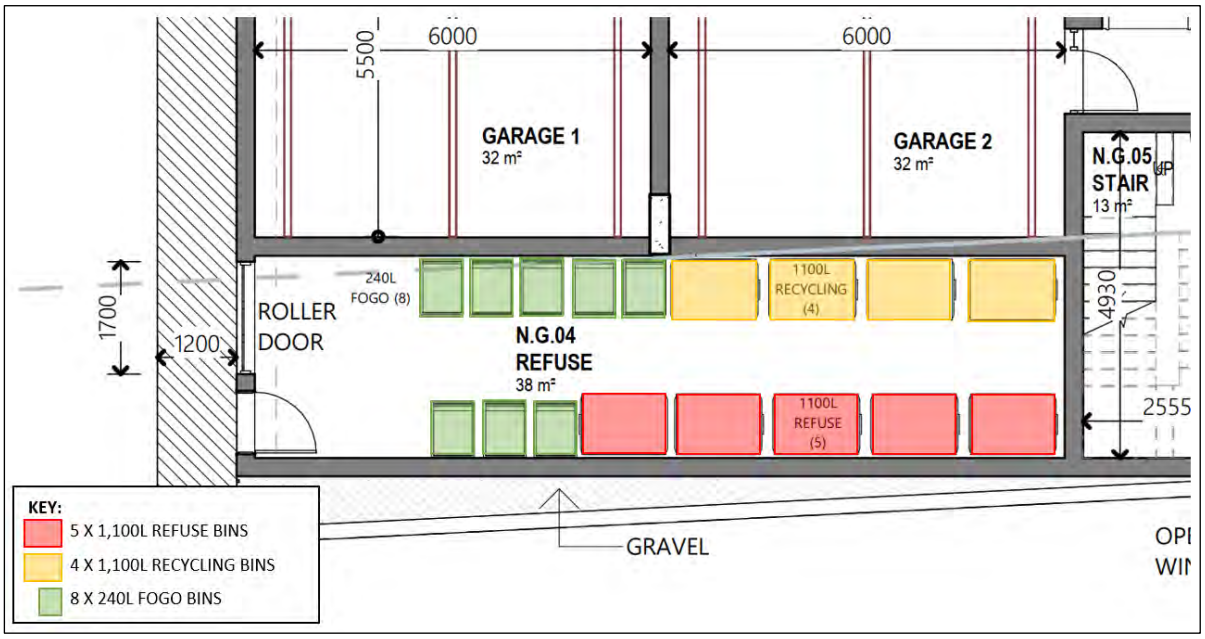
- Five 1,100L refuse bins;
- Four 1,100L recycling bins; and
- Eight 240L FOGO bins.

Table 3-2: Bin Requirements for Bin Storage Area

Waste Stream	Waste Generation (L/week)	Number of Bins Required		
		240L	660L	1,100L
Refuse	5,220	22	8	5
Recycling	2,040	12	7	4
FOGO	1,740	8	-	-

The configuration of these bins within the Bin Storage Areas is shown in Diagram 1. It should be noted that the number of bins and corresponding placement of bins shown in Diagram 1 represents the maximum requirements assuming one collection each week of refuse and FOGO and fortnightly collections of recyclables.

Diagram 1: Bin Storage Area



3.4 Bin Storage Area Design

The design of the Bin Storage Area will take into consideration:

- Smooth impervious floor sloped to a drain connected to the sewer system;
- Taps for washing of bins and Bin Storage Area;
- Adequate aisle width for easy manoeuvring of bins;
- Doors to the Bin Storage Area self-closing and vermin proof;
- Doors to the Bin Storage Area wide enough to fit bins through;
- Ventilated to a suitable standard;
- Appropriate signage;
- Undercover where possible and be designed to not permit stormwater to enter into the drain;
- Located behind the building setback line;
- Bins not to be visible from the property boundary or areas trafficable by the public; and
- Bins are reasonably secured from theft and vandalism.

Bin numbers and storage space within the Bin Storage Area will be monitored by the strata management during the operation of the Proposal to ensure that the number of bins and collection frequency is sufficient.

4 Waste Collection

The City will service the Proposal and provide five 1,100L bins for refuse, four 1,100L bins for recyclables and eight 240L bins for FOGO. The City will collect refuse and FOGO once each week and recyclables fortnightly utilising a rear loader waste collection vehicle.

The City's rear loader waste collection vehicle will service the bins onsite, directly from the Bin Storage Area. The City's waste collection vehicle will travel with left hand lane traffic flow on Harrison Street and turn into the Proposal in forward gear and pull up directly opposite the Bin Storage Area for servicing, refer Diagram 2.

There is adequate clearance to service the bins using the City's rear loader waste collection vehicle with ceiling height exceeding the waste collection truck operational height (3.4m operational height).

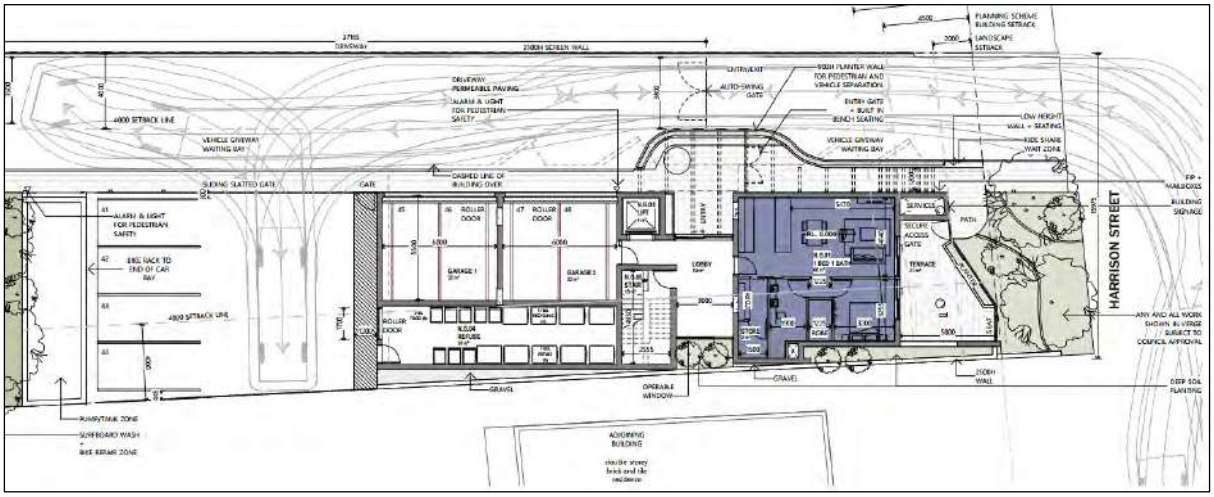
The City's staff will ferry bins to and from the rear loader waste collection vehicle and the Bin Storage Areas during servicing. The City will be provided with key/PIN code access to the Bin Storage Areas and security access gates to facilitate servicing, if required.

Once servicing is complete the City's waste collection vehicle will reverse back into the driveway and continue to exit in a forward motion, turning back onto Harrison Street moving with traffic flow.

The above servicing method will preserve the amenity of the area by removing the requirement for bins to be presented to the street on collection days. In addition, servicing of bins onsite will reduce the noise generated in the area during collection. Noise from waste vehicles must comply with the Environmental Protection (Noise) Regulations and such vehicles should not service the site before 7.00am or after 7.00pm Monday to Saturday, or before 9.00am or after 7.00pm on Sundays and Public Holidays.

The ability for the City's rear loader waste collection vehicle to access the Proposal in a safe manner has been assessed by Transcore. Refer to Transcore's Traffic Impact Statement for further information.

Diagram 2: Swept Path Analysis



4.1 Bulk Waste

Bulk waste materials will be removed from the Proposal as they are generated. Removal of bulk waste will be monitored by strata management, who will liaise with residents to assist with the removal of bulk waste, as required. A car bay could be utilised for the ad-hoc use of temporary skip bins for the collection of bulky wastes, if required.

5 Waste Management

Strata management will be engaged to complete the following tasks:

- Monitoring and maintenance of bins and the Bin Storage Area;
- Cleaning of bins and Bin Storage Area, when required;
- Monitoring and maintenance of bins and the Bin Storage Area;
- Ensure all residents at the Proposal are made aware of this WMP and their responsibilities thereunder;
- Monitor resident behaviour and identify requirements for further education and/or signage;
- Monitor bulk and speciality waste accumulation and assist with its removal, as required;
- Regularly engage with residents to develop opportunities to reduce waste volumes and increase resource recovery; and
- Regularly engage with the City to ensure efficient and effective waste service is maintained.

6 Conclusion

As demonstrated within this WMP, the Proposal provides a sufficiently sized Bin Storage Area for storage of refuse, recyclables and FOGO, based on the estimated waste generation volumes and suitable configuration of bins. This indicates that an adequately designed Bin Storage Area has been provided, and collection of refuse, recyclables and FOGO can be completed from the Proposal.

The above is achieved using:

- Five 1,100L refuse bins, collected once each week;
- Four 1,100L recycling bins, collected fortnightly; and
- Eight 240L recycling bins, collected once each week.

The City will collect refuse, recyclables and FOGO from the Proposal. The City's waste collection vehicle will service the bins directly from the Bin Collection Area located in the ground floor carpark adjacent to the Bin Storage Area accessed via Harrison Street.

Strata management will oversee the relevant aspects of waste management at the Proposal.

Figures

Figure 1: Locality Plan

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LEGEND

- Site Layout
- Cadastre

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LOCALITY



0 1 2 3 4 km

LOCALITY PLAN

89 Harrison Street,
Rockingham, WA 6168

Aria Project Development Pty Ltd

N 0 10 20 30 40 m

Coordinate System: GCS GDA 1994, Datum: GDA 1994
Scale @ A3: 1:1,000

Prepared: W Robertson	Date: 7/12/2021
Reviewed: D Marchant	Revision: A
Project: TW21169	

talis consultants

Figure 1

Data source: Roads - Landgate, 2021; Cadastre - Landgate, 2021; Imagery: Nearmap, 2021.

Document Path: \\server\talis\SECTIONS\Waste\PROJECTS\TW2021\TW21169 - 89 Harrison Street, Rockingham WMP\GIS\Maps\TW21169_HarrisonStreet_WMP.aprx

Assets | Engineering | Environment | Noise | Spatial | Waste

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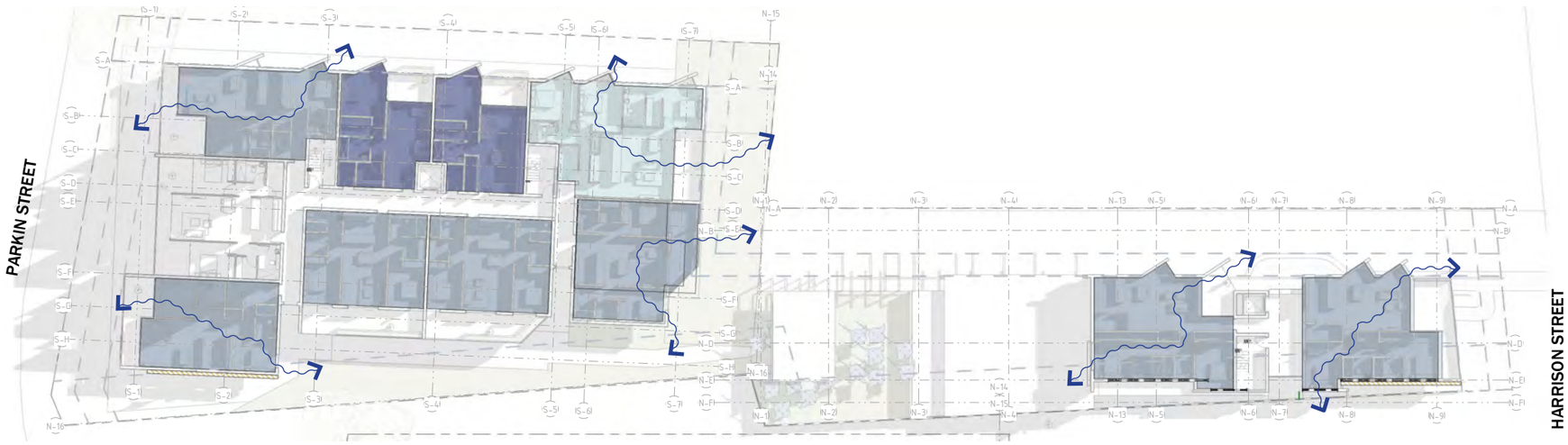
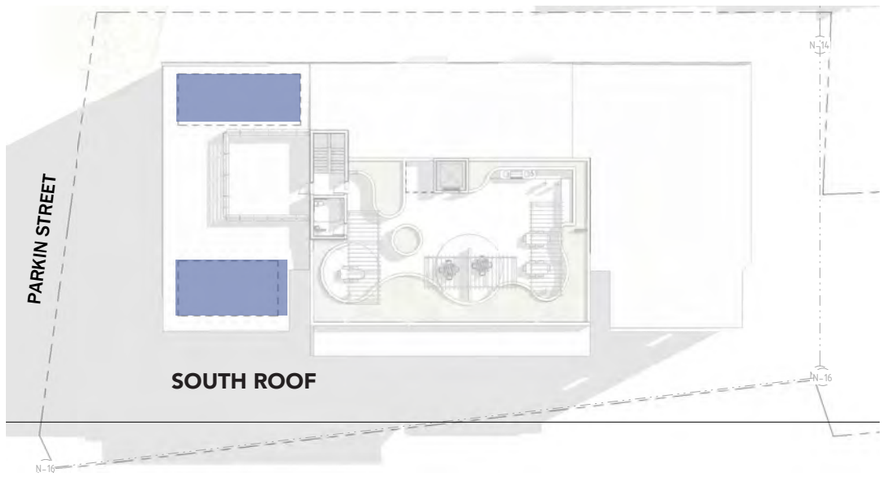
DMG ARCHITECTURE

5. Sustainability

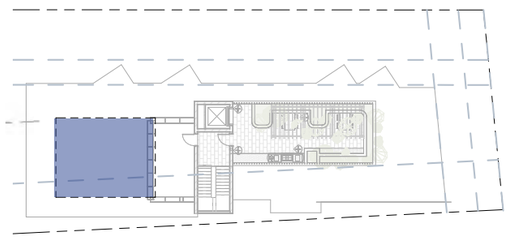
Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.



NATURAL VENTILATION



SOLAR PANEL PROVISION



5.1) Passive Ventilation + energy and resource reduction strategy

– Maximising opportunities for natural ventilation; large operable sections of glazing oriented to capture prevailing breezes to 38 units; equating to 76% of the apartments achieve cross ventilation through opposite walls to reduce energy consumption & improve indoor air quality

– Effective shading from summer sun; deep eaves thermal mass shading any glazing on Western elevation - no single aspect south facing apartments

– Roof top plant zones capacity for installation of systems such as a photovoltaics

– Conduits and capacity in the electrical distribution system and metering for future provision of electric car charging within car parking areas

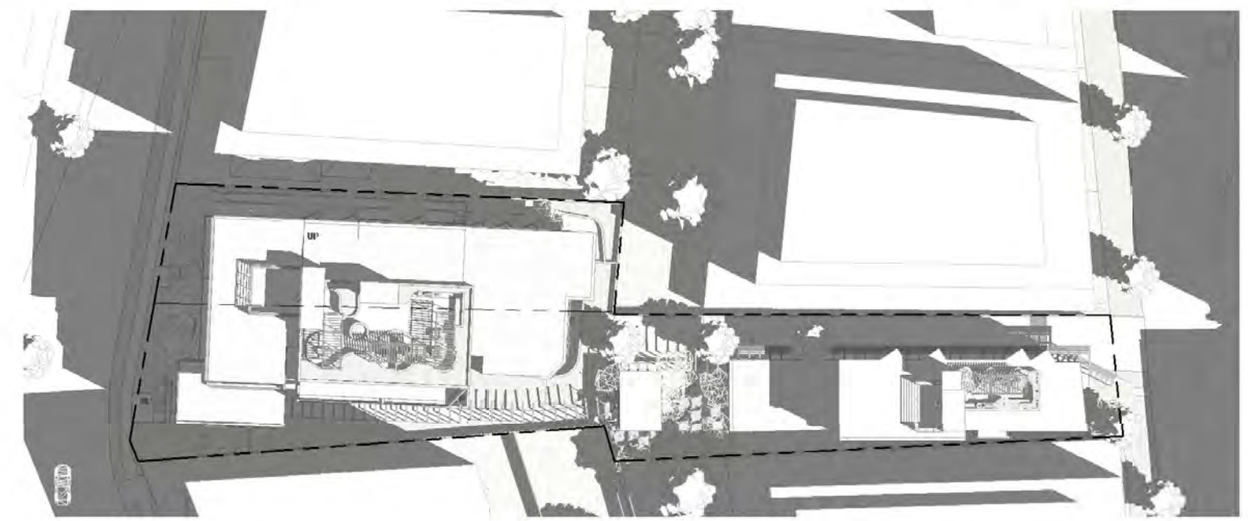
– Waste management systems & dedicated waste store with recycling areas

– Low water use fixtures & fittings

– Generous balconies, shading screens to the northern facade & high performance glazing reduces heat gain & glare into rooms



OVERSHADOWING - RESIDENTIAL (EXISTING) CONTEXT



OVERSHADOWING - WATERFRONT (FUTURE CONTEXT)

5.2) Solar Access

The proposed development complies with the requirements outlines in chapter 4.1.1 of the R-Codes which states:

Dwellings with a northern aspect are maximised, with a minimum of 70 per cent of dwellings having living rooms and private open space that obtain at least 2 hours direct sunlight between 9am and 3pm on 21 June

Total apartments 47

Dual aspect + north/west/east facing apartment = 44
=93.6% min 2 hrs sun between 9am-3pm 21st June

Single aspect south facing apartments = 3
= 6.38% no direct sun between 9am-3pm 21st June

5.3) Overshadowing

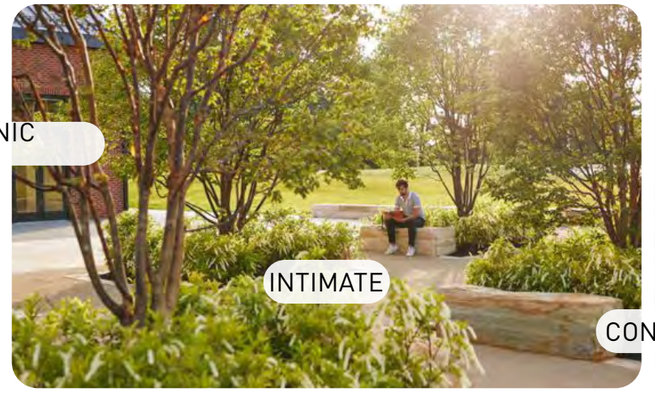
The proposed development complies with the requirements outlines in chapter 4.1.1 of the R-Codes which states:
.....

Northern neighbour site area: 1064.7 sqm
62.5 sqm over shadowing
= 5.87%

Southern neighbour site area: 907sqm
22.96 sqm over shadowing
= 2.53%


CURVY


ORGANIC


INTIMATE


CONTRAST

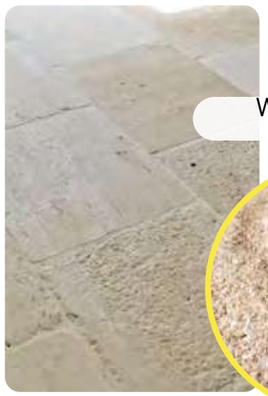

COASTAL



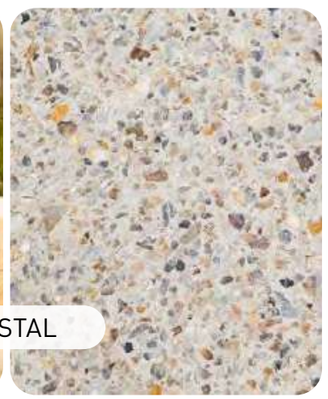

TEXTURE




FORM


WARM




COASTAL


TEXTURE





ARBOUR APARTMENTS

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THEMING & MATERIALITY

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PARKIN STREET

01
02
03
04
06
07
08
08
08
05

LOCATION MAP

LEGEND

01 PROPOSED NEW TREES

02 CONCRETE TERRACING RETAINING WALLS

03 SEATING NODE IN COMPACTED SUMMERSTONE FINES

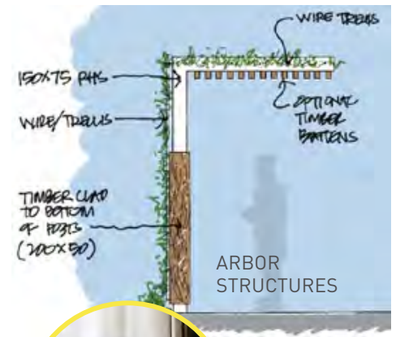
04 COASTAL AND NATIVE PLANTING MIXES

05 1M HIGH PRIVATE PLANTER

06 CREEPING PLANTING TO ARBOUR BY ARCHITECTS

07 FEATURE TILE PAVING - WARM TONES

08 OPPORTUNITY TO RETAIN EXISTING TREE



ARBOR STRUCTURES



142-144 PARKIN STREET

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LANDSCAPE CONCEPT GROUND FLOOR

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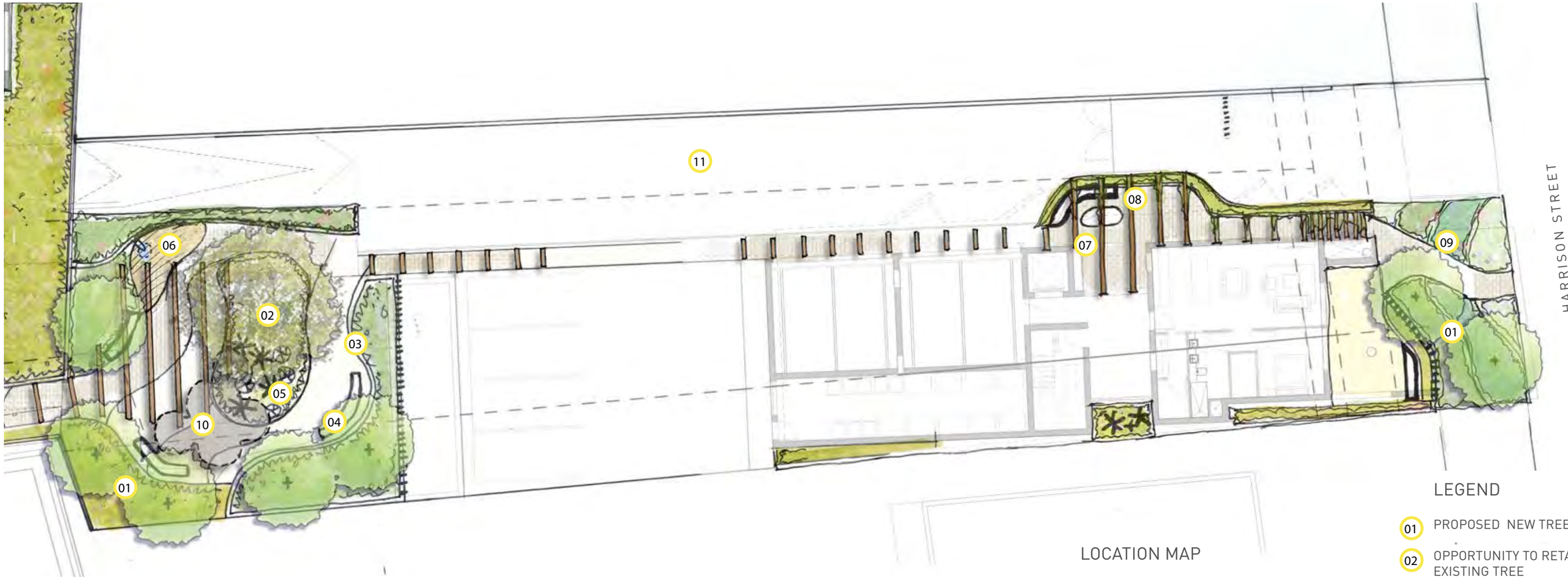

LOCATION MAP

LEGEND

01 PROPOSED NEW TREES

02 OPPORTUNITY TO RETAINED EXISTING TREE

03 0.5M HIGH CONCRETE PLANTER TO SCREEN PARKING BAYS

04 CONTEMPLATIVE SEATING BENCH

05 FEATURE COASTAL GARDEN WITH BOULDERS AND FEATURE SHURBS

06 COMMUNITY AMENITY - IE. GRAVEL PAD & TAP FOR SURF BOARD WASH DOWN STATION

07 ARBOUR BY ARCHITECTS

08 RAISED PLANTER & SEATING NODE DEFINING PEDESTRIAN ENTRY

09 LOW COASTAL PLANTINGS TO VERGE IN 'WAVE' PATTERNS

10 ARBOUR WITH FEATURE 'MANTRA RAY' ART ELEMENTS SHOWN DASHED AND INTEGRATED

11 PERMEABLE PAVING TO DRIVEWAY



89 HARRISON STREET

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LANDSCAPE CONCEPT GROUND FLOOR

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LOCATION MAP

LEGEND

01 PROPOSED NEW TREES

02 1M HIGH GARDEN BED WITH TREES AND CASCADING PLANTING

03 0.5M HIGH GARDEN BED TO ALLOW FOR OCEAN VIEWS

04 SUN DECK

05 SEMI-PRIVATE DINING

06 MOVABLE FURNITURE

07 HIGH BREAKFAST BENCH

08 BBQ FACILITIES

09 MOVABLE POT PLANTING

10 FEATURE TILE PAVING - WARM TONES

11 ARBOUR STRUCTURE WITH CREEPER PLANTING OVER











142-144 PARKIN STREET

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LANDSCAPE CONCEPT LEVEL 5

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LEGEND

01 PROPOSED NEW TREES

02 1M HIGH GARDEN BED WITH TREE AND CASCADING PLANTING

03 IN-BUILT SEATING BENCH TO 0.5M HIGH GARDEN BED TO ALLOW FOR OCEAN VIEWS

04 RAISED SUN DECK

05 MOVABLE FURNITURE

06 BBQ FACILITIES

07 FEATURE TILE PAVING - WARM TONES

LOCATION MAP







89 HARRISON STREET

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LANDSCAPE CONCEPT LEVEL 3

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DESIGN WA COMPLIANCE ITEMS

ITEM 3.3A - TREE CANOPY & DEEP SOIL AREA

REQUIRED DEEP SOIL AREA: 220.9 SQ.M - BASED ON A SITE AREA OF 3156 SQ.M

PROPOSED DEEP SOIL AREA EXCEEDS THE MINIMUM REQUIRED PROVISION - REFER TABLES 01-02

REQUIRED TREE CANOPY AREA: 348 SQ.M - BASED ON A SITE AREA OF 3156 SQ.M

PROPOSED TREE CANOPY COVER EQUATES TO APPROX. 5 TIMES THE MINIMUM REQUIRED PROVISION - REFER TABLES 03-05

DEEP SOIL AREA & TREE CANOPY REQUIREMENTS - TABLE 01

THE DEVELOPMENT SEEKS TO RETAIN EXISTING TREES WITHIN THE ADJACENT STREETSCAPE, AND PROVIDE SIGNIFICANT TREE CANOPY THROUGH ALL LEVELS OF LANDSCAPE, INCLUDING EXTERNAL LANDSCAPE SPACES.

THE TABLE BELOW OUTLINES MINIMUM REQUIREMENTS FOR DEEP SOIL AREAS AS DEFINED IN DESIGNWA.

TABLE 01: DEEP SOIL ZONE REQUIREMENTS

	LOT AREA: 3156 SQ.M	MINIMUM REQUIREMENTS	PROJECT REQUIREMENT FOR PROVISION
WAPC DEEP SOIL AREA REQUIREMENTS	>1000 SQ.M	7% OF DEEP SOIL AREA ON SITE (220.9 SQ.M) AS 2 NO. EXISTING TREE RETAINED	PROVIDED DEEP SOIL AREA OF 372.7 SQ.M PROVIDED ADDITIONAL PLANTING ON STRUCTURE OF 459.3 SQ.M AS DEEP SOIL AREA (1M DEPTH)

LANDSCAPE AREA REQUIREMENTS - TABLE 02

THE DEVELOPMENT SEEKS TO EXCEED THE REQUIRED LANDSCAPE PROVISION FOR DEEP SOIL AREA AS DEFINED IN DESIGNWA THROUGH GENEROUSLY SCALED LANDSCAPE AREAS; ALLOWING SIGNIFICANT ROOTABLE DEEP SOIL AREAS ON STRUCTURE.

SOIL VOLUMES ARE CONSIDERED IN TREE PLACEMENT AND SELECTION OF TREE SPECIES.

THE TABLE BELOW SUMMARISES THE EXTENT OF LANDSCAPE AREAS, AND DEEP SOIL AREA OVER THE VARIOUS LANDSCAPE LEVELS.

TABLE 02: LANDSCAPE AREAS / DEEP SOIL AREAS

	DEEP SOIL AREA (IN GROUND)	PLANTING ON STRUCTURE (1M DEPTH) AS DEEP SOIL AREA	PLANTING ON STRUCTURE (LESS THAN 1 M DEPTH)	SOFT LANDSCAPE GARDEN AREA
GROUND FLOOR	372.7 SQ.M	371 SQ.M	0 SQ.M	743.7 SQ.M
LEVEL 3	-	7.7 SQ.M	9.3 SQ.M	17 SQ.M
LEVEL 5	-	80.6 SQ.M	17.5 SQ.M	98.1 SQ.M
TOTAL	372.7 SQ.M	459.3 SQ.M	26.8 SQ.M	858.8 SQ.M

DEEP SOIL ZONE & TREE CANOPY REQUIREMENTS - TABLES 03-05

THE DEVELOPMENT SEEKS TO RETAIN 2 NO. EXISTING TREE ON SITE AND PROVIDE SIGNIFICANT DEEP SOIL AREA, ROOTABLE SPACE, AND SOFT LANDSCAPE AREA THROUGH ALL LEVELS OF LANDSCAPE, INCLUDING EXTERNAL LANDSCAPE SPACES.

TABLE 03: TREE POT SIZES

SPECIES	POT SIZE	HEIGHT AT DAY ONE	MATURE HEIGHT
AGONIS FLEXUOSA	500L	4M	10M
BANKSIA INTEGRIFOLIA	200L	3M	10M
CUPANIOPSIS ANACARDIOIDES 'TUCKEROO'	200L	3M	6M
METROSIDEROS EXCELSA 'NZ CHRISTMAS TREE'	500L	4M	6M
TRISTANIOPSIS LAURINA 'LUSCIOUS WATER GUM'	200L	4M	7M
WATERHOUSEA FLORIBUNDA 'WEEPING LILLY PILLY'	200L	3M	6M
MELALEUCA LANCEOLATA	200L	3M	6M
CITRUS 'EUREKA LEMON'	100L	2M	5M
CITRUS 'TAHITIAN LIME'	100L	2M	4M

THE TABLE BELOW OUTLINES MINIMUM REQUIREMENTS FOR TREE CANOPY COVER AS DEFINED IN DESIGNWA.

TABLE 04: TREE CANOPY REQUIREMENTS

	LOT AREA: 3156 SQ.M	MINIMUM REQUIREMENTS	PROJECT REQUIREMENT FOR PROVISION
WAPC TREE CANOPY REQUIREMENTS	>1000 SQ.M	5 LARGE TREES & 5 MEDIUM TREES (OR SMALL TREES TO SUIT AREA)	MINIMUM OF 348 SQ.M OF TREE CANOPY COVER WHICH EQUATES TO APPROX. 3.5% CANOPY COVER OF THE DEVELOPMENT SITE AREA

TABLE 05: TREE CANOPY COVER

	SMALL TREES: 2M DIAMETER 3.2SQ.M CANOPY COVER AT MATURITY	MEDIUM TREES: 5M DIAMETER 19.6 SQ.M CANOPY COVER AT MATURITY	LARGE TREES: 8M DIAMETER 50 SQ.M CANOPY COVER AT MATURITY	TOTAL CANOPY COVER (NOT INCLUDING EXISTING TREES)
GROUND FLOOR	11	14	5	559.6 SQ.M
LEVEL 3	2	5	-	104.4 SQ.M
LEVEL 5	3	-	-	9.6 SQ.M
TOTAL	51.2 SQ.M CANOPY COVER AT MATURITY	372.4 SQ.M CANOPY COVER AT MATURITY	250 SQ.M CANOPY COVER AT MATURITY	673.6 SQ.M PROPOSED TREE CANOPY COVER

IRRIGATION REQUIREMENTS

A FULLY AUTOMATIC IRRIGATION SYSTEM WILL BE INSTALLED FOR THE 89 HARRISON STREET, ROCKINGHAM, PROJECT. THE SCOPE WILL INCLUDE:
- IRRIGATION TO ALL LANDSCAPE AREAS
- MOISTURE SENSORS THROUGHOUT, TO ENSURE WATER USE IS MINIMISED
- USE OF LOW WATER USE EMITTERS TO ENSURE ONLY SUFFICIENT WATER IS PROVIDED TO IRRIGATE PLANTING AREAS
- IN-LINE FERTILISATION UNIT TO ENSURE FERTILISING AND MOISTURE RETENTION IS CONTROLLED
- INTEGRATION OF WSUD PRINCIPLES WITH DRAINAGE INTO GARDEN BED AREAS AND USE OF PERMEABLE PAVING
- USE OF POP - UP FLOOD BUBBLERS TO SUIT SIZE OF GARDEN BEDS TO ENSURE ANY OVER-SPRAY AND WASTAGE IS MITIGATED, AND;
- A DETAILED DESIGN AND SPECIFICATION WILL BE PROVIDED AT BUILDING LICENSE APPLICATION STAGE.

89 HARRISON STREET

PREPARED FOR DMG ARCHITECTS

DESIGN WA COMPLIANCE ITEMS

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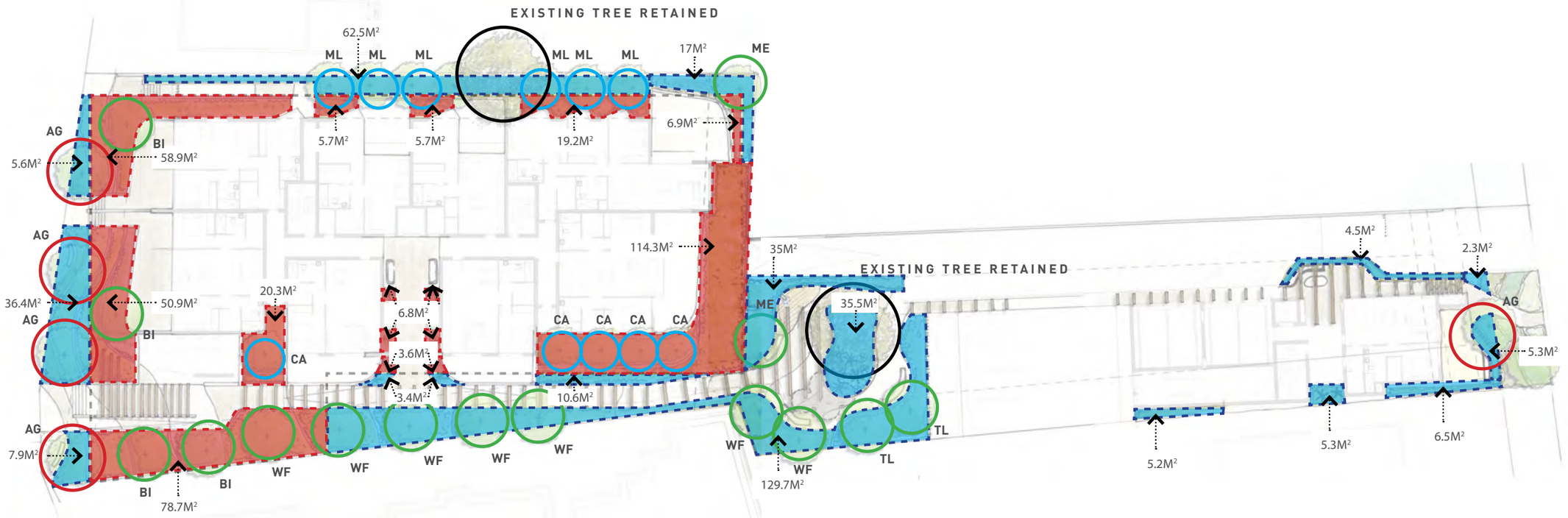
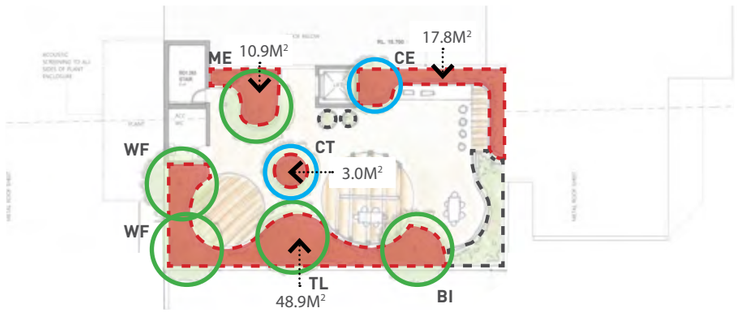
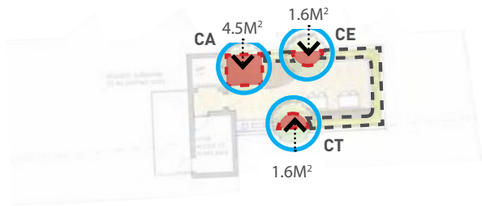
GROUND LEVEL



LEVEL C



LEVEL 3



LEGEND

DEEP SOIL AREAS

- DEEP SOIL AREA - IN GROUND PLANTING
- ON STRUCTURE PLANTING (1M DEPTH)
- ON STRUCTURE PLANTING (LESS THAN 1M DEPTH)

TREE CANOPY

- LARGE TREES- 8M+ DIAMETER
- MEDIUM TREES- 5M DIAMETER
- SMALL TREES- 2M DIAMETER

SUGGESTED TREE SPECIES



AGONIS FLEXUOSA



BANKSIA INTEGRIFOLIA



CUPANIOPSIS ANACARDIOIDES 'TUCKEROO'



METROSIDEROS EXCELSA



TRISTANIOPSIS LAURINA



WATERHOUSEA FLORIBUNDA



MELALEUCA LANCEOLATA



CITRUS 'EUREKA LEMON'



CITRUS 'TAHITIAN LIME'

89 HARRISON STREET

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DESIGN WA COMPLIANCE ITEMS - DSA BREAKDOWN & TREE SPECIES

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TREE PLANTING


AGONIS FLEXUOSA

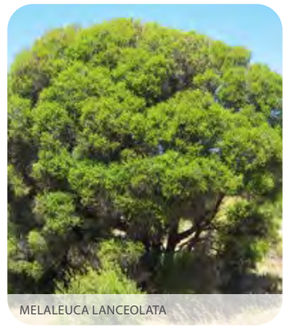

TRISTANIOPSIS LAURINA


CUPANIOPSIS ANACARDIOIDES 'TUCKEROO'


METROSIDEROS EXCELSA


WATERHOUSEA FLORIBUNDA


BANKSIA INTEGRIFOLIA


MELALEUCA LANCEOLATA

SHRUB & GROUNDCOVER PLANTING


CARBOBROTUS VIRESCENS


PIMELEA FERRUGINEA


BANKSIA NIVEA


BANKSIA ATTENUATA (PROSTRATE)


LEUCOPHYTA BROWNII


CONOSTYLIS ACULEATA


WESTRINGIA FRUITICOSA


OLEARIA AXILLARIS


SCAEVOLA CRASSIFOLIA (PROSTRATE)


GREVILLEA CRITHMIFOLIA (PROSTRATE)


TEMPLETONIA RETUSA


KENNEDIA PROSTRATA


HEMIANDRA PUNGENS


LOMANDRA 'LIME TUFF'


LEPIDOSPERMA GLADIATUM


KALANCHOE 'QUICKSILVER'


APTENIA CORDIFOLIA


ZAMIA FURFURACEA

EDIBLE PLANTING


CITRUS 'EUREKA LEMON'


CITRUS 'TAHITIAN LIME'


ROSMARINUS OFFICIANALIS (PROSTRATE)


THYMUS SERPYLLUM


MENTHA MINT


ORIGANUM VULGARE

SHADE TOLERANT PLANTING


FICUS 'MIDNIGHT BEAUTY'


DIANELLA 'WYEENA'


ASPIDISTRA ELIATOR


PHILODENDRON XANADU


METROSIDEROS 'DALESE'


DICHONDRA 'SILVER FALLS'

CREEPER PLANTING


HIBBERTIA SCANDENS


TRACHELOPSERMUM JASMINOIDES

89 HARRISON STREET

PREPARED FOR DMG ARCHITECTS

PLANTING PALETTE
OCTOBER 2022

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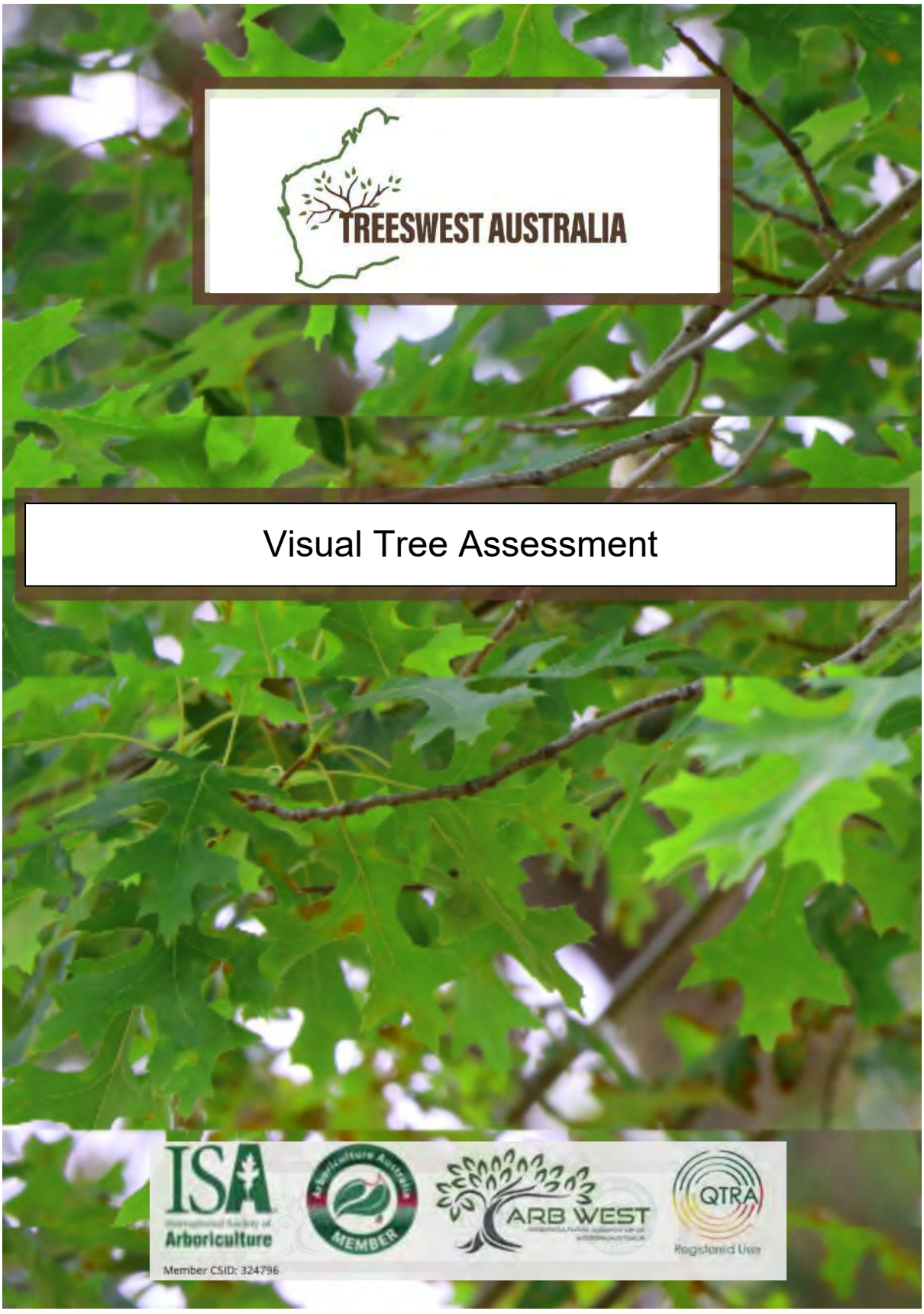
TREESWEST AUSTRALIA
Visual Tree Assessment
ISA
International Society of Arboriculture
Member CSID: 324796
MEMBER
ARB WEST
QTRA
Registered User

Arboricultural assessment on the Norfolk Island pine and advice on the surrounding vegetation.

Site Address: 142 & 144 Parkin Street, Rockingham

Attn: Tiffany Molloy, Project Architect, DMG Architecture

Date: 25.10.22

Prepared by:

Dave Crispin - Treeswest Australia
Senior Arborist AQF level 5
Ph: 0435006423
Office: 0407511639
Email: operations@treeswest.com.au
Web: www.treeswest.com.au

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ABSTRACT

This assessment gives a general overview of the health and condition of the Norfolk Island Pine (NIP), and the various shrubs on the block #142 and at the front of #144. The Norfolk Island pine tree is a significant tree, and in this consultant's opinion worthy of retention. The various zones around the NIP are detailed, and recommendations made regarding measures to take to protect the tree.
The report identifies the various plants around the property, and comments where applicable on their value. One of the plants is toxic (Oleander), one is recognised as causing respiratory problems, and causes skin irritations (Norfolk Island Hibiscus), and several declared noxious weeds.

INTRODUCTION

Treeswest Australia, were engaged by Tiffany Molloy, from DMG Architects to conduct an onsite overview of the residential trees/shrubs at 142 & 144 Parkin Street, Rockingham. The report was to mainly focus on the Norfolk Island pine (NIP) on the boundary with the council verge, and the neighbouring property. The report would detail the overall health and vitality of the tree.

LOCATION

The near map extract shows the property 144 Parkin Street, Rockingham. The subject tree is highlighted with the blue circle, the picture is current as of 30.08.22.



METHODS

The tree assessment was carried out on 25.10.22 at ground level by Dave Crispin, consulting Arborist with Treeswest Australia. In general, the weather was overcast with sunny periods, the average temperature was 19 deg Celsius with light winds from the south. The assessment was carried out between the hours of 09:00hrs and 10:30hrs. The tree was able to be viewed from all angles. Photographs were taken with an iPhone 11 . Equipment used: Bushnells 50 x 50 magnification binoculars, a Nikon inclinometer, 8m retractable tape, trenching shovel, long handled screwdriver for probing, a nylon taping hammer, and a Panasonic toughpad for recording data.

DISCUSSION

Auracaria heterophylla (Norfolk Island pine), Appendix A.

Tree details:

- Height 18.4m
- Canopy spread 12m – NS and EW
- DBH (Diameter Breast Height) 0.5m
- TPZ (Tree Protection Zone) 6m
- DRC (Diameter Root Crown) 0.65m
- SRZ (Structural Root Zone) 2.76m
- Estimated age – 15-20 years, considered juvenile/semi-mature
- ULE (Useful Life Expectancy)100+ years

The block is divided in two, #144 and #142 Parkin Street, with a house to the east that has a boundary fence separating the two blocks. At the rear of #142, which is where the majority of the trees are, there is a fence located half way down to the north. There is a small gap in the fencing to access the rest of the property to the north. This area was not assessed due to accessibility and the low quality of the trees (Appendix D).
The area of focus was mainly #142 due to the size and variety of the trees.
Species, clockwise along the western boundary (Appendix C):

- Cape honeysuckle (Tecoma capensis), an invasive shrub that is very difficult to remove.
- Bougainvillea var. an invasive shrub with sharp thorns.
- Variegated New Zealand Christmas trees (Metrosideros excelsa),
- Prickly pear cactus (Opuntia), a known invasive species
- Coral tree, Flame tree (Erythrina x sykesii), in some states considered an environmental weed. The trees on the block are juvenile trees with a low retention value due to their location and branch architecture.
- Umbrella tree (Shefflera actinophylla), an environmental weed in some states. Invasive root system.
- Mediterranean cypress (Cupressus sempervirens), east growing, highly adaptable to most soils.

- Moreton Bay fig (Ficus macrophylla), a 15-30m tall tree with a wide spreading canopy.
- Monterey cypress (Cupressus macrocarpa), two on the block.
- Cotton palm (Washingtonia filifera), previously set alight

Around the front and eastern side of house #144:

- Oleander (Nerium oleander)
- Hibiscus var.
- Norfolk Island Hibiscus (Lagunaria personia) also known as the itchy bomb tree.
- New Zealand Christmas tree (Metrosideros excelsa),

At the rear of block #142:

- Brazilian pepper tree (Schinus terebinthifolia) declared a noxious weed.
- Coral tree, Flame tree (Erythrina x sykesii), in some states considered an environmental weed. The trees on the block are juvenile trees with a low retention value due to their location and branch architecture.
- Cotton palm (Washingtonia filifera).

The Norfolk Island Pine tree on the boundary, is suited to the local environment. Sandy soil with an alkali pH, full sun, and near the coast, is the ideal growing environment.
The tree is in good condition, has an even canopy spread, but slightly suppressed on the eastern side. On the eastern side, there is a basal wound, probably caused by a vehicle at some stage. A small amount of bark has peeled off, exposing inner sapwood that has contracted a fungal growth. Currently, this doesn't appear to be too detrimental to the tree. From the base, traveling 6m up the main stem on the eastern side, mould is present due to constant shade from the neighbouring trees. This should go once sunlight makes its way through.
There are 2 surface roots visible on the eastern side, one shows callused tissue, through mechanical damage, probably from a vehicle. The roots extend out to approximately 1.5m (Appendix B), then sink down below the surface.
Previous pruning wounds on the lower sections of the trunk are visible, and show good occlusion. The pruning would have been to allow access into the block.
The canopy shows a 95% coverage, with a small amount of sporadic, necrotic pine needles.
The main apical stem has a good taper, no damage, or signs of insect infestation. Several NIP trees in Western Australia, are suffering from what is called 'Top-down disease,' (Neofusicoccum parvum). Top-down disease, is a fungal disease that can lead to premature decline and ultimately death. Taking this into consideration, the tree should be kept as healthy as possible, without any damage during the site clearance, or the construction phase.

RECCOMMENDATIONS

A solid temporary fence should be placed around the tree where practicable, prior to the commencement of any works on the block.

The potential risk associated with excavating within the tree's SRZ (Structural Root Zone) or TPZ (Tree Protection Zone) can be detrimental to the trees health and longevity. The SRZ is a measurement detailed in Australian Standards AS 4970-2009

Protection of trees on a development site. The formula is calculated just above the root crown, and multiplied using the link: https://arborlogix.com.au/services/tpz-and-srz-calculator-as-4970-2009/ The calculation is used as a measurement from the trunk of the tree outwards (radius) giving you an outside perimeter which is called the Structural Root Zone.
The structural root zone (SRZ) is the area or zone, that is detailed in the Australian Standard, responsible for the structural roots, the roots responsible for the structural integrity of the tree.
The TPZ is a similar protection zone, but responsible for the trees long term sustainability. This measurement is calculated by measuring the DBH x 12. The DBH or Diameter at Breast Height (usually measure 1.4m up the tree), in this case the trees DBH is 0.5m, under the standard the TPZ is 6m. The calculation is 0.5m x 12m = 6m.

Any work carried out within these zones, if the tree is to remain viable, should be under the guidance of a consulting Arborist. Consideration should be given at the planning stage for any dwelling.

CONCLUSION

The trees and shrubs mentioned above are at various stages of growth, some appear to have been planted, but the majority are self-seeded. None are considered to be of high value, and worthy of retention. Considerations need to be made in relation to root disturbance if footings are to be dug within the recommended protection zones.

Any queries or questions, please do not hesitate to contact me,

Kind regards,

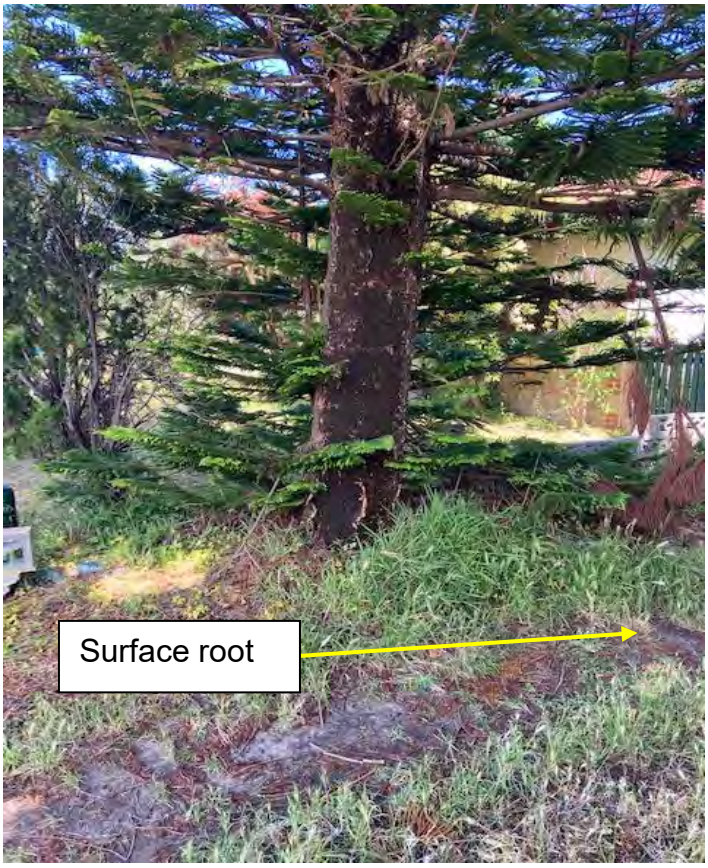
Dave Crispin
Senior Arborist Dip. Arb. Hort.
Ph: 0435006423

NB. This report is based on the conditions of the trees/shrubs at the time of the assessment.

Appendix A



Appendix B



Appendix C



Appendix D



ARIA PROJECT DEVELOPMENT

ARBOUR APARTMENTS

89 HARRISON STREET + 142-144 PARKIN STREET
ROCKINGHAM





NOTE: Contractor to check and verify all dimensions, levels, and angles on site before commencing.
All construction work to be in accordance with the Building Code of Australia, approved documents and relevant Australian Standards.

- DRAWINGS SHALL NOT BE READ IN ISOLATION AS THEY REFER TO OTHER DRAWINGS, SCHEDULES AND SPECIFICATIONS

DRAWING SCHEDULE

0.00	COVER SHEET	P6
0.01	SURVEY PLAN	P2
1.01	SITE PLAN CONTEXT	P4
1.02	SITE PLAN	P6
1.10	BASEMENT - SOUTH BUILDING	P7
1.11	PODIUM FLOOR PLAN - SOUTH BUILDING	P9
1.12	LEVEL 1+2 - SOUTH BUILDING	P6
1.13	LEVEL 3 - SOUTH BUILDING	P6
1.14	LEVEL 4 - SOUTH BUILDING	P6
1.15	LEVEL 5 (ROOF) - SOUTH BUILDING	P5
1.16	GROUND FLOOR PLAN - NORTH BUILDING	P10
1.17	LEVEL 1+2+ROOF - NORTH BUILDING	P6
2.01	ELEVATIONS - NORTH + SOUTH	P5
2.02	ELEVATIONS - EAST + WEST	P7
3.01	BUILDING SECTIONS	P2
3.02	BALCONY SECTIONS - NORTH	P1
3.03	BALCONY SECTIONS - SOUTH	P1
3.05	ALLOWABLE DEVELOPMENT ENVELOPE	P1
9.01	SHADOW DIAGRAM	P2
10.01	3D - HARRISON ST	P6
10.02	3D - PARKIN ST	P6

PROPERTY INFORMATION

RESIDENTIAL APARTMENTS

89 HARRISON STREET + 142-144 PARKIN STREET,
ROCKINGHAM WA 6168

Lot 94 on P 5742; Lot 95 on P 5742; Lot 62 on P 5742
CITY OF ROCKINGHAM

SITE AREAS: Lot 94-1067m²; Lot 95-928m²; Lot 62-1166m²;
TOTAL:3161m²

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG
ARCHITECTURE

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

COVER SHEET

SCALE	DRAWN	CHECKED
@ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	0.00	P6

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DATE
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HARRISON STREET

VIEW FROM 87 PARKIN



VIEW FROM 91 HARRISON





ENTRY ARBOUR VIEW



NORTHERN ELEVATION
(89 HARRSION ST)

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

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ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

3D - HARRISON ST

SCALE	DRAWN	CHECKED
@ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	10.01	P6

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PARKIN STREET

VIEW FROM 146 PARKIN



VIEW FROM 142 PARKIN





ENTRY ARBOUR VIEW



SOUTHERN ELEVATION
(142-144 PARKIN ST)

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.06.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

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ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

3D - PARKIN ST

SCALE	DRAWN	CHECKED
@ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	10.02	P6

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DATE 21.10.22



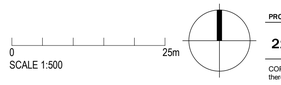
SITE winter 12noon - RESIDENTIAL

SCALE 1 : 500



SITE winter 12noon - WATERFRONT

SCALE 1 : 500



SCALE 1:500

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TOTAL APARTMENT #47

DUAL ASPECT + NORTH/WEST/EAST
FACING APARTMENTS = 44
=93.6% MIN 2 HRS SUN
BETWEEN 9AM-3PM 21ST JUNE

SINGLE ASPECT SOUTH
FACING APARTMENTS = 3
= 6.38% NO DIRECT SUN
BETWEEN 9AM-3PM 21ST JUNE

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P2	21.10.22	PLANNING UPDATE	DMG	TLM
P1	08.08.22	PLANNING APPLICATION	DMG	TLM

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

SHADOW DIAGRAM

SCALE	DRAWN	CHECKED
1 : 500 @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	9.01	P2

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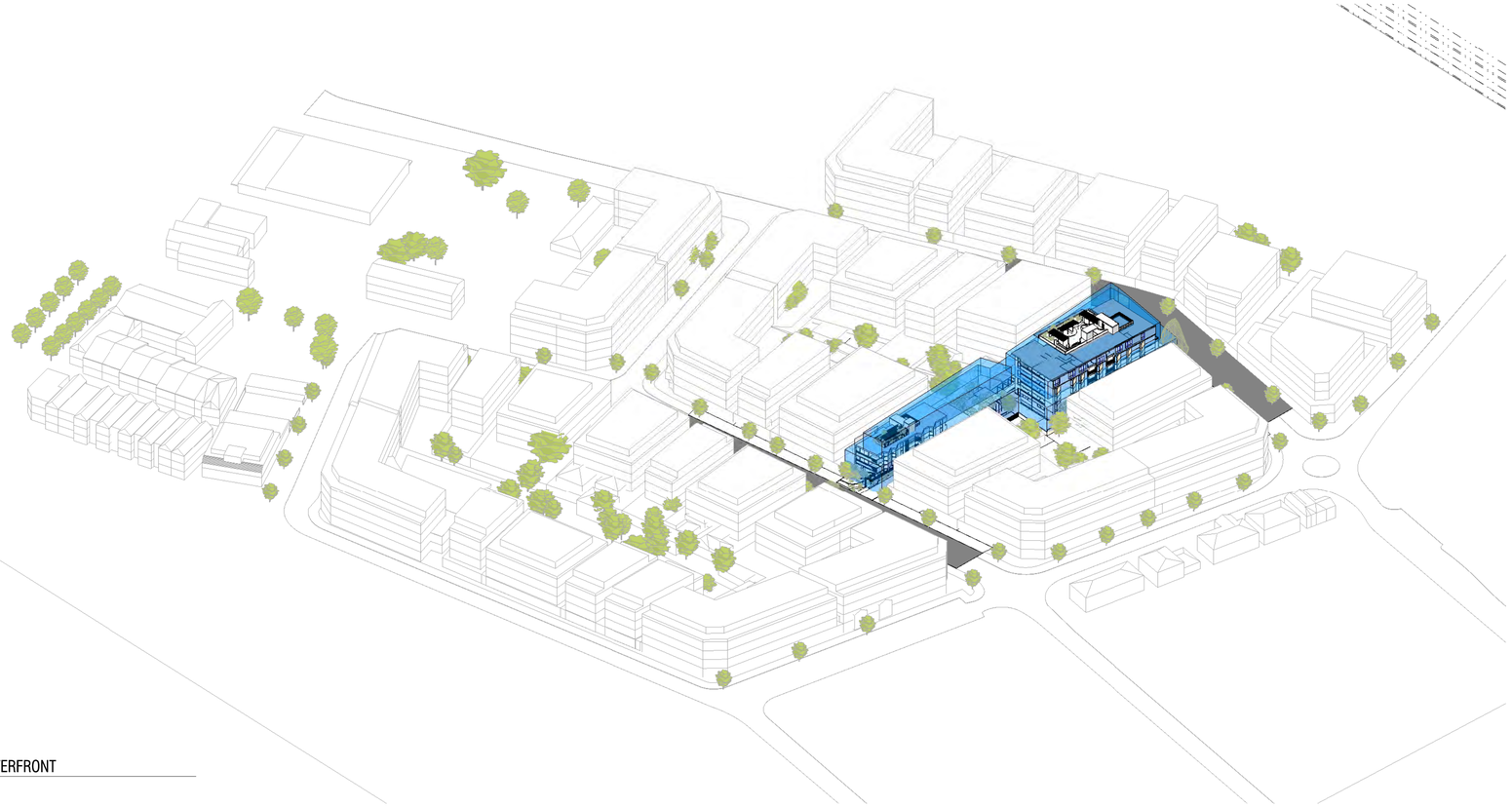
1 CONTEXT - EXISTING



2 CONTEXT - WATERFRONT

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P1	21.10.22	PLANNING UPDATE	DMG	TLM

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ARBOUR APARTMENTS

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TITLE

ALLOWABLE DEVELOPMENT ENVELOPE

SCALE	DRAWN	CHECKED
@ A1	SJ	TLM

PROJECT #	DRAWING #	ISSUE
21049	3.05	P1

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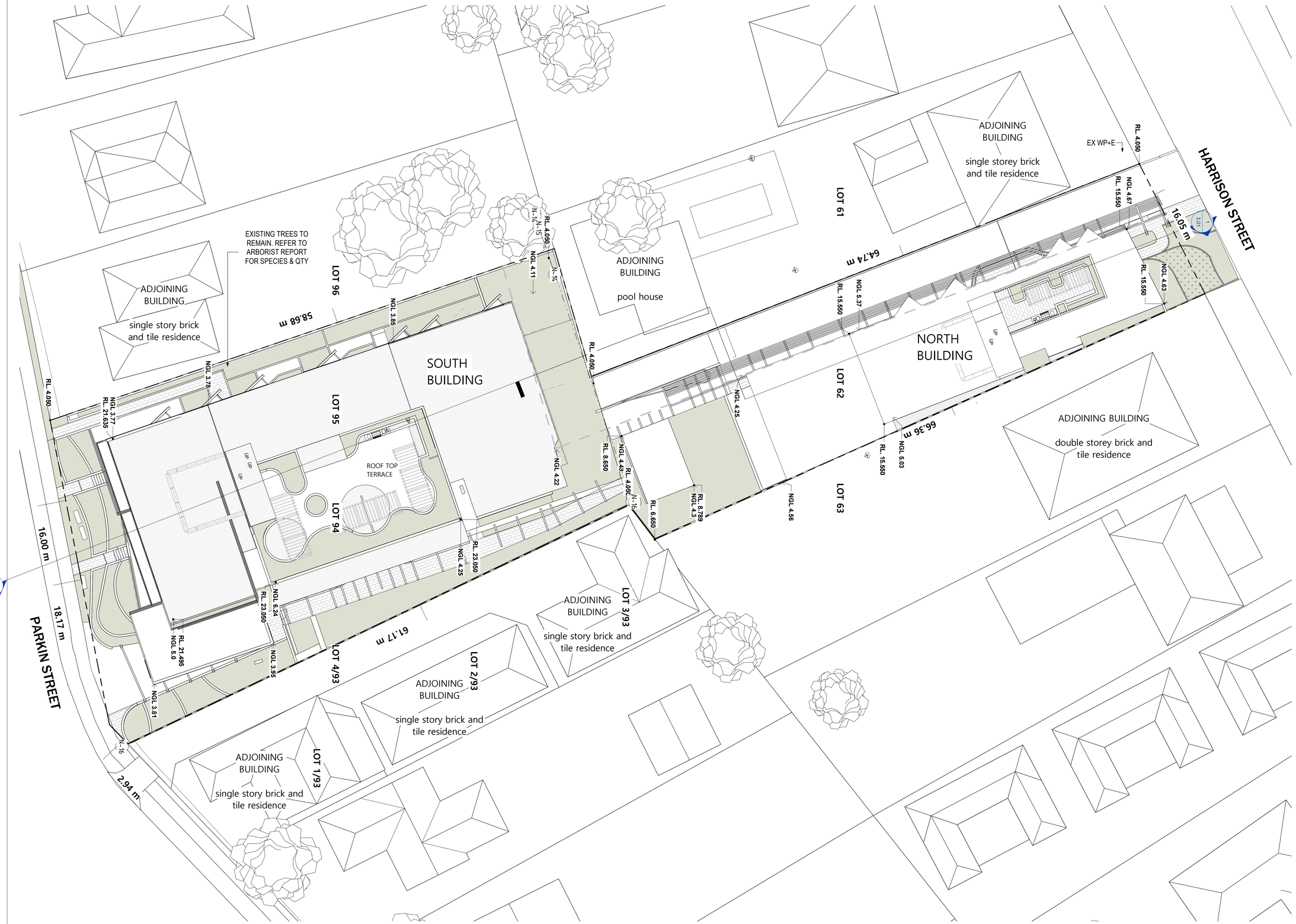

0 10m
SCALE 1:200

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SITE	3154 m²	
DEEP PLANTING	436 m²	14%

89 HARRISON STREET + 142-144 PARKIN STREET, ROCKINGHAM WA 6168

CITY OF ROCKINGHAM
Lot 94 on P 5742;
Lot 95 on P 5742;
Lot 62 on P 5742

SITE AREAS:
Lot 94-1067m²;
Lot 95-928m²;
Lot 62-1166m²;
TOTAL:3161m²

RAC-0

NORTH BUILDING
GF = 1 APARTMENT (1*1B)
L1 = 2 APARTMENTS (2*2B)
L2 = 2 APARTMENTS (2*2B)
L3 (ROOF)
NORTH TOTAL = 5 APARTMENTS

SOUTH BUILDING
PODIUM = 8 APARTMENTS (4*1B, 3*2B, 1*3B)
L1 = 9 APARTMENTS (2*1B, 6*2B, 1*3B)
L2 = 9 APARTMENTS (2*1B, 6*2B, 1*3B)
L3 = 8 APARTMENTS (2*1B, 5*2B, 1*3B)
L4 = 8 APARTMENTS (2*1B, 5*2B, 1*3B)
L5 (ROOF)
SOUTH TOTAL = 42 APARTMENTS

DEVELOPMENT TOTAL = 47 APARTMENTS

ONE BED - 13	23%
TWO BED - 29	66%
THREE BED - 5	11%

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
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P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
SITE PLAN

SCALE	DRAWN	CHECKED
1 : 200 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.02	P6

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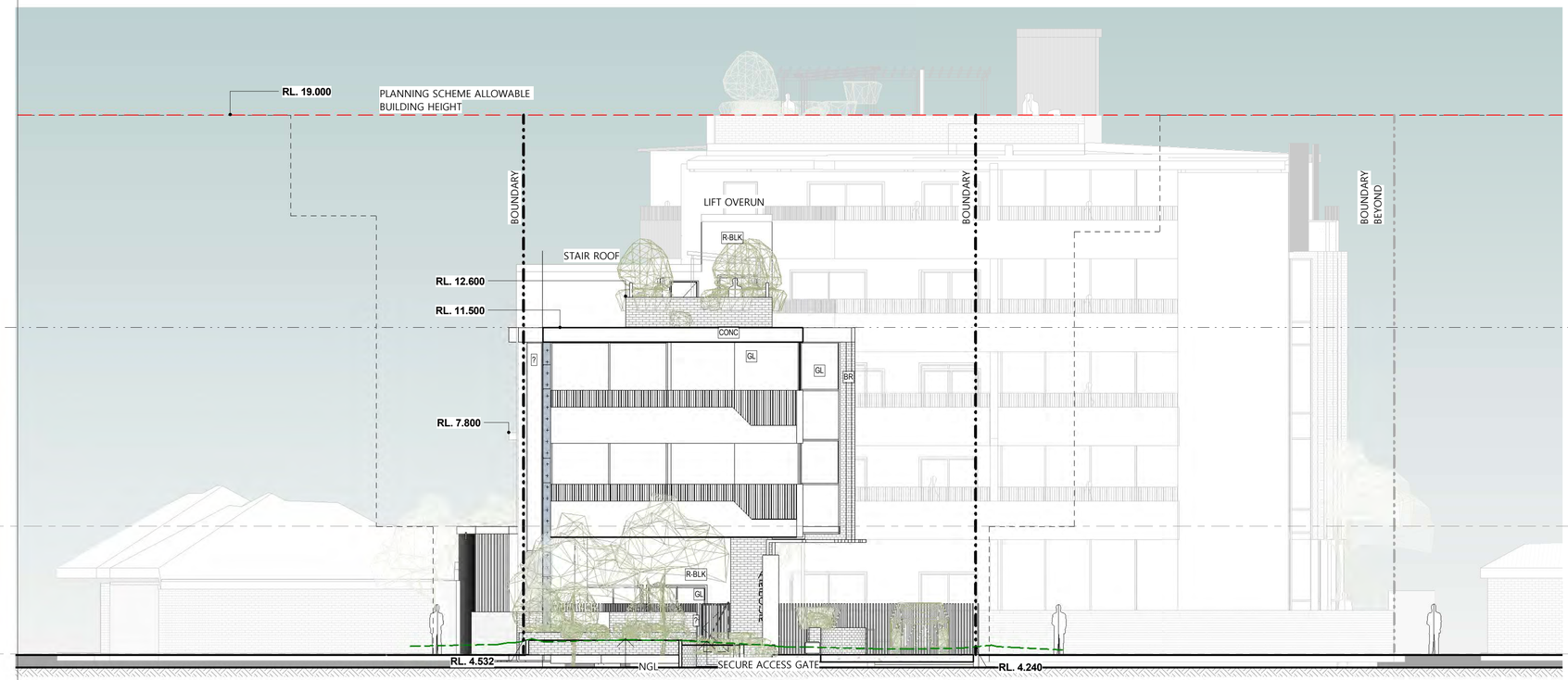
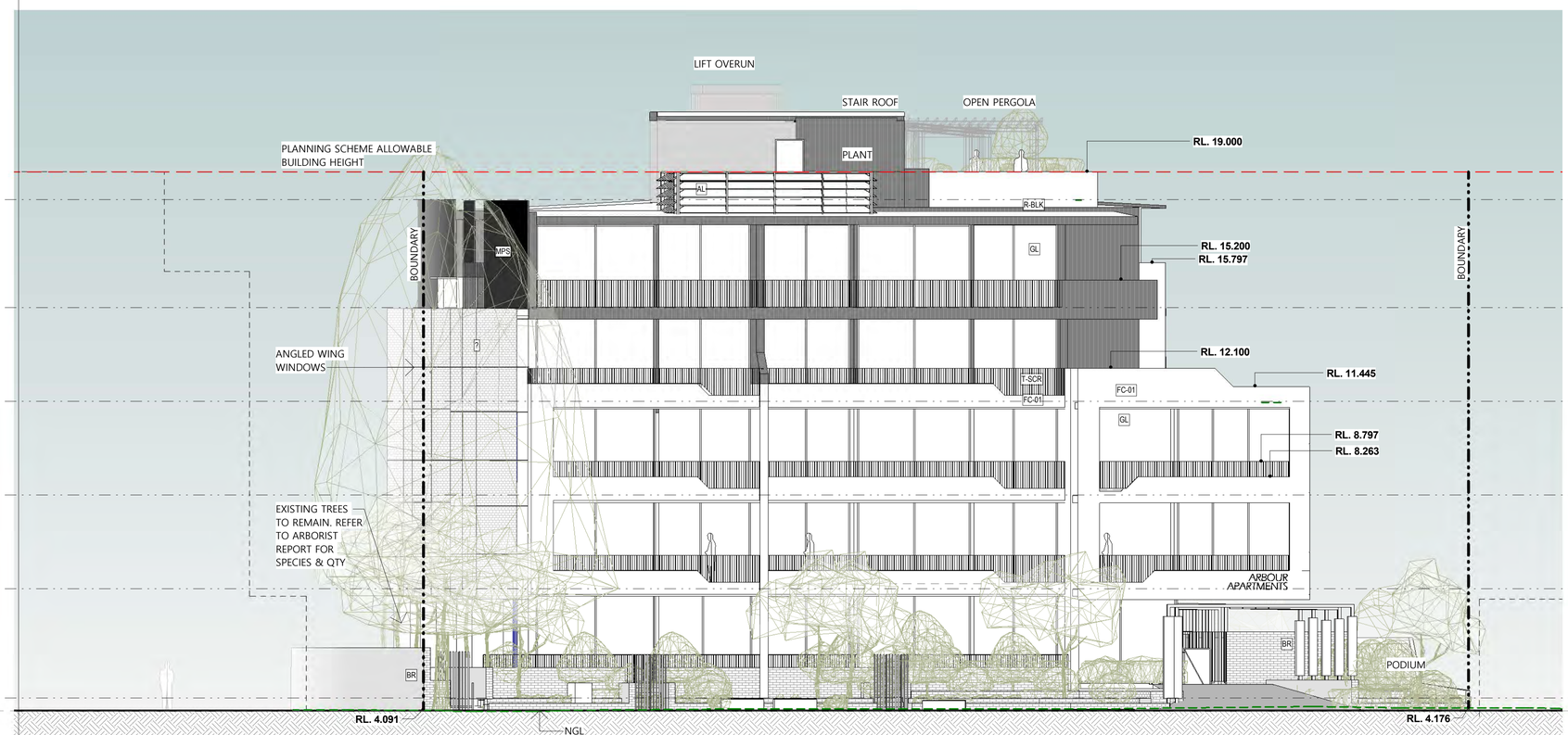


SOUTH ELEVATION (HARRISON ST)

SCALE 1 : 100



NORTH ELEVATION (PARKIN ST)

SCALE 1 : 100

CODE	IMAGE	DESCRIPTION
AL		ANODIZED ALUMINUM
ART		ART/MURAL (INDICATIVE ONLY)
BLK		MASONRY BLOCK - PAINTED
BR		FACE BRICK
CONC		CONCRETE - EXPOSED AGG
FC-01		FIBERCEMENT CLADDING - PAINT FINISH
GL		GLASS - LOW REFLECTANCE BRONZE TINT
MF-1		METAL FINISH - 1
MPS		METAL PAN WALL CLADDING
MRS		METAL ROOF SHEET
PF		PAINT FINISH
R-BLK		RENDER FINISHED MASONRY BLOCK
RRM		Asphalt
T		<varies>
T-CONC		TEXTURED CONCRETE RENDERED MASONRY
T-SCR		TIMBER LOOK ALUMINIUM SCREEN

0 5m

SCALE 1:100

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P5	21.10.22	PLANNING UPDATE	DMG	TLM
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P3	14.04.22	PRELODGE ISSUE	DMG	TLM
P2	06.04.22	PRELODGE ISSUE	DMG	TLM
P1	08.03.22	PRELODGE ISSUE	DMG	TLM

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

ELEVATIONS - NORTH + SOUTH

SCALE	DRAWN	CHECKED
1 : 100 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	2.01	P5

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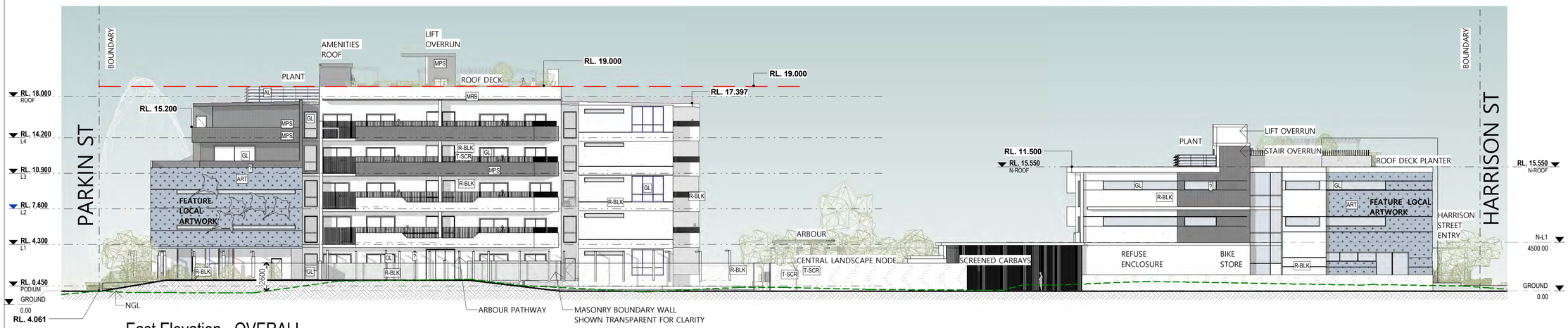
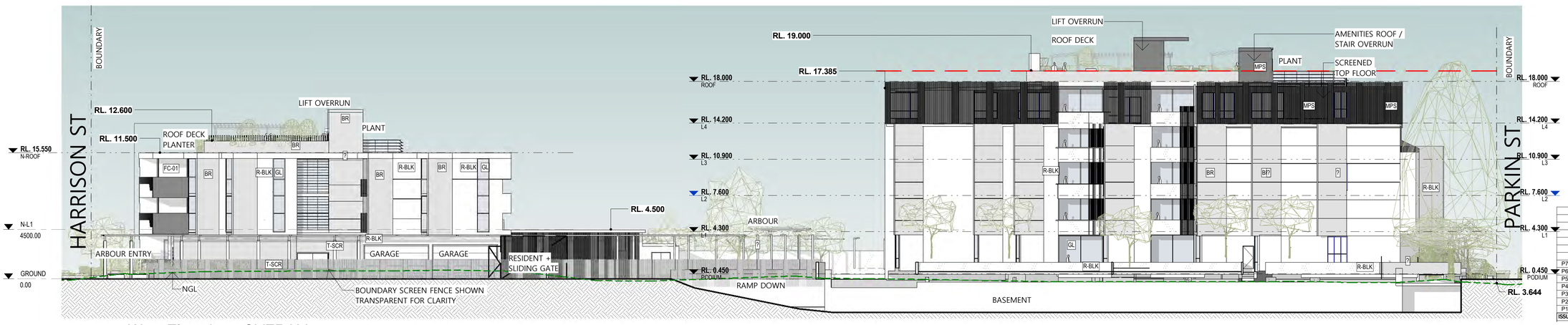


East Elevation - OVERALL

SCALE 1 : 200



West Elevation - OVERALL

SCALE 1 : 200

CODE	IMAGE	DESCRIPTION
AL		ANODIZED ALUMINUM
ART		ART/MURAL (INDICATIVE ONLY)
BLK		MASONRY BLOCK - PAINTED
BR		FACE BRICK
CONC		CONCRETE - EXPOSED AGG
FC-01		FIBERCEMENT CLADDING - PAINT FINISH

CODE	IMAGE	DESCRIPTION
GL		GLASS - LOW REFLECTANCE BRONZE TINT
MF-1		METAL FINISH - 1
MPS		METAL PAN WALL CLADDING
MRS		METAL ROOF SHEET
PF		PAINT FINISH

CODE	IMAGE	DESCRIPTION
R-BLK		RENDER FINISHED MASONRY BLOCK
RRM		Asphalt
T		<varies>
T-CONC		TEXTURED CONCRETE RENDERED MASONRY
T-SCR		TIMBER LOOK ALUMINIUM SCREEN

0 5m
SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P7	21.10.22	PLANNING UPDATE	DMG	TLM
P6	08.08.22	PLANNING APPLICATION	DMG	TLM
P5	14.04.22	PRELODGE ISSUE	DMG	TLM
P4	06.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
ELEVATIONS - EAST + WEST

SCALE	DRAWN	CHECKED
1 : 200 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	2.02	P7

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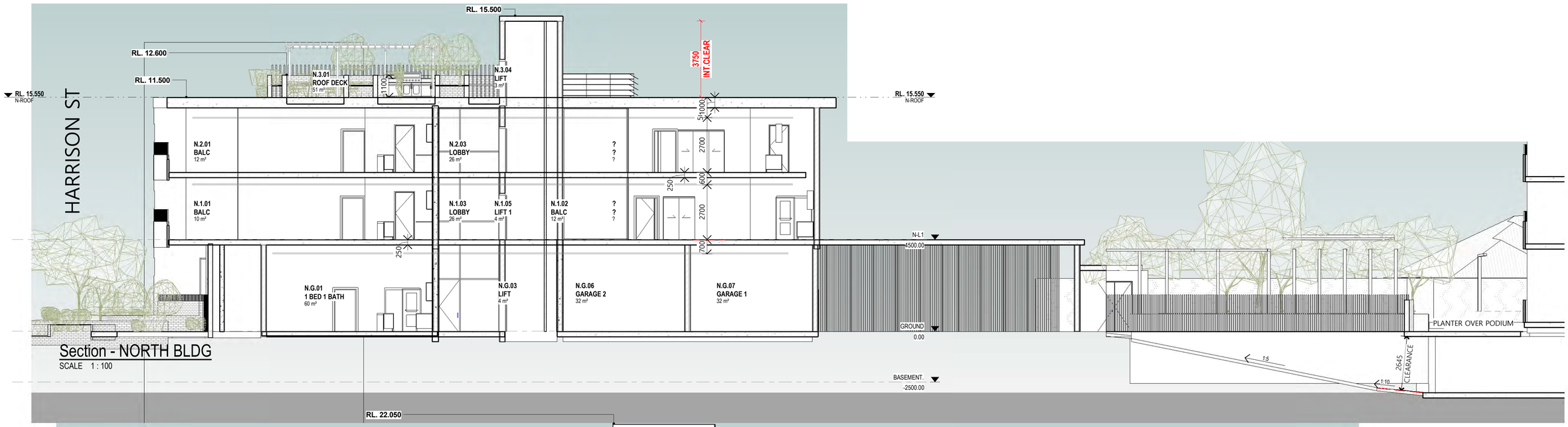
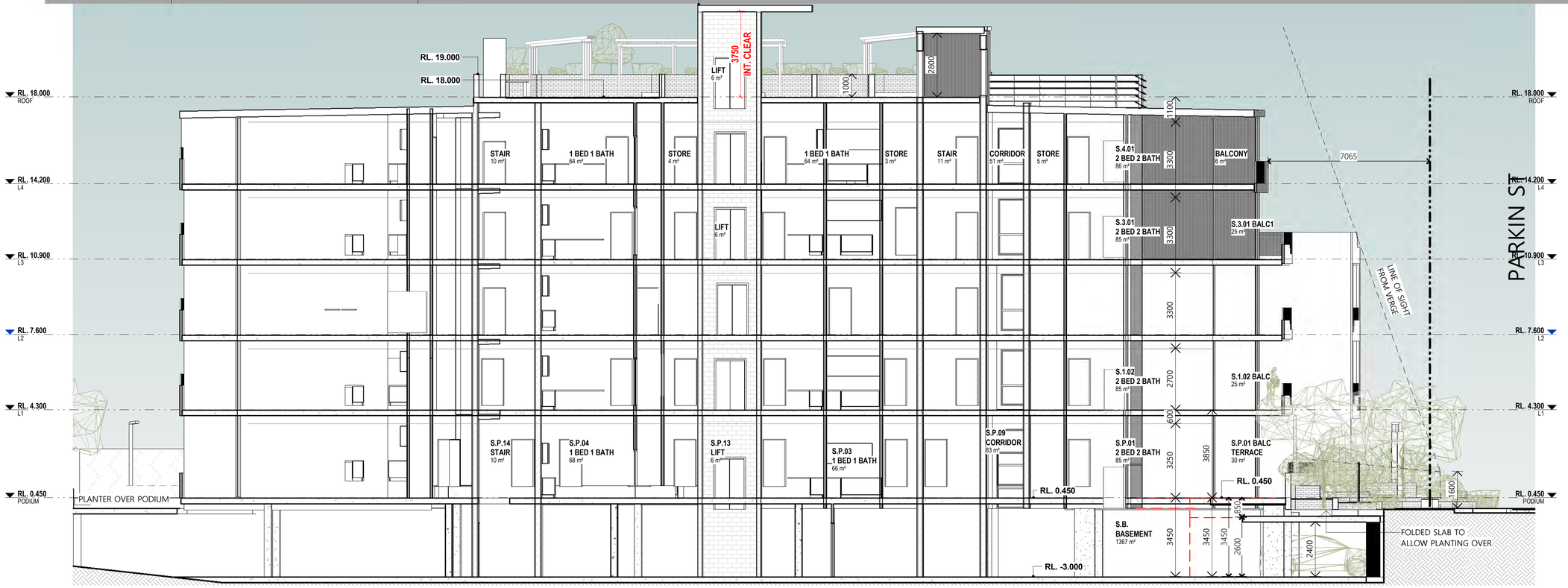


Section - NORTH BLDG

SCALE 1 : 100



Section - SOUTH BLDG

SCALE 1 : 100

0 5m

SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P2	21.10.22	PLANNING UPDATE	DMG	TLM
P1	08.08.22	PLANNING APPLICATION	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

BUILDING SECTIONS

SCALE	DRAWN	CHECKED
1 : 100 @ A1	TLM	GIE

PROJECT #	DRAWING #	ISSUE
21049	3.01	P2

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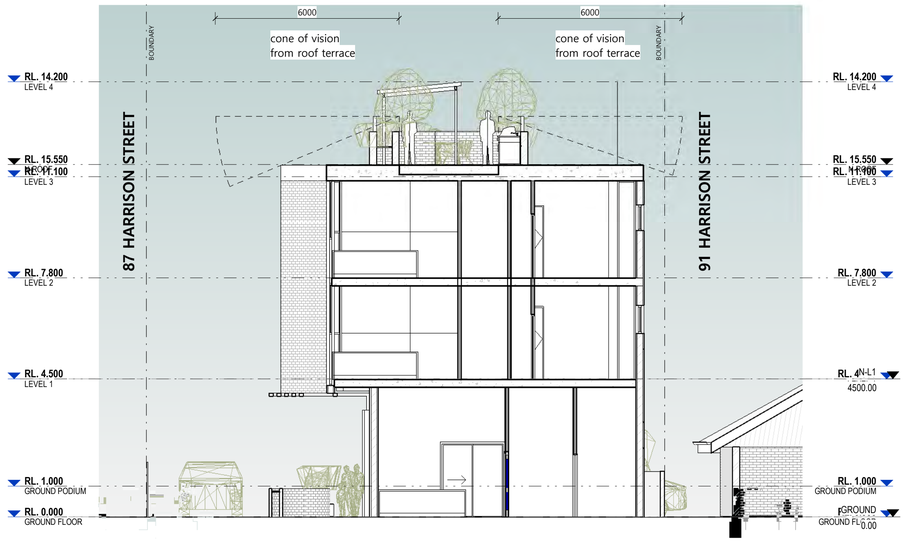
DATE 21.10.22



1 / 1.17 Section 10
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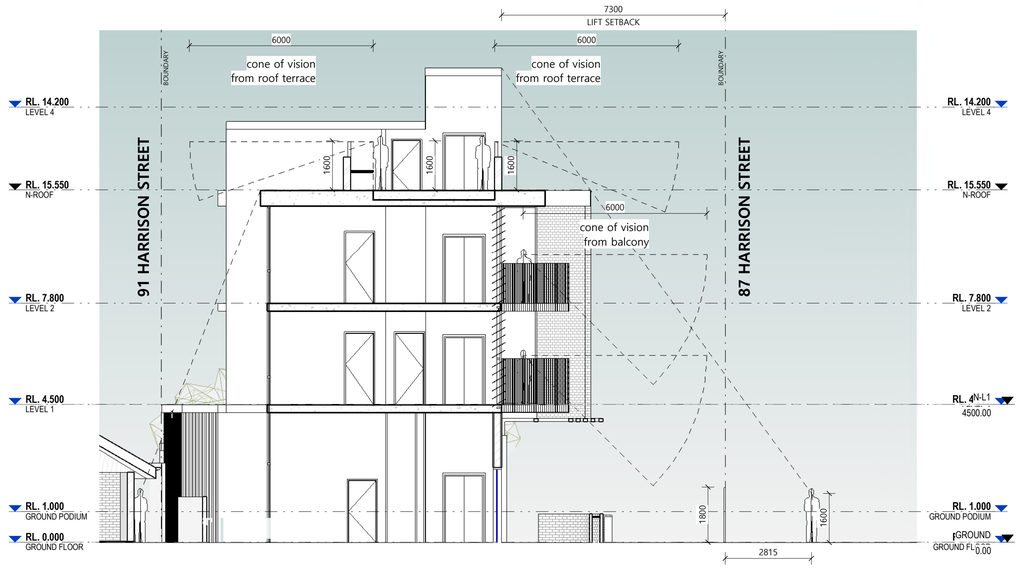
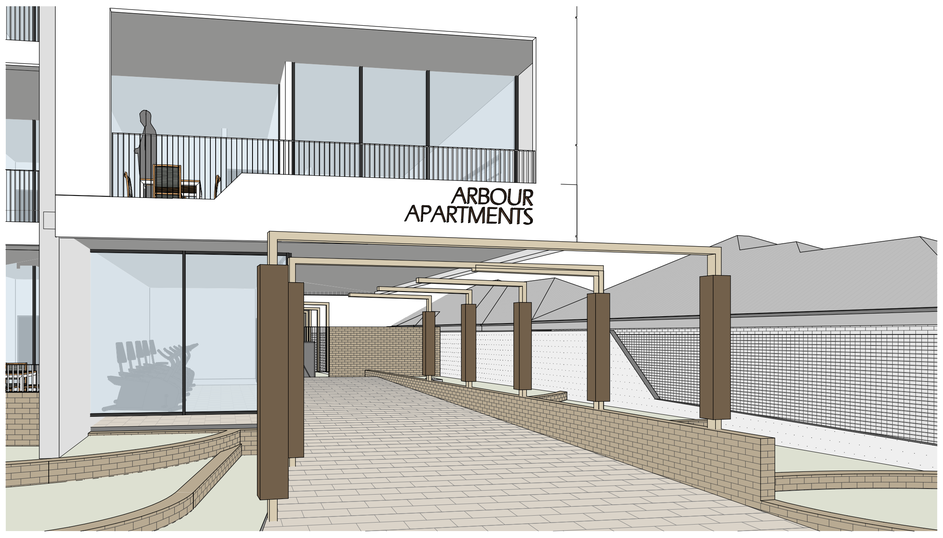
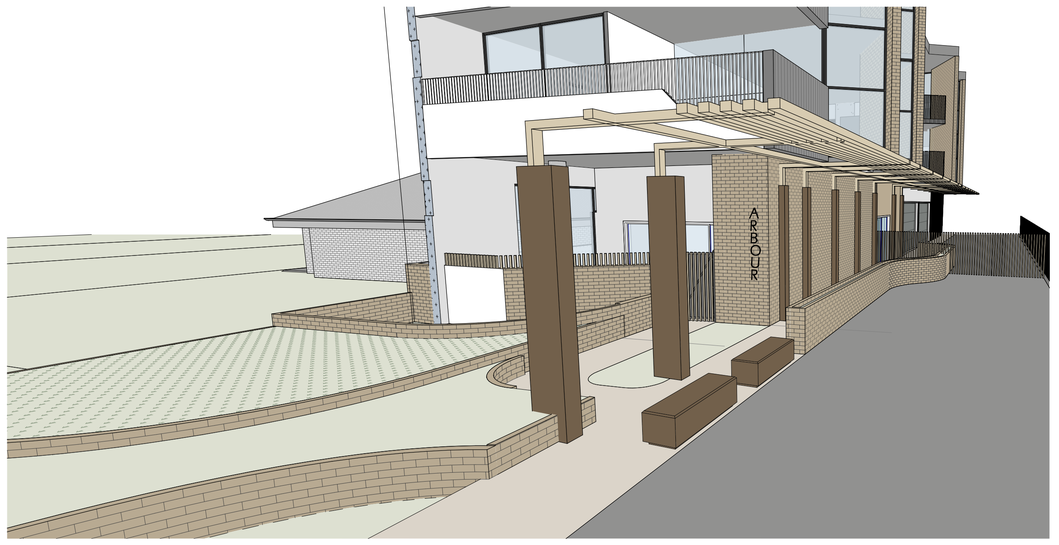


4 / 1.16 Section 19
1 : 100



2 PARKIN STREET - ENTRY ARBOUR



3 HARRISON STREET - ENTRY ARBOUR

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ISSUE	DATE	DESCRIPTION	DRN.	APP.
P1	21.10.22	PLANNING UPDATE	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

BALCONY SECTIONS - NORTH

SCALE	DRAWN	CHECKED
1 : 100 @ A1	Author	Checker

PROJECT #	DRAWING #	ISSUE
21049	3.02	P1

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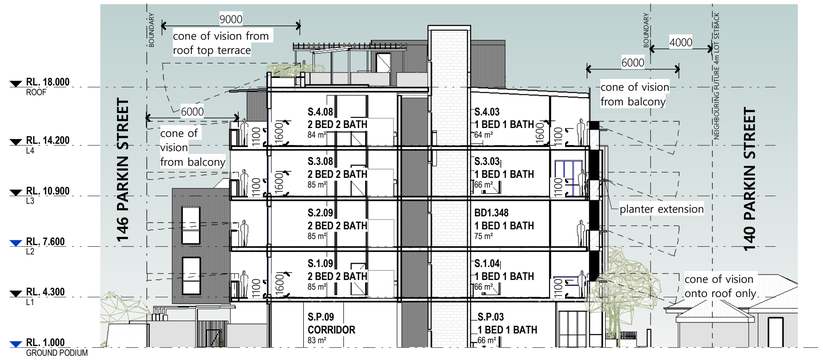
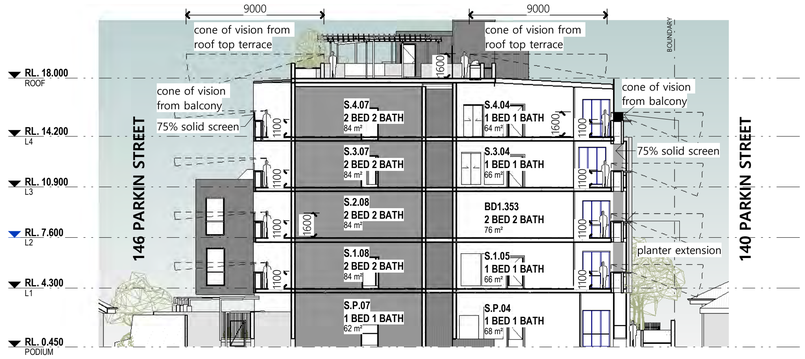
DATE 21.10.22



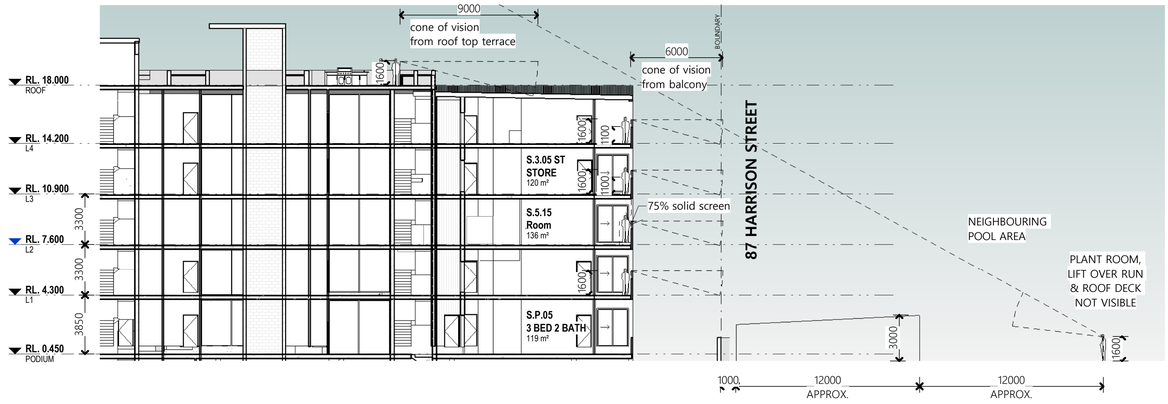
1 1.11 Section 19 - BALCONIES

1 : 200



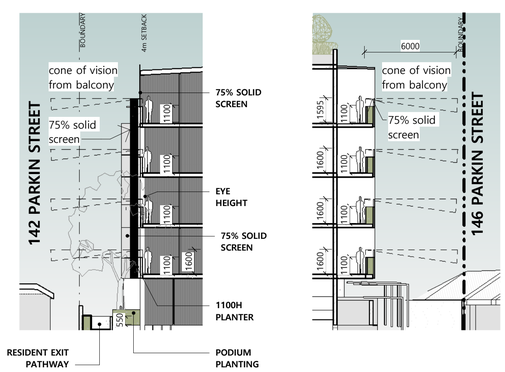
2 1.11 Section 17 - BALCONIES

1 : 200



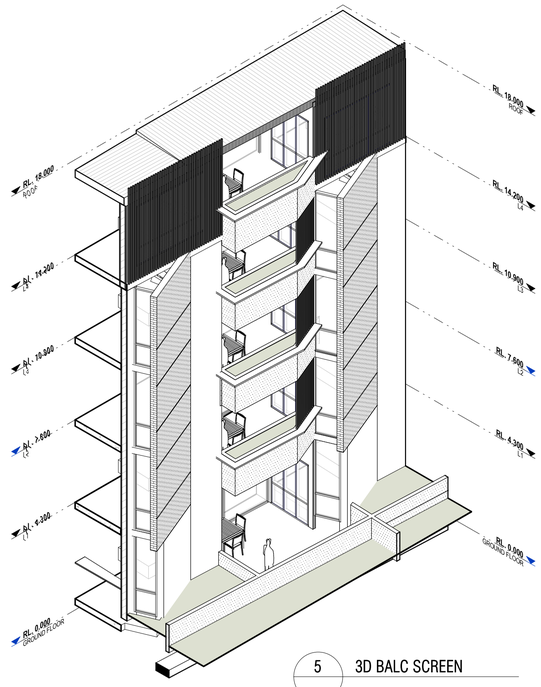
3 1.12 Section 14 - BALCONIES

1 : 200



4 1.12 SHORT SECTION - PLANTERS+WALKWAY

1 : 200



5 3D BALC SCREEN

NOTE: Contractor to check and verify all dimensions, levels, and angles on site before commencing.
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ISSUE	DATE	DESCRIPTION	DRN.	APP.
P1	21.10.22	PLANNING UPDATE	DMG	TLM

PLANNING APPLICATION

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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

BALCONY SECTIONS - SOUTH

SCALE	DRAWN	CHECKED
1 : 200 @ A1	SJ	TLM

PROJECT #	DRAWING #	ISSUE
21049	3.03	P1

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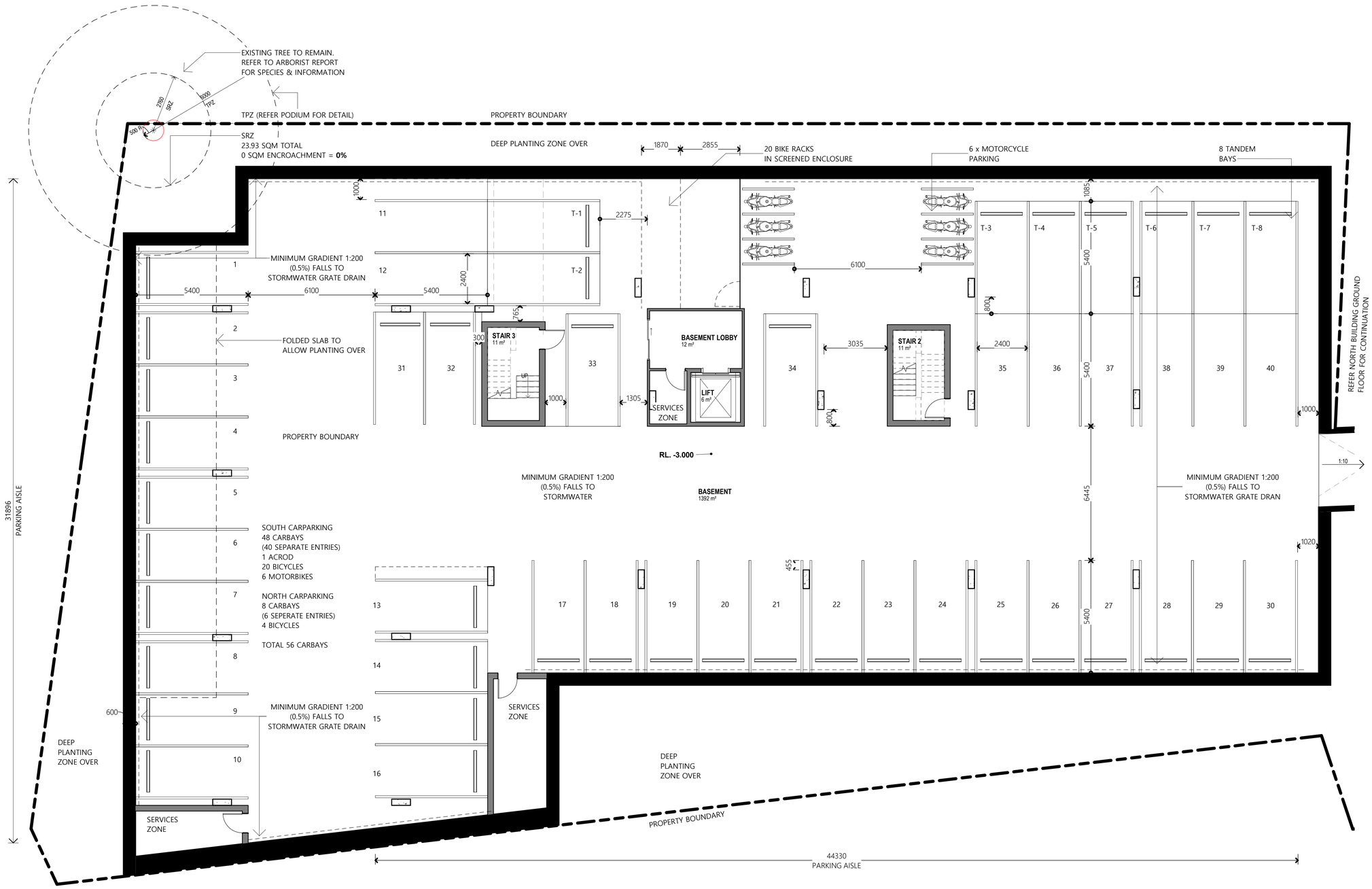

0 5m
SCALE 1:100

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m²
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P7	21.10.22	PLANNING UPDATE	DMG	TLM
P6	12.10.22	CONSULTANT UPDATE	TLM	SJ
P5	05.10.22	PLANNING UPDATE	TLM	SJ
P4	08.08.22	PLANNING APPLICATION	DMG	TLM
P3	26.07.22	CONSULTANT UPDATE	DMG	TLM
P2	14.04.22	PRELODGE ISSUE	DMG	TLM
P1	06.04.22	PRELODGE ISSUE	DMG	TLM

PLANNING APPLICATION

DMG
ARCHITECTURE

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
BASEMENT - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.10	P7

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ROOM SCHEDULE - SOUTH BDG - PODIUM

NUMBER	NAME	AREA
S.P.01	2 BED 2 BATH	85 m²
S.P.01 BALC	TERRACE	30 m²
S.P.01 ST	STORE	5 m²
S.P.02	2 BED 2 BATH	87 m²
S.P.02 BALC	TERRACE	37 m²
S.P.02 ST	STORE	4 m²
S.P.03	1 BED 1 BATH	66 m²
S.P.03 BALC	TERRACE	17 m²
S.P.03 ST	STORE	3 m²
S.P.04	1 BED 1 BATH	68 m²
S.P.04 BALC	TERRACE	17 m²
S.P.04 ST	STORE	4 m²
S.P.05	3 BED 2 BATH	119 m²
S.P.05 BALC	TERRACE	15 m²
S.P.05 ST	STORE	6 m²
S.P.06	2 BED 2 BATH	83 m²
S.P.06 BALC	TERRACE	16 m²
S.P.06 ST	STORE	4 m²
S.P.07	1 BED 1 BATH	62 m²
S.P.07 BALC	TERRACE	18 m²
S.P.07 ST	STORE	4 m²
S.P.08	1 BED 1 BATH	63 m²
S.P.08 ST	STORE	4 m²
S.P.08. BALC	TERRACE	19 m²
S.P.09	CORRIDOR	88 m²
S.P.10	STAIR	17 m²
S.P.13	LIFT	6 m²
S.P.14	STAIR	10 m²
S.P.16	RESIDENT FITNESS	37 m²

SITE	3154 m²	
DEEP PLANTING	436 m²	14%

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m² ← FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P9	21.10.22	PLANNING UPDATE	DMG	TLM
P8	12.10.22	CONSULTANT UPDATE	TLM	SJ
P7	08.08.22	PLANNING APPLICATION	DMG	TLM
P6	26.07.22	CONSULTANT UPDATE	DMG	TLM
P5	14.04.22	PRELODGE ISSUE	DMG	TLM
P4	06.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
PODIUM FLOOR PLAN - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.11	P9

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ROOM SCHEDULE - SOUTH BDG - LEVEL 1

NUMBER	NAME	AREA
BALCONY	BALCONY	15 m²
N.B.18	STORE	3 m²
S.1.01	2 BED 2 BATH	86 m²
S.1.01 BALC	BALCONY	16 m²
S.1.01 ST	STORE	4 m²
S.1.02	2 BED 2 BATH	85 m²
S.1.02 BALC	BALCONY	25 m²
S.1.02 ST	STORE	5 m²
S.1.03	2 BED 2 BATH	91 m²
S.1.03 BALC	BALCONY	20 m²
S.1.03 ST	STORE	4 m²
S.1.04	1 BED 1 BATH	66 m²
S.1.04 BALC	BALCONY	10 m²
S.1.05	1 BED 1 BATH	66 m²
S.1.05 BALC	BALCONY	10 m²
S.1.05 ST	STORE	4 m²
S.1.06	3 BED 2 BATH	120 m²
S.1.06 ST	STORE	6 m²
S.1.07	2 BED 2 BATH	81 m²
S.1.07 BALC	BALCONY	16 m²
S.1.08	2 BED 2 BATH	84 m²
S.1.08 BALC	BALCONY	18 m²
S.1.08 ST	STORE	4 m²
S.1.09	2 BED 2 BATH	85 m²
S.1.09 BALC	BALCONY	22 m²
S.1.09 ST	STORE	4 m²
S.1.10	CORRIDOR	58 m²
S.1.11	STAIR	11 m²
S.1.12	LIFT	6 m²
S.1.13	STAIR	10 m²



ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR

S.P. #
Name
m²
ROOM NAME
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 1+2 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.12	P6

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ROOM SCHEDULE - SOUTH BDG - LEVEL 3

NUMBER	NAME	AREA
S.3.01	2 BED 2 BATH	85 m²
S.3.01 BALC1	BALCONY	25 m²
S.3.01 BALC2	TERRACE	20 m²
S.3.01 ST	STORE	5 m²
S.3.02	2 BED 2 BATH	90 m²
S.3.02 BALC	BALCONY	20 m²
S.3.02 ST	STORE	4 m²
S.3.03	1 BED 1 BATH	66 m²
S.3.03 BALC	BALCONY	10 m²
S.3.03 ST	STORE	3 m²
S.3.04	1 BED 1 BATH	66 m²
S.3.04 BALC	BALCONY	10 m²
S.3.04 ST	STORE	4 m²
S.3.05	3 BED 2 BATH	Redundant Room
S.3.05 ST	STORE	120 m²
S.3.06	2 BED 2 BATH	83 m²
S.3.07	2 BED 2 BATH	84 m²
S.3.07 BALC	BALCONY	18 m²
S.3.07 ST	STORE	4 m²
S.3.08	2 BED 2 BATH	85 m²
S.3.08 BALC	BALCONY	22 m²
S.3.08 ST	STORE	4 m²
S.3.09	CORRIDOR	51 m²
S.3.10	STAIR	11 m²
S.3.11	LIFT	6 m²
S.3.12	STAIR	10 m²



ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name
m²
ROOM NAME
FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 3 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.13	P6

SCALE 1:100 (0 – 5m)

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DATE 21.10.22

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ROOM SCHEDULE - SOUTH BDG - LEVEL 4

NUMBER	NAME	AREA
BALCONY	BALCONY	16 m²
S.4.01	2 BED 2 BATH	86 m²
S.4.01 BALC 1	TERRACE	30 m²
S.4.01 BALC 2	BALCONY	6 m²
S.4.01 ST	STORE	5 m²
S.4.02	2 BED 2 BATH	89 m²
S.4.02 BALC	BALCONY	10 m²
S.4.02 ST	STORE	4 m²
S.4.03	1 BED 1 BATH	64 m²
S.4.03 BALC	BALCONY	10 m²
S.4.03 ST	STORE	3 m²
S.4.04	1 BED 1 BATH	64 m²
S.4.04 BALC	BALCONY	10 m²
S.4.04 ST	STORE	4 m²
S.4.05	3 BED 2 BATH	115 m²
S.4.06 ST	STORE	4 m²
S.4.07	2 BED 2 BATH	84 m²
S.4.07 BALC	BALCONY	18 m²
S.4.07 ST	STORE	4 m²
S.4.08	2 BED 2 BATH	84 m²
S.4.08 BALC	BALCONY	22 m²
S.4.08 ST	STORE	4 m²
S.4.09	CORRIDOR	51 m²
S.4.10	STAIR	11 m²
S.4.11	LIFT	6 m²
S.4.12	STAIR	10 m²
STORE	STORE	6 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name ← ROOM NAME
m² ← FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 4 - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.14	P6

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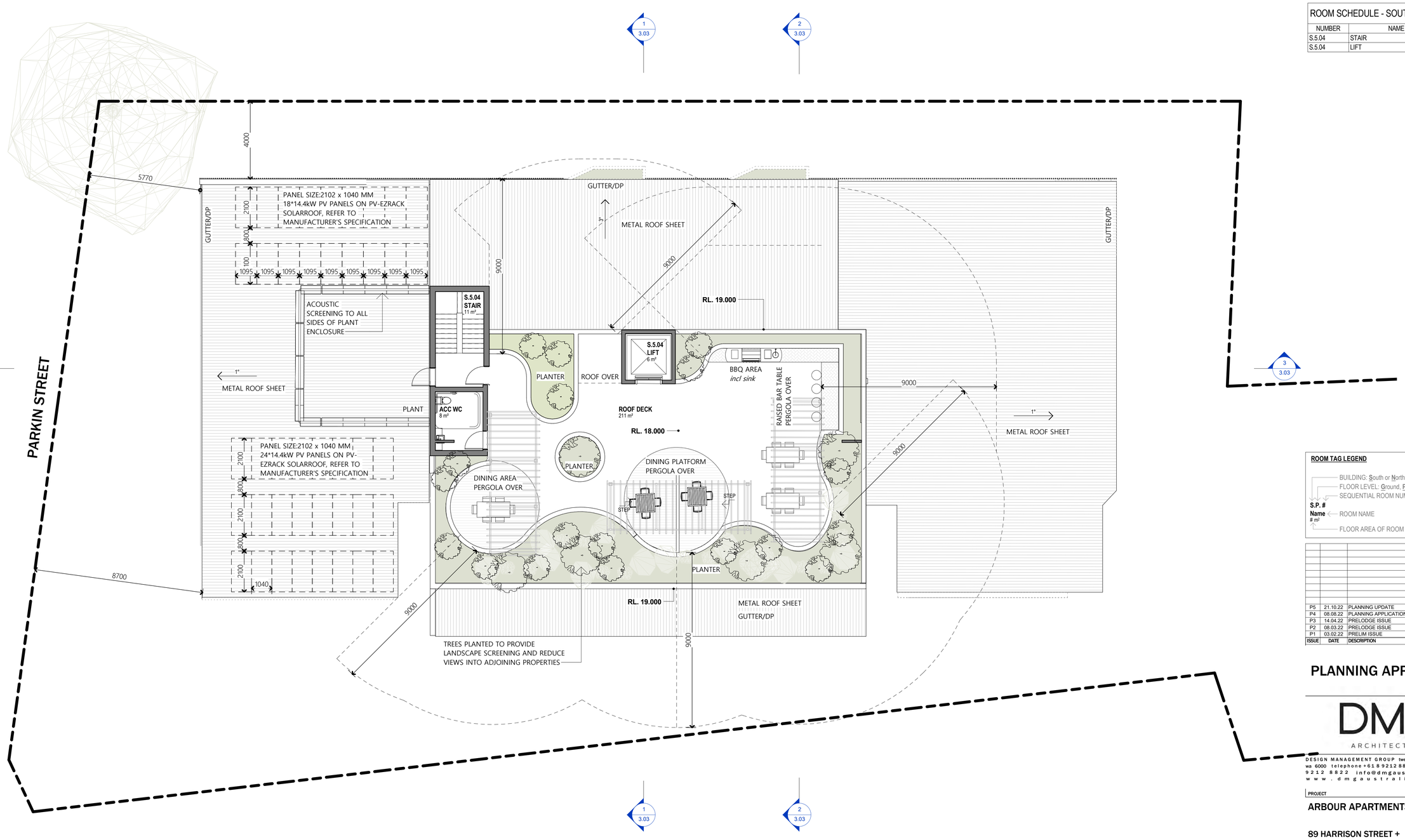
DATE 21.10.22

0 5m
SCALE 1:100

NOTE: Contractor to check and verify all dimensions, levels, and angles on site before commencing.
All construction work to be in accordance with the Building Code of Australia, approved documents and relevant Australian Standards.

- DRAWINGS SHALL NOT BE READ IN ISOLATION AS THEY REFER TO OTHER DRAWINGS, SCHEDULES AND SPECIFICATIONS

ROOM SCHEDULE - SOUTH BDG - LEVEL 5		
NUMBER	NAME	AREA
S.5.04	STAIR	11 m²
S.5.04	LIFT	6 m²



ROOM TAG LEGEND

S.P. #
Name
m²

- BUILDING: South or North
- FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
- SEQUENTIAL ROOM NUMBER ON FLOOR
- ROOM NAME
- FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P5	21.10.22	PLANNING UPDATE	DMG	TLM
P4	08.08.22	PLANNING APPLICATION	DMG	TLM
P3	14.04.22	PRELODGE ISSUE	DMG	TLM
P2	08.03.22	PRELODGE ISSUE	DMG	TLM
P1	03.02.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG ARCHITECTURE
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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 5 (ROOF) - SOUTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.15	P5

0 5m
SCALE 1:100

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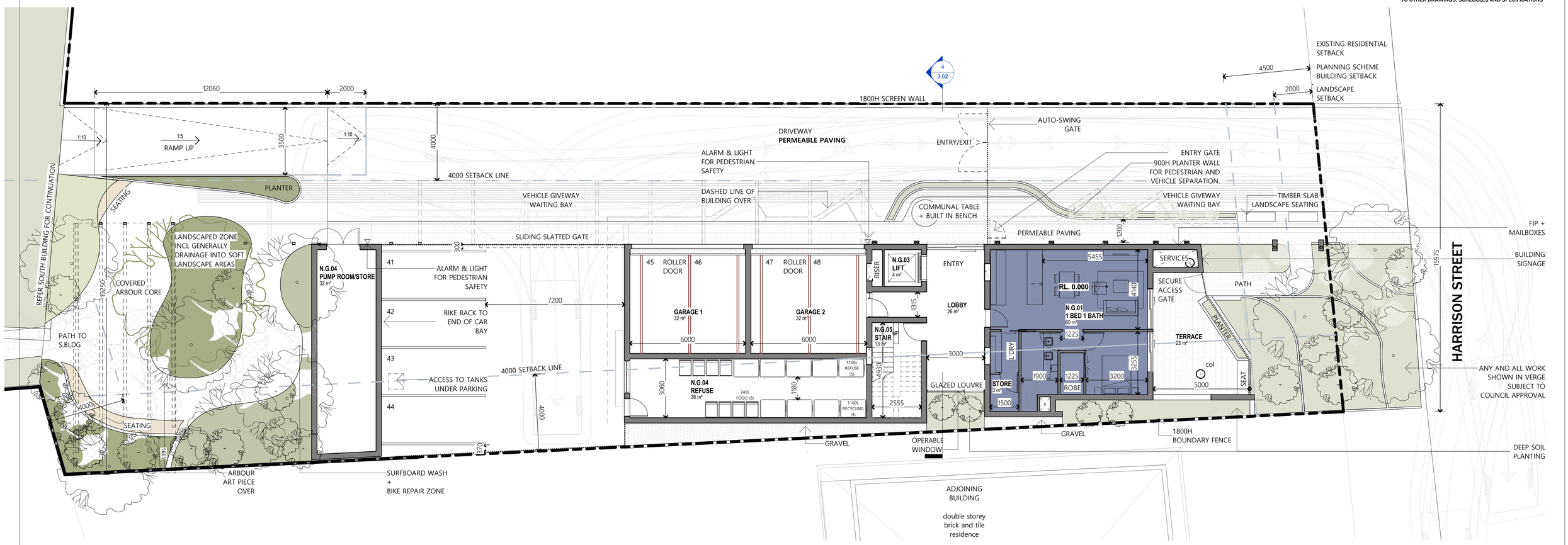

ROOM SCHEDULE - NORTH BDG -...		
NUMBER	NAME	AREA
N.G.01	1 BED 1 BATH	60 m²
N.G.01	STORE	3 m²
N.G.01	TERRACE	23 m²
N.G.03	LIFT	4 m²
N.G.04	PUMP ROOM/STORE	32 m²
N.G.05	STAIR	13 m²

SITE	3154 m²	
DEEP PLANTING	436 m²	14%

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name
 # m²
ROOM NAME
FLOOR AREA OF ROOM

0 5m
SCALE 1:100

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P10	21.10.22	PLANNING UPDATE	DMG	TLM
P9	12.10.22	CONSULTANT UPDATE	TLM	SJ
P8	05.10.22	PLANNING UPDATE	TLM	SJ
P7	08.08.22	PLANNING APPLICATION	DMG	TLM
P6	26.07.22	CONSULTANT UPDATE	DMG	TLM
P5	14.04.22	PRELODGE ISSUE	DMG	TLM
P4	06.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

DMG
ARCHITECTURE
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PROJECT

ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE

GROUND FLOOR PLAN - NORTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.16	P10

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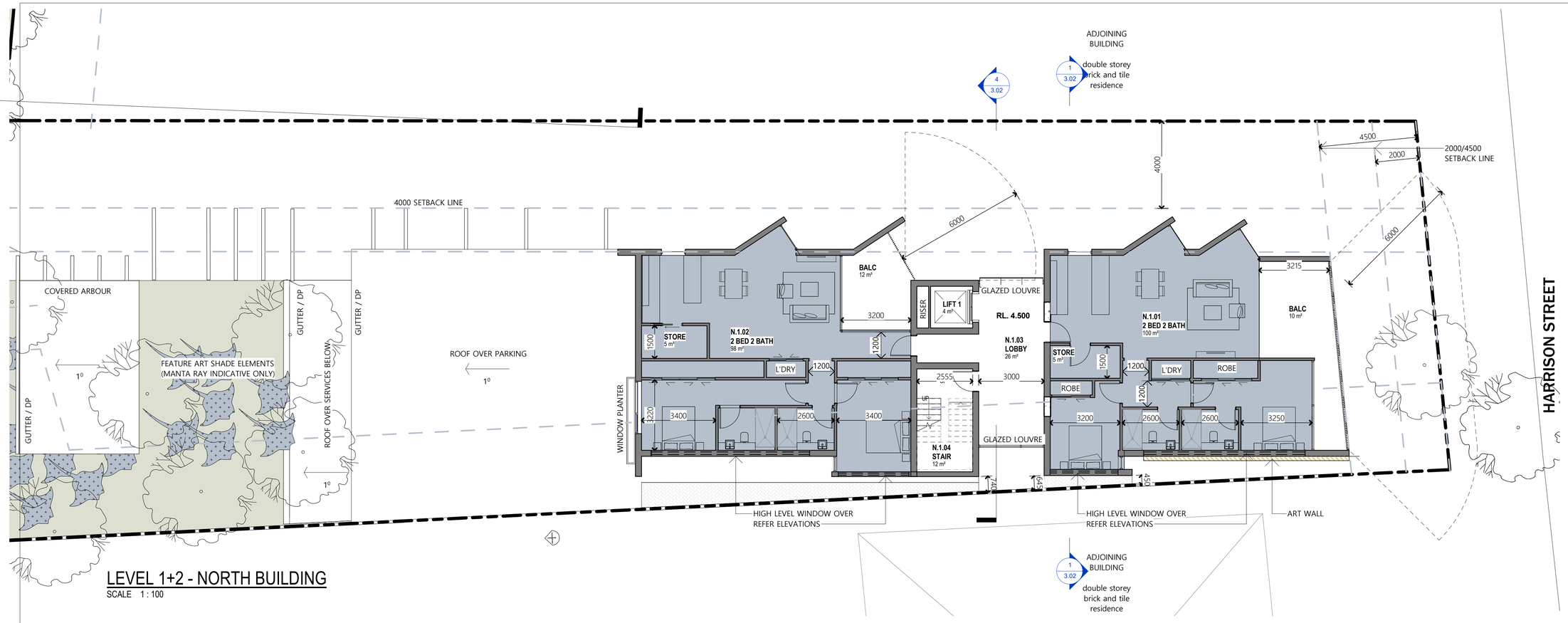

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ROOM SCHEDULE - NORTH BDG - LEVEL 1

NUMBER	NAME	AREA
N.1.01	2 BED 2 BATH	100 m²
N.1.01	BALC	10 m²
N.1.01 ST	STORE	5 m²
N.1.02	2 BED 2 BATH	98 m²
N.1.02	BALC	12 m²
N.1.02 ST	STORE	5 m²
N.1.03	LOBBY	26 m²
N.1.04	STAIR	12 m²
N.1.05	LIFT 1	4 m²

ROOM SCHEDULE - NORTH BDG - LEVEL 3

NUMBER	NAME	AREA
N.3.01	ROOF DECK	51 m²
N.3.02	PLANT	13 m²
N.3.03	STAIR	8 m²
N.3.04	LIFT	3 m²

ROOM TAG LEGEND

BUILDING: South or North
FLOOR LEVEL: Ground, Podium, Level 1, 2, 3, 4, 5
SEQUENTIAL ROOM NUMBER ON FLOOR
S.P. #
Name — ROOM NAME
m² — FLOOR AREA OF ROOM

ISSUE	DATE	DESCRIPTION	DRN.	APP.
P6	21.10.22	PLANNING UPDATE	DMG	TLM
P5	08.08.22	PLANNING APPLICATION	DMG	TLM
P4	14.04.22	PRELODGE ISSUE	DMG	TLM
P3	08.03.22	PRELODGE ISSUE	DMG	TLM
P2	03.02.22	PRELIM ISSUE	DMG	TLM
P1	04.01.22	PRELIM ISSUE	DMG	TLM

PLANNING APPLICATION

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PROJECT
ARBOUR APARTMENTS

89 HARRISON STREET +
142-144 PARKIN STREET
ROCKINGHAM WA 6168

TITLE
LEVEL 1+2+ROOF - NORTH BUILDING

SCALE	DRAWN	CHECKED
As indicated @ A1	DMG	GIE

PROJECT #	DRAWING #	ISSUE
21049	1.17	P6

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DATE 21.10.22

Schedule of Submissions
Proposed 3-5 Storey Multiple Dwelling Development - Lot 62 (No.89) Harrison Street and Lots 94 and 95 (No.142 and 144) Parkin Street, Rockingham

PUBLIC SCHEDULE OF SUBMISSIONS		
Name	**Address**	**Comment**
1. Mr Russell Mark	1 Parkin Street ROCKINGHAM WA 6168	I reside on Parkin Street and support the proposed multiple dwelling development at Lot 62 (No.89). However, Parkin Street already suffers significant congestion and dangerous speeding traffic when entering/departing my driveway. Please consider reducing the speed limit to 50kms an hour.
2. Mr Brett and Mrs Julie McDonald	134 Parkin Street ROCKINGHAM WA 6168	Thank-you for your letter dated 23 September 2022 regarding 142 & 144 Parkin street. Julie and I have had a good look at the plans and reports available on the City's website and tonight went for a walk around our block to consider the impact. We applaud the developers' proposal to have traffic enter and exit from Harrison street as the current Parkin street access on the corner is risky at best for residents at 144, 146 and 148 Parkin street with little warning of east bound vehicle's approaching. While the development exceeds some of the (waterfront village) development policy plan specifications we believe the development is a positive one for the area. We like the range of apartment sizes and allocated parking. We hope developers have or will make allowances for electric vehicle charging in the buildings electrical distribution. In summary as close neighbours we support this development application.
3. Mr Paul Dreghorn	3/67 Harrison Street ROCKINGHAM WA 6168	I strongly object to the proposal for such a large scale project in the area both in the height of the proposal and the number of dwellings as this will make it high density. This will further detract from the area with more loss of green being taken up by the entire development and parking. This will significantly increase the local traffic with there being 60 vehicle bays in the proposed development with there already being congested parking on the streets and verge since the prior city developments have reduced parking space along the foreshore. If there was to be any development of any scale the access should be from Parkin street with this has the major land area and also having facility for the additional traffic that this development would create. The area should be maintained for lower density housing projects as is currently the case. All high rise should be toward the Rockingham Beach area where there are already apartments established.
4. Mr Ken Pascoe	Florence Street ROCKINGHM WA 6166	I am submitting an opposition letter to this project. Re the 47 multiple dwellings between Harrison and Parkin streets. If according to policy a building can be no higher than 19 meters, why is a 24 meter building allowed to be proposed, don't these builders get these parameters when they apply for permits. I don't know the rules that govern the number of car bays per unit, but in my calculation, without any visitor bays there should be at least 75 off street bays and at least 1 maintenance service car bay. With this proposition, there will be dozens more on street parking, (let alone traffic) to a street which already has a lot of on street parking now.
5. Mr Dion & Mrs Melissa Dredge	87 Harrison Street ROCKINGHAM WA 6168	Request that an extension be given to all submissions for residents for the above proposed development. As a rate payer and owner of 87 Harrison Street myself and multiple neighbours have concerns regarding this proposal. I along with a few more of my neighbours are currently seeking legal advice on this proposal. As you can appreciate this will take some time hence the request for an extension for submissions.

Schedule of Submissions
Proposed 3-5 Storey Multiple Dwelling Development - Lot 62 (No.89) Harrison Street and Lots 94 and 95 (No.142 and 144) Parkin Street, Rockingham

PUBLIC SCHEDULE OF SUBMISSIONS		
Name	**Address**	**Comment**
5. cont…		I find it sneaky but deliberate that the council allows only 11 days, over a school holiday period for submissions regarding the Proposed development. I know for fact that several residents are on school holidays overseas or interstate that won't be able to provide a submission. This alone should highlight the fact that an extension for submissions be granted. I am not a lawyer nor a town planner however a bit of common sense should prevail that this proposal has many red flags that need to be investigated further. The current variations alone are not acceptable and don't meet the State Planning Policy 7.3 - Residential Designs Codes. Investigations conducted by the developer are one sided. I myself will not agree to any of these variations or deviations until I have seeked advice. It is obvious that I am not happy with the proposal, I am also aware that many more of my neighbours are also not happy and are against this development. At the end of the day you are putting a large multi dwelling complex in the middle of a residential area, I am unsure what influence the owner of 89 Harrison has on the council however I am investigating this further. I find it strange that this development benefits only 2 groups: the owner himself and putting rate dollars back into the council. I know for fact that nobody else on Harrison is in the position to put multi dwellings on their property because the land is simply not available, and you simply have established residential homes with families already in place. This is not the street nor the area for such development at this time. I ask you as a rate payer what would you do if a development as large as this was developed next door to you? such a development not only significantly reduces the property values in the area but also brings undesirable tenants, traffic hazards and impacts privacy laws. If you had a conscience this proposal should be put on hold until investigated further. This will be an eyesore in the middle of a beautiful part of Rockingham Foreshore and let's be honest 1 bedroom apartments of this size attract undesirable tenants, also bringing down property prices. Has the council conducted their own investigation on the impacts of this development? Issues with proposal • does not meet State Planning Policy 7.3 - Residential Design Codes and City of Rockingham Local Planning Policy 3.2.5 - Development Policy PLan (Waterfront Village Sector) • Height of proposal does not meet Planning Policy. More information on roof "roof top services". Concern with height, boundaries and privacy laws • Balconies do not meet Local Planning Policy and privacy laws. More information required regarding the mitigation of this variation • Variations to height and major openings, concern privacy and sound laws • Parking and the use of Harrison Street as the entry and exit point, what road infrastructure in place to accommodate. Issues with parking currently. Safety, noise and road traffic conditions are a concern - I don't agree with traffic report • development literally wrapped around 87 Harrison Street - valuation of my property significantly impacted, solar impacted, privacy impacted, safety impacted, property would be hard sell once this development is in place. Compensation should be considered.

Schedule of Submissions
Proposed 3-5 Storey Multiple Dwelling Development - Lot 62 (No.89) Harrison Street and Lots 94 and 95 (No.142 and 144) Parkin Street, Rockingham

PUBLIC SCHEDULE OF SUBMISSIONS		
Name	**Address**	**Comment**
5. cont…		Recommendations: • extension for submission granted to 11 November 2022, so Proposal can be reviewed thoroughly - there is a lot to review • meeting with residents and council to discuss the proposal • put a hold on proposal until all residents have replied or have attended one of the meeting dates Requests: • provide details of the next council meeting regarding this development • provide details of scheduled meeting dates • does Mr P Jackson have any influence or ties to the council either past, present or future. Family, Friends or business partners or interests? • provide date when this development was first proposed to the council • call back from someone in town planning regarding this proposal My intent is to have my submission completed prior to the 11 October, however consideration should be given to extend this date due to the complexity and the impact that this proposal has on the wider community, allowing less than 11 days to respond is unreasonable.
6. Mr Paul Sheridan	20 Sawley Close GOLDEN BAY WA 6174	I wish to submit my objection to the multistory development recently mailed out for Parkin and Harrison St. My grounds for objection are - This exceeds the planning guidelines, - I feel it does not fit with the existing buildings / homes - It is to large being 47 residences - Excess traffic stressing the local roads - No commercial / Café supermarket where the area desperately needs community infrastructure - There are multiple un developed blocks in the foreshore precinct that would benefit from progress, eg rockingham hotel or the unsightly abandoned garage at Parkin and Paterson
7. Mr Chris & Mrs Vjera Smith	Unit 4, 1 May Street ROCKINGHAM WA 6168	We live at 4/1 May St. Since the waterfront development was done & a large number of parking bays where removed from Railway Tce the traffic & parking along Harrison St & May St has increased a lot. This development will make it even worse. We believe there is a need to replace the parking on Railway Tce both in the middle of the road & on the waterfront side. The area on the waterfront side is hardly used by anybody & probably about 50 parking bays could be put there. Doing this would help ease the traffic around our residential area by quite a bit. As a resident we do not support 47 dwellings where there are now only 3.
8. Ms Clare Pettigrew	146B Parkin Street ROCKINGHAM WA 6168	Thank you for the letter informing me of the application seeking development approval on the land directly adjacent to my property. I have inspected the plans on-line, had a meeting with a representative from your Planning department and also had a call from David Banovic. These interactions have resolved many of my questions but I still have one issue, which is the height of the masonry wall along the driveway to my house and at the back corner of my property. On page 22 of the Transport Assessment, the height of the wall starting in Parkin St and continuing to my back corner is 1.6 high.

Schedule of Submissions
Proposed 3-5 Storey Multiple Dwelling Development - Lot 62 (No.89) Harrison Street and Lots 94 and 95 (No.142 and 144) Parkin Street, Rockingham

PUBLIC SCHEDULE OF SUBMISSIONS		
Name	**Address**	**Comment**
8. cont…		On page 7 on the Plans, the height is 2.6 for the wall. I am unsure which is the correct measurement. I object to the height of 2.6m, as that is higher than the brick work of my house, which is only 1.35m from the current fence. It would make that section of my yard feel very confined and affect light and airflow. Thank you for considering my response.
9. Mr Ian Saggers	11 Florence Street ROCKINGHAM WA 6168	I wish to lodge my objection especially on two issues on your submission for the proposed development above: 1. The heights of the proposed building should not exceed 19m. 2. The allowance of 60 parking bays for the 82 bedroom proposed development is well below that is needed for such a size dwelling. We have already seen that the parking allowances for basic infill developments on streets such as Parkin Street are inadequate with cars from the basic unit developments using street parking day and night time. Also street parking in Harrison Street is already under pressure especially in the afternoons and weekends with massive pressure on that street at busy times between Val Street and Florence Street. May Street is also generally well used at those times. When an event occurs the parking extends well into Florence Street and also into Parkin Street. The whole public parking is totally inadequate and that pressure will remain with the future planning for parking on the corner of Val Street and Harrison Street. This extenuates the need for greater parking allowance for the proposed development. At least one parking car bay per bedroom. The allowance for motor bikes and cycle bays seem relatively within reason.
10. Mr James & Mrs Hazel Maddalena	81 Harrison Street ROCKINGHAM WA 6168 10 Florence Street ROCKINGHAM WA 6168	We have been residents of Rockingham since 1973 and in Harrison St for 45 years. Firstly we find it unreasonable that we are given only 6 working days to respond to your request. We feel this decision needs questioning and furthermore have several issues with the proposed development. The proposed height of the building exceeds planning policy and we do not agree to this variation. We feel it encroaches on the privacy and safety of residents. Harrison Street has become increasingly busy on the weekend with activities on the foreshore and the increasing popularity of the restaurant precinct. At present it is difficult to find parking on Harrison Street and we believe the extra proposed residences will contribute to further congestion and noise. The 60 parking bays allocated for this proposed development is vastly inadequate for the residents with no provision for visitors. There is clearly not enough street parking to cater for the extra vehicles which cannot be housed at this development and as mentioned above the street parking is already full. The multi storey carpark has no mention of time frame for completion or who would be funding this carpark. It does not seem feasible, safe or convenient to expect tenants of the proposed development to pay for parking or walk 200 metres to their residences. The configuration of 47 units 17 of which are single bedroom residences is less than desirable. We feel our daily activities will be grossly affected and the residential area which supports families and the elderly will have a major negative impact.

Schedule of Submissions
Proposed 3-5 Storey Multiple Dwelling Development - Lot 62 (No.89) Harrison Street and Lots 94 and 95 (No.142 and 144) Parkin Street, Rockingham

PUBLIC SCHEDULE OF SUBMISSIONS		
Name	**Address**	**Comment**
11. Mr Paul Tunnard	16A Waller Street ROCKINGHAM WA 6168	I find that the proposal for a development of this density is not appropriate for the area. Parking, vehicle and people access's the scale and height of the development is not in keeping with surrounding area residencies.
12. Ms Julieann Wilson	Unit 2, 67 Harrison Street ROCKINGHAM WA 6168	I am an owner occupier of Unit 2 67 Harrison Street Rockingham. I wish to express my concerns for the parking and increased traffic in Harrison Street with the proposed construction of 47 Apartments / 82 bed complex, to be built with all traffic access via 89 Harrison Street. In my opinion 60 parking bays for residents will result in some residents resorting to use the current limited street parking. With cars parked outside overnight, this will create an opportunity for criminals to patrol the area and the risk of theft and break ins will increase. I totally reject the claim that there is adequate street parking for visitors of residents in the complex when the parking is already at capacity on weekends with a THREE bedroom house currently on the site!
13. Mr Paul Tunnard	16A Waller Street ROCKINGHAM WA 6168	I find that the proposal for a development of this density is not appropriate for the area. Parking, vehicle and people access's the scale and height of the development is not in keeping with surrounding area residencies.
14. Mr Michael Cucevic	Unit 3, 83 Harrison Street ROCKINGHAM WA 6168	To whom it may concern, I am happy with this project going ahead, however, I believe that the Harrison Street development should be built to be five stories instead of the proposed three. This is because my understanding of the allowed heights proposes that new developments on Harrison can be built to be up to five stories high, and I believe that the three stories are not developing the area properly. Also, I believe that as a shift worker my sleep would be greatly affected by this proposal provided it goes ahead and that because I am only a few doors down I should be provided double-glazed windows to reduce the noise of the construction.
15. Mr Bruce & Mrs Loretta Chamberlain	96C Harrison street ROCKINGHAM WA 6168	Thank you for your letter informing us of a Multiple dwelling proposal in our street that will have a direct Impact on us. After careful consideration we object to this proposal on the follow grounds: · The visual amenity in appearance and concrete build material. Would not be within the standard of the residential homes. · Safety of traffic flow. Harrison Street is already hazardous to Pedestrians. The number of cars and motor bikes are of concern and adding to this would cause a greater issue. As the Transport Impact Assessment indicates, the report does not consider this and summer traffic being even greater than estimated. · Parking: our own drive way is constantly being blocked. Practically sincethe bays have been painted. This would get worst with the extra visitors to the new Multiple Dwelling trying to access parking which does not cope already, our guest struggle to find parking. · I'm particularly worried about vehicles turning (including U turns) and · The impact Loading of trucks will have. Therefore, having road access from Harrison Street to the Multiple Dwellings would cause unnecessary congestion. Creating noise and disturbance to the area. · Pollution and smells are also a worry. Hazardous materials regarding the building. Then you would have a concern about the water run-off.

Schedule of Submissions
Proposed 3-5 Storey Multiple Dwelling Development - Lot 62 (No.89) Harrison Street and Lots 94 and 95 (No.142 and 144) Parkin Street, Rockingham

PUBLIC SCHEDULE OF SUBMISSIONS		
Name	**Address**	**Comment**
15. cont…		And the lack of Sunlight involving the surrounding homes. Creating a concern regarding the environmental effects. · Privacy: Is not meeting council rules therefore not in keeping with the Area. Also, the overlooking roof top is an issue. · This Multiple Dwelling will also impact our local services. For example, The NBN. As you are aware this is an old area with old lines and to date we are very lucky at the moment to have some normality and access. However, there are times we have no connections as the infrastructure has failed and is not available. In conclusion this proposal does have a negative effect on our surroundings and the area and we strongly oppose it. We do hope you consider these objections.
16. Mrs Margaret Marsiglio	6 Florence Street ROCKINGHAM WA 6168	I would like to make my comments noted in relation to the above proposal. I do not think the proposal will be in the interests of the present surrounding homes and residents in the vicinity. The Waterfront Village Precinct is going to be a major part of the development and the profile of Rockingham's future and it is very important to comply with permissible building heights in residential areas. This proposal does not comply the proposed development exceeding the permissible height of 19m and this will be a concern for all landowners directly adjacent to the proposed development and neighbouring properties. The increased traffic on Harrison Street will increase noise and cause distress to the existing home owners. The development may attract hoons in the parking basement and increase the possibility of homeless people squatting creating a very undesirable outlook for existing home owners and the possibility of increased burglaries making the area unsafe. The Waterfront Village Precinct is a prime location for visitors to Rockingham and the Palm Beach foreshore and the restaurant strip and I believe that this development and the increased traffic will be dangerous to pedestrians, bike riders and scooters. There is not enough road space to facilitate the increase of traffic on Harrison Street. I am not in favour of the development as a landowner who will be directly affected by the proposed project and do not believe that it will be in the interests of existing residents for the profile of Rockingham.
17. Mr Luigi Marsiglio	6 Florence Street ROCKINGHAM WA 6168	I would like to make my comments in relation to the above proposal. Firstly, I do not think the proposal will be in the interests of the present surrounding homes, the maximum building height exceeds the permissible maximum building height of 19m. This will affect the properties the landowners directly adjacent to this proposed development and their privacy will be affected. In addition I do not think Harrison Street is wide enough to accommodate the increased flow of traffic should the development proceed. It till cause congestion and be dangerous for residents. Surrounding homes will be inundated with additional cars parked on the road verges from visitors. Harrison Street cannot cope with the volume of cars parked on road parking now that the summer months have begun let alone with 47 additional apartments to accommodate and the additional traffic coming to and fro. I am also concerned that the development it will also attract hoons in the underground car park, undesirables, and the homeless, sleeping in corners and it will increase the chance of burglaries and violence making the area unsafe.

Schedule of Submissions
Proposed 3-5 Storey Multiple Dwelling Development - Lot 62 (No.89) Harrison Street and Lots 94 and 95 (No.142 and 144) Parkin Street, Rockingham

PUBLIC SCHEDULE OF SUBMISSIONS		
Name	**Address**	**Comment**
17. cont…		This area The Waterfront Village Sector is a prime location for visitors to the Palm Beach foreshore and the restaurant strip and it will be also very dangerous to pedestrians, bike riders and scooters with the increase of traffic flow. As an affected landowner I am not in favour of the project and I do not believe that it will be in the interests of existing residents.
18. June Ridley	157 Parkin Street ROCKINGHAM WA 6168	We are in receipt of your correspondence dated the 23 September 2022 in relation to a proposal for a multi story building plan for Lot 62 Harrison Street, Rockingham and continuing to Lots 142 and 144 Parkin Street, Rockingham. We hereby notify you that the receipt of your letter via Australia Post mail service was effect on 29 September 2022 which means we have not had the full legislated time to respond. We are formally registering our opposition to the proposal on the following grounds: 1. We believe the proposal will require significant de watering of the proposed basement carpark and ground footings which will negatively impact on the environment and the local properties who may from time to time draw water from the ground via their own water bores. It has been established in other areas that de watering alters the local water table irreparably and we do not wish to see this happen here. 2. The proposal to add high density living in the location mentioned will see an increase in vehicular traffic along that part of the roadway. We have been residents in the area for over 30 years and have noted many factors that have increased traffic and therefore increased risk of motor vehicle crashes in the vicinity. We are not prepared to accept another increase in the elevated risk of danger to motorists and pedestrians on top of that which has already occurred. 3. Your letter defines the proposal deviates from the allowable height limit for the Residential Design Code for the area. The significant height of this building would be massively above anything surrounding and would overwhelmingly detract from the visual amenity of the area so we would not support development of this scale in this location. 4. We are not happy to provide endorsement or leniency on the proponent exceeding the allowable height limit. 5. We are not going to accept the proposed variation on setbacks for visual privacy. 6. Noting in the proposal provides for anti-social delimiting. 7. Nothing in the proposal provides for mitigation of the brutal visual impact of the proposed monolith. 8. Nothing in the proposal provides for any convenience or amenity for the existing local residents. 9. We are opposed to anything that deviates from the Residential Design Codes. 10. We note that the Western End of the proposal adjoins lots with building height limits set at a maximum of 3 storeys or 12.5 metres. This proposal is significantly higher than that and whilst technically within the 5 storey and 19 metre height limit area, it is very close to the edge and the proposal would appear to be an ambit claim. We have a right to be informed at every step of this proposal and any alterations or variations to it. We expect to be informed in writing and be given an appropriate time to respond to any changes. We reserve all of our rights.

Schedule of Submissions
Proposed 3-5 Storey Multiple Dwelling Development - Lot 62 (No.89) Harrison Street and Lots 94 and 95 (No.142 and 144) Parkin Street, Rockingham

PUBLIC SCHEDULE OF SUBMISSIONS		
Name	**Address**	**Comment**
19. Mr Luke and Mrs Kristen Anderson	40 Harrison Street ROCKINGHAM WA 6168	We write to you today as concerned residents that currently owns properties on Harrison Street. My wife and I currently own 76, 75, 75A & 75b Harrison Street. We have received your letter dated 23rd September 2022 in regard to the proposed development on 89 Harrison Street and 94 & 95 Parkin Street Rockingham. While we are not against development as we believe that Rockingham should reach is true potential what we are concerned about is a number of factors on this proposal. 1. Our first concern is the access only available via Harrison Street. You have a development that backs onto Parkin Street which takes up a two-width block yet there is only access via a single block on Harrison Street. I am sure you are aware that Harrison Street is a family friendly street with a mix of young families and the older generation which is why we decided to live here. We get the best of both worlds. Our concern is that by having only one access via Harrison Street this is going to create more traffic flow from Florence Street. This intersection of Harrison and Florence is already a death trap. On any given day cars come flying around the corner and don't even STOP and the stop sign. Adding additional cars will only increase the traffic at the intersection. Why would you build a complex with only one access in and out. There should be an access point on Parkin Street. 2. Parking is going to be an issue. We already get cars parked further down Harrison Street as there is not enough parking at the foreshore. The bays that are located out the front of 89 Harrison Street are always taken up with people attending the restaurants and the beach. If there is going to be 47 apartments I would like to know where their visitors will be able to park. You can not expect them to be parking down Harrison Street. The street is not wide enough to accommodate extra cars. On our side of Florence Street, it is Zoned R40, so a number of the properties have two driveways allowing for access for the rear properties. It does not make sense to allow parking on the side verge in a R40 zone where there are multiple driveways. While this does concern us that the height may exceed the legal limits, I ask the counsel to consider objecting this proposal as it stands. Harrison Street is a residential street and there are other areas where a development like this should occur. The council should be looking at the properties that have been lying dormant for a number of years. • Rockingham Hotel, what on earth is going on with this. It is not only an eyesore on our beautiful foreshore but the parking that was once there has been taken away. Maybe the Council should purchase this land and develop it into a building and car park that would enhance the foreshore. • The old Bank on Railway Terrace – this has been vacant for many years with a for lease sign on it • The old Petrol Station on the corner of Parkin and Railway Terrace • The old Caravan Park The list really does go on. Areas like the above should be encouraged to develop Multiple dwellings like the proposal that you have sent out.

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19. cont…		In a residential street like Harrison Street, we should be having homes for families and not apartments the size of what is proposed. On your website you have listed photos on what apartments there are in the same area, but they are not in the middle of a residential area where family homes would be next door. We hope you take the 2-points on boards and ask the developer to re design their plans. We look forward to receiving any updates on this proposal.
20. Mr Johnny Jarvis	149 Parkin Street ROCKINGHAM WA 6168	I received a letter a few weeks ago regarding the new proposed dwellings on Harrington Stand Parkin st and this email is a response to that. After spending quite a time searching of where to direct my reply, as I could no see any addresses neither physical nor electronic except a phone number, unfortunately I have had to send it to the general enquires section of the city of Rockingham website and hope that it reaches the correct place. Such an omission is both unprofessional and unfair and should be a standard for any such correspondence from a government organisation to make it as fair as possible for its residents. Regarding the proposed development, although I understand the need for and support high density development, what I do not understand is why the City of Rockingham insists on making the foreshore area look so disorganised and mismatched. I am not sure whether or not you have actually been to visit the site but I can assure you a 5 storey apartment block on across two blocks on Parkin St (where all other housing is either one or two storeys), however well designed, will not fit in harmoniously with the surroundings at all. After the multi million dollar upgrades of the foreshore in the last few years I would like to see more emphasis on the commercial sector of the area sit seems the owners of property are allowed to let buildings stay vacant and fall into disrepair posing not only a eyesore but also a safety hazard. I have attached some examples below: 

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20. cont…		  As well as the above there is also the the site of the Rockingham beach Hotel and carpark which could be a great site for such development. After spending millions of taxpayers money on development of the foreshore I find it offensive that these lots are allowed by the city to get like this without severe penalty to the owners who should be held responsible for not only the upkeep of the properties, but also in ensuring that they are let out and not vacant. I would like to note that in the proposed plan it says that there are not plans for any commercial/ retail floor space allowed whereas surely if this kind of development was closer to the foreshore strip wherein naturally would belong, commercial space would be a great thing to have in such a complex. I would also like to add that in the proposed plans there are already plans to go 2.4M above the allowed heights for utility and services purposes. I am of the understanding that maximum heights are the maximum regardless of the use due to aesthetics and blocking out natural light amongst other things.

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20. cont…		I would object to the development from proceeding as I feel the proposed development would not be in keeping with the current look of the area and will block out natural light for the surrounding properties. It will also impose on the privacy of many properties which it will tower over. I would like welcome development in the area but would prefer any developments capped at three storeys high maximum for whatever reason unless on Rockingham beach road or the surrounding commercial area as I think this is reasonable and in keeping with the suburb but also in looking to modernise and future proof our beautiful beachside haven, as I am sure any planner would like to do as well. I would ask if you could please keep me updated on the forthcoming meetings regarding the proposal and please do not hesitate together in contact at all if you would like any further information.
21. Mr Roland Richardson	90 Harrison Street ROCKINGHAM WA 6168	We have several issues with this proposed development which will directly impact our daily lives. Our concerns are as follows: - Privacy: As it is proposed to have a 3 and 5 story building across the street from our residence, we will be in clear view of residents living on the northern face of the proposed complex. - Non Compliance of state planning Policy 7.3 - Residential Design Codes and City of Rockingham Local Planning Policy 3.2.5 Development Policy Plan (Waterfront Village Sector) - Height of proposal does not meet Planning Policy. We have concerns with roof top services and how this applies to height boundaries and privacy laws. - The balconies do not meet local planning and privacy laws. - We have concerns regarding the extra noise created by having so many extra people living so close to our property. - With the Entry/Exit being opposite our drive way we will have car headlights shinning in to the bedroom, and the increased traffic movements will have a detrimental effect on our life style. - Residents Parking: The proposal allows for 60 car bays and 6 motor bike bays, which we feel greatly under estimates the actual number of car bays required for the number of residents. Most households have at least 2 cars, which will result in increased street parking, particularly in Harrison Street. - Visitors Parking: We note that there is no provision for on site Visitor Parking The transport Impact Study stating that visitor Parking would be available on -street is clearly incorrect. Parking in Harrison street and surrounding streets becomes extremely crowded at most times, due to reduced parking when the council redeveloped the beach front. We also have concerns that this development will have a detrimental effect on the value of our property.
22. Ms Maureen Langley	No address details provided	My concerns for the development of 47 multiple dwellings at Parkin Street and Harrison Street are as follows - - the entrance for all parking is in Harrison Street and I'm worried about the amount of cars, the fumes and the noise. Harrison Street is such a busy street and I think there could be some accidents caused by all this extra traffic. - I think the amount of parking for the apartments is not enough. The street parking is already very busy. I'm concerned where the extra cars for tenants and visitors will park. - If the development goes ahead I'm worried about the amount of dust, sand and noise during the construction.

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23. Mr Stephen & Mrs Julie Saw	93 Harrison Street ROCKINGHAM WA 6168	We thank you for your letter dated 23rd September 2022 with reference 20.2022.195.1 – D22175423 regarding the subject matter. As your records would reflect, we have lived at 93 Harrison Street for in excessive of 35 years and during this period we have noted a number of changes with a major one being, growth and how very busy this area has become particularly during weekends. **We have many issues with this proposed development which will directly impact on our daily lives,** and we do not believe this should be approved just for the sake of the property developer making profitable gains when they are not even residents of Rockingham. **Our concerns are: -** - **Privacy** – with the proposed 3 and 5-story buildings since we are only one house away from the proposed development, **OUR PROPERTY WILL BE IN CLEAR VIEW** of residents living in the proposed complex. - **Height** - the proposed building height **EXCEEDS the current permissible height by 2.4 m** which has been supposedly done to incorporate "roof top services" this also allows for an extra floor to be included in the development and this further **ENCROACHES on OUR PRIVACY.** - **Parking – Residents** – the proposal allows a total of 60 Car bays and 6 motorbike bays and with a total of 47 units this equates to 1.4 Bays per unit which we would argue vastly underestimates what the real requirement will ultimately be considering it is common practise that in Australia the majority of households have at least 2 motor vehicles. The result of inadequate provision for motor vehicle parking will no doubt result in increased street parking, particularly on Harrison street. - **Parking Visitors** – we note that there are no provisions for Visitor parking with statement on the Transport Impact Study Stating **Quote** All visitor parking is proposed to take place off-site since public on-street and off-street parking is available within the immediate vicinity of the site **Unquote** It is quite clear that the person/s who completed this report have not had direct/firsthand experience in the parking within this area because on weekends it is extremely difficult to find a suitable parking bay and this development **WILL ONLY ADD TO THIS ALREADY CONGESTED, EXISTING PROBLEM.** - **Increased traffic flow** – we have already experienced an increase in traffic flow during recent times and with the proposed additional 47 new dwellings this is obviously going to **INCREASE TRAFFIC FLOW CONSIDERABLY.**
24. Mr Aleks Ceklic C/O Slavo Ceklic	Unit 4, 12 Dowling Street ROCKINGHAM WA 6168	In reference to your letter dated 23 September 2022 with reference 20.2022.195.1 – D22175423. I do not believe this development should be approved as it does not fit within the other residential houses or other facilities in the immediate area. **My concerns are:** **Height** The proposed building height exceeds the current permissible height by 2.4 m. There are no other 3 or 5 storey developments nearby and this would be an eye sore.

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24. cont…		If the development is approved, I ask it remains at two storeys maximum. **<u>Parking</u>** The proposal allows a total of 60 car bays with a total of 47 units. Our visiting guests already struggle to find parking outside our house. With an influx of 47 units parking will be impossible on Harrison street. **<u>Increased traffic flow</u>** Increased Traffic flow is already a problem on Harrison street. This development will further increase traffic flow in the area.
25. Mrs Leeann Murphy	98 Harrison Street ROCKINGHAM WA 6168	We are writing to you to oppose the Development Assessment Panel (DAP) application seeking approval for 47 multiple dwellings (apartments) at Lots 94 and 95 (No.142 and 144) Parkin Street and Lot 62 (No.89) Harrison Street, Rockingham. Our family residence is located on Harrison Street within the Village West Precinct1, within 100 metres of the proposed multi-dwelling redevelopment. We oppose this application on the grounds that the proposed apartment blocks: A) Are inconsistent with several items within the existing 'Development Policy Plan - Waterfront Village Sector' (Planning Policy No. 3.2.5)1 (*the DPP*) for the City of Rockingham. B) Are likely to be enduring neighbourhood structures that may not align with the more contemporary strategic intent of the soon-to-be endorsed, 'Rockingham Precinct Structure Plan'.2 (*the Structure Plan*). C) Are likely to negatively impact the aesthetics, liveability and property value of our neighbourhood, west of Val Street. That is the area bound by Val, May, Parkin and Florence streets, inclusive of Harrison Street. D) Create privacy, noise and traffic/parking congestion for this area of the Village West Precinct. We have reviewed the various planning frameworks against the DAP application's Development Report3, as best as we can in the time provided. Our opposition to the application is based on the following reasons: **1. INCONSISTENCIES WITH THE 'DEVELOPMENT POLICY PLAN - WATERFRONT VILLAGE SECTOR' (PLANNING POLICY NO. 3.2.5) (THE DPP)** We question if the features of the DAP application are consistent with the 2009 DPP (amended 2019) as follows. ***1.1) Minimum Site Area*** As per the Development Plans,4 Lot 62 (Harrison Street) is 15.975 metres wide and is the single vehicle access point for all proposed multiple dwellings (i.e. Up to 60 cars, 6 motorcycles and service vehicles). We question the functionality of this lot size to handle this volume of vehicle circulation and have concerns about the subsequent impact on traffic and access to Harrison Street. This concern is based on page 32 of the DPP, which states: • *"Lots should be of sufficient area with dimensions to permit a feasible, functional development. The dimensions of multiple dwelling and mixed use lots should permit conventional car parking layouts and convenient vehicle circulation. Typically, this requires a minimum lot width of 35-40 m.*

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25. cont…		*• New multiple dwelling and mixed use development lots should be provided with vehicular access (public roads, laneways) on a minimum of two sides."* **1.2) Planning and development principles** We believe the DAP application is inconsistent with several planning and development principles within the DPP (page 10 – 12). This includes (but not limited to): *• Minimise any detrimental impacts on neighbouring properties.* *• Manage provision of adequate parking facilities and encourage integration of car parking with adjoining sites which are convenient, safe and sustainable.* *Control new development so that access ways and parking facilities do not visually dominate the public realm or create obstructions to the pedestrian environment and minimise potential pedestrian/vehicle conflicts.* • *Avoid land uses and developments that generate high volumes of cars and trucks and have low employment intensities.* Our concerns regarding the impact on the neighbouring properties, parking facilities – particularly visitor parking - and traffic volumes are noted throughout this letter. ***1.3) Desired future character*** The Development Plans provided by the applicant confirms that the neighbouring premises are predominantly single storey homes. Lot 62 is the only lot with an adjacent double storey home. We feel the plans to construct three and five storey apartment blocks (both with an additional rooftop floor with plant and communal space) next these homes do not adhere to the 'Village West Precinct Policy' (Section 4.4.2, page 61 of the DPP), which states: *"The interface with existing, predominantly single storey residential development beyond should be carefully managed with the massing and scale of buildings stepped down where appropriate to the 2 storey minimum height of the Precinct."* ***1.4) Required Elements – Village West Precinct*** The DPP (Section 4.4.4, page 61) states: *"The scale and massing of buildings are to be designed to minimise overshadowing of adjoining residential properties and public spaces."* The Development Plans submitted by the applicant provide two scenarios only to illustrate the extent of overshadowing of neighbouring properties. This seems insufficient to understand the full impact of overshadowing from the apartment blocks on adjoining properties. ***1.5) Building Height Development Controls*** The north and south elevations in the applicant's Development Plans clearly illustrate that the five storey apartment block exceeds the 19m2 height limitation set out on page 62 the DPP. **2. ALIGNMENT WITH THE FUTURE 'ROCKINGHAM PRECINCT STRUCTURE PLAN'** The DAP application has been submitted as the new 'Rockingham Precinct Structure Plan' is being finalised. The new 'Structure Plan' is yet to be endorsed; however the June 2022 draft is a well-developed document and does state the following proposals for the Harrison and Parkin Street lots: • The lots are located within Precinct 2 – Waterfront Village. • The lots are zoned for residential R60 (as shown in P1 - Figure 2 of the draft Structure Plan).

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25. cont…		• Lot 94 and 95 will be subject to a maximum building height of three storeys (as shown in P1 - Figure 8 of the draft Structure Plan). • Lot 62 will be subject to a maximum building height of four storeys. • Visitor parking must be accommodated onsite (Section 2.2.5, page 30). The 'Structure Plan' appears to be a more modern, appropriate framework for developments in the Waterfront Village precinct, west of Val Street, and would better reflect the contemporary vision for residents in the area. The imminent potential policy change raises concerns for our family. The DPP is a key document that sets the parameters for the current DAP application (to develop lots 94, 95 and 62). However, once the new 'Structure Plan' is endorsed in 2023 it will supersede the 2009 DPP and the parameters for development in the Waterfront Village precinct (e.g. height limitation, residential density) will shift. Approving the DAP application now based on the outdated DPP would not be a satisfactory strategic decision for our area of the precinct. There is a risk that, if the current DAP application is approved, and the new 'Structure Plan' is endorsed soon after, the five-storey apartment block on Parkin Street will be the only build of this height visible along Parkin and Harrison streets and surrounds for many years to come. The big brown bricked apartment block would therefore be an unfortunate enduring structure that would negatively impact on the streetscape and aesthetics of the precinct, west of Val Street. **3. AESTHETICS FOR HARRISON AND PARKIN STREETS** The contextual descriptions and illustrations of the DAP application are misleading. For example, page 7 of the applicant's Development Report states: *"Historically, the area was developed with low-rise holiday accommodation and residential development, however, since being designated a Strategic Metropolitan Activity Centre, and the adoption of a framework that facilitates development consistent with that scale, the surrounding area has experienced a number of high-density developments up to 9 storeys high, particularly further along Harrison St to the north-east of the site where it becomes Rockingham Beach Road (located 400m from subject site). As a result, the surrounding area is in a state of transition, having both low-rise residential and high density development."* Those familiar with the area will know that the aesthetics of the entire Waterfront Village precinct are heterogeneous and quite distinct in areas within the precinct. The Rockingham Beach Road part of the precinct accommodates a cluster of high-density developments of up to nine-storeys, whilst the more suburban Harrison Street/Parkin Street part of the precinct has a mix of single, two and three storey homes. The cluster of high-rise buildings is clearly delineated or separated from the more suburban aesthetics and vibe of Harrison and Parkin streets by commercial premises, such as the yacht club, restaurants and complex of shops adjacent to the IGA – 'east' of Val Street. Whilst the Rockingham Beach Road neighbourhood has been in a state of transition and transformation over the last 20 years, the areas surrounding Harrison and Parkin have very much retained a residential/suburban aesthetic with new builds maintaining a mix of single, two and three storey premises.

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25. cont…		The existing home on Lot 62 would be one of the oldest structures on Harrison Street between Val and Florence streets. Otherwise, the newer homes in this area are modern, million-dollar plus homes that will remain in place in the decades to come. We would argue that the 2009 DPP has failed to meet its vision, when in reality demand for new homes in this section of the precinct have been for low rise homes and units. There would be inadequate housing stock on this street to demolish in the next twenty years or more to make way for more mid to high rise apartment blocks to complement the proposed development in the DAP application. Quite simply, a five-storey apartment block with an additional floor of rooftop plant, lift riser and communal space, alongside the three-storey apartment block with an additional floor of rooftop plant and communal space: • Is not within the area of the West Village precinct that has been under a 'state of transition' with high rise developments. • Would not complement the existing modern aesthetics of the established homes in this part of the precinct and be a blight on the existing and future streetscape. • Is unlikely to fulfill the developers intention for the build to be a "catalyst to transform the area in line with the City's Waterfront Village vision", (as per page 5 of the Development Report) when the vision, set in 2009, has not been met. It is noted that the 'Site Plan Context' illustrations within the Development Plans (page 5) exclude any contextual illustrations of existing builds along Parkin and Harrison Street. Further, architectural visualisations in the document are inadequate and do not adequately show how the proposed apartment blocks – complete with rooftop plant and lift risers - would look against the existing homes and streetscape of Parkin and Harrison streets. Finally, the proposed finishes of the apartment block, whilst always subjective to an individual's eye, are more complementary to an office block and do not match the coastal limestone, beachside, natural colourings of homes nearby. **4. BUILDING SET BACKS AND VISUAL PRIVACY** As highlighted by correspondence from the City of Rockingham (23 September 2022), we also noted the Development Plans submitted by the applicant reveal that some setbacks on the side of the build do not align with the Residential Design Codes (i.e. 4.5m and 6m setbacks). Whilst this does not impact on our property, we would support concerns by neighbouring properties that the current design could adversely impact on their privacy. **5. PROVISION FOR VISITOR PARKING** Page 15 and 24 of the applicant's Development Report states that there are no visitor carparking bays allocated for the 47 units. It appears a 'cash-in-lieu' payment to the local government would occur to meet the demand for visitor parking. A question arises as to where spacial provisions would be made for 'cash-in-lieu' visitor parking in the vicinity of the two apartment blocks, given the street parking surrounding the proposed redevelopment are often heavily occupied - particularly on weekends. We understand there are plans for a multistorey carpark on the corner of Val and Harrison streets but the program of works for this is unknown.

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25. cont…		We suspect there will be a significant shortfall in at-grade/on-street parking on Harrison Street until a multistorey carpark is commissioned. Parkin Street has no provisions for parking currently. The number of visitor vehicles generated by 47 units is likely to well exceed the current capacity of street parking and cause significant disruption to residents of Harrison Street and surrounding streets as normal weekend traffic, plus visitors for existing homes and new apartment visitors vie for parking. This is a significant concern for the traffic safety, access and the liveability of Harrison Street and the surrounding streets, and it will certainly detract potential buyers of real estate, which is likely to impact on property prices in the area. **6. ISSUES WITH TRAFFIC CONGESTION** The Transport Impact Statement5 daily traffic volume findings are questionable for two reasons: • The modelling is based on weekday volumes only. • The methodology to determine daily vehicle trips during the weekday AM and PM peak hour periods is unclear. Local residents are fully aware that the peak volumes for traffic is not the typical residential scenario of 9am to 5pm workers. Given the tourism appeal of the precinct, peak traffic volumes for Harrison Street and surrounding areas are experienced on weekends, when there are events and social gatherings at the beach, Esplanade and commercial premises that line the waterfront and Esplanade. This is when there is significant traffic and demand for parking and access to Harrison Street can be problematic. To not commission an investigation towards the impact of the proposed apartment blocks on peak weekend traffic volumes is a flaw in the application and should be investigated further. Afterall, planning or designing or approving the capacity of new infrastructure based on modelling that uses low activity volumes would not be good practice. **7. ISSUE WITH NOISE** Page 17 of the Development Report states: *"The Acoustic Report demonstrates that the development is capable of achieving compliance with acceptable noise targets, subject to the implementation of noise mitigation measures.* As the project is at the Development Application stage, it is noted that the noise mitigation measures for the build are yet to be decided and costed. Further, the Acoustics Report6 also acknowledges that the details of the mechanical plant and extent of noise-generating mechanisms (such as air conditioning) are currently unknown and the report itself was based on benchmarking against similar builds. Given the size and dwelling density of the build – which would be unique to this part of the West Village precinct - noise pollution/emissions generated from the proposed apartment block is a concern. Noise emissions will be an issue for neighbouring residents if developers do not adequately mitigate the risk of excessive noise during initial construction, as well as the ongoing noise generated from vehicles/traffic, plant, lifts, air conditioners and social activities on the rooftops and balconies once the build is commissioned. The application does not adequately reassure neighbours that there is a commitment to minimising noise emissions during construction and thereafter. It is also noted that the acoustic testing of road traffic in the Acoustic Report was done on Tuesday 14 December 2021 (9am – 11am).

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25. cont…		As mentioned above, this is not reflective of a typical peak period for the precinct. Further, the application does not appear to address the noise pollution/acoustic concerns to Lot 61 (Harrison Street) generated by up to 60 cars accessing the dual driveway on Lot 62, all hours of the day/night, nor the impact to neighbouring lots 93 and 96 (Parkin Street) from vehicles and motorbikes accessing the basement parking. The City of Rockingham should ensure future traffic monitoring and noise measurements includes the impact on neighbouring properties and weekends when Harrison and surrounding street traffic peaks as 'out of towners' access the precinct, and park up to enjoy beachside lifestyle residents love. **8. IMPACT ON SITE SERVICE INFRASTRUCTURE** Whilst waste management is described in the Development Report, the broader report does not acknowledge any assessments made to determine the impact of this apartment block on existing site service infrastructure such as power, gas, water, communications and sewage. The report does not acknowledge if there are any risks to the capacity of these services and if upgrades are required which may impact and/or inconvenience local residents prior to the build. Overall, initial conversations held with neighbours show that approving the DAP application would not be favourable to the liveability of the Waterfront Village precinct, west of Val Street. Residents do have concerns about what this development would do to the aesthetics of the neighbourhood and streetscape, as well as traffic, noise and property values. The application does not adequately address these concerns. Strategically, approving this application in its proposed lots along Harrison and Parkin would bring little value to the Waterfront Village, given the impending approval of a new 'Structure Plan'. The application shows that the developer has perhaps been over ambitious in the allocation of apartments planned for the three lots in the current context of the neighbourhood and their plans better align with a vision set in 2009, which is outdated and no longer aligns with the contemporary vision for this area. Approval of the application in its current form will be detriment to the residents of Harrison Street and surrounds. We trust the City of Rockingham hear our concerns and advocate strongly on our behalf to have this application declined by the Metro Outer Joint Development Assessment Panel, and hope endorsement of the new 'Rockingham Strategic Centre Precinct Structure Plan' with the proposed lower height limits for our area is expedited. References: 1 City of Rockingham. 'Development Policy Plan. Waterfront Village Sector'. 2009, amended 2019. https://rockingham.wa.gov.au/forms-and-publications/planning-and-building/policies-and-procedures/planning-policy-3-2-5-development-policy-plan-wate (Accessed 4 October 2022). 2 City of Rockingham. Rockingham Strategic Centre Precinct Structure Plan. June 2022. Draft Revision D. https://rockingham.wa.gov.au/forms-and-publications/planning-and-building/local-planning/attachments-to-council-report-draft-rockingham-str (Accessed 4 October 2022). 3 Element Advisory Pty Ltd. 'Lot 62 (No. 89) Harrison Street and Lots 94 and 95 (No. 144 and 142) Parkin Street, Rockingham.

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Name	**Address**	**Comment**
25. cont…		Application for 47 Multiple Dwellings. Prepared for Mr P Jackson. August 2022 | 21-739'. Issue 2 26 August 2022. https://rockingham.wa.gov.au/forms-and-publications/planning-and-building/local-planning/development-report-proposed-multiple-dwelling-deve (Accessed 4 October 2022). 4 DMG Architecture. 'Planning Application. Arbour Apartments. Site Plan Context'. 8 August 2022, Issue P3. https://rockingham.wa.gov.au/forms-and-publications/planning-and-building/local-planning/development-plans-proposed-multiple-dwelling-devel (Accessed 4 October 2022). 5 Transcore on behalf of ARIA Project Development. 'Proposed Residential Development, 142-144 Harrison Street, Rockingham Transport Impact Statement'. August 2022. Revision r01d. https://rockingham.wa.gov.au/forms-and-publications/planning-and-building/local-planning/transport-impact-assessment-proposed-multiple-dwel (Accessed 4 October 2022) 6 Lloyd George Acoustics. 'Acoustic Report: Development Application. Lot 62 (#89) Harrison Street, Rockingham Reference: 21086626-02 Acoustic DA'. 14 December 2021. https://rockingham.wa.gov.au/forms-and-publications/planning-and-building/local-planning/acoustic-report-proposed-multiple-dwelling-develop (Accessed 4 October 2022).
26. Mr Christopher & Mrs Paulene Tibbits	Unit 2, 1 May Street ROCKINGHAM WA 6168	We are in receipt of your letter dated 23rd September in relation to the above proposal and wish to lodge objections to the buildings for the following reasons: 1. **The Height Limit** - we object to the development of a 5-storey apartment complex in the location as proposed. We do not believe it is necessary for the development to exceed the height limit and request that the maximum overall height be restricted to 2 levels. The height proposed would seriously compromise the privacy of neighbouring nearby dwellings thereby restricting any outdoor/backyard activities those residents might wish to enjoy. 2. **Location** - The area in which the development is located is amongst 1 and 2 storey houses/units and would seriously compromise the aesthetics of the area. The proposed location is outside what we believe to be the Rockingham Foreshore Tourist Precinct and does nothing to enhance the area. 3. **Parking** - (See attached map) As there is no on-site parking available for visitors within the development it would mean they park on either Parkin St or Harrison St. Parking on both those streets is at a premium on weekends and often during weekdays. With the addition of visitors to the new development, parking and street access becomes a danger and could ultimately cause traffic accidents. On street parking along Parkin St would be restricted and, we consider, very dangerous, as visitors would be parking on a bend in the road and there exists a concrete safety divider in the middle of the road. This would already indicate that parking is not suited there. Harrison St does have marked bays which are fully utilised on weekends and most weekdays. Therefore, the comments in the document stating *"The visitor parking is proposed to be accommodated off-site, as ample public parking opportunities in form of on-street and off-street parking are available in the immediate vicinity of the subject site"* are extremely questionable.

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26. cont…		4. **Rooftop Amenities** - We do object to the provision of rooftop amenities as being unnecessary (irrespective of the height of the development). The City of Rockingham continues to promote the foreshore area and its wonderful surrounds as suitable for families and events throughout the year. Use of the rooftop areas with the amenities proposed comes with a certain amount of noise. No matter what conditions are set on their use there will always be a certain number of residents that so not and will not comply. Hence a noise problem for surrounding residences and their occupiers. 5. **Street Access from the Apartments** - with street access only from the apartments on to Harrison Street this will increase the traffic volume on that street. With on-street parking, visibility will be limited by parked cars thereby creating a driving hazard and the possibility of accidents increases sufficiently enough for it to be considered a Road Black Sport in my mind. Thank you for affording us the opportunity to comment on this proposed development and I trust our objections will be given a fair and equitable hearing. 
27. Mr Jim Leitch	8 Allen Close ROCKINGHAM WA 6168	As a rate paying resident of Rockingham I strongly disapprove of this development. I believe this type of high rise in this location is unacceptable.

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27. cont…		The parking arrangements are far from realistic. Already parking in this area and along the foreshore is at its peak. This is a residential area and as per the proposal already exceeds the maximum height regulations. We have many other areas in Rockingham more suitable for this type of development.
28. Mr Barry & Mrs Jenny Hooper	Unit 3, 2 Victoria Street ROCKINGHAM WA 6168	We are active members of The Cruising Yacht Club situated at 4 Val Street, Rockingham and have been made aware of the proposed Multiple Dwellings under the subject heading. Our major concerns are:- - Parking – Residents – the proposal allows a total of 60 Car bays and 6 motor bike bays and with a total of 47 units this equates to 1.4 Bays per unit which we would argue vastly underestimates what the real requirement will ultimately be considering it is common practise in Australia with the majority of households having at least 2 motor vehicles. The result of inadequate provision for motor vehicles parking will no doubt result in increased street parking particularly in Harrison street. - Parking Visitors – we note that that there is no provisions for Visitor parking with statement on the Transport Impact Study Stating It is quite clear that the person/s who completed this report have not had direct/firsthand experience in the parking within this area because on weekend it is extremely difficult to find a suitable parking bay and this development will only add to this already existing problem - Increased traffic flow – we have already experienced an increase in traffic flow during recent times and with the proposed additional 47 new dwelling this is obviously going to increase traffic flow considerably.
29. Ms Lauren Tully	Unit 1, 83 Harrison Street ROCKINGHAM WA 6168	I wish to comment that the proposed development is of little benefit to the local community and will be a large burden to the residents along Harrison Street with the proposed increase in traffic of over 60 proposed vehicle spaces. At the very least the development should have entry and exit ways distributed at both Parkin and Harrison Street to reduce the demand expected along Harrison street. Which does not have the infrastructure to safely support the increase of over 60 vehicles both entering and exiting each day. Secondly; The maximum building height being increased from 19 Meters to 21.4 meters is going to have a significant impact on the neighbouring properties by casting shadows that reduce the enjoyment of their private property and affecting the overall value and future saleability of their homes. Thirdly; Based on the data provided by REIWA and REA, there is a very small demand or interest in apartment living (especially 1 and 2 bedroom apartments) in the area of Rockingham which shows the number of days apartments are on the market at a record high. This lack of demand clearly demonstrates there is no need to increase the height levels in order to push more apartments onto the site. This leaves us with the conclusion that the ones who are likely to occupy the majority of the apartments are likely to be government housing. The minimum setback of 6m at a height f 21.4 meters is going to do little to reduce the over view that apartment residents have into the private yards and windows of the properties below. The additional height will only increase the views of the occupants and make the lack of privacy more apparent.

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29. cont…		I have recently engaged the opinion of several real estate agents to determine whether this is likely to affect the value of my home and those that surround. It has been proposed by more than 3 real estate agents that this type of development with the exceeding height and the number of 1 and 2 bedroom apartments will reduce the value of homes both immediate and surrounding by more than 20%. Rockingham has struggled to push past the stigma of being known as a lower class suburb, but our recent exposure has promoted Rockingham as a stunning beachside community offering great amenities and a leisure lifestyle. I am not against apartment living, however I am against apartment complexes that neither benefit or promote quality lifestyle living and are only designed to benefit the pockets of the developer, who will make their money and move on not considering the people who live in the community. I would like to be part of any future meetings to discuss feedback and the agenda of the local Rockingham council, which I expect to support both current and future residents in growing Rockingham as a beautiful city and not one that benefits only one small party (developers).
30. Ms Deidre Harris	11 May Street ROCKINGHAM WA 6168	**Loss of Privacy.** Full loss of privacy to whole rear yard including courtyard, downstairs lounge room, kitchen, dining, main bedroom, onsuite, washhouse, main upstairs bedroom and bathroom. Main living, sleeping and family recreational rooms full loss of privacy. **Visual/Noise Impact from Building**: Not only loss of privacy our visual outlook could also include a skyline of air conditioners and the noise of. **Loss of any sky view and sun.** Would be no sun in winter to any main outdoor and indoor living areas of home as listed above. Already due to orientations we receive no north facing sunlight as is. To not have that already limited sun exposure and sky view and for that to be replaced with the visual for additional people to look into my home and yard and 'I' to have the view of there residence and their noisy air conditioning systems. **Traffic:** Large increase of traffic in an already very congested traffic jam prone area, residences will not only be living with additional congestion but also constant traffic jams. Sometimes already difficult to get out of driveway let alone out of May Street itself. First development put up for proposal, already developers want to move the goal posts to the detriment of the rate payers in the area. Landowners in this zoned area have been left unable to maximise the value of their own land, yet a developer can come in and propose their changes. My proposal to knock my old house over and develop into units did not comply with the new zoning laws. The proposed changes does not comply with new zoning laws so therefore should not be proceeded with. Already impacted greatly by the development, re, the new changes will fully increase the problems the original proposed development brings. The new proposed changes effects people financially and effects the livelihoods, mental health and wellbeing of the people individually and also effects the community as a whole.
31. Mr Keith Thompson	44B Smythe Street ROCKINGHAM WA 6168	I have recently been made aware of the Proposed 47 Multiple Dwellings - Lots 94 and 95 (142 and 144) Parkin Street and Lot 62 (89) Harrison Street. Although I do not reside in the immediate vicinity, I would like to express my disapproval of the proposal on the following grounds:

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31. cont…		- It creates a precedent for future development of multi- dwelling complexes within other family residential areas such as mine, raising concerns regarding loss of privacy, reduced solar exposure, increased traffic and increased likelihood of unsociable behaviour. - As a member of The Cruising Yacht Club, I have regularly experienced traffic congestion and lack of parking in and around the area of the proposed development. The establishment of multiple dwellings will add considerably to this congestion, particularly given that the developers have made no provision for visitor parking. I am also concerned that the existing road infrastructure will be unable to cope with any increase in traffic flow. - Any multi-story development in the area will be a blight on the amenity of the foreshore area along The Esplanade.
32. Mr Peter Birch	3A May Street ROCKINGHAM WA 6168	**<u>Local Planning Policy 3.2.5 Development Policy Plan (Waterfront Village Sector)</u>** **Exceeding the Permissible height of 19.0m to a proposed height 21.4m, a total of 2.4m.** I do not believe it is in the public/rate payers interest, in particular the public/rate payers living in the immediate and adjacent area bordering and surrounding the development. For the Rockingham Shire to approve the height limitations due to the following:- 1. There will be a massive impact of shading/shadowing of homes, thus a blocking out of sunlight during the morning, sun rising in the east, causing shading/shadowing of all buildings on the western side of the development, in the afternoon, sun setting in the west thus shading/shadowing of homes to the eastern side of the development, in winter this shading/shadowing will cause a drop in temperature for the homes within the above areas. 2. There will be a massive impact on the loss of the Sea Breeze, summer South Westerly breezes, which serve as a natural coolant during the hotter months, to all homes in the vicinity on the eastern side of the development. 3. There will be a massive impact of visual pollution, ie, machinery on roof. 4. There will be a massive impact of noise pollution, ie, running machinery on roof. 5. There will be a massive loss of “Sky View” 6. The approval of the extra 2.4m of height will set a precedent for future developments in the area. **<u>Residential Design Codes (Volume 2 – Apartments</u>** **Privacy Setbacks** 1. All homes in the vicinity of the proposed development will be affected particularly the homes adjacent the proposed development, as there will be a total loss of privacy in the recreational/playing yards of the above homes, due to residents of the proposed development “looking in”. 2. All homes in the vicinity of the proposed development will be affected particularly the homes adjacent the proposed development, as there will be a total loss of privacy in the rooms of the above homes, due to residents of the proposed development “looking in” the only way to ensure privacy would be to close curtains/blinds at all times, this is not ideal. 3. In our modern Democratic Society, it is the right of all persons to privacy, particularly privacy in the home, this right will be lost due to the amendment to the proposed development.

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32. cont…		**Further to the above are my other concerns** 1. Traffic: there will be a large increase of traffic in an already very congested traffic jam prone area, residences will not only be living with additional congestion but also constant traffic jams. Sometimes already difficult to get out of driveways let alone out of May Street and other streets. 2. First development put up for proposal, already developers want to move the goal posts to the detriment of the rate payers in the area. Landowners in this zoned area have been left unable to maximise the value of their own land, due to the local zoning laws, (not everyone is a developer) yet a developer can come in and propose their changes. Many home owners in the area have proposed to knock their older houses over and more moderately developed into duplex, triplex units, these did not comply with the new zoning laws and were refused. The proposed changes do not comply with new zoning laws so therefore should not be proceeded with. 3. Already impacted greatly by the development, the new changes will fully increase the problems the original proposed development brings. The new proposed changes will affect people financially and will affect the livelihoods, mental health and wellbeing of the people individually, it will also affect the community as a whole.
33. Mr Neil Pipe	26 Griggs Way ROCKINGHAM WA 6168	With regards to a "Public Consultation" letter sent out to close proximity residents, about a proposed multiple dwellings development in Harrison Street has been brought to my notice. While not a close proximity resident myself, I have lived & been a ratepayer in the general area for the past 40+ years. After perusing your circular letter & its' detail, as a ratepayer I would like to comment, particularly regarding the parking provisions proposed. Over recent or mainly the prior 10 years, it has become very, very evident that the parking [or lack of] problems in the Rockingham Beach area have magnified greatly. In my opinion this is caused by developers gaining approvals without having provided enough onsite parking & then allowing of street parking to be taken up instead. It has been suggested by some that the City has accepted fees from developers, in lieu of having to provide onsite parking. (Presumably leaving it as a council responsibility to provide the extra parking.) One only has to visit places such as the old Fremantle residential areas & places such as Hobart's Battery Point residential areas to witness modern day street/verge parking disasters, but I feel they have an excuse; however, I don't believe it is sensible option for our council planners of today to plan to join these disaster type areas in the near future by design!
34. Mr Geoffry Mark Harris	92A Harrison Street ROCKINGHAM WA 6168	I refer to your recent correspondence dated 23rd September 2022 with reference 20.2022.195.1-D22175423 regarding the above subject matter. Our family own and reside within the property located at 92A HARRISON STREET, ROCKINGHAM located directly across the road to the proposed development. We have several concerns in relation to the proposed development which will directly impact on our daily lives, and as such **we do not believe that this should be approved**. We purchased our family home this year based on a number of factors including:

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34. cont…		- Street ambience and quality of homes located within the street - Quiet nature of the street in terms of local traffic (as compared to Parkin Street which is known to be the main thorough fare to Garden Island) - Potential resale value in the future My grandparents had resided in Victoria Street for over 60 years and as such, Rockingham holds a special place for my family to the degree we wanted to call it home (having relocated here 2 years ago from South Australia). In terms of the proposed development our key concerns include: **Increased traffic flow along this part of Harrison Street** • With 47 additional units and entry/exit to the proposed 60 car parking bays located directly across from our property, there will be increased traffic flow leading to increase traffic noise. At night the lights from the cars leaving the carpark will shine directly into our property (namely bedrooms). • The entrance should be redesigned to Parkin Street thereby retaining the current quiet nature of Harrison Street. • Currently the majority of the traffic travel along Rockingham Beach Road and the travel along the esplanade from Latitude 32/The Cruising Yacht Club. There is limited traffic that flows along this part of Harrison Street which are residential and low rise in nature. • The impact of traffic and associated construction noise is also a key concern for those residing adjacent to the proposed development. **Reduced Parking for visitors** • The development proposes that a total of 60 car bays and 6 motor bike bays will be provided on site servicing the 47 units. We believe that with the number of people residing within the site, the number of parks have been underestimated which will result in overflow onto Harrison Street resulting in congestion. • In addition, the proposal does not cater for the additional number of traffic from visitors to the 47 units and the impact it will have on carparking • Generally on weekends we find that a number of visitors to Rockingham and foreshore park in Harrison Street as a result of its proximity to the cafes/restaurants and beach/jetty. • Reduced parking as result of visitors coming to the development will congest other streets in addition to available parking in Harrison Street • Potential for more crime/damage to cars with more people frequenting the street **Reduced Privacy and Noise** • With balconies of the proposed 3 story development located on Harrison Street facing my residence, I am concerned about reduced privacy with the balconies looking into the bedroom/lounge rooms on my property • Increased noise will be a concern **Future Property Value** • With a large scale development proposed across the road from my property, we are concerned about the impact it will have on the future sale on my property. • We believe that the property will severely reduced the value and potential for sale

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34. cont…		**Multi Story Properties in this part of Harrison and Parkin Street** • There are currently no multi story properties located in this part of Harrison Street and certainly no 5 story properties located in Parkin Street. • The majority of multi story properties are located in the esplanade on Rockingham Beach Road • Development of such properties on Harrison Street will change the ambience of the street (I am certain many counsellors would not appreciate such a development in their own street) • Development of multi story properties should be limited to the areas on Rockingham Beach Road which currently have similar properties. Approval of the proposal allows for multi story creep.... next we will see similar properties approved at Point Peron to the benefit of developers proposing such developments! • 5 story development on Parkin Street has been designed to look over (towards the ocean) existing properties in Harrison Street resulting in concerns of privacy. • Can just imagine what the balconies will look like with clothes drying from each balcony! Definite attraction for visitors to Rockingham to see! **Potential for increased crime and social disturbances** • With a large number of the 47 units being either 1 or 2 Bedrooms, we are concern for and larger number of lower social economic tenants residing within the property which may result in potential crime/social disturbances • Resulting in reduced property values
35. Ms Sarah Barry	3 May Street ROCKINGHAM WA 6168	Am writing in objection to the above stated development, I do agree this land needs to be redeveloped yet not at the wellbeing of the surrounding residents. I would also like to request additional time for residents to seek advice on the matter. Some of the reasons for my objections are: Privacy - Both buildings will look directly over neighbouring properties. Under common law (case law) the right to privacy is the right of a person to live in a manner that is reasonably secluded from public scrutiny, including the scrutiny that comes from a neighbour's prying eyes, an eavesdropping device or a photographer's intrusive camera. Both the roof top and side windows/balconies of the development will look directly into my bedroom window with the only solution being to keep my blinds closed which does not allow any natural light into the house and would impact my metal state. The proposed development will also overlook my back yard and pool again removing my right of privacy. Sun - The proposed development will block the winter sun from my property of an afternoon again impacting my mental health and those around me. I am sure this will also cause other issues with my house being excluded from the afternoon sun to heat/dry the property. Current residents will also be impacted by the loss of the view of the sky and noise pollution from the air conditioner and roof top facilities. Parking - Parking is currently one of the biggest issues of the Rockingham Foreshore, any event with social medial will attest to this with comments of people not attending due to lack of parking. The proposed development allows for 60 car spaces, with most of the 47 apartments being 2/3 bedroom, this does not allow for enough parking. Also factoring in visitors and this will have a heavy impact on the limited parking in the area.

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35. cont…		Building Height - In this section of Palm Beach 19-meter height allowance is ample. The Rockingham Foreshore has a unique opportunity to attract 'millionaires row' on the esplanade and place the higher density living further inland that still allows for the ocean views and doesn't distract from value and privacy of the residents on the strip of land in between Parkin Street and the Esplanade. High-density housing affects the 'character of the suburb', meaning previously quiet streets with single or two-storey homes are now overshadowed by apartment's buildings. This area is not the place for this style of housing.
36. Mr Trevor Tatlor The Cruising Yacht Club of WA	2 Val Street ROCKINGHAM WA 6168	On behalf of The Cruising Yacht Club, I wish to express our concern / objection to the proposed development as set out above. Our concern is that the number of parking bays available within the development is unlikely to be enough to cater for those that will eventually live there, let alone any visitors that they may have. Should this prove to be the case then any overflow will take up any available roadside parking along Harrison Street, given there is none adjacent to the development on Parkin Street. This will have a detrimental effect on our members and their guests during busy periods such as sailing and social events run by the club for our members, their guests and in the case of any regattas we may hold, the wider sailing community. Whilst we are the only establishment in the immediate are to have its own parking facility, we do find that when the entry gate is required to be left open to allow non-members access to attend sailing events and functions, the general public often use it also, as any alternatives are more often than not unavailable to them. We believe that the building of such an intense development with what will likely be inadequate onsite parking, will only exacerbate the current problem even further. Therefore, we lodge our objection to the development in its current form.
Late Submissions		
37. Mr Rick Maxwell	129 Esplanade ROCKINGHAM WA 6168	Thanks for your time on the phone on Monday. As I mentioned we only returned from Holidays on Friday hence my call. With regards to the proposed development of 47 dwellings on 89 Harrison street and 142/144 Parkin street I thank you for the opportunity to comment on the above. **My comments are as follows:** **Building height.** I feel that 3 stories should be a maximum height for any development in this vicinity and therefore for would object to the proposed development being 5 stories which I believe is outside the permitted height guidelines. **Roof top services.** The safety concerns as well as noise associated with this and it's effects on the local communities well-being need to be considered. **47 Apartments.** I feel would create an overpopulation problem. The ratio of 1 bedroom units would create some anti-social and health issues. 20 units of a sizeable nature would be more acceptable in keeping with other developments on Parkin and Harrison streets. **No commercial or retail floor space.** Is a great idea.

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		Vehicular traffic. Traffic in and out of Harrison street would create considerably more safety issues for Pedestrians cyclists and motorists which already exist. The number of vehicles currently using off street parking already creates safety issues especially on weekends when parking is at a premium. Entry and exits should be considered on both streets. I personally feel that at least 2 parking bays on site per unit would be more appropriate to cover occupancy and visitor parking. **Design Codes** From my reading and understanding these haven't been adhered to and need to be addressed so as not to set a precedent for future developments in this location. I feel The effects of a development of this nature which appears to be way outside the plot ratios for the precinct in the area, on the local communities' health and well-being would be quite significant.
38. Mrs Sonia Pratt	47 Thorpe Street ROCKINGHAM WA 6168	Sorry for the delay in responding. This letter was received whilst I was away. I have never given a submission on a proposal and considering I'm going to be late. Will my time be wasted if I write up my reasons against this proposal? This proposal offers nothing to the community other than over populating our foreshore and building something ugly and against all original boundaries. Let's stop companies from making a quick $ and think about our beautiful foreshore.
39. Mr Joshua Walsh Cornerstone Legal	205/5 Harper Terrace SOUTH PERTH WA 6151	See attached.
40. Mr Richard Repp	No address details provided	I write on behalf of my wife, and two sister-in-laws and their ageing mother who are the Registered Owners of 91 Harrison St, Rockingham. Given that this property (6 Bedrooms) was purchased some 20years ago - after the passing of their 'matriarchal' Father, it has served as a property where our large extended Italian Family can come together and share the amenity of a 'holiday village' atmosphere, and engage in the associated amenity the area provides, with fishing, swimming, sailing and general comradery within a larger Italian family network. Furthermore, with the decline of health of my mother-in-law, due to dementia, the family have visualised this house as a 'place of care' for her and enables full family support. We strongly object to the proposed 47 dwelling development fronting both Harrison / Parkin St and believe the amenity that will be lost, given the overshadowing of the bulk scale, the congestion of street parking, due to lack of on-site parking and general noise, both during Construction as well as during occupation to be unacceptable. I welcome the opportunity to present a more formal objection where I can refer to the TPS of Rockingham Town Planning Policies and cite numerous non-conformities the proposed development includes.

cornerstone LEGAL

205/5 Harper Terrace
SOUTH PERTH WA 6151
P: (08) 9456 0900

BY EMAIL: david.banovic@rockingham.wa.gov.au

7 October 2022

The City of Rockingham
P O Box 2142
Rockingham DC
WA6967

Attention: The Acting Manager
Major Planning Project
Mr David Banovic

Dear Mr Banovic,

PROPOSED DEVELOPMENT LOT 62 HARRISON STREET AND LOTS 94 AND 95 PARKIN STREET, ROCKINGHAM : APPLICATION FOR 47 MULTIPLE DWELLINGS

1. We act for the neighboring land owners including the following neighbors of the proposed development for the above property.

1.1 We confirm that by email dated 6th October 2022 to our client, Mr Dion Dredge, the time for providing our submission was extended to 14th October 2022.

1.2 Accordingly we now make submissions in respect of the proposed development at the above lots.

1.3 The supporting application by Element fails to take into consideration or address a number of important criteria that is expressly required by the Planning & Development (Local Planning Schemes) Regulations 2015.

1.4 The application provides for a five-storey apartment complex fronting Parkin Street with a building height of 21.4 metres. It also provides for a three-storey apartment complex fronting Harrison Street with a building height of 11.1 metres.

1.5 The development proposal would result in the five-storey building being over height under the requirements of the R Codes and Rockingham Development Policy Plan 3.2.5.`

1.6 Whereas it is accepted that the residential design codes are able to be varied, any variation must be considered in light of the relevant policy that then applies.

1.7 The Rockingham Development Policy Plan 3.2.5 is a policy to which due regard must be had pursuant to Schedule 2 Regulation 67 of the Planning & Development (Local Planning Schemes) Regulations 2015.

1.8 The R Codes equally are a document to which due regard must be had.

1.9 Where the R Codes conflict with a local planning policy this must be resolved.

1.10 The R Codes are on an equal footing with any planning policy.

1.11 The manner within which the discretion is to be exercised is in accordance with the way within which the planning policy provides for the height limitation.

1.12 The Local Planning Policy provides for a height limitation of 19 meters.

1.13 The residential design codes equally apply the height limit at 19 meters. What is sought is a variation to the R-Codes without addressing the height limits as contained within the Rockingham Development Policy Plan 3.2.5.

1.14 This in and of itself is a matter of a serious limitation in respect of the proposed development. The reason for this is that the bulk size and impact of the proposed development in comparison with other buildings in the immediate proximity has not been taken into consideration in the applicant's report. The applicant's report considers matters such as landscape design, acoustics, traffic and parking as well as waste management but does not provide a visual impact assessment of the height of the development when compared to other surrounding development.

1.15 This is in addition to the provisions of the City of Rockingham's Local Development Policy Plan 3.2.5.

1.16 At paragraph 9.2 building height is addressed and it is blandly stated that "*The development is consistent with the desired **future** character of the street area.*"

1.17 This fundamentally fails to address the present requirements of Regulation 67 in considering the requirements of "the compatibility of the development" with its setting including the relationship of the development to development on adjoining land or other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development. These matters are side-stepped and entirely missed from the development application.

1.18 In part the reason for missing the questions relevant to height, bulk, scale and the like is because the development application only addresses the future proposal of development in the surrounding precinct as opposed to concentrating on "*the compatibility of the development with its setting including the relationship of the development to development on adjoining land.*"

1.19 It is clear that Regulation 67(M) does not include a consideration of the future development but rather considers the existing development. Further, what is required is to consider the existing development in relationship to the adjoining land.

1.20 Please refer to the figures below as to a representation of the impact of the height, bulk size and impact of the proposed development in comparison to other buildings in the immediate proximity:



Figure 1: The proposed development fronting Harrison Street in comparison to neighbouring properties.



Figure 2: The proposed development fronting Parkin Street in comparison to neighbouring properties.



Figure 3: The proposed development fronting Harrison Street directly compared with 87 Harrison Street (left) and 91 Harrison Street (right).



Figure 4: The proposed development fronting Parkin Street directly compared with 140 Parkin Street (left) and 146 Parkin Street (right).

1.21 The development application side-steps this issue by pointing to other further removed development at Lot 76 Rockingham Road which is some 315 meters from the subject site as the crow flies and the 9 stories on Lot 100 Rockingham Beach Road, 400 meters from the site as well as the 7 story development at Lot 374 Kent Street, some 450 meters from the subject site.

1.22 It is important and necessary to consider each one of these developments within their context. The area within which these buildings are located are more akin to the commercial center of the Rockingham waterfront village.

1.23 The development application states: "The proposed height of the development directly responds to the desired future scale of the area under Development Policy Plan 3.2.5." And further, later within the subsequent paragraph in respect of the Harrison Road development states: "Despite a 3 story podium being acceptable, the development recognizes the scale differences between it and the adjoining development and is sought to minimize the scale impact by pulling the bulk away from the side boundaries."

1.24 The application then boldly states the development meets the Element objective. Whereas it may meet the Element objective, what is important is that it meets the criteria as found within Regulation 67 of the Planning & Development (Local Planning Schemes) Regulations 2015. The proposed building is incompatible with surrounding residential houses, will create overlooking and over-shadowing.

1.25 The top storey of the building is to be used for outdoor entertainment of the residents, this will amplify noise, encourage overlooking and further create the type of amenity impacts that must be considered. There is nothing in the application to significantly and sufficiently ameliorate these effects. In fact the application proposes to use the top floor for entertaining further exasperates the amenity impacts.

1.26 The variation of the height limitations provided for within the R Codes and expressly stated within the Rockingham Development Policy Plan 3.2.5 should not be varied and the height, bulk and scale of the proposed building does not meet the requirements of Schedule 2 Regulation 67(M) of the Planning & Development (Local Planning Scheme) Regulations 2015.

1.27 Further the planning firm Element fails to address the requirements of the regulations and seeks to avoid the express requirements of the provision.

1.28 Accordingly, the development application fails to provide any visual presentation of the buildings in context to the immediate adjoining development.

1.29 It can be concluded as follows:

(a) This failure is significant and indeed is a matter on which the development ought of itself to be rejected.

(b) We rely on the observations of the Tribunal in *Ridgecity Holdings and City of Albany* [2016] WASAT 187, where the Tribunal found a proposed development, by virtue of its large size, to be disruptive in its visual character and impact on the broader locality.

(c) The proposed development presents as significant in terms of its size in comparison to the adjoining properties. This leads to the concept of amenity as a stand-alone separate consideration that provides a further basis on which the application ought to be refused.

2. AMENITY

2.1 Regulation 67(2)(n) outlines that in considering an application for development approval the local government is to have due regard to the amenity of the locality, including the environmental impacts of the development, the character of the locality, and the social impacts of the development.

2.2 Schedule 2 Regulation 1 defines 'amenity' as all factors which combine to form the character of an area, including the present and likely future amenity, for that reason the objects of the Waterfront Village may be properly considered.

2.3 However, the starting point is to assess the existing amenity as a matter of fact. This involves the assessment of the objective character of an area that represents the present state of amenity (*Sunbay Developments Pty Ltd and Shire of Kalamunda* [2006] WASAT 74 at [20]).

2.4 The determination of amenity is a question of fact and consists of three parts: the existing amenity, the manner in which the proposed use [of land] will affect the existing amenity and the degree of its impact (*Tempora Pty Ltd v Shire of Kalamunda* (1994) 10 SR (WA) 269 at 304).

2.5 The assessment usually calls in aid the independent view and opinions of town planners and the views of residents in the affected locality to determine on an objective basis the nature of the amenity of an area (*Canning Mews Pty Ltd and City of South Perth* [2005] WASAT 272 at [48] (**'Canning Mews'**)). In this respect, the views of the surrounding residents must be properly taken into account in considering the amenity impacts caused by the development.

2.6 The application fails to consider the present amenity of the locality. In that respect, the view of the impact on amenity by the residents must be factual and realistic. In *Self Help Addiction Resource Centre Inc v Glen Eira City Council* (2005) 145 LGERA 124, it was established that there needed to be a factual or realistic basis to resident's perception of amenity impacts caused by a development (see also *Woolworths and*

City of Joondalup [2009] WASAT 41 at [76]). This calls for an assessment of the immediately surrounding area.

2.7 The immediate locality is made up of houses on large residential lots. The area is on the periphery of the Waterfront Village. The expectation that the residents surrounding was that the taller buildings built to the maximum height would be located in the centre of the Waterfront Village close to the commercial center, the basis to this is set out in more detail below. However, simply because development may be able to be permitted does not mean that it ought to be allowed. Other discretionary criteria must be considered.

2.8 The Waterfront Village, as would be expected has the greatest intensity of development intersecting with the commercial area closest to the waterfront. Harrison and Parkin Streets are set back from the waterfront and are removed from the commercial center.

2.9 The Application for 47 Multiple Dwellings is a multi-storey building that in one part exceeds the height is not consistent with the amenity or character of the area.

2.10 The planner states that the development is consistent with the future character of the street and area without any explanation as to why this view is held.

2.11 There is no pictorial representation of the development in comparison with current or future development, there is no assessment of the existing amenity or future development of the locality. The statement is made by planners without any basis.

2.12 The future character of development is relevant, but this does not remove the need to assess the existing and future amenity, particularly where there is a request to exercise a discretion in favor of permitting the height of the building to exceed that of the R-Codes and the Policy.

2.13 The Rockingham Development Policy Plan 3.2.5 outlines that medium to high density residential development is preferred. High levels of amenity are to compliment the future character of the development.

2.14 The Application, whilst making reference to the desired future amenity of the area, does not adequately address the impact of the development upon the current amenity of the area.

2.15 Moreover, the Application only considers the Rockingham Development Policy Plan 3.2.5 in determining the amenity of the area. As established in *Canning Mews*, the views of affected residents are relevant to determining the amenity of the area. There has been no attempt to garner the views of affected residents in regard to the current amenity of the area. At a minimum, the local government should consider the views of the affected residents with regard to the impacts upon the amenity of the area.

2.16 Notably, Section 4.18.2 of the City of Rockingham Local Planning Scheme No.2 ('**LPS**') states that:

2.17 ...All land and buildings shall be so used and maintained as to preserve the amenity of the neighbourhood in which they are situated.

2.18 The term "preserve" here indicates that consideration should be given to the preservation of the current amenity of a neighbourhood when land use occurs. Given that the Application makes no real consideration for the current amenity, it cannot be seen to align with the LPS.

2.19 Doubtless the form, height and density of the development will impact the existing amenity. This in part is a consequence of the manner of the proposed use of the land and the extent of the impact.

2.20 The residents say that the extent of the impact is excessive when compared against the intent of the future of the locality, including that the building podium in the locality was only intended to be development of two to three- storeys.

2.21 As established in *Canning Mews*, the expert opinions of town planners and the views of residents in the affected locality are relevant in determining the objective amenity of an area.

2.22 The applicant fails to properly consider the test of amenity and only points to the future amenity. This is not the correct approach to be taken.

3. INCOMPATIBILITY WITH RELEVANT POLICY

3.1 The application notes that the development is consistent with the future character of the street and area. The Rockingham Development Policy Plan 3.2.5 outlines that medium to high density residential development is preferred.

3.2 At page 7 of the Rockingham Development Policy Plan 3.2.5 it states:

3.3 *"This Planning Policy provides a more detailed planning vision and policy framework for the Sector based on the concept of a sustainable, medium to high density urban village arranged around a central, high frequency transit spine.."*

3.4 At page 16 of the Rockingham Development Policy Plan 3.2.5 it states:

3.5 *"The advent of the TOD concept along the transit corridor provides the planning and amenity context for an orderly arrangement and distribution of medium to higher density residential development."*

3.6 The expectation of the Policy was that the TOD would be the areas where height and density would be at its highest.

3.7 With an orderly arrangement and distribution of medium to higher density. What this implies is a graduation of density.

3.8 This places the maximum height and density at the centre of the Village and along the Beach front with lower density at the perimeter of the Waterfront Village away from the TOD of the locality. This is also represented by the residential density plan that graduates the form of development from the edges to the centre.

3.9 The intention of the Waterfront Village Residential and Mixed Use Building typologies never intended development with the physical form to exceed a two to three-storey podium.

3.10 Given the locality and the area being at the edge of the Waterfront Village it is appropriate that the form of the development being a two-storey podium. This is taken directly from page 32 of the Policy at paragraph 3.3 that states:

3.11 *"High density residential developments (including mixed use) should predominantly take the form of street framing development, preferably with internal landscaped courtyards located over basement and/or off-street car parking areas. Developments over 4 storeys in height should generally be sited on 2-3 storey podiums, with upper floors setback from the street front building line of the podium and set back from the adjoining lot boundaries."*

3.12 Height affects the neighbouring properties. Clause 4.18.2 of the City of Rockingham Local Planning Scheme No.2 ('**LPS**') requires the amenity to be preserved. It states:

3.13 *"...All land and buildings shall be so used and maintained as to preserve the amenity of the neighbourhood in which they are situated."*

3.14 The term "preserve" here indicates that consideration must be given to the preservation of the current amenity of a neighbourhood.

3.15 The proposed height of the building exceeding what is permitted, and the expected podium height by two extra floors with the consequent overlooking, over shadowing and loss of visual privacy the application does not preserve the amenity.

4. HEIGHT AND VISUAL PRIVACY

4.1 R-Code O 3.5.1 states than an objective of design is to minimise direct overlooking of habitable rooms and private outdoor living areas of neighbouring properties.

4.2 The affected residents contend that their visual privacy amenity will be significantly impacted by the proposed development.

4.3 Variations made to the visual privacy requirements of the R-Codes in the application are not appropriate. In particular reference to 87 Harrison Street, the proposed variation to the building fronting Parkin Street, the rear apartments on levels two, three and four propose the following variations:

(a) Habitable room – 3.25 metres in lieu of the required 4 metres

(b) Balcony to the rear – 3.65/4 metres in lieu of 6 metres (with a proposed planter box).

All three levels of the apartments will be overlooking into a habitable room of the Games/Activity Room located on 87 Harrison Street, with a setback of 1.2 metres. Further to this portion of the building, the backyard includes a swimming pool and grassed area. The games room and backyard is a family space and the proposed intrusion is not acceptable.

4.4 In order to comply, the screening of the balcony and the window to the living room would need to be increased to a minimum sill height of 1.6 metres.

4.5 The Application's R-Code Assessment establishes that it relies upon Section 4.4.5 of the Rockingham Development Policy Plan 3.2.5 in lieu of R-Code A2.71 when determining setback requirements. However, Section 4.4.5 makes no provision for

setbacks of a building over a height of 19 metres. This is particularly problematic considering that the proposed complex fronting Parkin Street is to have a building height of 21.4 metres.

4.6 Section 67(c) and 67(g) provides that due regard be given to both the R-Codes and the Rockingham Development Policy Plan 3.2.5 when the local government is considering the application. Given that Section 4.4.5 of the Rockingham Development Policy Plan 3.2.5 does not make provision for a development over 19 metres, whilst R-Code Table 2.7 does, a conflict arises.

4.7 Section 4.3B.2 of the LPS states that the local government may exercise its discretion in regard to R-Code provisions with regard to the Primary Centre Waterfront Village Zone.

4.8 Given that the Rockingham Development Policy Plan 3.2.5 does not make provision for setback requirements for buildings over 19 metres high, it would appear that the local government's discretion to exclude the R-Code provisions would be misdirected. The local government ought to use their discretion to apply the more stringent R-Code provisions to account for the additional height of the proposed development.

4.9 Whilst there have been adjustments made to the design of the property in order to alleviate overlooking (see SPP 7.0 Assessment and Design Review Panel Response – Proposed Multiple Dwelling Development), the sheer size of the proposed development continues to create significant privacy concerns. The height of the proposed apartment complex is significantly greater than the neighbouring properties. The following should be considered:

(a) The neighbouring properties to the proposed five-storey apartment complex facing Parkin Street are all one-storey high. These properties include number 146 A and B Parkin Street, and number 140 Parkin Street.

(b) The neighbouring properties to the proposed three-storey apartment complex facing Harrison Street (number 87 and number 91 Harrison Street) are one and two-storeys respectively.

4.10 With consideration to R-Code clause 3.5.1 the size of the proposed development in comparison to neighbouring properties creates a logical postulate that visual privacy amenity cannot be achieved. Regardless of variations to the application to account for visual privacy, the sheer size of the development indicates that visual privacy amenity of the neighbouring residents cannot be maintained.

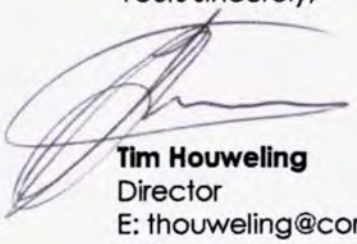
The development should be rejected on the basis of:

1. Bulk and form of the development;
2. Height inconsistent with the R-Codes and Policy, and no basis for the exercise of discretion in favour of varying the height;
3. Amenity impacts on surrounding development; and
4. Overlooking/visual impact.

We attach as an annexure a memorandum by Tamara Vreeken, Associate Director of Niche Planning Studio in support of this submission.

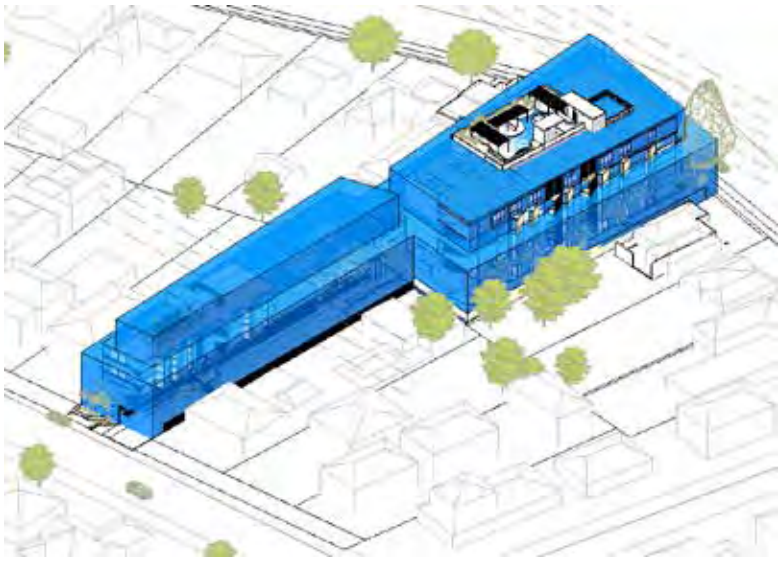
We wish to attend any DAP meetings on this matter and make presentations in regard to our findings.

Yours sincerely,



Tim Houweling
Director
E: thouweling@cornerstonelegal.com.au

Concern Raised	Applicant Response
Building height – variation to LPP3.2.5 and rooftop amenities	The building height associated with the South Building's rooftop terrace, relates to a lift overrun, plant rooms and rooftop amenities which do not add visual bulk or scale to the building, do not create additional shadow, and has no perceptible impact on the streetscape. Development LPP3.2.5 specifically excludes lift plants, water towers or similar non-accommodation development not exceeding 3m in height. The lift overrun, is approximately 3m above the anticipated 19m building height and the remainder is lower, therefore being entirely consistent with the framework. Element objective 2.2.3 of The Residential Design Codes Volume 2 – Apartments (R-Codes Vol. 2) requires that rooftops be articulated and rooftop amenities/communal open space are included in order to provide to provide a range of environmental, social and design benefits. The buildings and structures in question have been located central to the building mass, so as not to be highly visible from the street, or adjoining properties. Line of sight diagrams have been prepared that demonstrate this. The additional height is consistent with the intent and objectives of the R-Codes Vol.2 and meets the objectives and LPP3.2.5 by providing a high-quality building to the area. It should also be noted that the City's DRP expressed a strong desire to retain both rooftop terraces in the plans.
Building height, bulk and scale is not appropriate in context of, or compatible with surrounding properties	To determine the compatibility and appropriateness of any development in the Waterfront Village, the starting point is LPP3.2.5. The policy envisages, five-storey, potentially mixed-use, medium-to-high density development, configured with boundary-to-boundary podiums and recessed upper floors on the subject site. Despite much of the area being low-rise, this is the anticipated height, bulk and scale for development in this particular area of the Activity Centre. It is acknowledged that the proposal is of a greater scale than surrounding properties, but this is always the case in areas when they transition from low density to the level of development advocated by the planning framework. The Planning and Development (Local Planning Schemes) Regulations were specifically updated to include reference to the desired future character in Clause 67(2)(m)(i). As noted in the planning report, the strategic basis for the development is solid. LPP3.2.5 was adopted in 2009 in response to the area being designated a Strategic Metropolitan Centre, being zoned a Central City Area under the Metropolitan Region Scheme, and the need to fulfil the dwelling and population targets set by the State Government. The Policy has facilitated many high-density developments in close proximity to the site. The intent of LPP 3.2.5 to transition the built form down from areas of very high density areas located in the Waterfront Village core is based upon sound urban design principles. The street block in which the subject site is located, has a 5 storey height limit to act as a buffer from the areas of very high density to the surrounding lower density areas. As the first

	application to respond to LPP3.2.5 in this street block, the proposal has been iteratively modified to balance the expectations of the framework with existing low-rise properties. Instead of a hard 3 storey podium abutting the adjoining properties, overall the North and South building provide good separation between the two buildings and to adjoining properties. Upper floor setbacks comply or exceed the minimum standards of LPP3.2.5. The proposed building has by no means maximised the permitted building envelope as shown on the diagrams below.  The South Building's side and rear setbacks contain large areas of deep soil, tree canopy, landscaping which will positively contribute to the amenity of the area and provide attractive interfaces with surrounding development. The three-storey North Building is well below the anticipated five storeys and is provided with large areas of separation to the west and south. Despite images provided in submissions suggesting the north building will tower over the neighbouring properties, it will in fact be a narrow, low to mid-rise building not dissimilar to the two-storey house to the east. The proposal has sought to minimise the impacts of the development on adjoining properties through a range of design, massing, and landscape responses, which have been outlined in the Planning Report. The apartment building has pulled back from the acceptable building envelope to provide appropriate transition between the site and adjoining properties. Diagrams demonstrating how the development has sensitively responded to its neighbouring properties have been included in the response to the City. The contention that the variation would facilitate an undesirable precedent is refuted. The rooftop terraces provide a high-quality landscape response that will provide amenity for its residents and provide a benchmark for quality design into the future.
Street setback	The development exceeds the street setback standards of the Policy providing a far more generous setback than the requirements to pay respect to the existing setback line. Element Objective 2.3.1 of the R-Codes Vol. 2 requires that the development consider the landscape character of the street.

	Given that most properties within Harrison Street have large front gardens and verge areas, the development has sought to balance the existing streetscape character with the desired future character and development street setback standards outlined in LPP 3.2.5. A condition could be imposed, if required to reduce the front setback to Harrison Street.
Visual privacy and the request for screening	The intent of the current design is to move the bulk and mass of the building away from the northern part of the site (89 Harrison) to the southern part (142-144 Parkin). This has resulted in a smaller building locating on No. 89 Harrison with large setbacks of to the west and south. The design minimises privacy impacts to No. 87 and 91 Harrison Street, by having no development in the central portion of the property and ensuring all major openings are orientated towards the street To address the concerns raised by the community, the building has been modified to either comply with the R-Codes or improve privacy at adjoining properties. Modifications have been made in respect of: · North-facing apartments (S.P.05 and S.P.06, S1.06, S1.07, S.3.06, S.3.06, S4.05, S4.06) have been reconfigured to provide greater separation between the balconies and habitable rooms of those apartments and the property to the north (No. 87 Harrison). This interface now complies. · The ground floor of the South Building has been lowered to RL0.45, removing the requirement for screening to adjoining properties along the east, west and north. · The visual privacy setback shortfalls of the western elevation have been further improved so that outlook is directed to the horizon and are prevented from looking directly into adjoining properties. Line of sight diagrams have been provided to show that outlook from these areas of private open space do not adversely impact the privacy of No. 138 Parkin Street. · Line of sight diagrams have been prepared for both rooftop terraces, demonstrating how views are restricted by the roofs and landscaping so as not to impact on privacy of adjoining neighbours. · The North Building's rooftop terrace now features screening along the eastern edge, to address the concerns raised by the neighbouring property to the east. The garden areas, habitable windows and rooms of the neighbouring properties will not be viewable from the upper floor balconies and windows, due to the design and setback of the proposal. Full screening of the balconies is not supported and is specifically discouraged by clause A3.5.4 of the R-Codes Vol. 2. The design resolution of the building has balanced the need to provide outlook with the privacy concerns of its neighbours.
Side and rear setback	Following minor changes to the development, the development is consistent with the required setbacks. There remains minor variations in respect of the angled windows on the western elevation however, these are minor incursions into the setback area to add further articulation and assist in reducing perceived building bulk .
Parking	The concern raised by residents in respect of the lack of visitor bays is acknowledged, however, the proposal is responding to the planning framework by supporting the construction of a public parking facility through a mandatory cash-in-lieu payment, in preference to on-site visitor parking.
Traffic and Safety	The TIA has been prepared in accordance with the WAPC Transport Impact Assessment guidelines.

	The TIA concluded that the proposal would have minimal impact on the road network, would not pose any safety issues and has excellent access to alternative to private vehicle use.
Vehicle access from Harrison Street	The vehicle access proposed from Harrison Street is entirely appropriate given that Parkin Street has restricted movement and access due to a central median island and road bend. Harrison Street is the safest entry and exit point for the development. The impact on Harrison Street is well within acceptable limits and far less than the impacts envisaged by the planning framework if the remainder of the precinct was developed to the desired density of 160 dwellings per hectare. It is also noted that if the access were limited to Parkin Street, then west bound vehicles would need to exit eastbound and head down Harrison Street to the roundabout to be able to head west along Parkin Street.
Noise	The development has been assessed and the noise sources from the development can be mitigated through design measures, which will be incorporated into the design prior to occupation and required as a condition of any approval. The development is residential in nature and noise from residents will have exactly the same potential to impact on amenity as any other residential development
Amenity	The existing amenity has been considered in the design of the proposal, however regard must be had for the amenity expectation as a result of development undertaken in line with the planning framework 5 storey development will naturally have a different amenity impact than any low density single residential development. The contention that medium to high density development only detracts from the amenity is not supported. There are a number of aspects of the proposal that will benefit the streetscape and the area more broadly. The streetscape and landscaping enhancements, will positively contribute to the existing landscape character of both street frontages. The architectural design is contextual and positively responds to the varied coastal character of the area and was broadly supported by the city's DRP. The proposed and retained tree canopy (Norfolk Pine), greater areas of open space and landscaping demonstrate the benefits of high density over grouped dwelling development that typically have a far greater building footprint. . Based on a preliminary aerial survey of the area, most grouped dwellings in the surrounding area have little or no trees located on-site. Overshadowing – due to the orientation of the lot and the design of the building, the proposal does not unreasonably overshadow adjoining properties and meets the objective for overshadowing in the R-Codes Vol. 2. Outlook – due to the orientation of the lots within the surrounding street blocks, the proposal does not unreasonably restrict outlook and has been designed to be well within the prescribed building envelope, except for the minor incursions that have little or no impact on anyone's outlook. The single storey properties on the southern side of Parkin Street are adequately separated from the site and the adjoining properties to the east and west are oriented away from the building, providing adequate outlook to their respective street frontages. .

	Bulk and scale – as outlined in the planning report the proposal has been careful to minimise its bulk and scale impact on surrounding properties through increased separation, articulation, landscaping and materiality. Acoustic Privacy– the development is supported by an acoustic report which provides recommendations to comply with the noise regulations. These recommendations will be required to be implemented as part of any condition for approval. Visual Privacy – the development has been carefully designed to minimise overlooking and has been further modified to address the concerns of particular properties. All habitable rooms and balconies are either appropriately set back or include design measures that result in views that are directed away from adjoining boundaries and toward the horizon. The existing characteristics of the streetscape including large gardens, with grass and low or no fencing has been respected by the development The development has setbacks in excess of that required by the planning framework and provides high quality soft and hard landscaping along both frontages. It also retains a large Norfolk pine providing continuity between the previous and new development.
Lack of commercial land use	To ensure that the development is compatible with surrounding residential housing the proposal is exclusively residential. In accordance with LPP 3.2.5, the development includes higher ground floor ceiling heights to provide opportunity for adaptable use in the future, should the need arise. The development responds to the street at ground level, provides excellent passive surveillance and includes communal facilities that activate the street. Given that the development is the first medium to high density development within this particular locality, providing a café or shop at ground level would be a significant change to the existing amenity.
Height of dividing fences	Following the lowering of the finished level of the ground floor of the South Building, there is no need for screening along the side boundaries and the previous 2.6m high walls have been removed from the proposal.
Suitability of site for high density	The development responds to the approved planning framework and characteristics of the site by proposing a low rise apartment building on No. 89 Harrison Street and a larger building on No 142-144 Parkin Street. The development is able to retain a large Norfolk pine tree, provide large areas of open space, deep soil and tree canopy, high quality communal open space, and more parking bays than is required under the R-Codes Vol. 2.
Services/utilities/ infrastructure	The utility and services of the area are the responsibility of State government providers. The development proposed is less than the density anticipated by the approved planning framework.

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31 October 2022

Mr David Banovic
Acting Manager – Major Planning Projects
City of Rockingham
PO Box 2142
Rockingham DC WA 6967

Dear Mr Banovic

Lot 62 (No. 89) Harrison Street and Lots 94 and 95 (No. 144 and 142) Parkin Street, Rockingham – Application for 47 Multiple Dwellings

Background

1 Lavan acts for Aria Project Management Pty Ltd, which is the proponent of the above development application.

2 The application seeks approval to develop a 3 to 5 storey multiple dwelling development on Lot 62 (No. 89) Harrison Street, Rockingham and Lots 94 and 95 (No. 142 and 144) Parkin Street, Rockingham (**Subject Site**). The proposed development will comprise 47 apartments with basement parking and resident amenities such as a wellness facility and quality rooftop areas.

3 The purpose of this legal submission is to respond to the objections to the proposed development raised in the Cornerstone Legal submission dated 7 October 2022, which will be addressed by the City of Rockingham (**City**) in its responsible authority report (**RAR**) and considered by the Metro Outer Joint Development Assessment Panel (**JDAP**) in determining the application.

A full service Western Australian firm:

Aged Care
Asian Investment
Banking & Finance
Construction & Infrastructure
Corporate, Commercial & Tax
Education
Employment & Safety
Energy
Family Law
Insolvency & Reconstruction
Intellectual Property
Liquor Licensing
Litigation & Dispute Resolution
Mining & Resources
Planning & Environment
Private Wealth
Property & Leasing
Wills & Estates

Our values:

Excellence
Integrity
Courage
Collaboration
Fulfilment

Lavan respectfully acknowledges the traditional owners of the land on which we live and work.

4 In making its objection to the application, Cornerstone Legal (for and on behalf of neighbours to the proposed development) contends that the proposed development should be rejected based on its:

4.1 height, bulk and scale;

4.2 inconsistency with *SPP 7.3 – Residential Design Codes Volume 2* (**SPP 7.3 Volume 2**) and the City's *Local Planning Policy 3.2.5: Development Policy Plan – Waterfront Village Sector* (**DPP 3.2.5**); and

4.3 amenity, overlooking and visual privacy impact on surrounding development.

5 For the reasons that follow, it is my opinion that the Cornerstone Legal submission is misconceived and should be disregarded entirely by the JDAP in determining with respect, the application.

Interaction between SPP 7.3 Volume 2 and DPP 3.2.5

6 As set out in the applicant's planning assessment, the Subject Site is zoned 'Residential' and has a density coding of 'R-AC0'. SPP 7.3 Volume 2 does not contain any primary controls for land coded R-AC0, instead referring the reader to a *"local planning scheme, local development plan and/or precinct controls as applicable"*. In the context of the proposed development, that reference is to DPP 3.2.5

7 DPP 3.2.5 is a local planning policy made pursuant to Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015* (**Deemed Provisions**) and must be given due regard pursuant to Clause 67(2)(b).

8 The relationship between pre-existing local planning policies and SPP 7.2 Volume 2 is clarified in clauses 1.2.1 – 1.2.4 of SPP 7.3 Volume 2. Relevantly, Clause 1.2.1 provides that in the case of any inconsistency between a properly adopted local planning policy which came into effect prior to the gazettal of SPP 7.3 Volume 2:

8.1 for those sections identified in clause 1.2.2, SPP 7.3, Volume 2 does not superseded any development standard provided in the local planning policy; and

8.2 for those sections of Parts 3 and 4 identified in Clause 1.2.3, the provisions of SPP 7.3 Volume 2 prevail over the local planning policy to the extent of any inconsistency.

9 The sections of SPP 7.3 Volume 2 identified by Clause 1.2.2 include: "*All of Part 2, 3.6 Public domain interface, 3.7 Pedestrian access and entries, 3.8 Vehicle access, 4.10 Façade design and 4.13 Adaptive reuse"*.

10 Notwithstanding Clause 1.2.3, a local planning policy may amend or replace any of the acceptable outcomes of a number of sections of SPP 7.3 Volume 2, including 3.5 Visual privacy, 4.1 Solar and daylight access. 4.4 Private open space and

balconies (amongst others), where it can be demonstrates that the proposed amendment or replacement:

10.1 is warranted due to a specific need related to that particular locality or region;

10.2 is consistent with the Element Objectives of SPP 7.3 Volume 2; and

10.3 can be properly implemented and audited by the decision-maker as part of the ongoing building approval process.

11 The Cornerstone Legal submission suggests that in some circumstances, SPP 7.3 of Volume 2 should outweigh the due regard to be given to DPP 3.2.5. In that regard I refer to the decision of Justice Barker in *Clive Elliott Jennings & Co Pty Ltd v Western Australian Planning Commission* [2002] 122 LGERA 433 at [24]:

> *"The existence of a policy cannot replace the discretion of the decision-maker in the sense that it is to be inflexibly applied regardless of the merits of the particular case. However, the relevant consideration in many applications will be why the 'policy' should not be applied; why the planning principles that find expression in the 'policy' are not relevant to the particular application".*

12 In my opinion, there are no factors at play in respect of the application which would justify the non-application of DPP 3.2.5.

Due regard

13 It is well understood that fundamental to the assessment of material considerations in the Deemed Provisions (as set out in Clause 67(2)) is the requirement to have "due regard" to those considerations.

14 There is of course significant judicial commentary on the meaning of the "due regard" in the context of planning legislation and that requirement has been interpreted to mean to give:

14.1 "active and positive" consideration (*Marshall v Metropolitan Redevelopment Authority* [2015] WASC 226); or

14.2 "proper, genuine and realistic" consideration (*City of South Perth v ALH Capitalists Group Property Holdings Pty Ltd* (2016) LGERA 96).

15 It is also well understood that the term "due regard" is a flexible concept which must be considered in the context of the particular proposal and applies to the provisions of DPP 3.2.5 pursuant to Clause 67(2)(b) of the Deemed Provisions.

16 What that means is a decision-maker is to be guided by the planning principles set out in an applicable planning framework rather than directed to adhere to the them and is able to depart from a strict application of those principles in circumstances that there is a cogent reason to do so (*Bestry Property Group Limited and WAPC* [2019] WASAT 15 [at 99]). Those reasons are explored in further detail below.

Height, bulk and scale

17 The considerations outlined in the Cornerstone Legal submission relating to height, bulk and scale are more relevantly dealt within the considerations set out in Clause 67(2)(m) and (n) of the Deemed Provisions.

18 In that regard, I observe that the decisions of the State Administrative Tribunal (**SAT**), in *BHY Alexander Unit Trust and City of Nedlands* [2021] WASAT 41 (**BHY**) and *Ware and City of Melville* [2021] WASAT 65 (**Ware**) offer useful commentary on the exercise of planning discretion and consideration relevant to the assessment of those elements.

19 Section 3.6(f) of DPP 3.2.5 defines 'building height' and provides an explanation as to what is to be considered as being part of the height of a building in metres. Relevantly, section 3.6(f) states that 'building height' does not include "*lift plant, water tower or similar utility or service, not exceeding 3m in height, or any architectural feature or decoration (other than a free-standing sign) not used for any form or accommodation, which may be approved by the City*".

20 In my opinion, it is clear that the roof development is to be excluded from any calculation of the proposed development's height.

21 In the alternative, I observe that rooftop communal open space is encouraged by objective 2.2.3 of SPP 7.3 Volume 2 and therefore consider the height of the proposed development to be acceptable because the exceedance is minor (1m), technical and does not contribute to overshadowing.

Compatibility in its setting

22 In relation to considerations of compatibility raised in the Cornerstone Legal Submission, I observe that Clause 67(2)(m) of the Deemed Provisions was amended on 15 February 2021 to include specific references to 'desired future character' and now states as follows:

"*(m) the compatibility of the development with its setting, including –*

(i) the compatibility of the development with the desired future character of its setting; and

(ii) the relationship of the development to development on adjoining land or on other land in the locality, including but not limited to, the likely affect of the height, bulk, scale and orientation and appearance of the development;"

23 As to the compatibility of the proposed development with its existing and future setting, I note the following:

23.1 The applicant's identification of the relevant locality should not be controversial by virtue of the assessment required by Clause 67(2)(m) of the Deemed Provisions.

23.2 The immediate locality of the site in the BHY case had substantially transitioned from a very low density (R-10) to a higher interim density, before ultimately being up coded to R-80. That historical transitional upcoding resulted in the potential for greater sensitivity from new development through historical subdivision and recent redevelopment of those subdivided lots (to accommodate a R10 scale-built form). By way of comparison to the proposed development, the upcoding of the Subject Site (and its immediate locality) by DPP 3.2.5 has not resulted in similar subdivision and redevelopment and the locality is framed by large sites capable of significant redevelopment in the future.

23.3 The zoning of the locality relevant to the proposed development is unlikely to give rise to the disparity in height referred to in the BHY case and redevelopment is possible in the foreseeable future.

23.4 The expectations as to future amenity of the locality are informed by DPP 3.2.5. it is facilitating change in the built form of the area and will continue to do so for some time as further sites are turned over to higher density development. In my opinion, it is reasonable to conclude that the predominant building height in the immediate locality of the Subject Site may change in the foreseeable future and it is not the case that existing built form in the locality will remain the same for some time.

24 I respectfully submit that what is proposed by this development is exactly what is contemplated in terms of future amenity by DPP 3.2.5. Accordingly, in my opinion, the proposed development is compatible within its setting when considering the available discretion and the likely future setting of the locality.

Amenity

25 As outlined by the SAT in *Sapphire Developments Alliance Pty Ltd and City of Nedlands* [2022] WASAT 149 at [38] the determination of the amenity of the locality is a question of fact and consists of three parts: the existing amenity, the manner in which the proposals will affect the existing amenity and the degree of impact on the locality.

26 The likely future amenity in the context of the proposed development includes a scenario where redevelopment of the sites to the north and south of the Subject Site occur in the not too distant future and can comprise a built form similar to that contemplated by the proposed development.

27 Amenity considerations take into account a multitude of issues including height, bulk and scale, streetscape, visual privacy and overshadowing.

28 I observe that there is no provision in DPP 3.2.5, as it relates to the Subject Site which either assigns a maximum percentage of allowable overlooking or mandates compliance with such a figure. Notwithstanding, DPP 3.2.5 seeks to achieve a density of 80 to 160 dwellings per hectare and more specifically, section 3.6 of DPP 3.2.5 provides for development of the kind proposed in this application should be *"separated from adjoining buildings to maintain vistas, solar access and an appropriate level of visual permeability"* (my emphasis).

29 On this basis, it is arguable that clause 1.2.3 of SPP 7.3 Volume 2 has been applied and in the absence of any cogent reason to depart from DPP 3.2.5 as a policy instrument, it is my opinion that it should be applied with greater weight than the R Codes Volume 2 in the circumstances.

30 In relation to overshadowing, I note the comments made by the former Deputy President Judge Parry in Ware at [74] that:

> *"the extent of overshadow in this case is an unfortunate, but largely inevitable, consequence of regional development consistent with the R-40 coding of the site and the fact that the affected properties lie to its south".*

31 I respectfully submit that amenity concerns relating to the proposed development as identified in the Cornerstone Legal submission are inevitable as a consequence of development consistent with DPP 3.2.5 and the R-AC0 coding of the locality. This would occur even if development is in substantial compliance with the acceptable development criteria outlined in SPP 7.3 Volume 2.

Precedent

32 Despite not being mentioned in the Cornerstone Legal objection, the consideration of planning precedent in this assessment is of concern.

33 It is important to understand that planning precedent in the context of decision making has the potential to be inherently problematic, particularly when planning framework considerations (as outlined in Clause 67(2) of the Deemed Provisions) require a consideration of the planning merits of a specific proposal.

34 Indeed, nothing in Clause 67(2) of the Deemed Provisions requires a consideration of planning precedent and as such JDAP should exercise caution in attributing too much weight to it.

35 The role of precedent has been the subject of consideration by the Town Planning and Appeals Tribunal in *Aspen Pty Ltd v State Planning Commission* (unreported, appeal no 13 of 1988, 21 October 1988) where it stated:

> *“The precedent argument is not usually treated by this Tribunal as a ‘stand alone’ argument. It is a consideration, but if there is no other reason why a development should not occur, the fact that it may tend to result in other applications being made for similar kinds of development, should not be a reason why the appeal should be dismissed”.*

36 In other words, precedent is not of itself a valid reason for the refusal of an application; each matter needs to be treated on its merits and regard given to the particular circumstances of the subject site: see also *Thio and WAPC* [2008] WASAT 265 at [48]; *Smith and WAPC* [2007] WASAT 261 at [67].

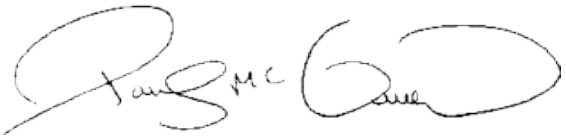
Conclusion

37 In summary, it is clear that the JDAP has the legal ability to consider and approve the proposed development. In my opinion, the key elements in Clauses 67(2)(m) and (n) have been appropriately considered with due regarded to the future intent of the locality contemplated by the relevant planning framework

38 I respectfully submit that the concerns outlined in the Cornerstone Legal submission are not justified in in the circumstances and do not prevent proposed development being approved.

Please contact me or Isabella Mosole if you have any questions.

Yours sincerely



Paul McQueen
General Counsel
Partner

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City of Rockingham

Design Review Panel Meeting Notes

Notes of the Design Review Panel held on 30 May 2022

Panel Members:	Mr Sam Klopper Mr Trent Woods Mr Tom Griffiths
City Officers:	Mr David Banovic - A/Manager Major Planning Projects (Chair) Mr Mike Ross - Manager Statutory Planning Mr David Waller - Coordinator Statutory Planning Mr Chris Parlane - Senior Planning Officer Mrs Casey Gillespie - Senior Planning Officer
A/Panel Coordinator:	Mrs Melinda Wardle - EA to Director Planning and Development Services
Proponents:	Item 1 - Mr David Read (Element), Ms Tiffany Molloy and Mr Greg Ewart (DMG)
Declarations of Interest:	Nil
Agenda Item 1	
Proposed Development	Pre-Lodgement Concept Design (First Review) - Multiple Dwelling Development
Property Address	Lot 89 Harrison Street and Lots 94 and 95 Parkin Street, Rockingham
Proposal	This conceptual proposal involves the development of two (2) apartment buildings on an amalgamated site with a total land area of 3,161m^2 . The proposal is summarised as follows: Ÿ A total of 50 apartments, comprising a mix of one, two and three bedroom dwellings; Ÿ Northern building - 5 residential storeys (7 storeys total); building height of 22.75m and 18 apartments; Ÿ Southern building - 5 residential storeys (7 storeys total); building height of 22.1m and 32 apartments; Ÿ Communal areas adjacent to the eastern aspect of the southern building and a roof top communal area only; Ÿ Full movement, singular vehicular access point from Harrison Street; Ÿ 13 car parking spaces at ground level under the northern building and basement car park under the southern building, with 55 parking spaces, comprising of 29 single bays and 13 tandem bays;

	Ÿ 35 bicycle parking and 6 motorbike spaces within basement; Ÿ Services/bin store located at ground level within car park area; Ÿ Pedestrian access: - to northern building via Harrison Street; - to southern building via Parkin Street; - throughout the development connecting both street frontages; Ÿ Development is framed by terrace style planter landscaping and a tree arbour spine; and Ÿ Landscaping elements predominantly to edges of the southern building.
Background	The subject land is currently occupied as follows: Ÿ Lot 89 Harrison Street - single detached dwelling; Ÿ Lot 94 Parkin Street - single detached dwelling; and Ÿ Lot 95 Parkin Street - vacant land.
Proponent deputation to the Panel	Ms Tiffany Molloy, DMG, provided an overview of the site in terms of the site context, development concept and design elements.
Officer presentation to the Panel	Mrs Casey Gillespie provided a high-level overview of the planning assessment of the proposed development.

‘Design Quality Evaluation’		
		Supported
		Pending further attention
		Not supported
Design Principles		
Principle 1 ***Context and Character***		*Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.*
		Ÿ Further analysis required to inform the local form and character. Contextual analysis should demonstrate an understanding of the Rockingham Foreshore area, mainly surrounding context, the heights and historical context. Ÿ Street elevations and perspectives showing the local context and existing development would help to understand the context and character. Plotting the development within the local context would help to understand the scale and bulk of the proposal. Ÿ Softening the entrances is required. Acknowledge the terracing, however, the collective visual impact presents as walls. Ÿ The size and scale of the entrances to be reviewed to address the street character with respect to the residential zone/locality. Ÿ The built form could be stepped to address the interface. Ÿ The renders are difficult to understand the context of the proposal. Ÿ Overshadowing needs to be addressed and details provided to consider impacts. Ÿ It is difficult to understand the bulk and scale as the street interface details and elevations do not show the entire building at the proposed heights. Ÿ The length of the site, whilst narrow, needs to address the break in wall lengths. Ÿ Concern with proposed height and the justifications for the proposal is not apparent or clear. Ÿ Blade walls are an acceptable design option. Ÿ Southern elevation presents well, further depth, however, is required. Ÿ Podium to three storeys with a nil setback to be explored. Ÿ Can yield be explored outwards instead of upward? Ÿ A Landscape Architect should be engaged to assist with landscape outcomes and plant selections commensurate of sites context.
Principle 2 ***Landscape Quality***		*Good design recognises that together, landscape and buildings cooperate as an integrated and sustainable system, within a broader ecological context.*
		Ÿ Landscape Architect should be engaged in the project to strengthen the story of the landscaping. Ÿ Arbour spine to be further detailed. Appears to be the primary landscape feature of the development. Ÿ Alignment of the arbour has pinch point at the refuse store area. Ÿ Existing trees and retention objectives need to be clearly realised and included. Ÿ Protecting existing trees and integrating them into the design should be explored further.

		Ÿ An existing tree central to the site - can this tree be retained or included in the design? Ÿ Deep soil, coupled with tree planting and tree retention will maximise the benefit of the landscaping. Ÿ Calculations for landscaping are required. Ÿ Amenity areas attributed to 1 zone in 1 building only. How will this work for all residents of the development? Ÿ Multiple user functionality of the communal areas to be considered and the ground floor area better utilised. Ÿ The arbour provides good connection, however, the height of the feature vs impacts to neighbouring development should be reconsidered. Ÿ Success planting for the proposed arbour at height of 5m is questionable.
Principle 3 ***Built Form and Scale***		*Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.*
		Ÿ The built form conflicts with the local context. Ÿ An overall section of the development from one street through to the next street is required. Ÿ The impact of the development will be more significant than shown in the drawings. Ÿ Gap between the two buildings could be key to addressing the massing and scale. Ÿ Built form presents amenity i.e. bulk and scale and visual privacy impacts. Ÿ Justifications for bulk and scale has not been adequately justified. Ÿ Detailed sections and elevations are required. Ÿ Overdevelopment of site - consider the arrangement over yield.
Principle 4 ***Functionality and Build Quality***		*Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.*
		Ÿ Justification showing compliance with the requirements is required. Ÿ Space planning and screening is weak. Ÿ Proposal has diluted a sense of entry. Ÿ Consider separation of buildings and core of each. Reduction in the number of lifts and stairwells should be explored. · Further consideration on how waste collection and services will be appropriately managed. Ÿ Parkin Street living area ratios to be confirmed. Ÿ Screening to balconies to be further reviewed. Ÿ Functionality of the communal areas to be reviewed. Disposition across the development, access, usability, welcoming to all residents?

Principle 5 ***Sustainability***		*Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.*
		Ÿ Large use of pavements - water sustainability to be considered and landscaping with sustainability in mind in design. Ÿ Opportunity to maximise the solar amenity objectives. Ÿ Concern with impact of solar access for neighbouring properties. Detailed solar analysis will be required. Ÿ Cross ventilation details to be provided to confirm compliance. Ÿ Blade walls seem appropriate for purpose. Ÿ ESD star rating 6.5 recommended to be achieved.
Principle 6 ***Amenity***		*Good design optimises internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy.*
		Ÿ Privacy and separation of areas does not appear to have been addressed appropriately. Ÿ Neighbouring amenity impacts and occupant amenity and privacy impacts are of concern. Ÿ The extent and over-reliance of screening indicates there are issues and does not indicate that these matters have been successfully addressed. Ÿ Pedestrian movement and safety at ground level to be further explored, particularly with respect the arbour spine. Ÿ Further analysis required for the semi basement. Applicant should consider cost vs site layout/planning. Ÿ Presents as two identities, two addresses. Increase the separation of buildings and amenity offerings. Ÿ Communal areas to be further reviewed. Could the rooftop area be split between the two buildings? Appears to be a long transition to access the roof top, especially for occupants of the northern building. This space does not appear to be welcoming to all occupants of the development. Ÿ Shared areas, easily accessible at ground level to be explored between two buildings.
Principle 7 ***Legibility***		*Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.*
		Ÿ The arbour walkway suggests use of a walkway, however, the sightlines are of a concern. Ÿ Pedestrian and vehicle separation is generally achieved. Ÿ Enhancements for way finding and safety throughout the development and the basement to be further explored and demonstrated. Ÿ Northern street entry seems acceptable, the southern entry is concealed. Ÿ Consider providing one entry to the buildings, as opposed to multiple lobby entries. Site planning/arrangement will influence this. Ÿ Southern street entry provides two entries - public and private. These need to be further delineated or distinguished for use.

Principle 8 ***Safety***		*Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.*
		Ÿ The arbour pedestrian link does not present as a safe and considered feature. Ÿ Eastern aspect of the northern building is too narrow, presents real concern for safety. Ÿ Better connectivity, use of lighting, way finding etc. to be explored.
Principle 9 ***Community***		*Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.*
		Ÿ The design requires further evolvement to ensure development contributes to the street and its local context. Ÿ Opportunity to consider public art contribution now, rather than later in the design phase. Ÿ Interface with the public realm to be further explored.
Principle 10 ***Aesthetics***		*Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.*
		Ÿ Blade walls are a good feature. Ÿ Southern composition is appropriate. Ÿ Northern building frontage in terms of scale and massing required is generally not appropriate. Ÿ Indicate curved brick walls features - can the curve be at the top, not the bottom? Ÿ Material palette is generally appropriate. Ÿ Massing of the proposal to be further refined with respect to scale. Ÿ Southern building including landscaping will better resolve the design. Ÿ Consider reflecting on the local context and locality to inform the character of the development. Ÿ Justification for any increase on height has not been presented and is weak.
Summary **(Key Issues)**		There are design and site planning concerns more or less with each of the 10 Design Principles and this generally is resultant from the overdevelopment of the site, by virtue of scale and massing. Primarily: Ÿ Development does not respond or demonstrate an understanding of place and scale. Ÿ Impact on amenity of adjoining neighbours is unresolved. For example, the extent of screening proposed indicates that this has not been properly considered. Ÿ Stepping/articulation of the buildings (including podium) and the associated opportunities have not been adequately explored. Ÿ Street frontages – reduce podium to 1m maximum. Ÿ Landscaping outcomes throughout are not acceptable. Ÿ Functionality and security of the arbour is unresolved. Ÿ Building and landscaping design should be better integrated to provide a cohesive environment. Ÿ It has not been demonstrated building separation is in proportion to the building height.

		Ÿ Disposition of communal areas is weak. Communal areas need to cater for the overall amenity and usability of all occupants of both buildings. Ÿ Provide a full set of detailed plans to properly comprehend amenity impacts.
Panel Recommendation		**The design is not supported.**

Meeting Close	1:07pm
Chair Signature	
Date	2 June 2022

D22/95019

City of Rockingham

Design Review Panel Meeting Notes

Notes of the Design Review Panel held on 27 September 2022

Panel Members:	Mr Sam Klopper Mr Trent Woods Mr Tom Griffiths
City Officers:	Mr David Banovic - A/Manager Major Planning Projects (Chair) Miss Nyah Cheater - Planning Assistant
A/Panel Coordinator:	Mrs Melinda Wardle - EA to Director Planning and Development Services
Proponents:	Mr David Read (Element), Ms Tiffany Molloy (DMG) and Mr Tony Metcalf (Aria Projects)
Declarations of Interest:	Nil
Agenda Item 1	
Proposed Development	Post Lodgement Review - Multiple Dwelling Development
Property Address	Lot 89 Harrison Street and Lots 94 and 95 Parkin Street, Rockingham
Proposal	This development proposal involves the development of two (2) apartment buildings on an amalgamated site with a total land area of 3,161m^2. Specifically: Ÿ One three (11.1m high) storey apartment complex fronting Harrison Street and one five (max height 21.4m) storey apartment complex fronting Parkin Street. Ÿ A total of 47 apartments, comprising of a mix of 17 one-bed, 25 two-bed and 5 three-bed dwellings. Ÿ No commercial/retail floor space is provided. Ÿ Each building provides individual roof top communal areas and associated amenities. Ÿ All vehicular access movements (in/out) is proposed via the Harrison Street driveway/crossover. Ÿ A total of 60 car parking bays distributed between basement parking (Parkin Street end) and ground level (Harrison Street end), 6 motorbike bays and 28 bicycle parking bays throughout.
Background	The subject land is currently occupied as follows: Ÿ Lot 89 Harrison Street - single detached dwelling; Ÿ Lot 94 Parkin Street - single detached dwelling; and Ÿ Lot 95 Parkin Street - vacant land.
Proponent deputation to the Panel	Ms Tiffany Molloy, DMG, provided an overview of the revised development in terms of the site context and design elements.
Officer presentation to the Panel	Mr David Banovic provided a high-level overview of the planning assessment of the proposed development.

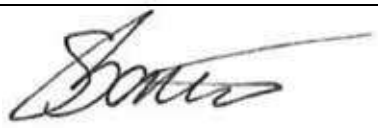
‘Design Quality Evaluation’		
		Supported
		Pending further attention
		Not supported
Design Principles		
Principle 1 ***Context and Character***		*Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.*
		Ÿ Evidence of significantly more thoughtful contextual analysis. Some concerns regarding the implementation and response to this analysis. Ÿ Two distinct buildings fronting two distinct streets is a positive outcome. Ÿ Alternative to use of 'white washed' finish preferred. Ÿ Built form closer to street for ground level - supportive of current location. Ÿ Building fabric as outlined in the application not evident in building façade. Ÿ Retaining tree on Parkin Street has impact on parking. Redesign of basement parking could allow retention. Ÿ Activation to both frontages is generally ok, further emphasis to be placed on Harrison Street building. Ÿ Design meets future objectives of locality. Ÿ The integration of the manta ray into artwork and shade structure a nice touch.
Principle 2 ***Landscape Quality***		*Good design recognises that together, landscape and buildings cooperate as an integrated and sustainable system, within a broader ecological context.*
		Ÿ Retention of tree is strongly supported. Ÿ Consider blocking out corner of basement parking to retain pine tree, rotate parking to retain bay numbers. Ÿ External spaces are more moderately scaled which makes these spaces work more successfully. Ÿ Two roof spaces are supported but could be expensive, their inclusion is influential on the panel support. Any future value engineering removal will require strong justification as support was provided on the design considered at the time. Ÿ Consider use of permeable paving on driveway and WSUD principles throughout design. Ÿ Consideration for more landscaping installed along western edge. Ÿ Landscaping report states that deep soil requirements for large trees not met. Provide justification for m2 of deep soil per tree. Ÿ Provide additional detail on shrub planting to demonstrate suitable plant selections and high levels of biodiversity. Ÿ Review landscape terraces and basement interface to ensure that sufficient planting depth is created. Ÿ Consider providing more amenity in the central node to enhance community benefit i.e. bbqs etc.

Principle 3 ***Built Form and Scale***		*Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.*
		Ÿ Building separation is a positive site design response. Ÿ Not deploying podium to three levels works. Ÿ More planting to western side of the development is encouraged. Ÿ Western elevations is the strongest - consider implementing materials and composition onto East. Ÿ Winged wall strong and successful aspect that improves privacy, shading as well as enhancing the built form. Ÿ Harrison Street greater amenity for ground floor apartment could be provided. Ÿ Harrison Street frontage and arbour should be better activated - orchestrated frontage. Ÿ The panel discussed the variation to the town planning guidelines for street setbacks to both Harrison and Parkin. The Panel was generally satisfied that the unique 'crank' location may require a different approach and that the proposal sits well in the existing context.
Principle 4 ***Functionality and Build Quality***		*Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.*
		Ÿ The internal planning is improved and works well. Ÿ Movement and access diagrams are more logical and clearer. Ÿ Refuse strategy currently under review but greatly improved. Ÿ Could one fire stair be engineered out of Parkin Street apartment? Ÿ The step up from the street of 1m would be better as less than 1m to avoid handrails and fall hazards generally. Ÿ The egress on the West is a lost opportunity for landscaping. Could occupants exit through lobby (alternative solution). Ÿ Consideration should be given to how the central outdoor space with retained trees could be best utilised by residents. Ÿ The stairs on the Harrison Street apartments are tight and may require additional length. Ÿ Consider whether stores should be inbound or at least attached to an external wall. Consider residents and the bulky equipment they will want stored living so close to the coast (bikes, paddleboards, kayaks etc.) Ÿ Additional passive ventilation would enhance the development. Ÿ The west egress would be better if it was landscaped with more trees. Ÿ Recommended that the ramp on Parkin Street should have a minimum slope 1:20 to improve pedestrian experience. Ÿ Two lifts would be better than one.

		Ÿ Overlooking and setbacks are still significant concerns especially for the 4 'internal' one-bedroom apartments. Proprietary 1.6m slatted screening is not supported and any screening solution would need to maintain amenity and light to the apartments, the planters are a better outcome but may need to be married with increased setbacks or change in room usage (e.g. living and balcony on 'blade wall' side bedroom on open side.
Principle 5 ***Sustainability***		*Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.*
		Ÿ The building's solar access performance exceeds requirements, as a result of the site's orientation and your response to it. Ÿ The lightless apartments are minimised, and they have good access to open space which will mitigate the loss of direct light. Ÿ Natural ventilation could be improved be providing additional operable windows to circulation corridors on the Parkin apartments. Ÿ Consider your response to the NAThers requirements of an additional half star and the NCC changes of October 2023. Ÿ Consider commissioning Sustainable Consultant early. Ÿ Reconsider pump house/water tank in central outdoor area. Place it in paved area rather than landscaped area. Ÿ The treatment of the building's west façade provides appropriate shading and orientation of glazing - could this be deployed elsewhere? Ÿ Consideration should be given for water sensitive design opportunities i.e. permeable paving, drainage into soft landscape areas, biodiversity of shrub plangent (use broad mix of native plants) Ÿ Include solar power provision on rooftops now, rather than later to meet DesignWA requirement for sustainability initiative requirement. Ÿ Water tank/pump house detrimental to design, relocate to paved area rather than landscaped area.
Principle 6 ***Amenity***		*Good design optimises internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy.*
		Ÿ Internal planning typically is good. Ÿ Dual roof decks is good, and supported. Ÿ Shared amenity on GF south is fine. Ÿ Light to lobbies is good, although Harrison St lobby is dimensionally tight. Ÿ Servicing locations are good. Ÿ The functionality of the external area on Harrison Street was questioned - dimensionally seemed quite tight and small. Ÿ Consideration should be given to redesign of the driveway, the panel encourage exploration of narrowing this to allow for planting. Ÿ Edge of balconies should be considered/resolved to enhance amenity. Ÿ Balustrade treatments vary, more work to resolve and unify this element is encouraged.

Principle 7 ***Legibility***		*Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.*
		Ÿ The front entry is much improved, however, the Parkin entry steps could be made more generous and the ramping more integrated. Ÿ Suggest reducing elevation to less than 1m to avoid handrails and fall hazards and to make the entry space feel more open and residential. Ÿ Cars and pedestrians conflict on the Harrison Street side. Consider separating these two uses or better delineating the usages. E.g. Access on the Eastern side behind the cars? Or consolidating parking into a single crossover? Ÿ 6m drive aisle not supported considering length of driveway. Ÿ The arbour on Harrison Street could be paired back and better integrated with the landscaping. Ÿ The direct entry to Parkin Street ground floor apartments from the terrace could be improved to enhance privacy at arrival. Ÿ The pedestrian pathway directly adjacent to the driveway for the northern building does not work well and should be reconsidered or significantly improved. Ÿ The pedestrian entry on Harrison Street is not very generous and needs to be improved. There should be less emphasis on vehicle access and more on pedestrian entry/movement. Ÿ The Harrison Street entrance and wayfinding could be improved, including the location of the foyer. Bicycle parking is also hidden.
Principle 8 ***Safety***		*Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.*
		Ÿ Passive surveillance of the circulation is much improved. The centre arbour would be improved if the rear Harrison Street apartment was visually connected. Ÿ The pedestrian and vehicle circulations clash in the narrower section of the lot. Consider taking movement behind cars directly into lobby this will move lobby off cars at Harrison Street. Ÿ Passive surveillance could be improved with ground floor apartments better presented to street. Ÿ Pedestrian and vehicle access on Harrison Street required greater consideration. Opportunity is there for a reduced driveway and more pedestrian-oriented entry point. Ÿ Security gate to access driveway should be moved behind pedestrian entry to make this space more generous and inviting.
Principle 9 ***Community***		*Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.*
		Ÿ While the integration of the public art is welcome - the community offering could still be strengthened. Ÿ While both street interfaces are softer, they do not meet the strategic planning controls of the area. This *may* be the most appropriate massing diagram, but consider opportunities for community 'wins' in your response and explain how your response, which is supported, is appropriate. Refer tree retention below.

		Ÿ Mixture of 1/2/3 bedroom apartments supported. Ÿ Rooftop terraces to each building supported. Ÿ The location of the fitness centre may not be the best as it predominantly will serve the Parkin Street building. Ÿ Could the public art be further evolved? Ÿ Retention of pine tree on street front would be welcomed by community.
Principle 10 ***Aesthetics***		*Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.*
		Ÿ The building's aesthetics are much improved. The strong elements have been retained while the weaker elements improved. Ÿ The context/character could be better enhanced with the material selection. Ÿ Better contextual reasoning behind the material/colour choices could be provided (i.e. the choice of burnt red).
Summary (Key Issues)		Ÿ Further site planning and layout is required for Harrison Street end of the development, particularly in relation to GF activation offering and to address safety concerns around pedestrian and vehicle crossover. Ÿ Deep soil requirement of concern, more soil would be better. Ÿ Consideration to be given to softening and reducing the 6m driveway. Ÿ Overlooking elements require further consideration and innovation.
Panel Recommendation		**The design is supported subject to:** · **Separation of pedestrian and traffic flow along Harrison Street and improved amenity along GF plain** · **Addressing overlooking via innovative design outcomes or providing compliant setbacks**

Meeting Close	11:11am
Chair Signature	
Date	30 September 2022

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