



City of Nedlands

Minutes

Council Committee Meeting

1 December 2020

ATTENTION

This is a Committee which has only made recommendations to Council. No action should be taken on any recommendation contained in these Minutes. The Council resolution pertaining to an item will be made at the next Ordinary Meeting of Council following this meeting.

Table of Contents

Declaration of Opening	3
Present and Apologies and Leave of Absence (Previously Approved)	3
1. Public Question Time	4
1.1 Mr Peter Robins, 10 Edward Street, Nedlands.....	4
2. Addresses By Members of the Public (only for items listed on the agenda)	5
3. Disclosures of Financial and/or Proximity Interest.....	5
4. Disclosures of Interests Affecting Impartiality.....	5
4.1 Councillor Smyth – 9.1 – Responsible Authority Report – 97 Smyth Road, Nedlands – 12 Multiple Dwellings.....	6
5. Declarations by Members That They Have Not Given Due Consideration to Papers.....	6
6. Confirmation of Minutes	6
6.1 Committee Meeting 10 November 2020.....	6
7. Matters for Which the Meeting May Be Closed	6
8. Divisional Reports	7
8.1 Planning & Development Report No’s PD55.20 to PD57.20	8
PD55.20 Local Planning Scheme 3 – Local Planning Policy Waste Management and Guidelines - Proposed Amendments to Policy	8
PD56.20 Amendments to the Parking Local Planning Policy (Residential Aged Care) Consideration of Submissions.....	11
PD57.20 Built Form Modelling and Traffic Modelling Project, Nedlands Town Centre, Broadway and Waratah Village – Budget Allocation	13
8.2 Technical Services Report No’s TS20.20.....	14
TS20.20 Capital Works Program Mid-Year Update	14
8.3 Community Development No’s CM11.20	15
CM11.20 Hollywood Subiaco Bowling Club – Request for Financial Support	15
8.4 Corporate & Strategy Report No’s CPS30.20	17
CPS30.20 List of Accounts Paid – October 2020	17
9. Reports by the Chief Executive Officer	18
9.1 Responsible Authority Report – 97 Smyth Road, Nedlands – 12 Multiple Dwellings	18
10. Urgent Business Approved By the Presiding Member or By Decision	22
10.1 Community Engagement RFQ	22
11. Confidential Items	23
Declaration of Closure	23

City of Nedlands

Minutes of a meeting of the Council Committee held in the Adam Armstrong Pavilion, Beatrice Road, Dalkeith on Tuesday 1 December 2020 at 7 pm.

Declaration of Opening

The Presiding Member declared the meeting open at 7.01 pm and drew attention to the disclaimer below.

Present and Apologies and Leave of Absence (Previously Approved)

Councillors	Her Worship the Mayor, C M de Lacy	(Presiding Member)
	Councillor F J O Bennett	Dalkeith Ward
	Councillor A W Mangano	Dalkeith Ward
	Councillor B G Hodsdon	Hollywood Ward
	Councillor J D Wetherall	Hollywood Ward
	Councillor R A Coghlan	Melvista Ward
	Vacant	Melvista Ward
	Councillor R Senathirajah	Melvista Ward
	Councillor L J McManus	Coastal Districts Ward
	Councillor K A Smyth	Coastal Districts Ward

Staff	Mr M A Goodlet	Chief Executive Officer
	Mrs L M Driscoll	Director Corporate & Strategy
	Mr P L Mickleson	Director Planning & Development
	Mr J Duff	Director Technical Services
	Mrs N M Ceric	Executive Assistant to CEO & Mayor

Public There were 3 members of the public present and 2 online.

Press Nil.

Leave of Absence (Previously Approved) Councillor N R Youngman Dalkeith Ward

Apologies Councillor N B J Horley Coastal Districts Ward
Councillor P N Poliwka Hollywood Ward

Disclaimer

Members of the public who attend Council meetings should not act immediately on anything they hear at the meetings, without first seeking clarification of Council's position. For example, by reference to the confirmed Minutes of Council meeting. Members of the public are also advised to wait for written advice from the Council prior to taking action on any matter that they may have before Council.

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1. Public Question Time

A member of the public wishing to ask a question should register that interest by notification in writing to the CEO in advance, setting out the text or substance of the question.

The order in which the CEO receives registrations of interest shall determine the order of questions unless the Mayor determines otherwise. Questions must relate to a matter affecting the City of Nedlands.

1.1 Mr Peter Robins, 10 Edward Street, Nedlands

Nedlands Council recently assessed and adopted a new Waste Management LPP approximately 6 months ago. Within a few months the City Administration claimed to have identified perceived issues with "unexpected adverse planning outcomes", to justify revisiting the newly adopted LPP at a time when many other LPPs needed urgent attention. To this time no evidence of any material adverse outcomes has been verified, and despite this, a decision was made to redraft the specific parts of the LPP that appear to restrict developer's ability to maximize development potential of rezoned Nedlands blocks. The proposed changes are all at the expense of local amenity and the valued streetscape character of Nedlands, with no real benefit to anyone except the developer, with the justification of conforming to "best practice" because other local governments are doing it.

It is hard to understand how after advertising the redrafted Waste LPP, and detailed and meaningful community feedback was provided, including concerns over significant risk, that no significant changes have been made, suggesting an agenda to "rail-road" these amendments through, with no regard to proper planning process or outcomes.

There is apparent complete disregard for risk management in relation to some changes and particularly the proposal to allow 360L bin sizes for General Waste (rather than only for Recyclables as in other suburbs such as Claremont and Cambridge). This facility for General Waste is not currently available nor recommended by Suez, who is the City of Nedlands waste contractor, and to progress these amendments will leave the City of Nedlands exposed to significant risk. Potential expensive and disastrous outcomes include having to allow double the bin numbers on the verge when 360L bins are not available,

to possibly have to hire or create a new contractor or utility specifically for Nedlands to empty these large bins, to have to redraft and advertise the Waste LPP policy for a third time and potentially to have to compensate developers that have slipped through under this flawed policy.

From a risk perspective therefore, Councillors cannot vote for this revised Waste LPP in its current form.

Question

Given the background above, wouldn't a more sensible and measured proposal for council to consider be to revisit the Waste LPP in an appropriate timeframe (e.g. 2-3 years after it was revised), when any perceived issues can be properly assessed, and appropriate risk management strategies can be put in place?

Answer

This option to revisit the Waste LPP with a different timeframe is available to Council.

2. Addresses By Members of the Public (only for items listed on the agenda)

Addresses by members of the public who have completed Public Address Session Forms will be invited to be made as each item relating to their address is discussed by the Committee.

Mr Andrew Jackson, Unit 13, 114 Stirling Highway, Nedlands PD55.20
(spoke in opposition to the recommendation)

3. Disclosures of Financial and/or Proximity Interest

The Presiding Member reminded Councillors and Staff of the requirements of Section 5.65 of the *Local Government Act* to disclose any interest during the meeting when the matter is discussed.

There were no disclosures of financial interest.

4. Disclosures of Interests Affecting Impartiality

The Presiding Member reminded Councillors and Staff of the requirements of Council's Code of Conduct in accordance with Section 5.103 of the *Local Government Act*.

4.1 Councillor Smyth – 9.1 – Responsible Authority Report – 97 Smyth Road, Nedlands – 12 Multiple Dwellings

Councillor Smyth disclosed an impartiality interest in Item 9.1- Responsible Authority Report – 97 Smyth Road, Nedlands – 12 Multiple Dwellings. Councillor Smyth disclosed that she is a Ministerial appointee and paid member of the MINJDAP that will be considering this item at a meeting scheduled for 3 December 2020 and as a consequence, there may be a perception that her impartiality on the matter may be affected. In accordance with recent legal advice from McLeods released to the local government sector in relation to a recent Supreme Court ruling, Councillor Smyth advised she will not stay in the room and debate the item or vote on the matter.

Please Note that although not participating in the debate I intend to listen to Public Questions and Addresses as I believe this is a neutral position and does not predispose a bias for the JDAP.

5. Declarations by Members That They Have Not Given Due Consideration to Papers

Councillor McManus advised that due to a family bereavement before the Meeting he has been unable to given due consideration to the Papers.

Councillor Smyth that she had not given due consideration to the Mid Year Financial Review papers.

6. Confirmation of Minutes

6.1 Committee Meeting 10 November 2020

Moved – Councillor Wetherall
Seconded – Councillor Hodsdon

The Minutes of the Council Committee held 10 November 2020 be confirmed.

**CARRIED 8/1
(Against: Cr. Bennett)**

7. Matters for Which the Meeting May Be Closed

In accordance with Standing Orders and for the convenience of the public, the Committee is to identify any matter which is to be discussed behind closed doors at this meeting and that matter is to be deferred for consideration as the last item of this meeting.

Nil.

8. Divisional Reports

Note: Regulation 11(da) of the *Local Government (Administration) Regulations 1996* requires written reasons for each decision made at the meeting that is significantly different from the relevant written recommendation of a committee or an employee as defined in section 5.70, but not a decision to only note the matter or to return the recommendation for further consideration.

8.1 Planning & Development Report No's PD55.20 to PD57.20

Planning & Development Report No's PD55.20 to PD57.20 to be dealt with at this point (copy attached yellow cover sheet).

PD55.20	Local Planning Scheme 3 – Local Planning Policy Waste Management and Guidelines - Proposed Amendments to Policy
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Committee	1 December 2020
Council	15 December 2020
Applicant	City of Nedlands
Employee Disclosure under section 5.70 Local Government Act 1995	Nil
Director	Peter Mickleson – Director Planning & Development
CEO	Mark Goodlet
Reference	Nil
Previous Item	PD38.19 – OCM 24 September 2019 PD53.19 – OCM 17 December 2019 PD06.20 – OCM 31 March 2020 CEO Item 13.8 – OCM 28 July 2020
Attachments	1. Tracked Changes Draft Waste Management Local Planning Policy (LPP) 2. Tracked Change Draft Waste Management Guidelines 3. Draft Waste Management Local Planning Policy (LPP) and Guidelines 4. Summary of Submissions – Waste Management LPP
Confidential Attachments	1. Full Submissions – Waste Management LPP

Regulation 11(da) – The Committee determined that it wished to further consider any changes to the LPP before resolving to do so.

Moved – Councillor Coghlan

Seconded – Councillor Senathirajah

That Council:

- 1. does not proceed to adopt the Waste Management Local Planning Policy and Guidelines with proposed modifications as set out in Attachment 3.**

2. **instructs the CEO to undertake further review of the Policy and Guidelines for consideration by Council.**
3. **requires that the further review includes examination of the following:**
 - a. **The appropriateness of on-site versus verge collection for a variety of development scenarios, with a presumption that multiple dwellings to provide on-site collection.**
 - b. **Clear provisions and guidance to ensure good design outcomes for on-site or verge waste collection as applicable, with a focus on the functionality and amenity of the public realm.**
 - c. **A concise method to assess the capacity of verges to accommodate waste collection where permitted, and any special measures to be applied whereby a finding of insufficient capacity requires on-site collection.**
 - d. **Detailed examination of all aspects identified in the submissions received, to contribute to and test the provisions of the Policy and Guidelines.**
 - e. **The efficacy of waste management policies and practices of other local governments for possible beneficial inputs to the Policy and Guidelines.**

Amendment

Moved – Mayor de Lacy

Seconded - Councillor Wetherall

That 3 d and e be deleted.

The AMENDMENT was PUT and was

CARRIED 5/4

(Against: Crs. Smyth Bennett Mangano & Coghlan)

The Substantive was PUT and was

CARRIED 7/2

(Against: Crs. McManus & Wetherall)

Committee Recommendation

That Council:

- 1. does not proceed to adopt the Waste Management Local Planning Policy and Guidelines with proposed modifications as set out in Attachment 3.**
- 2. instructs the CEO to undertake further review of the Policy and Guidelines for consideration by Council.**
- 3. requires that the further review includes examination of the following:**
 - a. The appropriateness of on-site versus verge collection for a variety of development scenarios, with a presumption that multiple dwellings to provide on-site collection.**
 - b. Clear provisions and guidance to ensure good design outcomes for on-site or verge waste collection as applicable, with a focus on the functionality and amenity of the public realm.**
 - c. A concise method to assess the capacity of verges to accommodate waste collection where permitted, and any special measures to be applied whereby a finding of insufficient capacity requires on-site collection.**

Recommendation to Committee

1. Proceeds to adopt Local Planning Policy Waste Management and the Waste Management Guidelines, with modifications as set out in Attachment 3, in accordance with the *Planning and Development (Local Planning Schemes) Regulations 2015* Schedule 2, Part 2, Clause 4(3)(b)(ii); and
2. Refers the Local Planning Policy Waste Management and the Waste Management Guidelines to the Western Australian Planning Commission for final approval in accordance with State Planning Policy SPP7.3 and *Residential Design Codes Volume 2 – Apartments 2019* Clause 1.2.3.

PD56.20	Amendments to the Parking Local Planning Policy (Residential Aged Care) Consideration of Submissions
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Committee	1 December 2020
Council	15 December 2020
Applicant	City of Nedlands
Employee Disclosure under section 5.70 Local Government Act 1995	Nil
Director	Peter Mickleson – Director Planning & Development
CEO	Mark Goodlet
Reference	Nil
Previous Item	Item 13.9 OCM 25 August 2020
Attachments	1. Schedule of Submissions 2. Parking Local Planning Policy as amended. 3. Submission No.4

Regulation 11(da) - The very detailed submission provided to the City makes a sound argument for 1 car bay per 2 beds particularly if the City is keen to encourage best practice aged care. The Gold standard is sometimes referred to as Alfred Carson Lodge in Claremont. This has 90 beds and approximately 50 car bays.

Moved – Mayor de Lacy
Seconded – Councillor Senathirajah

That the Recommendation to Committee be adopted subject to in clause 2b) replace the ‘3’ with the ‘2’ before the word “beds”

CARRIED 7/2
(Against: Crs. McManus & Senathirajah)

Committee Recommendation

Council:

- 1. endorses the Schedule of Submissions relating to the amendments to the Parking Local Planning Policy as contained at Attachment (1); and**
- 2. In accordance with clause 4(3)(b)(i) of Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015* proceeds without modification with the following amendments to Table 1 of the City of Nedlands Parking Local Planning Policy:**

- a) **Removing the existing minimum number of car parking bays required for a residential aged care facility of 12 or 1 per every 4 beds (whichever is greater); and**
- b) **Inserting a new minimum number of car parking bays required for a residential aged care facility of 12 or 1 per every 2 beds (whichever is greater).**

Recommendation to Committee

Council:

1. endorses the Schedule of Submissions relating to the amendments to the Parking Local Planning Policy as contained at Attachment (1); and
2. In accordance with clause 4(3)(b)(i) of Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015* proceeds without modification with the following amendments to Table 1 of the City of Nedlands Parking Local Planning Policy:
 - a) Removing the existing minimum number of car parking bays required for a residential aged care facility of 12 or 1 per every 4 beds (whichever is greater); and
 - b) Inserting a new minimum number of car parking bays required for a residential aged care facility of 12 or 1 per every 3 beds (whichever is greater).

PD57.20	Built Form Modelling and Traffic Modelling Project, Nedlands Town Centre, Broadway and Waratah Village – Budget Allocation
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Committee	1 December 2020
Council	15 December 2020
Applicant	City of Nedlands
Employee Disclosure under section 5.70 Local Government Act 1995	Nil
Director	Peter Mickleson – Director Planning & Development
CEO	Mark Goodlet
Reference	Nil
Previous Item	Nil
Attachments	<ol style="list-style-type: none"> 1. Built Form Modelling RFT – Hassell 2. Traffic Modelling RFT – ARUP 3. Nedlands Town Centre & Waratah Avenue Built Form Modelling RFQ

Regulation 11(da) – Not Applicable – Recommendation Adopted

Moved – Councillor Wetherall
 Seconded – Councillor McManus

That the Recommendation to Committee be adopted.

(Printed below for ease of reference)

CARRIED 7/2
(Against: Crs. Bennett & Mangano)

Committee Recommendation / Recommendation to Committee

Council:

- 1. approves a budget allocation of \$280,459 to the 2020/21 Planning Budget to be funded from the 2019/20-year budget surplus;**
- 2. notes a budget increase of \$45,458 (from \$235,000 to \$280,459) from the amount previously approved which accounts for the additional traffic and built form modelling for Waratah Village Precinct; and**
- 3. approves the reallocation of \$146,508.99 for built form modelling to the 2020/2021 Annual Budget and \$133,950.00 for traffic modelling to the 2020/2021 Annual Budget.**

8.2 Technical Services Report No's TS20.20

Technical Services Report No's TS20.20 to be dealt with at this point (copy attached blue cover sheet).

TS20.20	Capital Works Program Mid-Year Update
Committee	1 December 2020
Council	15 December 2020
Applicant	City of Nedlands
Employee Disclosure under section 5.70 Local Government Act 1995	Nil.
Director	Jim Duff – Director Technical Services
Attachments	Nil.
Confidential Attachments	Nil.

Regulation 11(da) – Not Applicable – Recommendation Adopted

Moved – Councillor Mangano
 Seconded – Councillor McManus

That the Recommendation to Committee be adopted.
 (Printed below for ease of reference)

CARRIED 7/2
(Against: Crs. Smyth & Senathirajah)

Committee Recommendation / Recommendation to Committee

Council:

- 1. endorses the proposed changes to the Capital Works Program; and**
- 2. approves the allocation of budget for initiation activities for future Financial Year's projects.**

8.3 Community Development No's CM11.20

Report No's CM11.20 to be dealt with at this point (copy attached orange cover sheet).

CM11.20	Hollywood Subiaco Bowling Club – Request for Financial Support
Committee	1 December 2020
Council	15 December 2020
Applicant	Hollywood Subiaco Bowling Club
Employee Disclosure under section 5.70 Local Government Act 1995	Nil
Director	Lorraine Driscoll – Director Corporate & Strategy
Attachments	1. Letter from Hollywood Subiaco Bowling Club 2. Profit and Loss Statement.
Confidential Attachments	Nil.

Regulation 11(da) – The Committee wished to encourage financial sustainability of the Club and also wished to increase financial support given the importance of the Club in the City.

Moved – Mayor de Lacy
Seconded – Councillor Wetherall

That the Recommendation to Committee be adopted subject to:

In clause 1 after the word ‘Club’ include the following “and its efforts to better position itself to generate revenue;”

Replace clause 2 with ‘authorises Administration to continue allowing the Hollywood Subiaco Bowls Club to retain 100% of sublease income from Sand Sports Australia until the declared State of Emergency ends; and’

CARRIED UNANIMOUSLY 9/-

Committee Recommendation

Council:

- 1. acknowledges the financial difficulties being experienced by the Hollywood-Subiaco Bowling Club and its efforts to better position itself to generate revenue;**
- 2. authorises Administration to continue allowing the Hollywood Subiaco Bowls Club to retain 100% of sublease income from Sand Sports Australia until the declared State of Emergency ends; and**
- 3. requests the Club to advise the City if their financial position declines further.**

Recommendation to Committee

Council:

1. acknowledges the financial difficulties being experienced by the Hollywood-Subiaco Bowling Club;
2. authorises Administration to recommence collecting 30% of sub lease income, as of 1 July 2020; and
3. requests the Club to advise the City if their financial position declines further.

8.4 Corporate & Strategy Report No's CPS30.20

Report No's CPS30.20 to be dealt with at this point (copy attached green cover sheet).

CPS30.20	List of Accounts Paid – October 2020
Committee	1 December 2020
Council	15 December 2020
Applicant	City of Nedlands
Employee Disclosure under section 5.70 Local Government Act 1995	Nil.
Director	Lorraine Driscoll – Director Corporate & Strategy
Attachments	1. Creditor Payment Listing – October 2020 2. Credit Card and Purchasing Card Payments – October 2020 (28 September – 27 October 2020)
Confidential Attachments	Nil.

Regulation 11(da) – Not Applicable – Recommendation Adopted

Moved – Councillor McManus
Seconded – Councillor Senathirajah

That the Recommendation to Committee be adopted.
(Printed below for ease of reference)

CARRIED 8/1
(Against: Cr. Coghlan)

Committee Recommendation / Recommendation to Committee

Council receives the List of Accounts Paid for the month of October 2020 as per attachments.

9. Reports by the Chief Executive Officer

9.1 Responsible Authority Report – 97 Smyth Road, Nedlands – 12 Multiple Dwellings

Committee	1 December 2020
Applicant	Urbanista Town Planning / AoYo Real Estate Pty Ptd
Landowner	AoYo Real Estate Ptd Ltd
Director	Peter Mickleson – Director Planning & Development
Employee Disclosure under section 5.70 Local Government Act 1995	Nil
Report Type Information Purposes	Item provided to Council for information purposes.
Reference	DA 20-52231 (DAP/20/01834)
Previous Item	Nil
Delegation	Not applicable – Joint Development Assessment Panel application.
Attachments	1. Responsible Authority Report and Attachments – available at: https://www.dplh.wa.gov.au/about/development-assessment-panels/daps-agendas-and-minutes

Councillor Smyth – Impartiality Interest

Councillor Smyth disclosed that she is a Ministerial appointee and paid member of the MINJDAP that will be considering this item at a meeting scheduled for 3 December 2020 and as a consequence, there may be a perception that her impartiality on the matter may be affected. In accordance with recent legal advice from McLeods released to the local government sector in relation to a recent Supreme Court ruling, Councillor Smyth advised she will not stay in the room and debate the item or vote on the matter.

Please Note that although not participating in the debate I intend to listen to Public Questions and Addresses as I believe this is a neutral position and does not predispose a bias for the JDAP.

Councillor Smyth left the meeting at 8.46 pm.

Regulation 11(da) – The Committee agreed to support this development application due to the low number of objections. The proposed conditions deal with many of the planning issues.

Moved – Mayor de Lacy

Seconded – Councillor Hodsdon

Council Resolution

That Council:

- 1. notes the Responsible Authority Report for the proposed 12 Multiple Dwelling development at 97 Smyth Road, Nedlands.**
- 2. agrees to appoint Councillor Hodsdon to co-ordinate the Council's submission and presentation to the Metro Inner-North JDAP.**
- 3. supports approval of the development; and**
- 4. should the JDAP approve this development application condition 23 d) be replaced with the following:**

23d) Prior to occupation, the solid vertical fin screening on the approved plans is to be installed to prevent sideways views into the adjoining properties; and

14 becomes 14a and the following conditions of approval be added:

14b) Dilapidation Reports shall be conducted prior to demolition and/or excavation works for all adjoining property owners at the cost of the development applicant.

14c) All adjoining property owners, as listed in 14b, will be notified in writing at least 14 days prior to the commencement of demolition and/or excavation works.

CARRIED 5/3

(Against: Crs. Bennett Mangano & Coghlan)

Recommendation to Council

That Council:

- 1. notes the Responsible Authority Report for the proposed 12 Multiple Dwelling development at 97 Smyth Road, Nedlands.**
- 2. agrees to appoint Councillor..... and Councillor.....to co-ordinate the Council's submission and presentation to the Metro Inner-North JDAP.**

3. does/does not (remove one) support approval of the development; and
4. provides the following reasons for the Council's position on the application
 - a. ...
 - b. ...

1.0 Executive Summary

An application for the development of 12 multiple dwellings in a three storey building at 97 Smyth Road, Nedlands was received on 11 August 2020. The application has been made to the Metro Inner-North Joint Development Assessment Panel (JDAP). Administration has prepared a Responsible Authority Report (RAR) in accordance with the DAP Regulations.

The purpose of this report is to provide Council the RAR as prepared by Administration and to allow Council to consider making a submission to the JDAP.

2.0 Background

The City originally received the JDAP application for 97 Smyth Road, Nedlands on 11 August 2020. The 3-storey building will comprise 12 multiple dwellings (apartments) of 1-2 bedrooms. The site is zoned Residential with a density code of R60. Surrounding properties to the north and west are coded R60. The property immediately to the south is coded R160.

The application was advertised for public comment from 19 September to 16 October 2020.

The Metro Inner-North Joint Development Assessment Panel will consider the application on 3 December 2020.

3.0 Application Details

The applicant seeks development approval for a residential development comprising 12 multiple dwellings over 3 storeys, with ground level parking. The building is proposed as follows:

- A ground floor comprising one 1 bedroom 1-bathroom apartment and one 2-bedroom 2-bathroom apartment.
- Two upper floors will each comprise two 1 bedroom 1-bathroom studio apartments and three 2-bedroom 2-bathroom apartments.
- Communal facilities comprising open space, alfresco with BBQ and indoor communal area.

- A total of 15 resident car parking spaces will be provided at ground level. Three visitor car parking spaces are to be provided.

4.0 Consultation

In accordance with the City's Local Planning Policy – Consultation of Planning Proposals, the development proposal is considered a Complex Application. The application was advertised for over three weeks, commencing on 19 September 2020 and concluding on 16 October 2020.

Administration received a total of 12 submissions during the public consultation period, of which 10 objected, 1 supported and 1 provided neither support nor objection to the development.

5.0 Recommendation to JDAP

The proposal was assessed against the element objectives of the Residential Design Codes Volume 2. This found that the development is compliant with the element objectives. Although generally consistent with the acceptable outcomes for visual privacy, a number of conditions are recommended to address the concerns of neighbouring properties.

Given the compliance with the element objectives of the R-Codes and the aims and objectives of the Scheme, Administration is recommending the application be approved with conditions.

6.0 Conclusion

Administration has prepared a Responsible Authority Report to the Metro Inner-North Joint Development Assessment Panel recommending conditional approval for the development of 12 multiple dwellings at 97 Smyth Road, Nedlands. Council may wish to make a submission to the Panel on the application. This submission will be presented to the Panel for consideration at its meeting on 3 December 2020.

Councillor Smyth returned to the meeting at 9.09 pm.

97 SMYTH ROAD, NEDLANDS – PROPOSED 12 MULTIPLE DWELLINGS

Form 1 – Responsible Authority Report (Regulation 12)

DAP Name:	Metro Inner-North JDAP	
Local Government Area:	City of Nedlands	
Applicant:	Urbanista Town Planning	
Owner:	AoYo Real Estate Pty Ltd	
Value of Development:	\$2.2 million <input type="checkbox"/> Mandatory (Regulation 5) <input checked="" type="checkbox"/> Opt In (Regulation 6)	
Responsible Authority:	City of Nedlands	
Authorising Officer:	Peter Mickleson, Director Planning and Development Services	
LG Reference:	DA20-52231	
DAP File No:	DAP/20/01834	
Application Received Date:	11 August 2020	
Report Due Date:	20 November 2020	
Application Statutory Process Timeframe:	90 Days	
Attachment(s):	1. Development Plans 2. Landscaping Plan 3. Applicant's Report 4. Waste Management Plan 5. Acoustic Report 6. Traffic Impact Statement 7. Architectural design review 8. Applicant's response to design review 9. R-Codes assessment	
Is the Responsible Authority Recommendation the same as the Officer Recommendation?	<input type="checkbox"/> Yes	Complete Responsible Authority Recommendation section
	<input checked="" type="checkbox"/> N/A	
	<input type="checkbox"/> No	Complete Responsible Authority and Officer Recommendation sections

Responsible Authority Recommendation

That the Metro Inner-North Joint Development Assessment Panel resolves to:

1. Approve DAP Application reference DAP/20/01834 and accompanying plans date stamped 6 November 2020 in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, and the provisions of City of Nedlands Local Planning Scheme No. 3, subject to the following conditions:

Conditions

1. Pursuant to clause 26 of the Metropolitan Region Scheme, this approval is deemed to be an approval under clause 24(1) of the Metropolitan Region Scheme.
2. This decision constitutes planning approval only and is valid for a period of four (4) years from the date of approval. If the subject development is not substantially commenced within the specified period, the approval shall lapse and be of no further effect.
3. The development shall at all times comply with the application and the approved plans, subject to any modifications required as a consequence of any condition(s) of this approval.
4. Prior to occupation of the development the finish of the parapet / retaining walls is to be finished externally to the same standard as the rest of the development or in:
 - face brick;
 - painted render;
 - painted brickwork; or
 - other clean material as specified on the approved plans and maintained thereafter to the satisfaction of the City of Nedlands.
5. All stormwater generated on site is to be retained on site. An onsite storage/infiltration system is to be provided within the site for at least 1 in 20-year storms event. No stormwater will be permitted to enter the City of Nedlands's stormwater drainage system unless otherwise approved.
6. Prior to the issue of a building permit, the applicant shall submit a schedule of materials, colours, finishes and textures for the development to the satisfaction of the City of Nedlands.
7. Prior to occupation of the development, each dwelling unit shall be provided with mechanical clothes driers or alternatively shall have an adequate area provided for drying clothes. Any drying area shall be screened from view from any adjacent public place to the satisfaction of the City of Nedlands.
8. Prior to occupation of the development, all external fixtures including, but not limited to TV and radio antennae, satellite dishes, plumbing vents and pipes, solar panels, air conditioners, hot water systems and utilities shall be integrated into the design of the building and not be visible from the primary street, secondary street to the satisfaction of the City of Nedlands.
9. Prior to occupation of the development, all air-conditioning plant, satellite dishes, antennae and any other plant and equipment to the roof of the building shall be located or screened so as not to be highly visible from beyond the boundaries of the development site to the satisfaction of the City of Nedlands.
10. A minimum of three (3) units are to be designed at building permit stage to the Silver Level requirements as defined in the Liveable Housing Design Guidelines (Liveable Housing Australia) and implemented prior to occupation.

11. Prior to the issue of a building permit, a detailed landscaping plan shall be submitted to and approved by the City of Nedlands and such landscaping is to be installed and maintained by the landowner in accordance with that plan, or any modifications approved thereto, for the lifetime of the development thereafter, to the satisfaction of the City of Nedlands. The landscaping to be maintained includes the existing trees to be retained or relocated.
12. Prior to the issue of a building permit, an arborist report and tree retention plan shall be submitted to the City of Nedlands, demonstrating that the construction and built development will not adversely affect the health of the tree to be retained on site, to the satisfaction of the City of Nedlands.
13. Prior to the commencement of physical works, a tree protection zone (TPZ) in accordance with AS 4970-2009, is to be established and maintained around each existing tree shown for retention for the duration of the development to the satisfaction of the City of Nedlands. The following restrictions and conditions apply to the TPZ:
 - install protective fencing to prevent any damage to the trees in general accordance with Section 4.3 of AS4970-2009;
 - provide signage identifying the 'Tree Protection Zone' on exclusion fencing;
 - no materials are to be stored within the TPZ;
 - no vehicles or machines are to be driven or parking within the TPZ;
 - ensure trees are protected from harm during works on site; and
 - no tree roots within the TPZ are to be cut or damaged.

A qualified arborist must approve any modification to a TPZ.

14. A Demolition and Construction Management Plan addressing the control of; vibration, dust, noise, waste, sand, sediment, temporary fencing, hoardings, gantries, site access / egress, site deliveries, heavy construction machinery and traffic control shall be provided to the City of Nedlands with or before the demolition permit and building permit approval applications are submitted.
15. Prior to the issuing of a building permit the landowner is to demonstrate compliance with the recommendations within the acoustic report completed by Hewshott Acoustics dated 5 August 2020 to the City's satisfaction. Where detailed acoustic assessment is recommended to achieve compliance with the requirements of the Environmental Protection (Noise) Regulations 1997 this is to be undertaken.

16. Prior to the issue of a building permit, a noise management plan is to be submitted detailing measures that will be undertaken to ensure noise levels are kept within levels prescribed in the Environmental Protection (Noise) Regulations 1997. The plan is to be prepared by a suitably qualified consultant and is to include:
- sound proofing measures used in the design and construction of the development;
 - separation of noise-emitting equipment from bedroom windows and walls to habitable rooms;
 - predictions of noise levels;
 - control measures to be undertaken (including monitoring procedures);
 - a complaint response procedure; and
 - demonstration of all dwellings exceeding the minimum requirements of the National Construction Code as it relates to acoustic management.

All sound attenuation measures, identified by the plan or as additionally required by the City, are to be implemented prior to occupancy of the development or as otherwise required by the City and the requirements of the plan are to be observed at all times.

17. Prior to the issue of a building permit, the development shall be required to incorporate noise mitigation measures as required by the State Planning Policy 5.4 – Road and Rail Noise, to the satisfaction of the City of Nedlands.
18. A Waste Management Plan prepared in accordance with the City of Nedlands Waste Management Local Planning Policy and Guidelines is to be submitted and approved by the local government at the building permit stage, implemented prior to occupation and maintained at all times.
19. The applicant shall arrange a suitably qualified consultant to prepare a lighting plan which demonstrates that the proposed development will not cause adverse amenity impacts on the surrounding locality and comply with the relevant Australian Standard:
- a) a full site plan indicating the proposed siting of lighting columns including details of their proposed height;
 - b) times of operation;
 - c) a Management Plan to detail the methods that will be employed to mitigate the impacts of light penetration and glare to the occupiers of adjacent property, including the use of an automatic timing device;
 - d) details of orientation and hooding and/or other measures to minimise their impact in the interests of pedestrian and/or vehicular safety and amenity; and
 - e) details where the proposed floodlighting is sited in close proximity to residential property, the spread of lighting from the lighting installation must be restricted in accordance with the relevant Australian Standard.
20. All car parking dimensions, manoeuvring areas, crossovers and driveways shall comply with Australian Standard AS2890.1 (as amended) to the satisfaction of the City of Nedlands.

21. The visitor parking bays are to be clearly marked, signposted and made available to visitors at all times through use of an intercom system or similar, to the satisfaction of the City of Nedlands.
22. The bicycle rack shall be installed prior to occupation of the development and maintained for the life of the development to the satisfaction of the City of Nedlands.
23. Screening:
 - a. Screening of balconies as shown on the approved plans to be installed prior to occupation.
 - b. Balcony balustrading to be obscure glaze or solid material for Apartments 3, 7, 8 and 12 prior to occupation.
 - c. The south-facing living room windows to Apartments 6 and 11 to be screened to a minimum of 1.6m in height above finished floor level, or the windows modified to provide a bottom sill height of at least 1.6m above finished floor level.
 - d. The solid vertical fin screening shown on the approved plans it to be installed prior to occupation.
 - e. Horizontal screening to be installed prior to occupation to the bottom of the north facing windows to Apartments 3, 4, 8 and 9 and south-facing windows to Apartments 6, 7, 11 and 12 to prevent downwards views into the adjoining properties.
 - f. Landscaping along the northern and western boundaries of the site is to be established and maintained at all times so as to provide screening between the development and neighbouring properties.
24. All dwellings to be individually metered for water usage prior to occupation.
25. The development, hereby approved, shall at building permit stage demonstrate a minimum NATHERS rating of 6.5 stars, or one significant energy efficiency initiative described in State Planning Policy 7.3 – Residential Design Codes Volume 2 - Apartments to the satisfaction of the City of Nedlands.

Advice Notes

1. In relation to the Demolition and Construction Management Plan, the applicant is advised that the plan is to address but is not limited to the following matters:
 - a) hours of construction;
 - b) traffic management;
 - c) parking management;
 - d) access management;
 - e) management of loading and unloading of vehicles;
 - f) heavy vehicle access;
 - g) dust management;
 - h) waste management (where applicable);
 - i) protection of infrastructure and street trees within the road reserve;
 - j) the need for a dilapidation report of adjoining properties;
 - k) if required, details of and reasons for construction work on the construction site that is likely to be carried out other than between 7.00 am and 7.00 pm on any day which is not a Sunday or public holiday;
 - l) if required, details of and duration of activities on the construction site likely to result in noise emissions that fail to comply with the standard prescribed under regulation 7 of the Environmental Protection (Noise) Regulations 1997;
 - m) predictions of noise emission on the construction site;
 - n) use of City car parking bays for construction related activities;
 - o) protection of infrastructure and street trees within the road reserve;
 - p) security fencing around construction sites;
 - q) gantries;
 - r) dewatering management plan;
 - s) contact details;
 - t) site offices;
 - u) details of measures to be implemented to control noise (including vibration) emissions;
 - v) complaint response procedure to be adopted;
 - w) details of how dust will be suppressed (e.g. by use of water tanker, independently powered water pumps, high volume hoses) or whether an approval from the water corporation for hydrant standpipe has been granted;
 - x) details of how dust and sand drift will be controlled in the event that the landscape remains bare for any period of time after demolition (consideration of more permanent dust suppression or sand drift measures such as hydromulching); and
 - y) any other relevant matters.

2. The applicant is advised that the responsible entity (landowner) is responsible for the maintenance of the common property (including roads) within the development.

3. The applicant is advised that in relation to the lighting plan:
 - a) a Suitably qualified lighting consultant – is to be a Member of the illuminating Engineering Society of Australia and New Zealand;
 - b) the Relevant Australian Standard is Australian Standard AS.4282 – Control of the Obtrusive Effects of Outdoor Lighting; and
 - c) certification by a suitably qualified lighting consultant shall demonstrate that the development is in compliance with the relevant Australian Standard. On completion of the installation, the consultant is to confirm that the lighting conforms to the relevant Australian Standard and if not, remedial measures are to be undertaken to rectify the situation and bring about compliance with the relevant Australian Standard. The requirement for confirmation certification on completion of the installation is to be included as a condition on all planning approvals granted by the City.

4. The applicant is advised that prior to the commencement of any demolition works, any Asbestos Containing Material (ACM) in the structure to be demolished, shall be identified, safely removed and conveyed to an appropriate landfill which accepts ACM.

Removal and disposal of ACM shall be in accordance with Health (Asbestos) Regulations 1992, Regulations 5.43 - 5.53 of the Occupational Safety and Health Regulations 1996, Code of Practice for the Safe Removal of Asbestos 2nd Edition, Code of Practice for the Management and Control of Asbestos in a Workplace, and any Department of Commerce Worksafe requirements.

Where there is over 10m² of ACM or any amount of friable ACM to be removed, it shall be removed by a Worksafe licensed and trained individual or business.

5. The applicant is advised that:
 - a. Submitted Waste Management Plan will require modification to correct / clarify a number of matters including:
 - i. Bin placement for verge collection;
 - ii. Operation of the bin compactor;
 - iii. Confirmation of arrangements if 'FOGO' is introduced; and
 - iv. Confirmation of bin store layout.
 - b. The maximum number of 240L bins allowed on the verge for collection is 8 in total (which includes 3x240L City of Nedlands weekly waste bins and 5x City of Nedlands fortnightly recycling bins).
 - c. Any internal bins used by each unit shall be purchased and maintained by the developer by private arrangement.

6. The applicant is advised that all downpipes from guttering are to be connected so as to discharge into drains, which shall empty into a soak-well; and each soak-well shall be located at least 1.8m from any building, and at least 1.8m from the boundary of the block. Soak-wells of adequate capacity to contain runoff from a 20-year recurrent storm event. Soak-wells are to be a minimum capacity of 1.0m³ for every 80m² of calculated surface area of the development.

7. The applicant is advised that a sewage treatment and effluent disposal system or greywater reuse or treatment system is not to be installed unless an Approval to Construct or Install an Apparatus for the Treatment of Sewage has been issued by the City beforehand.
8. The applicant is advised that:
 - a. All internal water closets and ensuites without fixed or permanent window access to outside air or which open onto a hall, passage, hobby or staircase, are to be serviced by a mechanical ventilation exhaust system which is ducted to outside air, with a minimum rate of air change equal to or greater than 25 litres / second.
 - b. Laundry facilities are to be provided in accordance with the Building Code of Australia, and adequately ventilated to reduce condensation, in accordance with AS1668.2 The use of mechanical ventilation and Air-conditioning in buildings.
9. The applicant is advised that developers are responsible for providing telecommunications infrastructure in their developments. To provide this infrastructure, they need to contract a carrier to install telecommunications infrastructure in their new development. If you choose National Broadband Network (NBN) to service your development, you will need to enter into a developer agreement with NBN. The first step is to register the development via <http://www.NBNco.com.au/develop-orplanwiththeNBN/newdevelopments.html>, once registered NBN will be in contact to discuss the specific requirements for the development. NBN requires you to apply at least six months before the required service date. All telecommunications infrastructure should be built to NBN guidelines found at <http://www.NBNco.com.au/develop-or-plan-withtheNBN/newdevelopments/builders-designers.html>.
10. The applicant is advised to consult the City's Acoustic Advisory Information in relation to locating any mechanical equipment (e.g. air-conditioner, swimming pool or spa) such that noise, vibration impacts on neighbours are mitigated. The City does not recommend installing any equipment near a property boundary where it is likely that noise will intrude upon neighbours. Prior to selecting a location for an air-conditioner, the applicant the applicant is advised to consult the online fairair noise calculator at www.fairair.com.au and use this as a guide to prevent noise affecting neighbouring properties.
11. The applicant is advised that as the proposal consists of more than 3 dwellings, the City's Health Local Laws 2017 require an enclosure for the storage and cleaning of waste receptacles to be provided on the premises, per the following requirements:
 - a) sufficient in size to accommodate all receptacles used on the premises;
 - b) constructed of brick, concrete, corrugated compressed fibre cement sheet or other material of suitable thickness approved by the City;
 - c) walls not less than 1.8m in height and access of not less than 1.0 metre in width fitted with a self-closing gate;
 - d) smooth and impervious floor not less than 75mm thick and evenly graded to an approved liquid refuse disposal system;
 - e) easily accessible to allow for the removal of the receptacles;

- f) provided with a ramp into the enclosure having a gradient of no steeper than 1:8 unless otherwise approved by the City;
 - g) provided with a tap connected to an adequate supply of water;
 - h) adequately ventilated, such that they do not create a nuisance to residences (odour); and
 - i) the location of all exhaust systems, ductwork and any other mechanical service is not to be such that it will cause a nuisance for residents.
12. The applicant is advised that dust control measures are to be applied during construction in accordance with City of Nedlands Health Local Laws 2017 and Department of Water and Environmental Regulation requirements.
13. The applicant is advised that:
- a. The applicant is advised that all works within the adjacent thoroughfare, i.e. road, kerbs, footpath, verge, crossover or right of way, also require a separate approval from the City of Nedlands prior to construction commencing.
 - b. A new crossover or modification to an existing crossover will require a separate approval from the City of Nedlands prior to construction commencing.
 - c. All redundant crossovers to be removed and the verge and kerbing reinstated prior to occupation of the development to the satisfaction of the City of Nedlands.
 - d. The contractor/developer shall protect the City's street trees from any damage that may be caused by the scope of works covered by this contract for the duration of the contract. All work carried out under this contract is to comply with the City's policies, guidelines and Australian Standards relating to the protection of trees on or adjacent to development sites (AS 4870-2009).
 - e. All street tree assets in the nature-strip (verge) shall not be removed. Any approved street tree removals shall be undertaken by the City of Nedlands and paid for by the owner of the property where the development is proposed, unless otherwise approved by the City of Nedlands.
 - f. Prior to commencing landscaping of the nature strip / verge, refer to the City of Nedlands' Nature Strip Improvement Guidelines to ascertain if there is a requirement to obtain a Nature Strip Improvement Permit.

Details: outline of development application

Region Scheme	Metropolitan Region Scheme
Region Scheme - Zone/Reserve	Urban
Local Planning Scheme	City of Nedlands Local Planning Scheme No. 3
Local Planning Scheme - Zone/Reserve	Residential R60
Structure Plan/Precinct Plan	N/A

Structure Plan/Precinct Plan - Land Use Designation	N/A
Use Class and permissibility:	Residential 'P' (Multiple Dwelling)
Lot Size:	1,012m ²
Existing Land Use:	Residential (Single House)
State Heritage Register	No
Local Heritage	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Heritage List <input type="checkbox"/> Heritage Area
Design Review	<input type="checkbox"/> N/A <input type="checkbox"/> Local Design Review Panel <input type="checkbox"/> State Design Review Panel <input checked="" type="checkbox"/> Other – Design Review by single practitioner
Bushfire Prone Area	No
Swan River Trust Area	No

Proposal:

Proposed Land Use	Residential (Multiple Dwelling)
Proposed Plot Ratio	0.802
Proposed No. Storeys	3
Proposed No. Dwellings	12

Background:**Application Overview**

The application proposes a total of 12 multiple dwellings within a three storey building located at 97 Smyth Road, Nedlands. The development proposes the following:

- A ground floor comprising one 1 bedroom 1 bathroom apartment and one 2 bedroom 2 bathroom apartment.
- Two upper floors will each comprise two 1 bedroom 1 bathroom studio apartments and three 2 bedroom 2 bathroom apartments.
- Communal facilities comprising open space, alfresco with BBQ and indoor communal area.
- A total of 15 resident car parking spaces will be provided at ground level. Three visitor car parking spaces are to be provided.

The following information on the application is attached to this report. All information is date stamped 1 September 2020:

- Development Plans (**Attachment 1**)
- Landscaping Plan (**Attachment 2**)
- Applicant's Report (**Attachment 3**)
- Waste Management Plan (**Attachment 4**)
- Acoustic Report (**Attachment 5**)
- Traffic Impact Statement (**Attachment 6**)

Development Context

The development is located in an established residential area approximately 120m from Stirling Highway. The site is currently developed with a single storey dwelling that appears to be over 50 years old. The front yards contains a swimming pool and brick

front wall. The driveway continues down the south side of the house to a carport located in the back yard. There is a large eucalypt located in the north western corner of the site. Additional smaller trees are in the back yard.

The site is relatively flat with a slight slope of approximately 1m from the front to the rear of the site.

Surrounding the site are neighbouring single houses of differing ages and sizes. The property to the immediate north (95 Smyth Road) is subject to an application for subdivision. This application proposes to create 4 strata lots plus common property under the same R60 density coding as applies to the subject site. The property to the immediate south is coded R160 and is currently developed for a single house of a similar age and size to the subject site.

The site is located within a R60 density area with all properties to the north, northeast and west similarly coded. Properties to the south, east and south west are coded R160.

The property at 101 Smyth Road, Nedlands is listed in the City's municipal inventory. This site is developed for 4 multiple dwellings in a two storey building. Whilst located on the municipal inventory, the site is not afforded statutory protection through a heritage list (local or state).

Existing Character

The City is currently preparing a local planning framework for the locality. This framework is currently proposed to be the Hollywood Central Transition Zone Local Planning Policy. At the time of writing this report, a draft of the document is being advertised for comment. The draft document includes analysis of the existing character of the Hollywood Central precinct, including the site. The following are the main characteristics of the precinct.

Current lot characteristics

- Regular, grid like pattern of subdivision.
- Lots generally orientated east-west.
- Relatively large residential lots, typically over 1000m² with a pocket of lots approximately 900m² in area between Smyth Road and Portland Street.
- Vehicle access from the street.
- Relatively large front and rear gardens.

Current Dwelling Typology

- Detached single houses.
- A mix of character and modern style building form. The California Bungalow, a popular style of housing in the inter war years (1920-1945), is noted as the dominant style of character home within the precinct.
- The most common building materials are face and rendered brick, with terracotta tile roofing.

Current Setbacks

- The standard street setbacks range from 3 to 6 meters.
- Front gardens are large and often heavily vegetated, with a number of mature trees.
- Side setbacks range from 0.5m to 2m, providing additional space for vegetation on the lots.

Current Building Heights

- Predominantly 1 and 2 storey single houses.

Current Architectural Style and Form

- A mix of traditional and modern building forms are observed. Attributes related to the California Bungalow, a popular style of housing in the Inter-war years (1920-1945) are also evident. California bungalow is noted for its generous verandahs, open gardens, gabled roof and balanced composition.
- Tiled roofing.
- Vertical fenestration.
- Verandahs and awnings.

Current Streetscape and Landscape

- Vehicle storage is typically in the form of enclosed garages or free-standing carports.
- Most properties do not have any front fencing.
- The streets are lined with mature trees.
- The area has wide nature strips.
- Footpaths on one side of each road.
- Rear yards are generous in size and vegetated.

Desired Future Character

The draft Hollywood Central Transition Zone Local Planning Policy includes the following statement relating to desired future character:

The Hollywood Central Transition Zone will provide for more diverse housing options for residents, within a setting that maintains streetscapes with an open aspect and mature vegetation. Each lot shall provide appropriately sized front and rear setbacks that allow for significant mature vegetation to flourish. Developments shall be constructed using materials that are respectful of the local context, reinterpreting the traditional built form of the area through the use of historic materials in modern forms. Building height will remain relatively low where the development fronts the street, with greater heights to be located centrally within the lots.

The following are valued elements in the desired future character of Hollywood Central:

- *Open, legible and attractive streetscapes;*
- *Mature vegetation interfacing with the lot boundary and street; and*
- *Aesthetic of the current architectural style and form being reinterpreted in a contemporary manner with the use of a high-quality palette of materials and finishes.*

The above statement has been adopted by Council for the purposes of advertising. Consequently, it does not form part of the local planning framework as of yet. However, it provides some assistance on future character in the absence of a developed local planning framework.

Legislation and Policy:

Legislation

- *Planning and Development Act 2005.*
- *Planning and Development (Local Planning Schemes) Regulations 2015.*
- *Planning and Development (Development Assessment Panel) Regulations 2011.*
- *Metropolitan Region Scheme.*
- *City of Nedlands Local Planning Scheme No. 3 – clauses 9, 16, 18, 32 and 34.*

State Government Policies

- *State Planning Policy 5.4 – Road and Rail Noise (SPP 5.4).*
- *State Planning Policy 7.0 – Design of the Built Environment (SPP7.0).*
- *State Planning Policy 7.3 – Residential Design Codes Volume 2 – Apartments (R-Codes Vol. 2).*

Local Policies

- *Local Planning Policy – Consultation of Planning Proposals.*
- *Local Planning Policy – Waste Management.*

Consultation:

Public Consultation

In accordance with the City's Local Planning Policy – Consultation of Planning Proposals, the development proposal is considered a Complex Application. The application was advertised from 19 September 2020 and concluding on 16 October 2020, and consisted of:

- Letters sent to all City of landowners and occupiers within a 200m radius of the site;
- A sign on site was installed at the site's street frontage for the duration of the advertising period;
- An advertisement was published on the City's website with all documents relevant to the application made available for viewing during the advertising period;
- An advertisement was placed in *The Post* newspaper published on 19 September 2020;
- A Social media post was made on one of the City's Social Media platforms on 18 September 2020;
- A notice was affixed to the City's Noticeboard at the City's Administration Offices;
- A community information session was held by City Officers on 30 September 2020, where there were approximately 7 attendees.

Administration received a total of 12 submissions during the public consultation period, of which:

- 1 submission was in support of the application;
- 1 submission was neither supportive nor objecting;
- 10 submissions objected to the proposal; and
- 5 of the submissions were from properties located within close proximity to the development site.

The schedule of the issues raised during the public consultation are tabled below.

Issue Raised	Officer comments
Visual Privacy <i>Balconies at rear look directly into neighbouring properties.</i> <i>Lack of detail regarding screening by landscaping</i> <i>Northern and southern side windows look into neighbouring private areas</i>	Four submissions from surrounding properties were received on this matter. This issue is discussed in detail in the Planning Assessment section of this report.
Parking <i>Insufficient parking</i> <i>Congested street parking caused by nearby Council office.</i>	Four submissions were received on this matter. Parking provision exceeds the acceptable outcome requirement for resident parking (15 provided, 11 required). Visitor parking meets the acceptable outcome of 3 spaces.
Landscaping <i>Lack of deep soil area</i> <i>Lack of green space</i> <i>Loss of tree canopy</i> <i>Lack of landscaping detail</i>	Five submissions were received on this matter. A revised landscaping plan has been prepared that attempts to address submissions recommending landscaped screening to assist with visual privacy control. The deep soil area for the development exceeds the 7% required as an acceptable outcome (18% provided). Tree canopy is proposed to be greater than that existing at maturity of the new trees (25%). The existing 20m diameter eucalypt canopy is to remain.
Overshadowing <i>Impact on property to the south</i>	Three submissions were received on this matter. Overshadowing of the property to the south (99 Smyth Road) is discussed in detail in the Planning Assessment section of this report.
Traffic <i>Heavy traffic on Smyth Road currently</i> <i>Will create additional traffic on Smyth Road</i> <i>Safety concerns on Smyth Road</i> <i>Traffic estimates may be optimistic</i>	Two submissions raised concerns with this matter. A traffic impact statement has been prepared for the development. This indicates that the traffic generated by the development can be accommodated on Smyth Road and the nearby intersection with Stirling Highway.
Odour <i>Odour from the bin store will impact on neighbouring property</i>	The bin store will be roofed and walled. Venting of the store will be provided to assist in odour control. The waste management plan and environmental health requirements will provide management of the bin store to reduce odour concerns.
Character <i>Out of character with area</i>	One submission raised concerns with this matter.

Issue Raised	Officer comments
<i>Lacks street appeal</i>	<p>The development will constitute a departure from the single residential nature of the area. However, more modern buildings closer to Stirling Highway establish a new character.</p> <p>The development proposes a façade that provides appropriate interface between public and private areas and visual interest through the use a various textures and materials.</p>
Support <i>Not excessively high</i> <i>Visually attractive</i>	<p>One submission supported the development.</p> <p>The development is within the acceptable outcomes for building height.</p>

Referrals/consultation with Government/Service Agencies

No referrals were required for this application.

Design Review Panel Advice

The City of Nedlands currently does not have an active Design Review Panel. In the absence of a Panel, the City refers the application for architectural and landscape architectural Design Review by suitably qualified practitioners.

For this application, an architectural review was undertaken. Insufficient landscape information was available in time to allow for a landscape architectural review. A copy of the architectural review against SPP 7.0 is included at Attachment 7. The applicant's response to the review is included at Attachment 8.

The concerns raised by the assessment are summarised below.

SPP Principle	7.0	Review Comments	Officer Response
1	Context and character	<p><u>Comment</u> The proposal fails to adequately address this design principle, and this has ramifications for the design outcome and its appropriateness for the site.</p> <p><u>Recommendation</u> The applicant would be advised to take into consideration the current context and the way that this might inform the future character of the area. A detailed analysis of the existing building stock will provide many clues that can be used to</p>	<p>The existing and proposed future character of the locality is contained in draft Local Planning Policy – Hollywood Central Transition Zone.</p> <p>The proposed development seeks to address the design guidelines proposed by the draft Policy in a manner consistent with achieving a 'leafy green' character. The façade and roof design attempt to take cues from existing architectural forms. The materials used in the building are similar to those used in surrounding homes.</p>

	<p>generate a design response appropriate to the context.</p>	<p>The more contemporary look to the building is similar to that illustrated by buildings closer to Stirling Highway.</p>
<p>2. Landscape Quality</p>	<p><u>Comment</u> The landscape design as presented appears under-developed with an overreliance on turf. This is particularly the case in the communal outdoor area and the interface with the public domain. These will impact on the amenity of the space for residents and the connection to community.</p> <p><u>Recommendation</u> It is recommended that further work is done to develop the communal open space to improve amenity. Additionally, it is recommended that the landscape to the street is developed, with the entire landscape taking into consideration the opportunity of sustainable planting and watering selections.</p>	<p>The use of lawn areas is consistent with the character of the locality. Lawn areas provide utility of use in communal open space areas, while providing a cooling effect. In this case, the communal lawn area will be located adjacent to the alfresco and BBQ area, which appears functional.</p> <p>The use of water-sensitive plantings can be addressed by standard landscaping conditions in the event of approval being granted.</p>
<p>5 Sustainability</p>	<p><u>Comment</u> Sustainability has not been adequately addressed in this proposal. No provision has been made for the incorporation of solar PV cells or water conservation. In addition, apartment layouts could be improved to get better solar access and natural ventilation. No solar shading elements have been included on the northern and western elevations.</p> <p><u>Recommendation</u> It is recommended that the applicant consider ways in which sustainability principles can be incorporated into the design of the building in order that it can improve functionality and amenity for all residents. In particular the applicant</p>	<p>The provision of at least one sustainable initiative is a requirement of acceptable outcomes for the development. It is recommended that this outcome be reflected in a condition in the event of approval being granted.</p>

	should address issues of solar access and shading.	
6 Amenity	<p><u>Comment</u> The current proposal fails to take advantage of the site's northern aspect with several bedrooms located along the building's northern edge. All apartments need to be considered through the lens of solar access, natural light and ventilation, passive surveillance and connection to outdoor spaces, visually or physically. While commendable that apartments have reached the silver liveable standard none of the carparks have the adequate dimension to achieve this rating.</p> <p><u>Recommendation</u> It is recommended that the applicant revisit the layout of the apartments on the northern edge of the building to maximise the amount of natural light to the shared living spaces. Additionally, more work is required to ensure that the communal open space provides real amenity to residents. Two carparks need to be dimensioned to achieve the silver liveable standard.</p>	<p>North-facing apartments have achieved acceptable outcomes for solar and daylight access and natural ventilation.</p> <p>There is no requirement in the R-Codes for car parking spaces to meet disabled access requirements. This requirement remains applicable only to commercial development. However, the width of a number of bays in the development is wider due to the location of columns. This will provide additional space for the opening of doors.</p> <p>It is uncertain what 'real amenity' for residents is alluding to with regards the communal open space. The open space is augmented by an alfresco area with BBQ and an indoor communal room. This will provide for flexibility in how the space can be used, maximising amenity.</p>
9 Community	<p><u>Comment</u> The current proposal misses the opportunity to connect with the broader community through the activation of the street front via planning and landscape. By placing the parking along the southern edge of the block rather than at the rear the interface with the community is diminished.</p> <p><u>Recommendation</u> It is recommended that the applicant consider the reconfiguration of the parking and the communal open space</p>	<p>The current design provides a relatively large landscaped 'back yard' consistent with the character of the locality.</p> <p>The existing front fence is a blank brick wall. This will be replaced with a visually permeable fence that incorporates horizontal slats.</p>

	<p>to enhance the interface at the street. By making a provision for parking at the rear the communal open space could be brought to the street. In addition, the activation of the street can be achieved by replanning Apartment 2. The applicant is encouraged to look closely at the existing streetscape and to observe the existing fencing, much of which has vertical elements, rather than horizontal. It is considered that this would be more in keeping with the neighbourhood.</p>	
10 Aesthetics	<p>Comments More work is required in regard to the aesthetics of the proposal in terms of the character and context in which it is being proposed as well as the future character of the area. Whilst face brick is considered appropriate to the context, it could be used more liberally, forming the base of the building and grounding it (as can be seen on houses locally). Glass balustrading is questioned as is the use of the stone cladding. Side elevations require further development and it is necessary to consider the appropriateness of glass balustrading here also (for reasons of privacy for apartment residents), as well as the need for shading elements to be integrated into the design where applicable. It is considered that the front façade needs considerable work in relation to the proportioning and hierarchy of elements. In particular the stone clad feature element is not supported and is severely compromised by the number of building elements that it interfaces with.</p>	<p>The design achieves objectives of Element 4.10 Façade Design.</p>

	<p>Recommendations</p> <p>It is recommended that the applicant first undertake a full context and character analysis in order to develop a design language that truly responds to its location. With this in mind the selection of materials and the way they are deployed across the building facades will become evident. Additionally, the applicant is advised that the incorporation of shading elements to the necessary facades will assist in the articulation of elevations. The location of the parking along the southern edge of the block is not supported and consideration should be given to the opportunities for this to be remedied.</p>	
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Planning Assessment:

The proposal has been assessed against all the relevant legislative requirements of the Scheme and State and Local Planning Policies 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:

- Aims of the Scheme
- Matters to be considered (Deemed Provisions clause 67)
- Residential Zone Objectives
- Visual privacy
- Orientation
- Tree Canopy and Deep Soil Areas
- Public Domain Interface
- Size and Layout of Dwellings
- Circulation and Common Spaces
- Plot Ratio
- Energy efficiency
- Water management and conservation
- Waste management

These matters are outlined and discussed below. A full assessment of the proposal against the Residential Design Codes Volume 2 (R-Codes) is included at Attachment 9.

Aims of the Scheme

The City has assessed the development against the relevant provisions of the Scheme as set out below.

Aims of LPS 3			
Item	Requirement	Officer Response	Satisfies
9 – Aims of Scheme	Protect and enhance local character and amenity	The development has been assessed as compliant with the Element Objectives of the R-Codes. It is considered to be generally consistent with the existing and desired future character of the area due to its setbacks, landscaping and aesthetics.	Satisfied
	Respect the community vision for the development of the district;	<p>The community vision is provided under Section 8.1.2 City of Nedlands Strategic Community Plan (2013) on page 49 of the Local Planning Strategy). It is as follows:</p> <p><i>“Our overall vision is of a harmonious community. We will have easy access to quality health and educational facilities and lively local hubs consisting of parks, community and sporting facilities and shops where a mix of activities will bring people together, strengthening local relationships. Our gardens, streets, parks will be well maintained, green and tree-lined and we will live sustainably within the natural environment. We will work with neighbouring Councils and provide leadership to achieve an active, safe, inclusive community enjoying a high standard of local services and facilities. We will live in a beautiful place.”</i></p> <p>The proposed multiple dwelling development is consistent with the community vision outlined above as it does not adversely affect any of the objectives contained within the vision statement.</p>	Satisfied
	Achieve quality residential built form outcomes for the growing population;	The development meets all element objectives of the R-Codes. It is noted that the architectural design review has raised a number of concerns.	Partly Satisfied
	To develop and support a hierarchy of activity centres	The proposal seeks to place a higher density residential development in close proximity to the Stirling Highway activity corridor.	Satisfied

	To integrate land use and transport systems	The site is located in close proximity to a high frequency public transport route (Bus Routes 102, 103, 107, 998 and 999).	Satisfied
	Facilitate improved multi-modal access into and around the district	The development includes bicycle parking (racks) for residents and visitors.	Satisfied
	Maintain and enhance the network of open space	The development does not impact the City's network of open space.	Satisfied
	Facilitate good public health outcomes	The development will not adversely affect the desired public health outcomes.	Satisfied
	Facilitate a high-quality provision of community services and facilities	A development proposal of this type and scale is not required to include community services or facilities.	N/A
	Encourage local economic development and employment opportunities	Whilst being built, the development will positively contribute to local businesses.	Satisfied
	To maintain and enhance natural resources	There is limited information on sustainability initiatives. However, this can be addressed via conditions on any approval granted.	Satisfied by condition
	Respond to the physical and climatic conditions	The east-west orientation of the site has required two of the dwellings to not receive any winter sun. However, the height and setback of the building reduces the amount of overshadowing of the property to the south when compared to a taller 'acceptable outcome' development.	Satisfied
	Facilitate efficient supply and use of essential infrastructure	The development does not negatively impact this objective.	Satisfied
16.2 – Land Use	Not applicable	Permitted Use, Residential (multiple dwellings)	Satisfied

32.1(1) - Parking	Except for development to which the R-Codes apply, every development shall provide on-site car parking spaces in accordance with any applicable local planning policy adopted by the local government.	Residential parking for this development is governed by the Residential Design Codes.	N/A
32.1(2-6) - Parking	Cash-in-lieu of parking	N/A	N/A – the City does not have a Car Parking Strategy to guide cash-in-lieu. Therefore, these scheme provisions cannot be applied.
32.4(5) – Development Standards	In relation to developments that are not subject to the R-Codes, where development standards are not specified in an approved structure plan, local development plan, and/or activity centre plan, the development standards are subject to the applicable R-Code.	The application has been assessed in accordance with the relevant provisions of the R-Codes.	Satisfied, refer Attachment 15 and below.

The City has assessed the application in accordance with the LPS Regulations, the assessment of which is provided in the table below against the relevant provisions:

Provision	Assessment
<i>(a) the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area;</i>	Refer to assessment of clause 9 of LPS 3 – Aims of Scheme.
<i>(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;</i>	The development proposal has achieved all relevant element objectives of the R-Codes and is consistent with the expected development within Residential R60.
<i>(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;</i>	<p>The Zoning Table in the Scheme classifies all residential development as a 'P' use in the Residential Zone. The suitability of the land use is not therefore, in question.</p> <p>The development itself is either generally consistent with or exceeds the default primary controls of the R-Codes.</p> <p>Whilst the development is a departure from the existing built form, it is consistent with the expected built form of the medium density code (R60) to which it relates.</p>
<i>(n) the amenity of the locality including the following —</i> <i>(i) environmental impacts of the development;</i> <i>(ii) the character of the locality;</i> <i>(iii) social impacts of the development;</i>	<p>(i) With recommended conditions of approval, the development is considered to achieve the element objectives for water and energy efficiency.</p> <p>(ii) The development is considered to respond to the prevailing character of the locality.</p> <p>(iii) Given the scale of the residential development, the City is of the view that there are no identifiable social impacts that further residents would pose.</p>
<i>(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 should be preserved.</i>	The applicant has provided a landscaping plan which outlines the species to be retained and removed. One large tree on the property will be retained and integrated into the development.

	Additions small and large trees will be planted.
(s) <i>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.</i>	The applicant has provided a Transport Impact Statement (TIS). The City's Technical Services reviewed the TIS and supports the proposed access and egress, manoeuvring and parking of vehicles.
(t) <i>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;</i>	The applicant has provided a Transport Impact Statement (TIS) which concluded that the trip generation from a development of this type and size is unlikely to materially impact the local road network.
(y) <i>any submissions received on the applications</i>	All submissions have been given due regard in accordance with this provision. A summary of the submissions was provided to the applicant and where possible have been addressed.
(zc) <i>any advice of the Design Review Panel (Supplemental provision)</i>	The City is currently preparing for the introduction of a Design Review Panel. However, it is not operational as yet. In the meantime, a process of design review of the proposal has been undertaken using a qualified architectural consultant. The design review has assessed the development against the principles of design incorporated into SPP 7.0.

Residential Zone Objectives

The table below outlines the objectives for the Residential Zone, and how the development addresses these.

Objective	Satisfied by Development?
<i>To provide for a range of housing and a choice of residential densities to meet the needs of the community</i>	Satisfied The development will provide medium density housing in a multiple dwelling format.
<i>To facilitate and encourage high quality design, built form and streetscapes throughout residential areas.</i>	Satisfied The development seeks to reflect the prevailing character of the area. The quality of development meets the Element Objectives of the R-Codes.
<i>To provide for a range of non-residential uses, which are compatible with and complementary to residential development.</i>	Not applied This development proposes residential use only.
<i>To ensure development maintains compatibility with the desired</i>	Satisfied

<p><i>streetscape in terms of bulk, scale, height, street alignment and setbacks.</i></p>	<p>The development is three storeys in height and setback sufficiently to provide a landscaped front and rear area. This has been undertaken to ensure the building sits well within the streetscape, which is characterised by large front setbacks. The retention of a large eucalypt tree in the rear setback will make a positive impact to the way the development sits in the landscape.</p>
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Given the above, the application is considered to meet the objectives for the residential zone.

Visual Privacy

A number of submissions from adjoining properties raised visual privacy as a concern. Visual privacy is controlled by Element 3.5 of the R-Codes. Acceptable Outcome A3.5.1 has not been achieved for the windows on the southern elevation for the living rooms to Apartments 6 and 11. A 3.5m setback is achieved to these windows, whereas a 4.5m setback is required under the acceptable outcome. All other windows in the development meets the acceptable outcome setback. In the event of approval, it is recommended that these windows be screened or modified to increase the bottom sill height to at least 1.6m above finished floor level. Outlook will be retained for these rooms from the east-facing windows.

A number of submissions provided suggestions regarding improving visual privacy notwithstanding the development generally complied with the acceptable outcomes. These suggestions have been considered by the proponent. Subsequently, the development has been modified to incorporate solid vertical fins onto upper floor windows on the southern and western elevations. These fins will partially screen the windows without affecting outlook. In addition to the screening elements, modifications to landscaping have been made to provide more effective screening vegetation. These modifications have been made as a result of the submissions received and are not required in order to meet acceptable outcomes. It is recommended that a condition be placed on any approval ensuring the landscaping is installed and maintained at all times in accordance with the landscape plan.

Visual privacy on the northern elevation meets acceptable outcomes. However, the potential for overlooking of the single house to the north remains a concern from submissions. It is noted that an application for subdivision of the neighbouring property to the north has been lodged and is currently being assessed. Notwithstanding the subdivision, visual privacy will remain a consideration given the 3.2m setback and number of windows. In the event of approval, it is recommended that horizontal screening be affixed to the bottom of the windows in the northern elevation of Apartments 3, 4, 8 and 9. This screening will be designed to prevent downwards views into the adjoining property.

Upper floor balconies have been partially screened to meet acceptable outcomes. The proportion of screening for the balconies to Apartments 3 and 8 exceeds Acceptable Outcome A3.5.2 as 18% of the balcony remains unscreened in lieu of 25%. This has been assessed as meeting the element objectives in that visual privacy is provided, whilst access to outlook and daylight remain.

In order to provide additional visual privacy without affecting the element objectives, it is recommended that balustrading of balconies facing into neighbouring properties are obscure glaze or solid to reduce overlooking from inside the apartments. The balconies affected are to Apartments 3, 7, 8 and 12. Obscure glaze or solid balustrading will reduce passive overlooking when seated in the living rooms of these apartments. The balustrade to the balconies for Apartments 6 and 11 can remain visually permeable given there is no living room that would look over the balcony and into surrounding properties.

Overshadowing

A number of submissions raised overshadowing as a concern, particularly to the property to the south. This property is coded R160, where there is no maximum overshadowing requirements in Acceptable Outcome 3.2.3. However, the development will overshadow the southern neighbour at midday on 21 June for 31% of the site area. This is considered acceptable given the acceptable outcomes provide for 50% overshadow had the property to the south been coded R60. It also compares favourably to the low density overshadowing of 25% applied to single houses and grouped dwellings.

This development has met the elements objectives for Element 3.2. Whilst overshadowing is a concern for the property to the south, the development has minimised the impacts as far as practicable.

Tree Canopy and Deep Soil Areas

Tree canopy and deep soil areas are controlled by Element 3.3 of the R-Codes. This development meets all acceptable outcomes with the exception of A3.3.5. Three medium-sized trees are proposed. One tree will be located in the front setback adjacent to the bin store. The deep soil area provided on the site is 9m² with a width of 1.8m. The acceptable outcome is 36m² and 3m respectively. However, the reduced deep soil area and width is offset by the tree being planted in an area that abuts the road verge where an additional 40m² of rootable soil zone is available.

The two medium trees located on the rear boundary are to be located in deep soil area of 9m² with a width of 1.5m. As this area abuts a paved car parking area, there is additional rootable soil zone available, which reduces the recommended deep soil area width to 2m. The trees will also be located on a boundary where DSA/rootable zone area is present on the neighbouring property.

All element objectives of Element 3.3 have been appropriately addressed by this development.

Public Domain Interface

Public domain interface is controlled by Element 3.6 of the R-Codes. The development complies with the acceptable outcomes for the Element with the exception of A3.6.1 relating to the majority of ground floor dwellings fronting onto a street have direct access. The development proposes Apartment 2 to front the street. However, it will not have direct access via a private terrace or similar. The access into the private open space is from the side (north) side of the apartment. Whilst access is provided into the street setback area, it is indirect. This is offset by windows from Beds 1 and 2 looking

directly into the street setback area. The space is also overlooked from the apartments above.

All element objectives of Element 3.6 have been appropriately addressed by this development.

Size and Layout of Dwellings

Size and layout of dwellings is controlled by Element 4.3 of the R-Codes. The development complies with the acceptable outcomes for this element, with the exception of:

- The internal area of Apartment 2 is 70m² (72m² acceptable outcome).
- Apartment 1 Master Bedroom is 9m² (10m² acceptable outcome) with a minimum dimension of 2.9m (3.0m acceptable outcome).
- Apartment 2 Bedroom 2 has a minimum dimension of 2.9m (3.0m acceptable outcome).

These departures are considered minor in nature and do not undermine the ability for the development to meet the element objectives. The reduced sizes continue to allow each room to have flexibility in furniture arrangement and natural ventilation and daylight access is afforded.

Circulation and Common Spaces

Circulation and common spaces are controlled by Element 4.5 of the R-Codes. The development meets the acceptable outcomes with the exception of A4.5.1 corridor width. It is noted that the circulation corridors for the upper floors will be 1.3m wide. The acceptable outcome is 1.5m. However, the reduced width is offset by the 'straight line' design of the corridors on the upper floors. There are no changes of direction that would warrant additional width to accommodate moving of furniture. The entry landing to the lift on upper floors is wider (1.7m), which will allow for manoeuvring.

All element objectives of Element 4.5 have been appropriately addressed by this development.

Plot Ratio

Plot ratio is controlled by Element 2.5 of the R-Codes. The acceptable outcome for plot ratio for R60 developments is 0.8. This development proposes a plot ratio of 0.802, which equates to 2m² of additional plot ratio area. This is considered within the margin of error for calculation of plot ratio given the assessment uses a scaled PDF version of the plans rather than utilising a drafting program.

Energy Efficiency

Energy efficiency is controlled by Element 4.15 of the R-Codes. In order for the development to meet the Element Objectives, it is recommended that a condition requiring provision of at least one energy efficiency initiative is included in any approval. Alternatively, all dwellings are to exceed the minimum NATHERS requirements for apartments by 0.5 stars.

Water Management and Conservation

Water management and conservation is controlled by Element 4.16 of the R-Codes. Conditions relating to stormwater management and individual water meters are recommended in order to meet the Element Objectives.

Waste Management

Waste management is controlled by Element 4.17 of the R-Codes and the City's Local Planning Policy and Guidelines relating to Waste Management. A draft Waste Management Plan has been prepared and reviewed by the City of Nedlands. There are number of matters that remain unresolved. However, there are no matters that prevent the granting of conditional planning approval. These matters include:

- Bin placement for collection on the verge;
- Bin compactor operation;
- Confirmation of arrangements if 'FOGO' is introduced; and
- Confirmation of bin store layout.

The City's waste guidelines prevent use of compactors for recycling. However, the City's revised Waste Management Policy currently undergoing public advertising permits the application of a discretionary approval based on the merits of the particular application as assessed on a 'case by case' basis. Therefore, the City supports the use of compactors for recycling bins for the following reasons;

- The recent approvals under very similar circumstance sets the precedent for the decision maker to grant an approval regardless of the City's concerns with compaction of recyclable material.
- Compaction of recyclable material has the potential to reduce the overall number of bins on the verge and avoids adverse amenity impacts on the streetscape
- Non-compaction of waste material will result in the development needing to be redesigned to accommodate a larger bin store or use inside service resulting in poor built form outcomes (in terms of over height/width vehicle entrance to accommodate a waste truck)

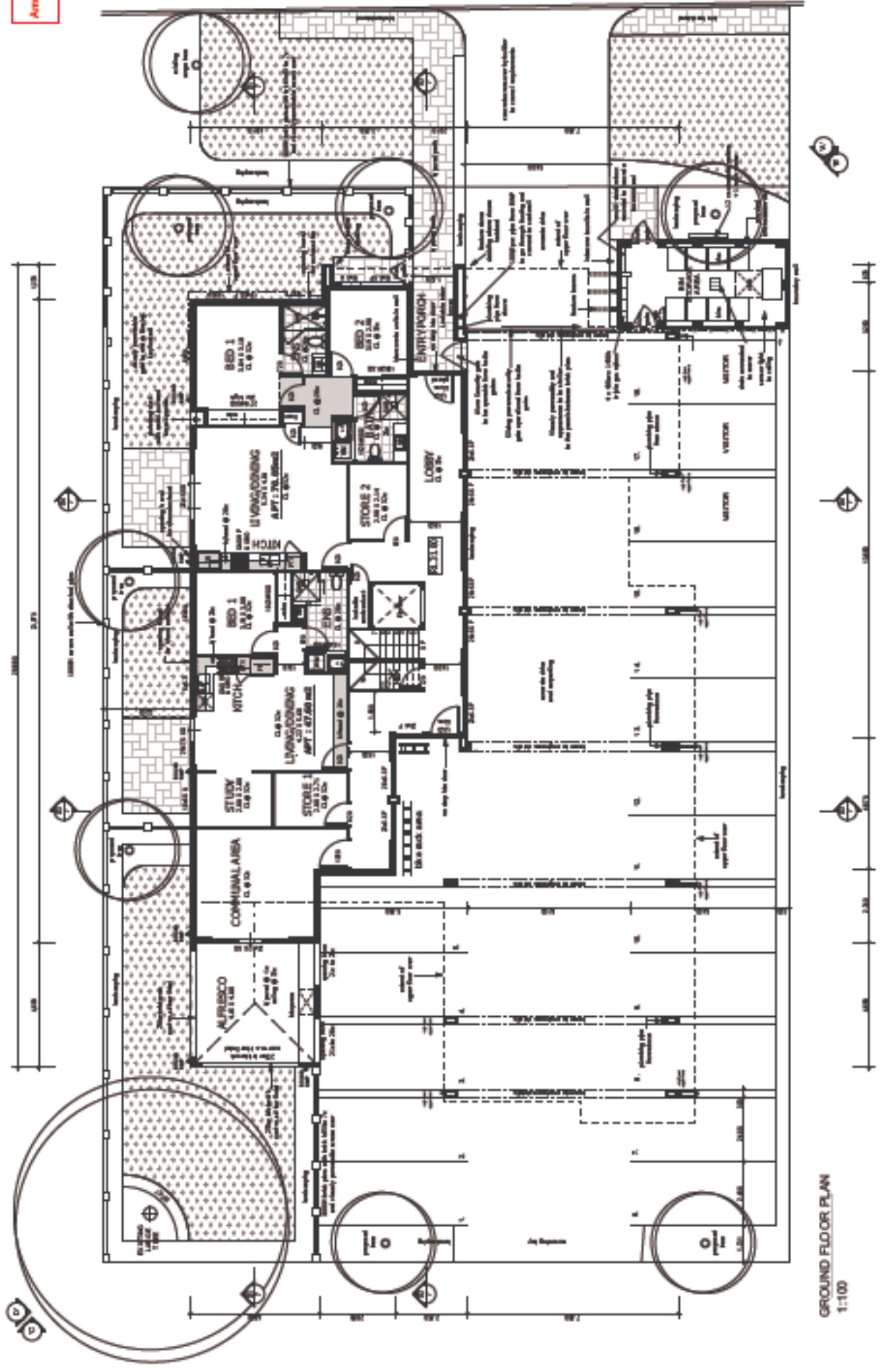
It is recommended that a condition be placed on any approval that requires the preparation, approval and implementation of a Waste Management Plan in accordance with the City's Waste Management Guidelines.

Conclusion:

This development has been assessed as consistent with the Scheme and the element objectives of the R-Codes. There are no significant areas of discretion applied, with all element objectives having been appropriately achieved. The concerns of neighbouring property submitters regarding visual privacy have been addressed through recommended conditions of any approval granted.

The architectural design review identified a number of matters that remain unresolved against the design principles of SPP 7.0. However, the merits of the development are suitably strong to warrant a recommendation for conditional approval with the issues raised considered to be minor in nature.

The development is on balance able to be supported given that it has provided adequate setbacks, does not maximise building height and can accommodate appropriate visual privacy measures.



GROUND FLOOR PLAN
1:100

PROJECT CONTRACTIONS	
LUTYANA	2017-2018
R. COOK	R. 08
PLOTTATO ALONSO (RESIDENTIAL INC)	04
BURTON HENRY	10/2018
NEWMAN PROPERTY SERVICE	20
HENSLIN ENGINEERING	20
HENSLIN ENGINEERING	20

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A2

AS PER A22000
"RESIDUAL"
AND A22000
"RESIDUAL"
"RESIDUAL"
"RESIDUAL"

PROPOSED RESIDENCE FOR
ALOYO GROUP PTY LTD
LOT 206 (887)
SMYTH ROAD,
NEDLANDS

DATE: []/ []/ []
REVISION: []

DATE	REVISION	DETAIL	TABLE

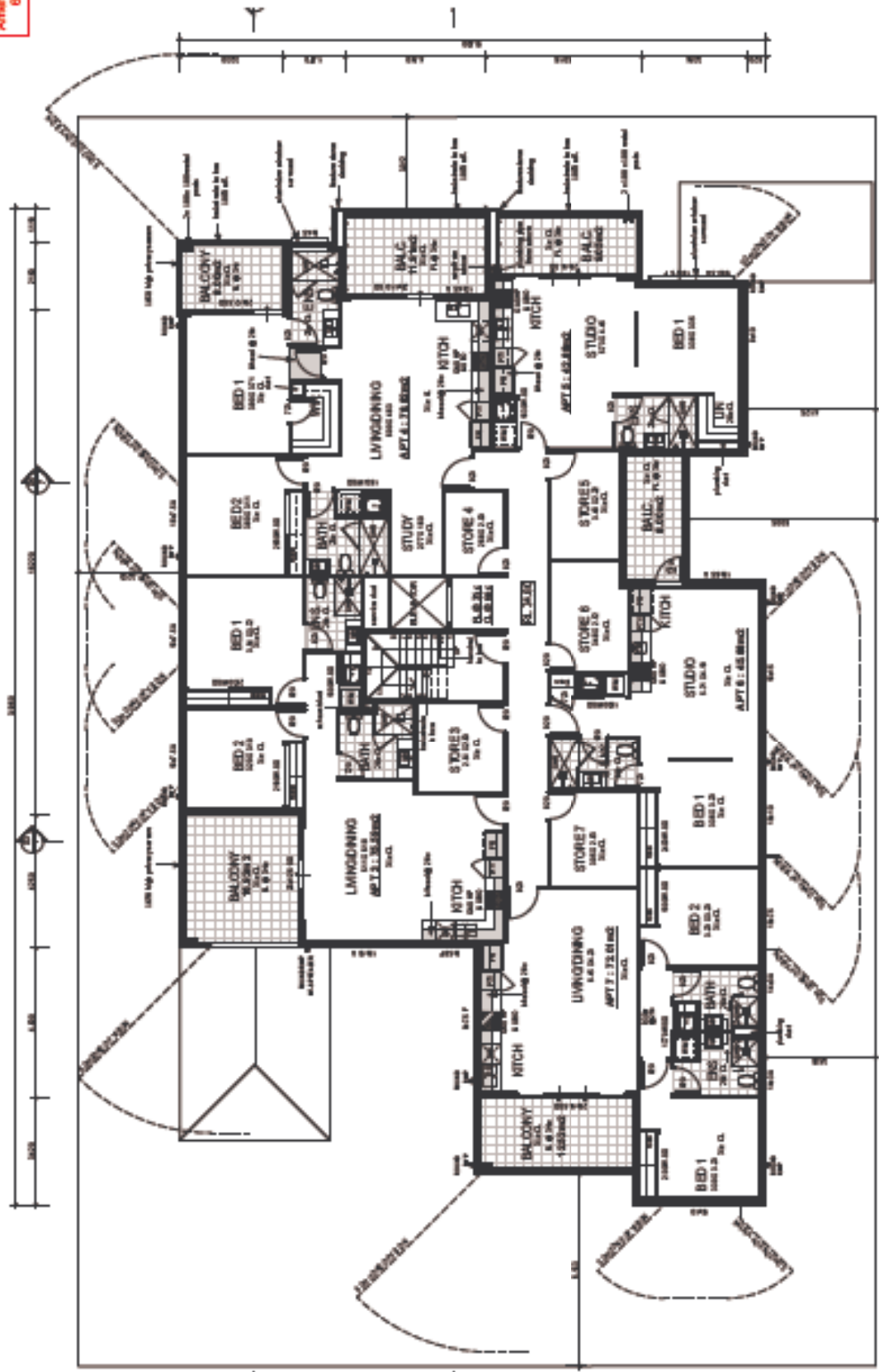
JOB No: 20-12

DESIGNER: CW

FLOOR PLAN

SHEET 1 OF 12

COORDINATOR: []



FIRST FLOOR PLAN
1:100

PLOT BAYDO AREA BY APARTMENT	
LAVET 1	61.00m ²
LAVET 2	76.00m ²
LAVET 3	74.00m ²
LAVET 4	78.00m ²
LAVET 5	61.00m ²
LAVET 6	61.00m ²
LAVET 7	71.00m ²
LAVET 8	74.00m ²
LAVET 9	78.00m ²
LAVET 10	61.00m ²
LAVET 11	61.00m ²
LAVET 12	74.00m ²
LAVET 13	74.00m ²

PLOT BAYDO AREA BY FLOOR	
GROUND FLOOR	1,241.00m ²
FIRST FLOOR	1,141.00m ²
SECOND FLOOR	1,141.00m ²
REAR PORCH	1,141.00m ²
TOTAL	4,664.00m ²

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A2

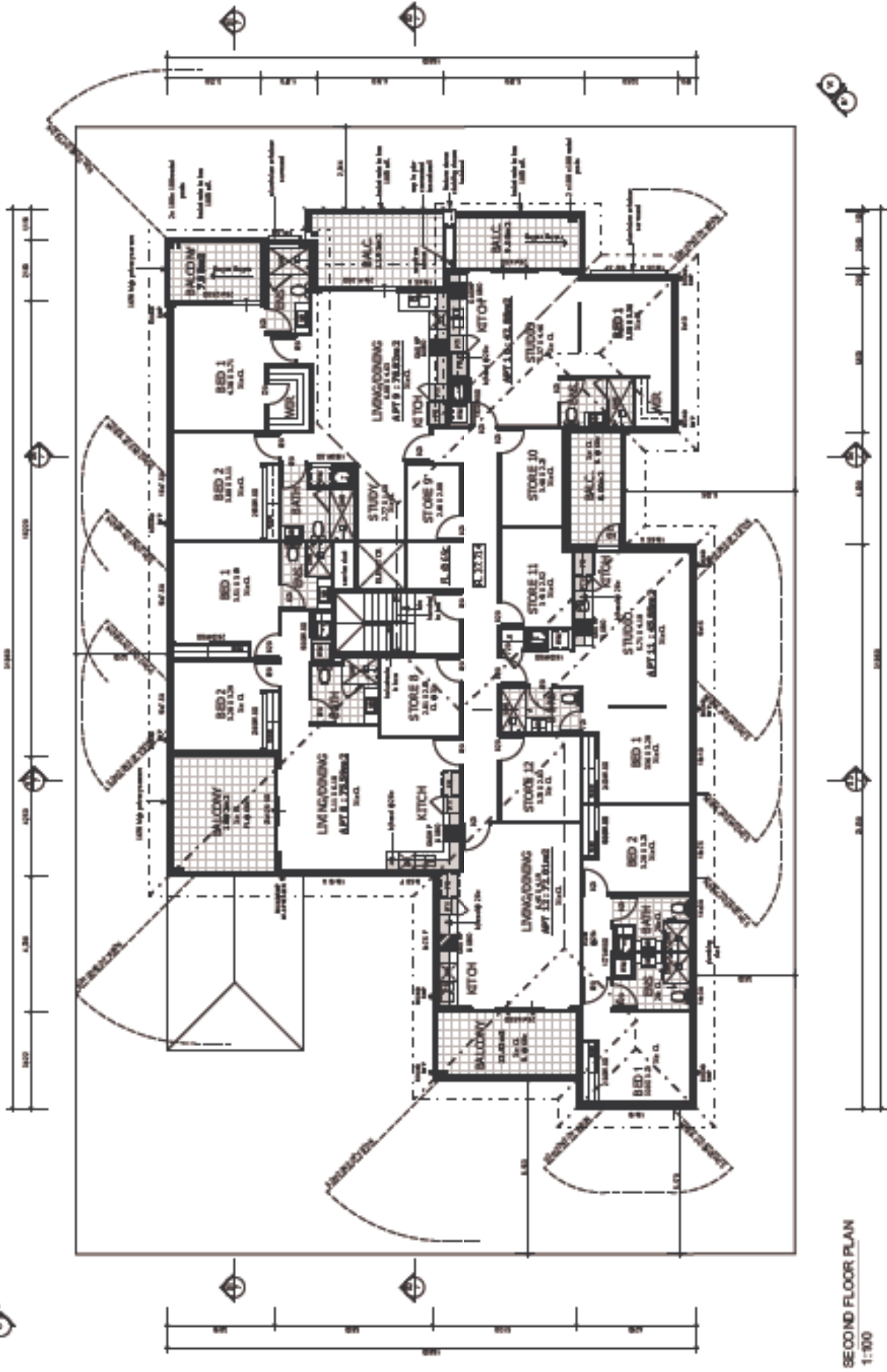
PROPOSED RESIDENCE FOR
AOYO GROUP PTY LTD
LOT 256 (887)
SMYTH ROAD,
NEDLANDS

GENERAL
TABLE 1

DATE
REVISION

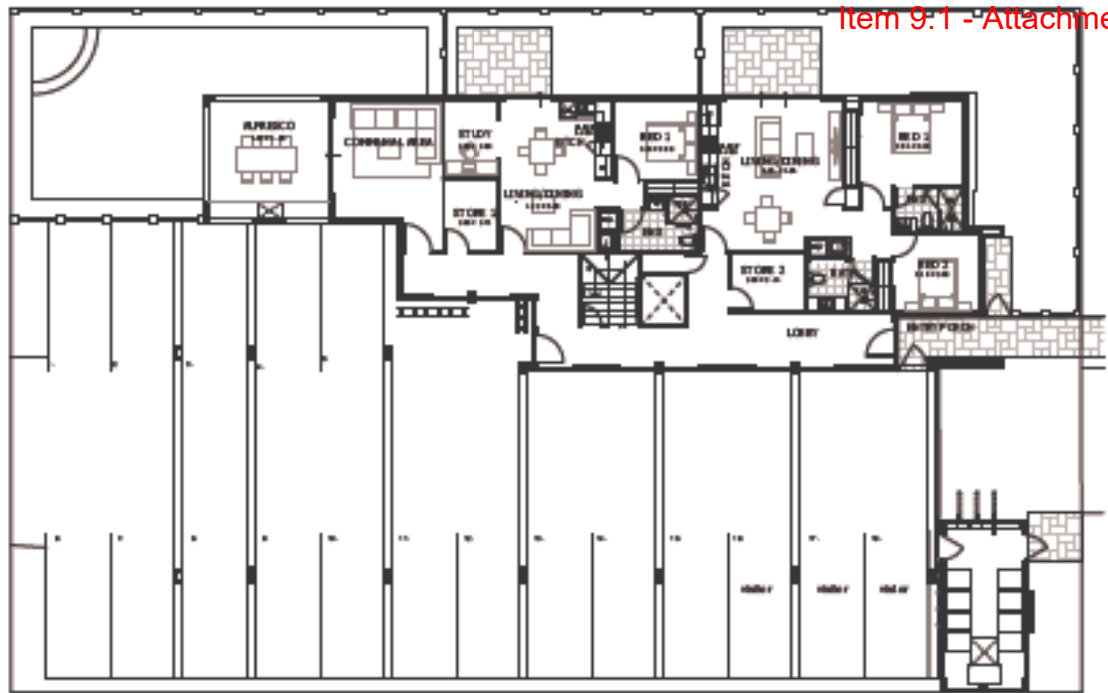
FLOOR PLAN

JOB No. 20-12
SHEET 3 OF 12
SUBMIT CW
CONSULTANCY
City of Nedlands

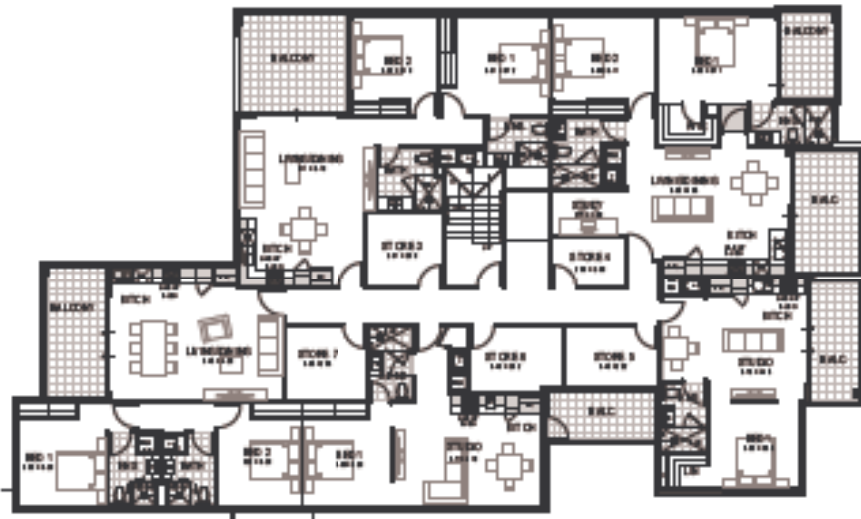


SECOND FLOOR PLAN
1:100

 <p>The Development Consultancy 100/102 South Street, Perth WA 6000 www.thedevelopmentconsultancy.com.au</p>	<p>AS PER PLAN PROPOSED RE-SUBDIVISION AND ALTERATION OF EXISTING SUBDIVISION</p>	<p>PROPOSED RESIDENCE FOR ALOYO GROUP PTY LTD LOT 256 (887) SMYTH ROAD, NEDLANDS</p>	<p>DATE REVISION</p>	<p>FORMER SUBMIT # CW</p>	<p>FLOOR PLAN</p>
	<p>A2</p>	<p>JOB No. 20-12</p>	<p>SHEET 3 OF 22</p>	<p>DATE REVISION</p>	<p>FORMER SUBMIT # CW</p>



GROUND FLOOR FURNITURE LAYOUT
1:200



FIRST FLOOR FURNITURE LAYOUT
1:200



SECOND FLOOR FURNITURE LAYOUT
1:200



The Development Consultancy

Ashion Zhao : 0868 758 887
www.kdgroup.com.au

ON THE SITE REVIEW PLAN AND THE SITE DEVELOPMENT APPLICATION, THE DEVELOPER HAS INTRODUCED CHANGES WHICH ARE HIGHLIGHTED IN RED IN THIS PLAN FOR CLARITY.

A2

PROPOSED RESIDENCE FOR:
AOYO GROUP PTY LTD
LOT 256 (#97)
SMYTH ROAD,
NEDLANDS

DETAILS

sheet 6

DATE

08-04-2020

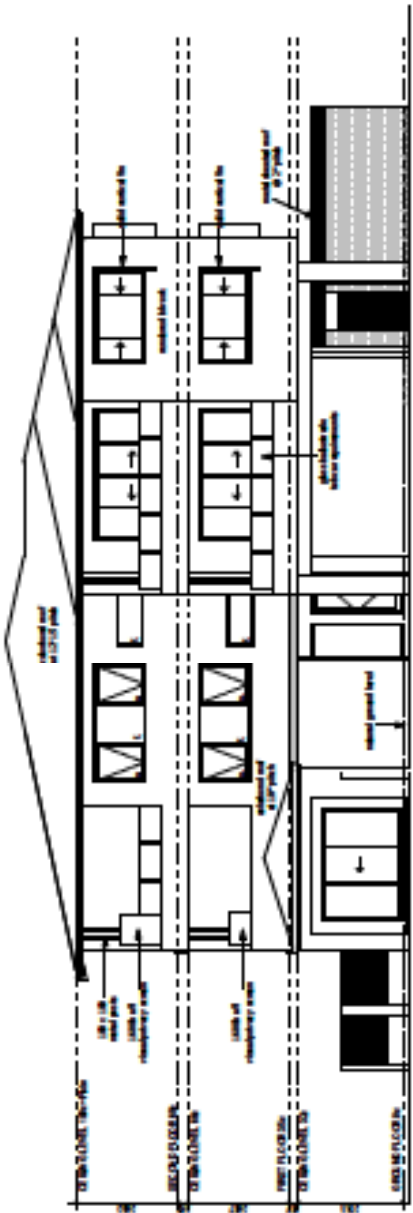
FURNITURE FLOOR PLAN

JOB No 20-12

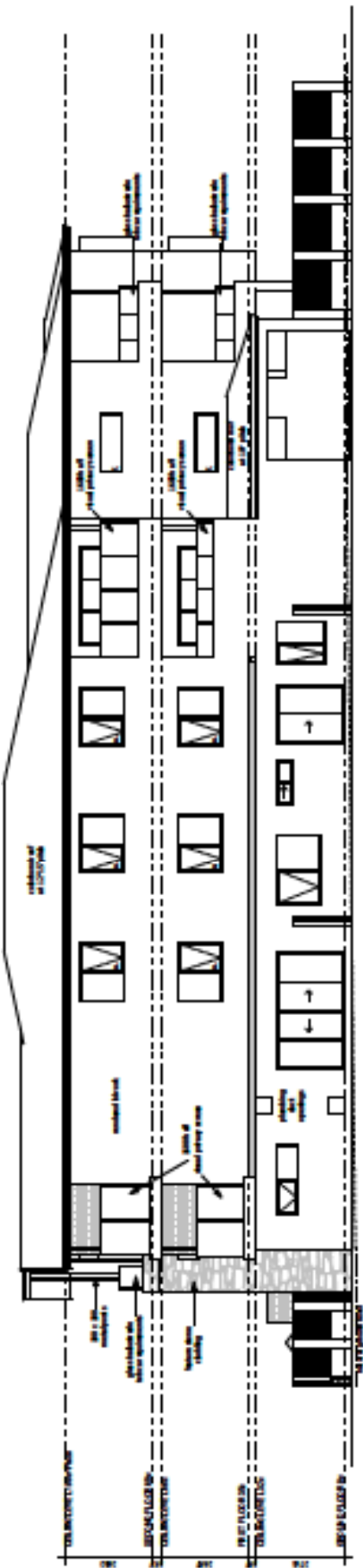
SHEET 4 OF 22

DRAWN BY CW

LOCAL AUTHORITY
CITY OF NEDLANDS



ELEVATION C
 1:100

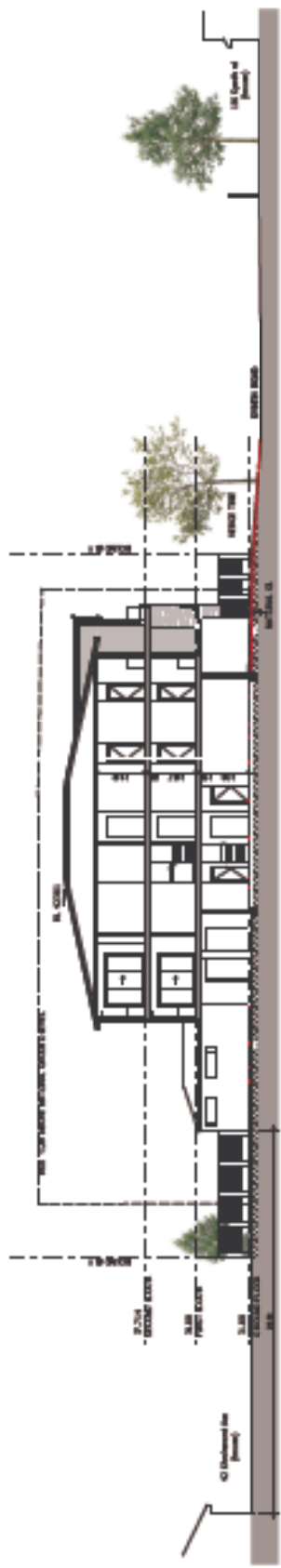


ELEVATION D
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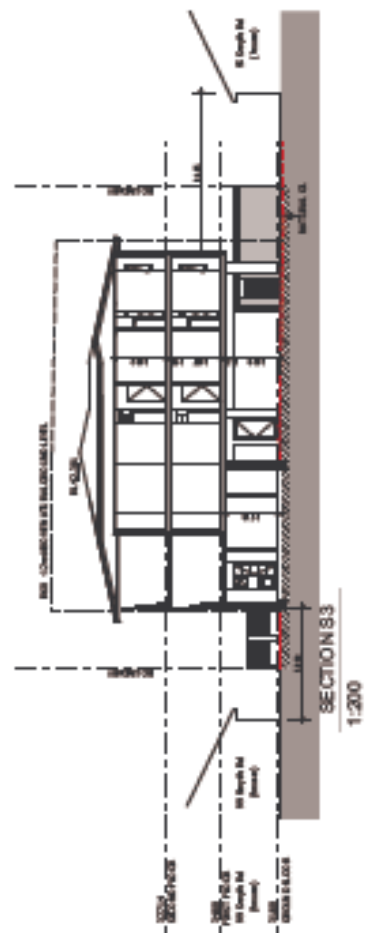
<p>The Development Consultancy 1100 South Coast Road Perth, Western Australia</p>	A2	PROPOSED REDEVELOPER AJOYO GROUP PTY LTD LOT 256 (987) SMYTH ROAD, NEDLANDS	DETAILS SHEET 1	DATE 20/12/20	FLOOR PLAN
	A2	PROPOSED REDEVELOPER AJOYO GROUP PTY LTD LOT 256 (987) SMYTH ROAD, NEDLANDS	SHEET 6 OF 12	DATE 20-12	CONSULTANT CW



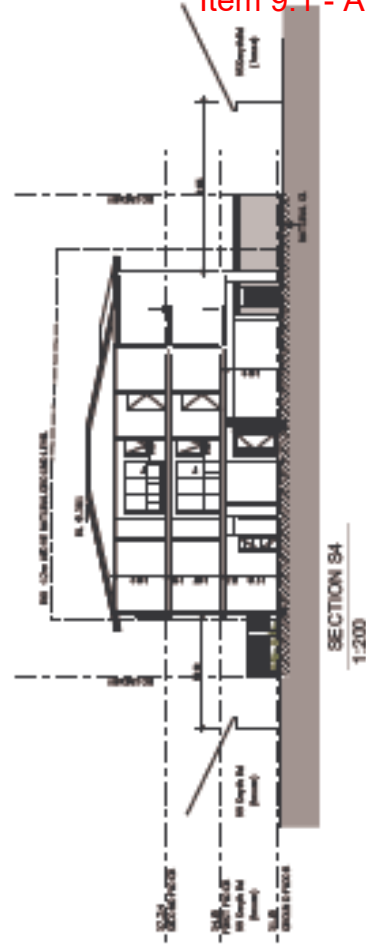
SECTION S1
1:200



SECTION S2
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SECTION S3
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SECTION S4
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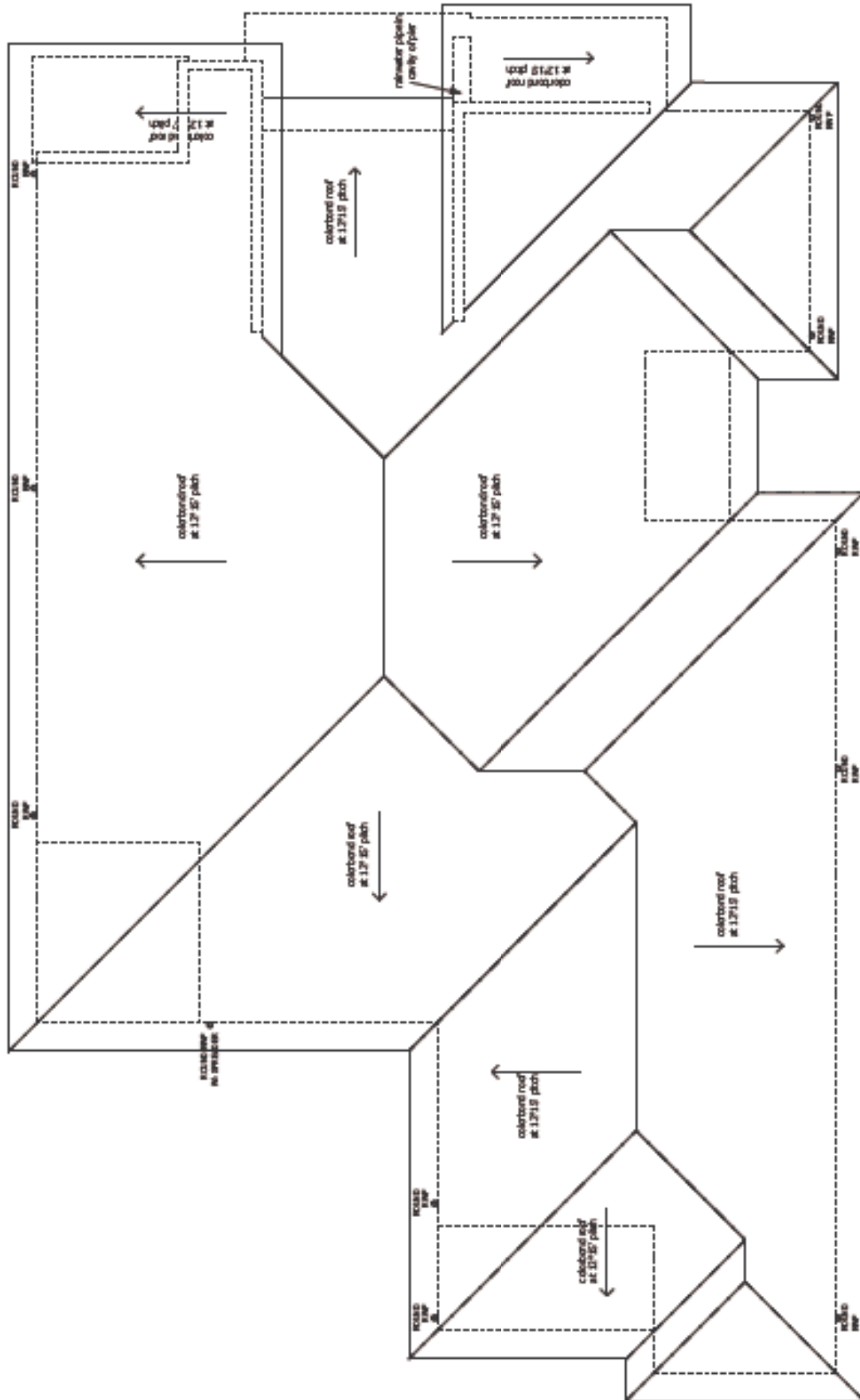
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PROPOSED RESIDENCE FOR
AJOYO GROUP PTY LTD
 LOT 256 (687)
 SMYTH ROAD,
 NEDLANDS

DATE	REVISION

SECTION	DATE	REVISION

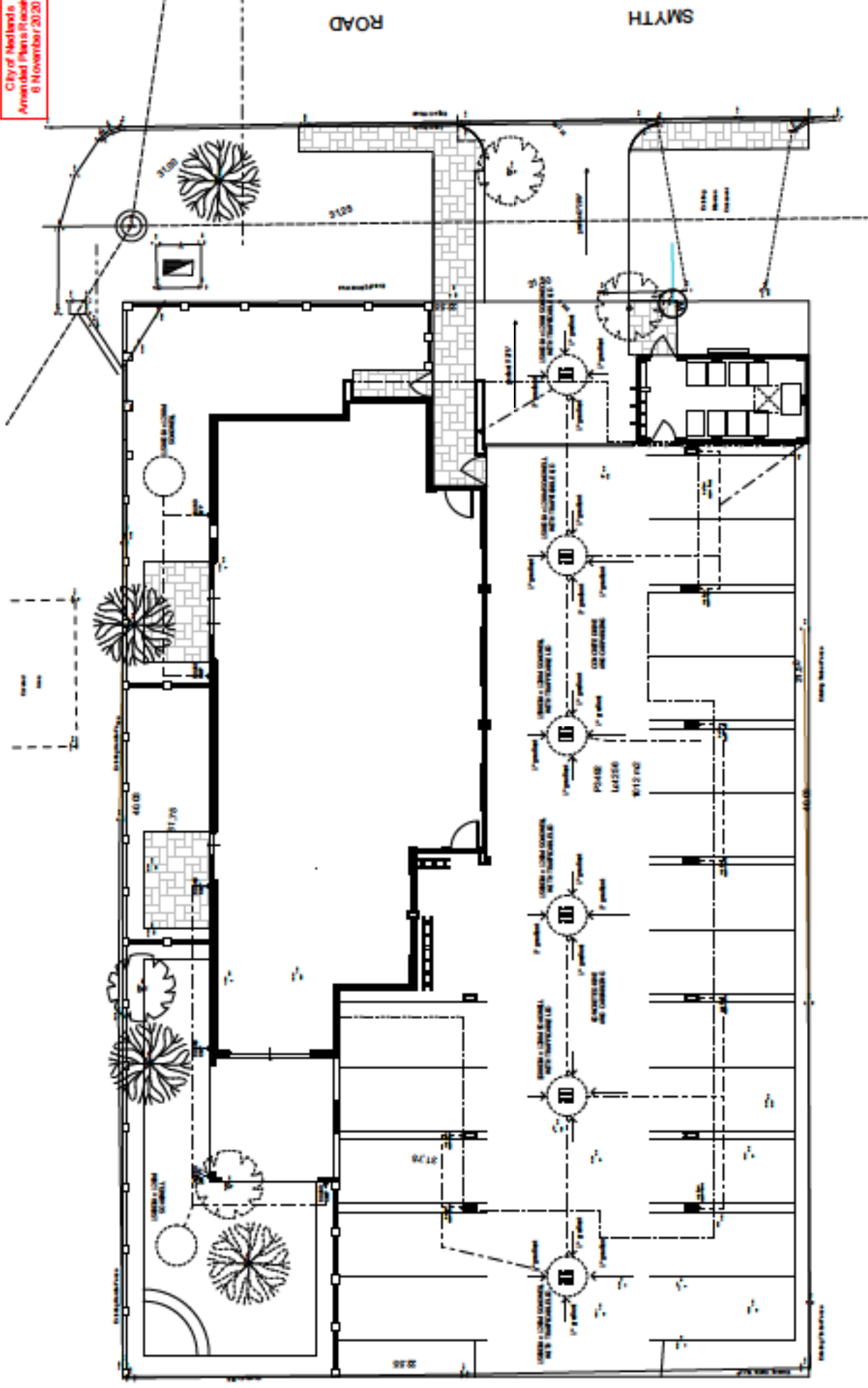
JOB No. 20-12
 SHEET 7 OF 22
 DRAWN BY: CW
 CHECKED BY: CW



ROOF PLAN

 <p>The Development Consultancy Arlton Zhao : 0488 756 687 www.devcgroup.com.au</p>	<p>DETAILS NO. 1 OF THE DEVELOPMENT CONSULTANCY'S STANDARD DRAWING SYSTEM FOR RESIDENTIAL DEVELOPMENT</p>	<p>PROPOSED RESIDENCE FOR: AOYO GROUP PTY LTD LOT 256 (#97) SMYTH ROAD, NEDLANDS</p>		<p>DATE 08-04-2020</p>	<p>ROOF PLAN</p>	
		<p>A3</p>	<p>DETAILS SHEET 6</p>	<p>JOB No 20-12</p>	<p>SHEET 8 OF 22</p>	
		<p>DRAWN BY CW</p>	<p>LOCAL AUTHORITY CITY OF FREMANTLE</p>			

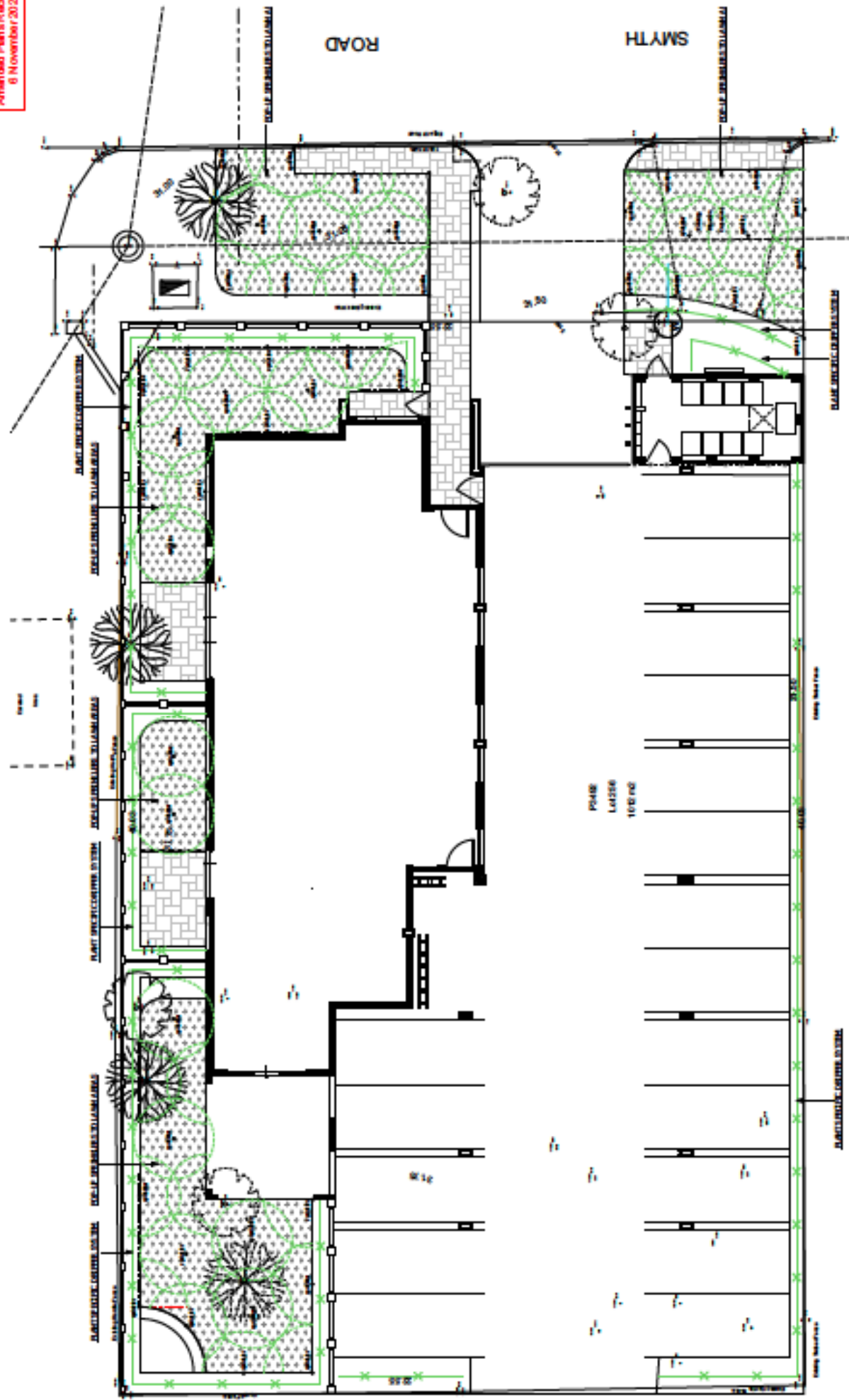
City of Nedlands
Amended Plans Received
6 November 2020




 <p>The Development Consultancy Address: Suite 1004, 100 Stirling Hwy Perth, Western Australia 6008</p>	<p>AS A2200-2018 "AS1546-2018" "AS1546-2018" "AS1546-2018"</p>	<p>PROPOSED RE-DEVELOPER AOYO GROUP PTY LTD LOT 256 (987) SMYTH ROAD, NEDLANDS</p>	<p>DATE REVISION</p>	<p>DRAINAGE CONSULTANT</p>
	<p>A2</p>	<p>FORMAL REVISION</p>	<p>DATE REVISION</p>	<p>FORMAL REVISION</p>

City of Nedlands
Amended Plans Received
6 November 2020

Item 9.1 - Attachment 1



RETIC. CONCEPT PLAN
1:100

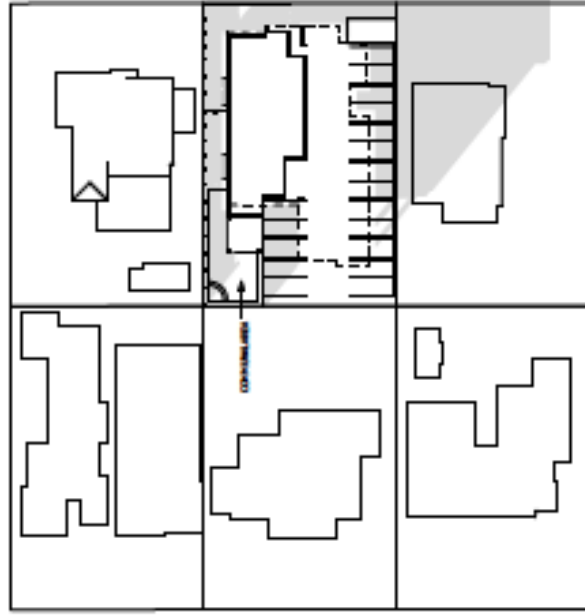
 <p>The Development Consultancy Address: Suite 1000, 100 St St Perth, Western Australia</p>	<p>AS A GUIDE TO THE DEVELOPMENT CONSULTANCY'S STANDARD DRAWING SYMBOLS</p>	<p>PROPOSED REDEVELOPER FOR ADVO GROUP PTY LTD LOT 256 (987) SMYTH ROAD, NEDLANDS</p>	<p>DATE: 20-12-20</p>	<p>RETIULATION PLAN</p>
	<p>A2</p>	<p>DATE: 20-12-20</p>	<p>DATE: 20-12-20</p>	<p>DATE: 20-12-20</p>

City of Nedlands
Amended Plans Received
6 November 2020

Item 9.1 - Attachment 1



OVERSHADOWING AT 3:00PM JUNE 21st



OVERSHADOWING AT 4:00PM JUNE 21st

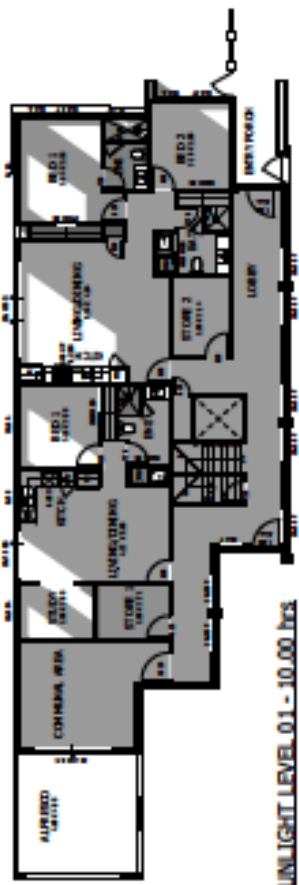


OVERSHADOWING AT 1:00PM JUNE 21st



OVERSHADOWING AT 3:00PM JUNE 21st

 <p>The Development Consultancy Address: Suite 1000, 7th St W Perth, Western Australia</p>	<p>AS A GUIDE TO THE DEVELOPMENT CONSULTANCY'S PRACTICE</p>	<p>PROPOSED REDEVELOPER ALOYO GROUP PTY LTD LOT 25 (6/87) SMYTH ROAD, NEDLANDS</p>	<p>DATE</p>	<p>SHADOW DIAGRAM</p>
			<p>REVISION</p>	
<p>PROJECT NO: 20-12</p>		<p>DATE: 23.09.20</p>	<p>DESIGNER: CW</p>	<p>CONSULTANCY: CW</p>



SUNLIGHT LEVEL 01 - 10.00 hrs



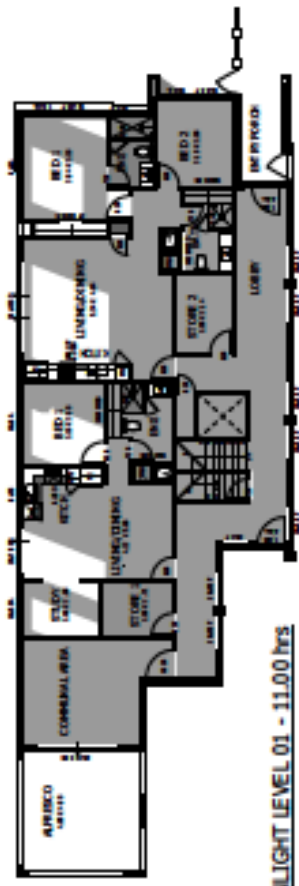
SUNLIGHT LEVEL 01 - 12.00 hrs



SUNLIGHT LEVEL 01 - 14.00 hrs



SUNLIGHT LEVEL 01 - 09.00 hrs



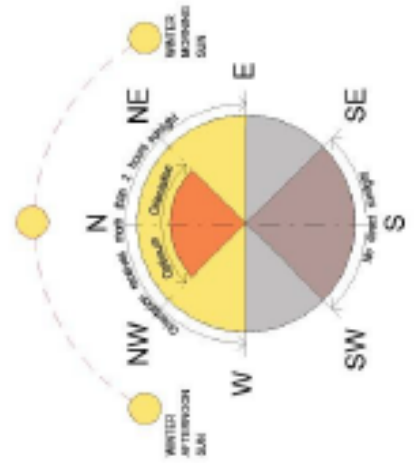
SUNLIGHT LEVEL 01 - 11.00 hrs



SUNLIGHT LEVEL 01 - 13.00 hrs



SUNLIGHT LEVEL 01 - 15.00 hrs

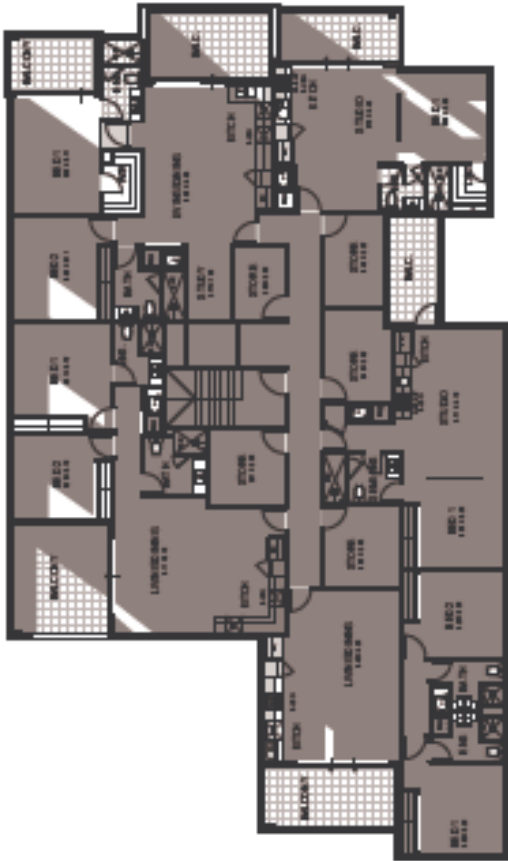


300% OF APARTMENTS ON LEVEL 1
ACHIEVE A MINIMUM OF 2hrs PER DAY
OF DIRECT SUNLIGHT BETWEEN 9.00am
and 3.00pm

The Development Consultancy Adam Zhao : 0418 756 047 www.devcgpc.com.au	PROPOSED RESIDENCE FOR: AOYO GROUP PTY LTD LOT 256 (#97) SMYTH ROAD, NEDLANDS	DETAILS SHEET 6	DATE 08-04-2020	SUNLIGHT DIAGRAM
		A3	JOB NO 20-12	SHEET 13 OF 22
		DRAWN BY CW	LOCAL AUTHORITY CITY OF PERTH	



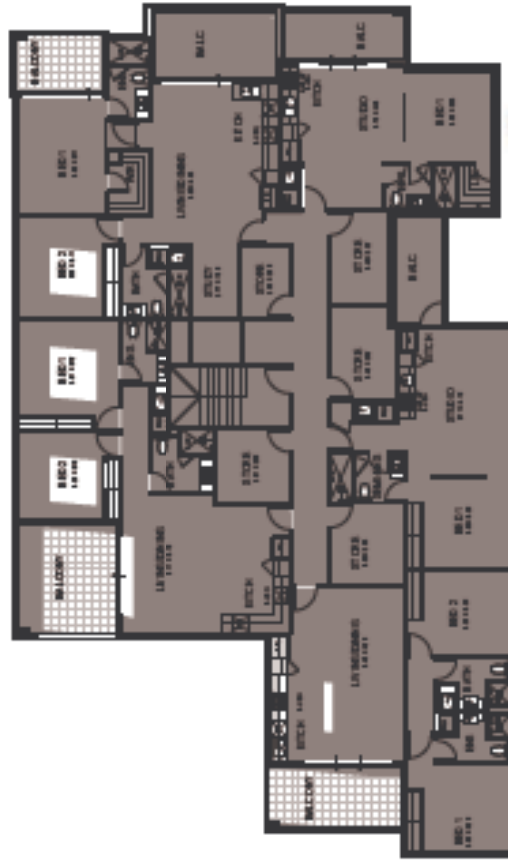
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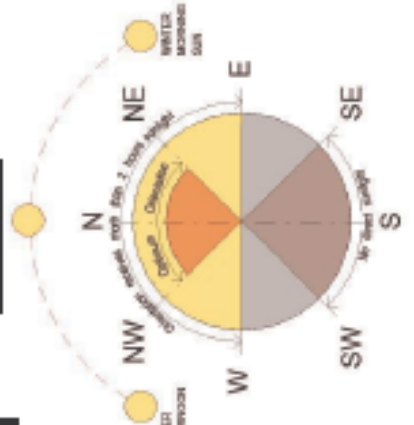
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SUNLIGHT LEVEL_02 - 11.00 hrs



SUNLIGHT LEVEL_02 - 12.00 hrs

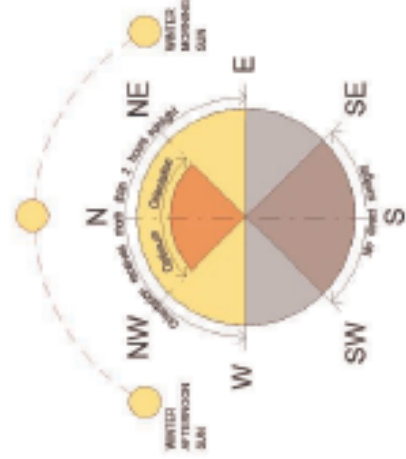


89% OF APARTMENTS ON LEVEL 2
ACHIEVE A MINIMUM OF 2hrs PER DAY
OF DIRECT SUNLIGHT BETWEEN 9.00am
and 3.00pm

 <p>The Development Consultancy Arlon Zhao : 0418 756 687 ar@developmentconsultancy.com.au</p>	<p>APPROVALS REQUIRED: 1. IN THE INTEREST OF PUBLIC INTEREST AND PUBLIC PARTICIPATION</p> <p>A3</p>	<p>PROPOSED RESIDENCE FOR: AOYO GROUP PTY LTD LOT 256 (#97) SMYTH ROAD, NEDLANDS</p>		<p>DATE 08-04-2020</p>	<p>SUNLIGHT DIAGRAM</p>
		<p>DETAILS SHEET 6</p>	<p>JOB No 20-12</p>	<p>SHEET 14 OF 22</p>	<p>LOCAL AUTHORITY CITY OF MELBANE</p>
		<p>DRAWN BY CW</p>	<p>LOCAL AUTHORITY CITY OF MELBANE</p>		



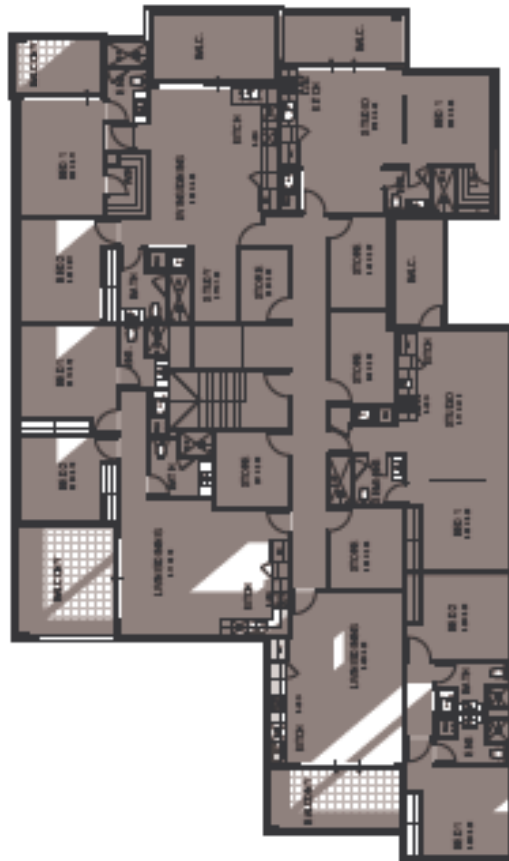
SUNLIGHT LEVEL 02 - 14.00 hrs



88% OF APARTMENTS ON LEVEL 2
ACHIEVE A MINIMUM OF 2hrs PBR DAY
OF DIRECT SUNLIGHT BETWEEN 9.00am
and 3.00pm



SUNLIGHT LEVEL 02 - 13.00 hrs



SUNLIGHT LEVEL 02 - 15.00 hrs

 <p>The Development Consultancy Arlon Zhao : 0483 756 667 ar@devgroup.com.au</p>	<p>FOR ALL THE INFORMATION OF APPLICANTS, THIS DRAWING IS NOT VALID FOR CONSTRUCTION</p>	<p>PROPOSED RESIDENCE FOR: AO YO GROUP PTY LTD LOT 256 (#97) SMYTH ROAD, NEDLANDS</p>	<p>DATE 08-04-2020</p>	<p>SUNLIGHT DIAGRAM</p>
	<p>A3</p>	<p>DETAILS SHEET 6</p>	<p>JOB No 20-12</p>	<p>SHEET 15 OF 22</p>
				<p>DRAWN BY CW</p>
				<p>LOCAL AUTHORITY CITY OF MELB</p>



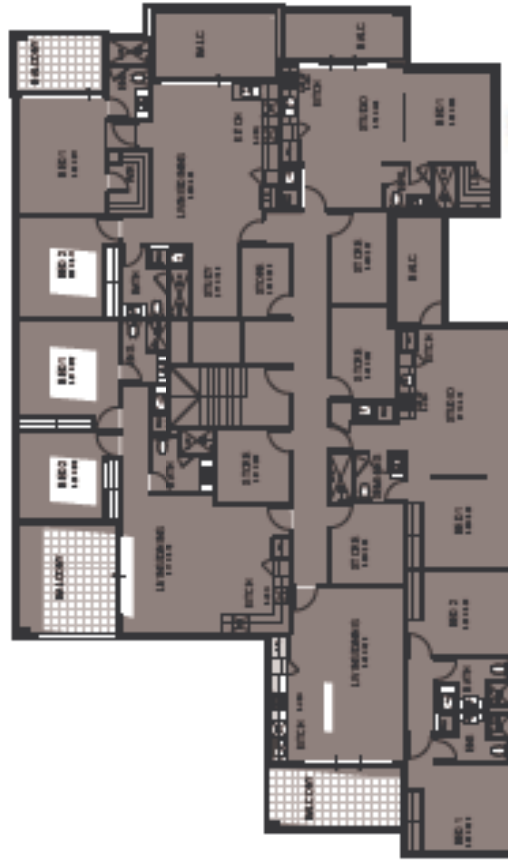
SUNLIGHT LEVEL_03 - 09.00 hrs



SUNLIGHT LEVEL_03 - 10.00 hrs



SUNLIGHT LEVEL_03 - 11.00 hrs



SUNLIGHT LEVEL_03 - 12.00 hrs



89% OF APARTMENTS ON LEVEL 2
ACHIEVE A MINIMUM OF 2hrs PER DAY
OF DIRECT SUNLIGHT BETWEEN 9.00am
and 3.00pm

 <p>The Development Consultancy Arlon Zhao : 0418 756 687 ar@devgroup.com.au</p>	<p>APPROVALS REQUIRED: 1. IN THE INTEREST OF PUBLIC HEALTH, SAFETY & WELL-BEING OF THE COMMUNITY</p>	<p>PROPOSED RESIDENCE FOR: AO YO GROUP PTY LTD LOT 256 (#97) SMYTH ROAD, NEDLANDS</p>		<p>DATE 08-04-2020</p>	<p>SUNLIGHT DIAGRAM</p>
		<p>DETAILS SHEET 6</p>	<p>JOB No 20-12</p>	<p>SHEET 16 OF 22</p>	<p>LOCAL AUTHORITY CITY OF PERLEHAR</p>
<p>A3</p>		<p>DRAWN BY CW</p>	<p>LOCAL AUTHORITY CITY OF PERLEHAR</p>		

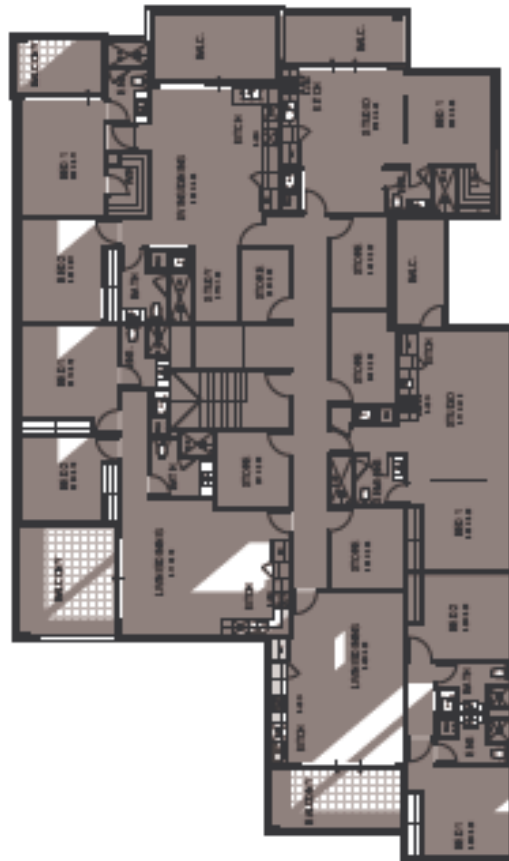


SUNLIGHT LEVEL 03 - 14.00 hrs

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ACHIEVE A MINIMUM OF 2hrs PBR DAY
OF DIRECT SUNLIGHT BETWEEN 9.00am
and 3.00pm

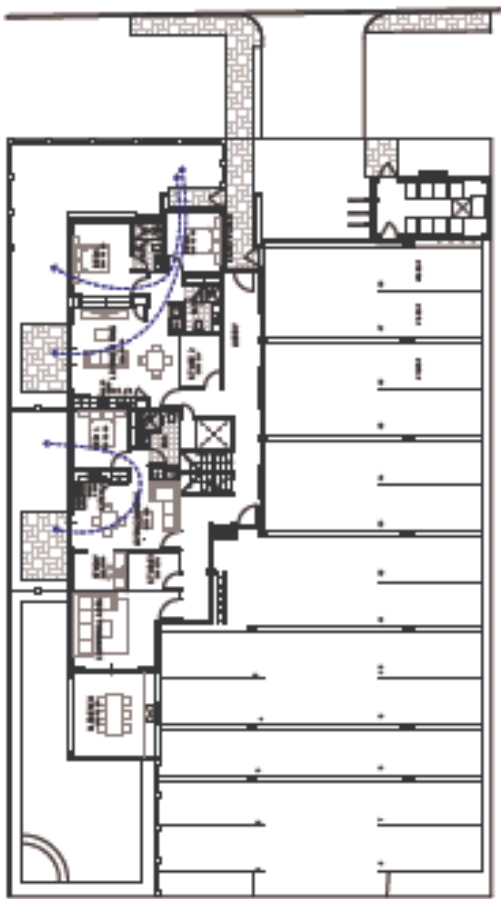


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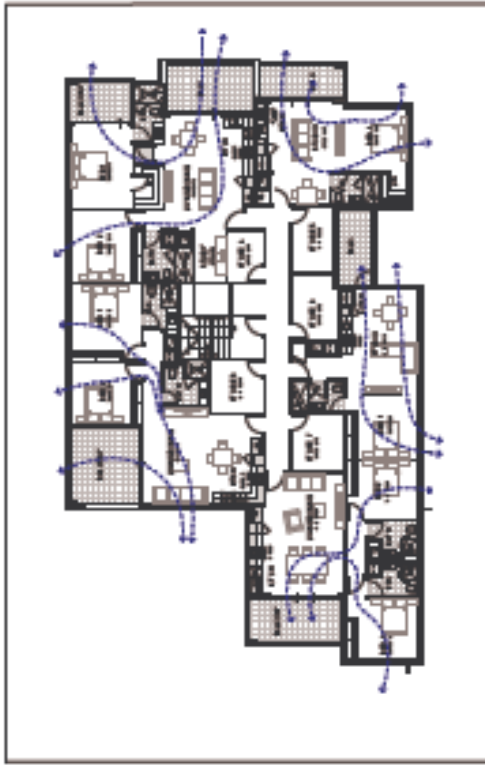


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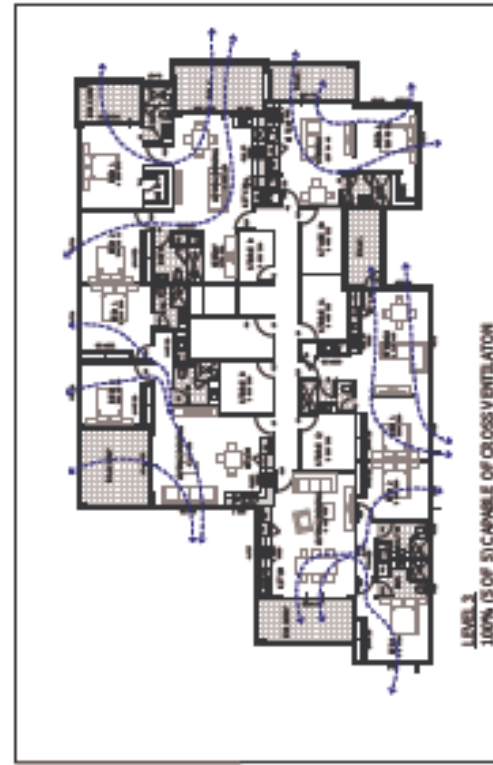
 <p>The Development Consultancy Arlon Zhao : 0483 756 667 ar@devgroup.com.au</p>	<p>APPROVALS REQUIRED: 1. APPROVAL FROM THE LOCAL AUTHORITY 2. APPROVAL FROM THE WATER SUPPLY AUTHORITY 3. APPROVAL FROM THE FIRE DEPARTMENT</p>	<p>PROPOSED RESIDENCE FOR: AOYO GROUP PTY LTD LOT 256 (#97) SMYTH ROAD, NEDLANDS</p>	<p>DATE 08-04-2020</p>	<p>SUNLIGHT DIAGRAM</p>
	<p>A3</p>	<p>JOB No 20-12</p>	<p>SHEET 17 OF 22</p>	<p>LOCAL AUTHORITY CITY OF MELB</p>
<p>DETAILS SHEET 6</p>		<p>DRAWN BY CW</p>	<p>DATE</p>	<p>DATE</p>



LEVEL 1
50% (1 OF 2) CANOPY OF CROSS VENTILATION



LEVEL 2
100% (5 OF 5) CANOPY OF CROSS VENTILATION



LEVEL 3
100% (5 OF 5) CANOPY OF CROSS VENTILATION

NATURAL CROSS VENTILATION

ACCEPTABLE OUTCOMES

- HABITABLE ROOMS HAVE OPENINGS ON AT LEAST TWO WALLS WITH A PERMITTED LINE DISTANCE BETWEEN THE CENTRES OF THE OPENINGS OF AT LEAST 2M.
- A MINIMUM OF 80% OF DWELLINGS ARE OF CANOPY OF AIRBORNE NATURALLY VENTILATED.
- SINGLE ASPECT APARTMENTS WITHIN THE APARTMENT MUST HAVE:
- SOLAR SHADE OPENINGS ORIENTED BETWEEN 45-90 DEGREES OF THE PROTRUDING COULINA WIND ORIENTATION FROM DEPTH NO ORIENTED TOWARDS COULINA HEIGHT.

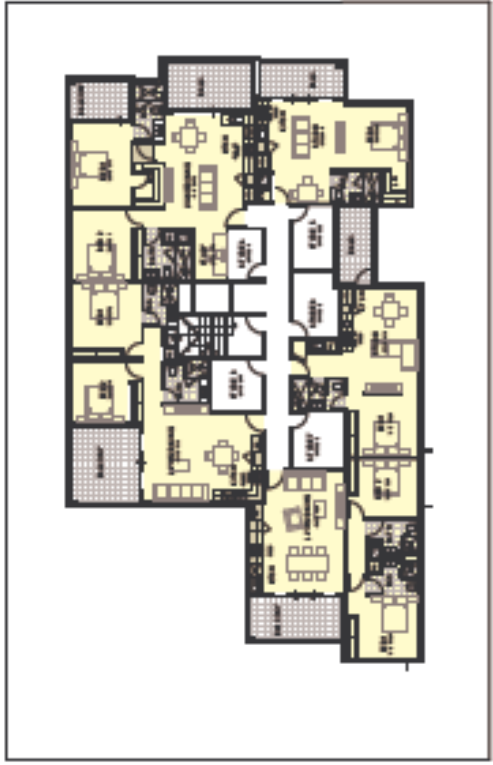
Wind speed and direction rose



Wind speed and direction rose

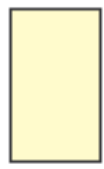


 <p>The Development Consultancy 100/110 Smith Road, Nedlands WA 6009 Phone: 9447 1200 Fax: 9447 1201 www.thedevelopmentconsultancy.com.au</p>	<p>AS PER PLAN NO. 15333/2019-10 DATE OF ISSUE: 15/03/2020 DRAWN BY: J. SMITH CHECKED BY: J. SMITH</p>	<p>PROPOSED RESIDENCE FOR ADVO GROUP PTY LTD LOT 256 (887) SMYTH ROAD, NEDLANDS</p>	<p>DATE RECEIVED: 18/09/20</p>	<p>CROSS VENTILATION DIAGRAM</p>
	<p>A2</p>	<p>JOB No: 20-12</p>	<p>SHEET 18 OF 22</p>	<p>DESIGNER: CW</p>

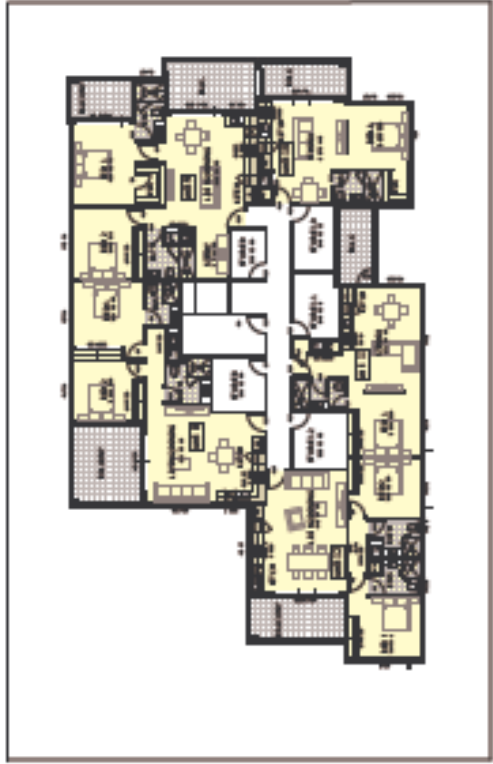


- SILVER LEVEL Dwellings**
APPLICABLE COMPLIANCE TO 2D
- 1 DWELLING CODE
 - a. Includes 4.5.1a
 - b. All Dwelling Units are Silver Level Units
 - c. 4.5.1
 - d. There are no steps or the path for path of travel.
 - 2 DWELLING CODE 3.1.1.1
 - a. Core walls to other Silver Level Units and Lobby 2.0.
 - b. The Lift Shafts to other Silver Level Units and Lobby 2.0.
 - c. There are no steps or ramps in the path of travel.
 - 3 BPT DETA, CODES & COMPLIANCE
 - a. All fire exit doors have a clear opening of 1000mm.
 - b. All passages are more than 1000mm wide.
 - 4 T2.2.1.7
 - a. All Silver Level Units are Silver Level Units.
 - b. All Silver Level Units are Silver Level Units.
 - c. All Silver Level Units are Silver Level Units.
 - d. All Silver Level Units are Silver Level Units.
 - 5 CODES
 - a. All Silver Level Units are Silver Level Units.
 - b. All Silver Level Units are Silver Level Units.
 - c. All Silver Level Units are Silver Level Units.
 - d. All Silver Level Units are Silver Level Units.
 - 6 REINFORCEMENT OF BPT DETA CODES & COMPLIANCE
 - a. All Silver Level Units are Silver Level Units.
 - b. All Silver Level Units are Silver Level Units.
 - c. All Silver Level Units are Silver Level Units.
 - d. All Silver Level Units are Silver Level Units.
 - 7 BPT DETA, CODES & COMPLIANCE
 - a. All Silver Level Units are Silver Level Units.
 - b. All Silver Level Units are Silver Level Units.
 - c. All Silver Level Units are Silver Level Units.
 - d. All Silver Level Units are Silver Level Units.
 - 8 CODES to be included in the Silver Level Units

LIVABLE HOMES COMPLIANT DWELLINGS



20% OF 12 APARTMENTS = 2.4 APT required
12 silver level dwellings provided (100%)



The Development Consultancy
Public, Open Office 100 St
James Street Perth WA 6000
www.thedevelopmentconsultancy.com.au

PROPOSED RESIDENCE FOR
AOYO GROUP PTY LTD
LOT 25 (687)
SMYTH ROAD,
NEDLANDS

AS PER PLAN
1:500
DATE: 15/11/2020
DRAWN BY: [Name]
CHECKED BY: [Name]

A2

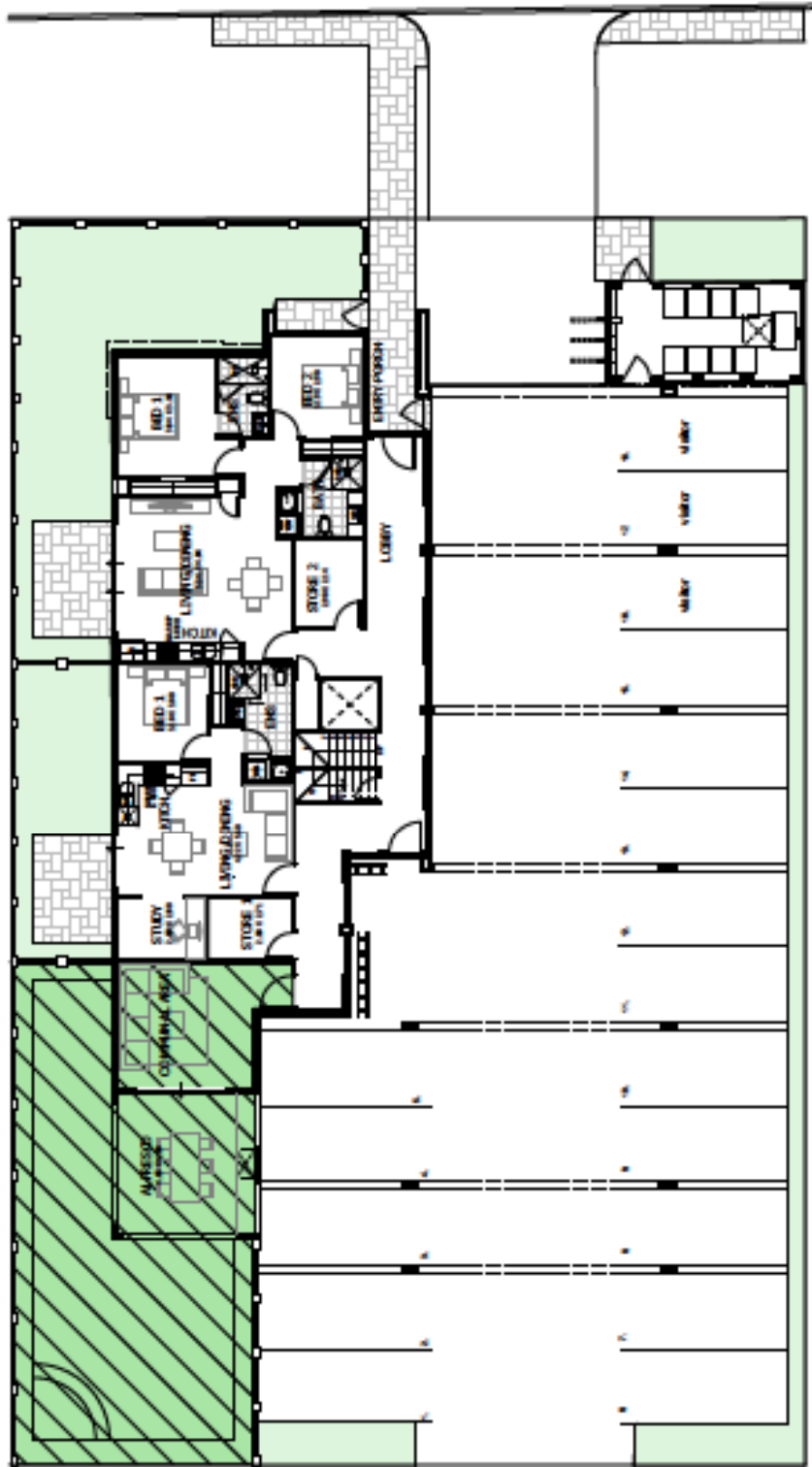
DATE	REVISION	DESCRIPTION

LIVABLE HOMES DIAGRAM

DATE	REVISION	DESCRIPTION
20-12 <td>19 OF 23 <td>REVISION</td> </td>	19 OF 23 <td>REVISION</td>	REVISION
20-12 <td>19 OF 23 <td>REVISION</td> </td>	19 OF 23 <td>REVISION</td>	REVISION

BUS STOP 170m
STIRLING HWY

A2



TOTAL DEEP SOIL AREA: 215.08m²

TOTAL COMMUNAL AREA: 107.79m²

CARPARKING/DEEP SOIL/COMMUNAL AREA PLAN
1:200

CARPARKING - LOCATION A

- 5 x 1 Bedroom dwelling : 5 x 0.75 bays per dwelling = 3.75 bays
- 7 x 2+ bedrooms dwelling : 7 x 1 bay per dwelling = 7 bays
- 3 dwellings = 3 visitor bays
- (1 bay per four dwellings up to 12 dwellings)
- TOTAL BAYS REQUIRED = 13.75 bays
- TOTAL BAYS ACHIEVED = 81 bays

Parking types	Location A	Location B
On-street parking	0.75 bays per dwelling	1 bay per dwelling
Off-street parking	2 bays per dwelling	1.25 bays per dwelling
Visitor parking	1 bay per four dwellings up to 12 dwellings	1.25 bays per dwelling
Residential parking	1 bay per eight dwellings for the 200 dwelling lot above	1 bay per four dwellings
Visitor parking	0.5 bays per dwelling	1 bay per four dwellings
Visitor parking	1 bay per four dwellings	1 bay per four dwellings

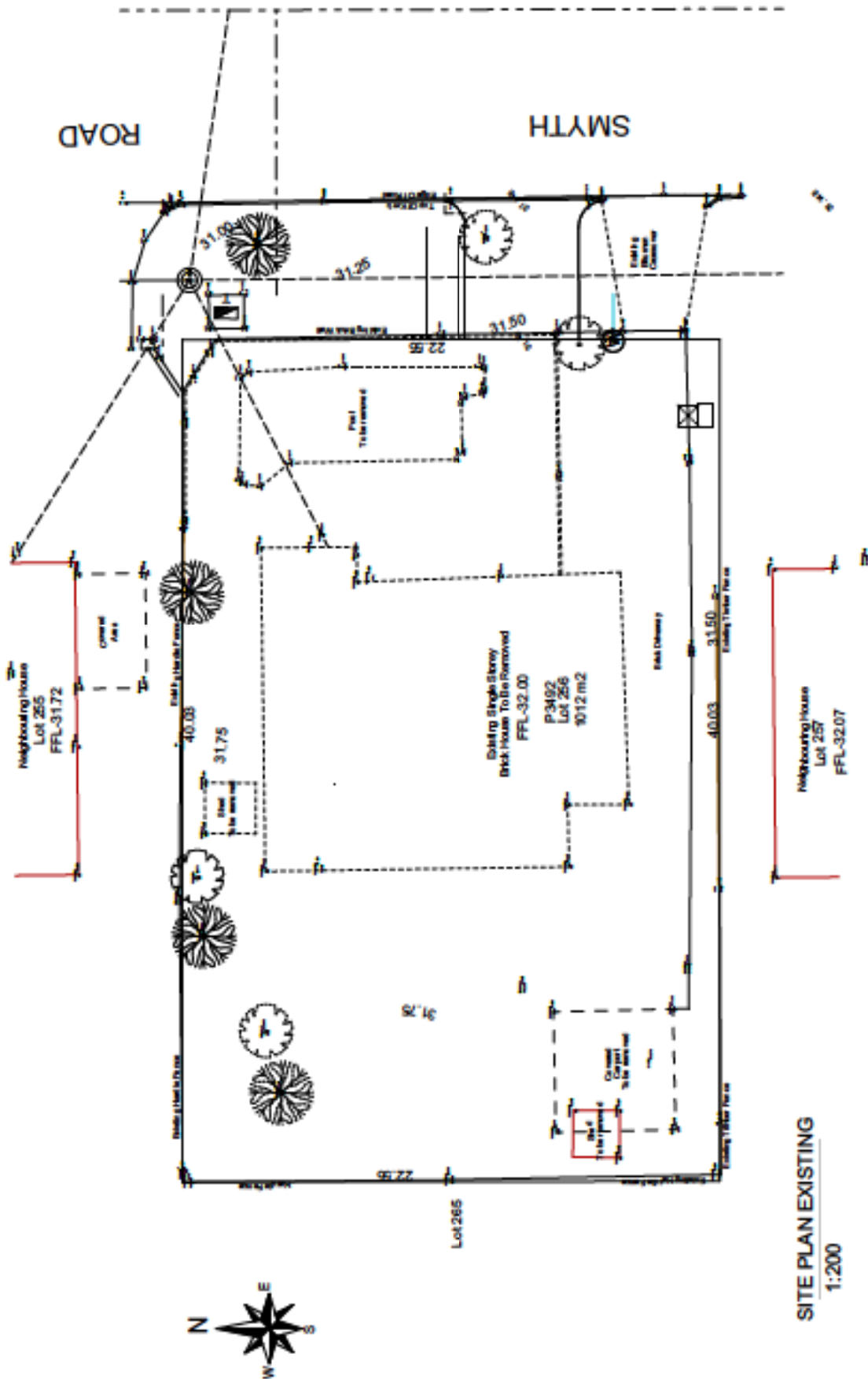
Notes:
 1. Locations of parking lots shall be indicated on the site plan.
 2. The maximum number of parking bays per dwelling is indicated in the table. All other parking bays may be substantially reduced.
 3. The maximum number of parking bays per dwelling is indicated in the table. All other parking bays may be substantially reduced.
 4. The maximum number of parking bays per dwelling is indicated in the table. All other parking bays may be substantially reduced.
 5. The maximum number of parking bays per dwelling is indicated in the table. All other parking bays may be substantially reduced.

The Development Consultancy
 Action 2000 : 0416 756 000
 www.devcap.com.au


A3

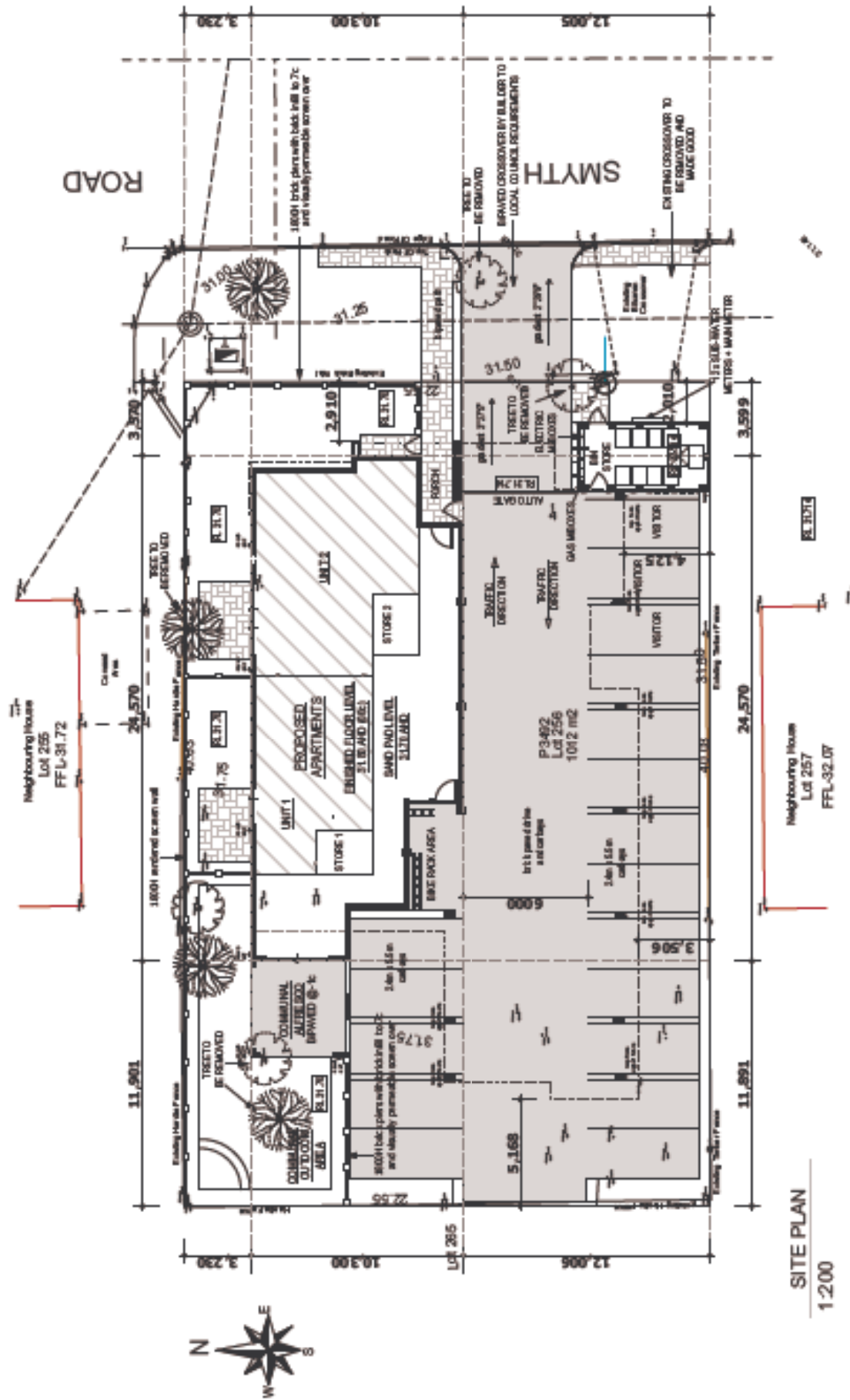
PROPOSED RESIDENCE FOR:
AOYO GROUP PTY LTD
 LOT 256 (#97)
 SMYTH ROAD,
 NEDLANDS

DETAILS	DATE	CARPARKING, COMMUNAL SPACE, DEEP SOILD DIAGRAMS
Sheet 6	08-08-2020	
		JOB No 20-12 SHEET 20 OF 22
		DRAWN BY CW LOCAL AUTHORITY CITY OF MELBANE



SITE PLAN EXISTING
1:200

 The Development Consultancy Address: 21/22 - 64/65 Tiro Road Westmead NSW 2115	PROJECTS DELIVERED BY US INCLUDE: • COMMERCIAL DEVELOPMENT • RESIDENTIAL DEVELOPMENT • LAND DEVELOPMENT • SITE PLANNING • SURVEYING • ENVIRONMENTAL ASSESSMENT	PROPOSED RESIDENCE FOR: AOYO GROUP PTY LTD LOT 256 (#97) SMYTH ROAD, NEDLANDS		DETAILS SHEET 1 OF 1	DATE 01-01-2020	EXISTING STRUCTURES SITEPLAN	
		A3	JOB No 20-12	DRAWN BY CW	SHEET 21 OF 22	LOCAL AUTHORITY CITY OF PEARLAND	



DETAILS		SITE PLAN	
DATE	08-04-2020	JOB No	20-12
SCALE	1:200	DRAWN BY	CW
		SHEET	22 OF 22
		LOCAL AUTHORITY	CITY OF PHELAN

PROPOSED RESIDENCE FOR:
AOYO GROUP PTY LTD
 LOT 256 (#97)
 SMYTH ROAD,
 NEDLANDS

The Development Consultancy
 Action Drive : 0480 756 667
 www.aoyogroup.com.au



A3

REV	DATE	CHN	DESCRIPTION
A	18.05.2023	ED	LANDSCAPE PLANTING PLAN
B	26.05.2023	ED	UPDATED PLANTING AREA
C	07.02.2024	ED	UPDATED PLANTING AREA
D	06.11.2024	ED	UPDATED GMP (S) TABLES

Planting Schedule	Quantity	Plant Name	Quantity	Notes
1.1	1	Large tree	1	100%
1.2	1	Medium tree	1	100%
1.3	1	Small tree	1	100%
1.4	1	Shrub	1	100%
1.5	1	Groundcover	1	100%
1.6	1	Palmetto	1	100%
1.7	1	Spiky plant	1	100%
1.8	1	Flowering plant	1	100%
1.9	1	Grass	1	100%
1.10	1	Water feature	1	100%
1.11	1	Pathway	1	100%
1.12	1	Wall	1	100%
1.13	1	Deck	1	100%
1.14	1	Pool	1	100%
1.15	1	Other	1	100%

LANDSCAPE AREA CALCULATIONS

TOTAL GARDEN AREA: 1000.00 SQM

DEEPPOOL AREA: 100.00 SQM

LANDSCAPE AREA: 900.00 SQM

NOTES

1. ALL PLANTING TO BE INSTALLED WITHIN THE LANDSCAPE AREA.

2. ALL PLANTING TO BE INSTALLED WITHIN THE LANDSCAPE AREA.

3. ALL PLANTING TO BE INSTALLED WITHIN THE LANDSCAPE AREA.

4. ALL PLANTING TO BE INSTALLED WITHIN THE LANDSCAPE AREA.

5. ALL PLANTING TO BE INSTALLED WITHIN THE LANDSCAPE AREA.

PLANTING SCHEDULE

1.1 1x Large tree

1.2 1x Medium tree

1.3 1x Small tree

1.4 1x Shrub

1.5 1x Groundcover

1.6 1x Palmetto

1.7 1x Spiky plant

1.8 1x Flowering plant

1.9 1x Grass

1.10 1x Water feature

1.11 1x Pathway

1.12 1x Wall

1.13 1x Deck

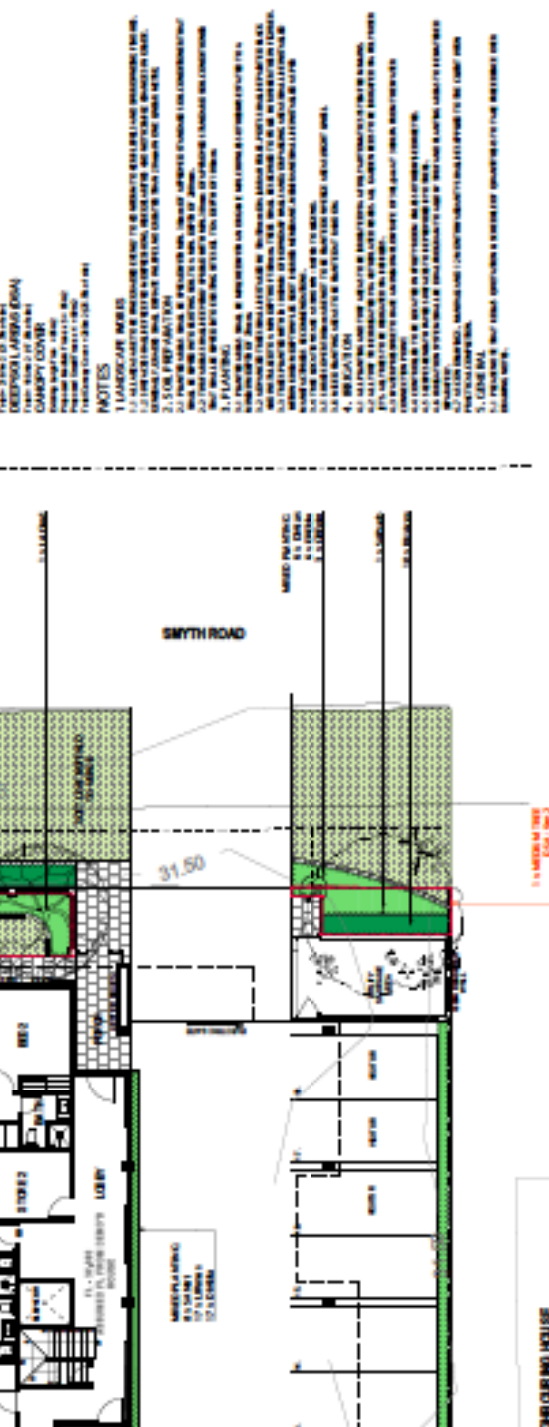
1.14 1x Pool

1.15 1x Other

SMYTH ROAD

NEIGHBOURING HOUSE

Lot 20



Planting Schedule	Quantity	Plant Name	Quantity	Notes
1.1	1	Large tree	1	100%
1.2	1	Medium tree	1	100%
1.3	1	Small tree	1	100%
1.4	1	Shrub	1	100%
1.5	1	Groundcover	1	100%
1.6	1	Palmetto	1	100%
1.7	1	Spiky plant	1	100%
1.8	1	Flowering plant	1	100%
1.9	1	Grass	1	100%
1.10	1	Water feature	1	100%
1.11	1	Pathway	1	100%
1.12	1	Wall	1	100%
1.13	1	Deck	1	100%
1.14	1	Pool	1	100%
1.15	1	Other	1	100%



City of Nedlands
Approved for Development
8 November 2023

Item 9.1 - Attachment 1

SMYTH ROAD APARTMENTS LANDSCAPE PLANTING PLAN

AOYO GROUP
97 SMYTH ROAD, NEDLANDS



DEVELOPMENT APPROVAL
JOB No. 0060
PAGE 2/01
REV D

SCALE 1:100 @A1

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URBANISTA

TOWN PLANNING



PROPOSED MULTIPLE DWELLING DEVELOPMENT

97 Smyth Road Nedlands

This report has been prepared by Urbanista Town Planning
for the proposed apartments at 97 Smyth Road Nedlands



Petar Mrdja | Director

Urbanista Town Planning | admin@urbanistaplanning.com.au

231 Bulwer Street, Perth

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CONTENTS

1	Introduction	4
<hr/>		
2	Site Context	4
<hr/>		
2.1	Location & Property Description	4
2.2	Topography	4
2.3	Amenities	5
3	The Proposal	14
<hr/>		
3.1	Floor By Floor Composition	15
3.2	Apartment Design Summary	18
3.3	Supporting Information & Reports	18
4	Planning Framework	19
<hr/>		
4.1	Statutory Planning Framework	19
4.2	Non-Statutory Planning Framework	21
4.3	Strategic Planning Framework	23
5	Planning Assessment & Justification	24
<hr/>		
5.1	SPP 7.0 Planning Assessment	24
5.2	SPP 7.3 Vol. 2 Planning Assessment	29
5.3	Planning & Development (Local Planning Schemes) Regulations 2015	54
6	Conclusion	56
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1 INTRODUCTION

Urbanista Town Planning have been engaged by the owners of 97 Smyth Road, Nedlands to prepare and submit a Joint Development Assessment Panel application for twelve apartments, comprising four studio apartments, one single-bedroom apartment, and seven two-bedroom apartments. This application has been submitted as an "opt-in" Joint Development Assessment Panel (JDAP) application with an estimated cost of development of \$2,200,000.

This report provides a detailed assessment of the proposal in accordance with the relevant state and local planning frameworks to comprehensively demonstrate the merit of the proposal, and its supportability in planning approval.

The proposed apartments will provide much needed housing diversity with a range of unit configurations including two and three-bedroom apartments to address the housing needs of the local area. The applicant looks forward to working with the City and JDAP to achieve development approval.

2 SITE CONTEXT

2.1 LOCATION & PROPERTY DESCRIPTION

The proposed development is located at No. 97 Smyth Road Nedlands and is currently occupied with a single house which is proposed to be removed in conjunction with this proposal. The subject site has a total land area of 1,011.7sqm with an overall frontage of 22.6m and lot depth of 40.0m.

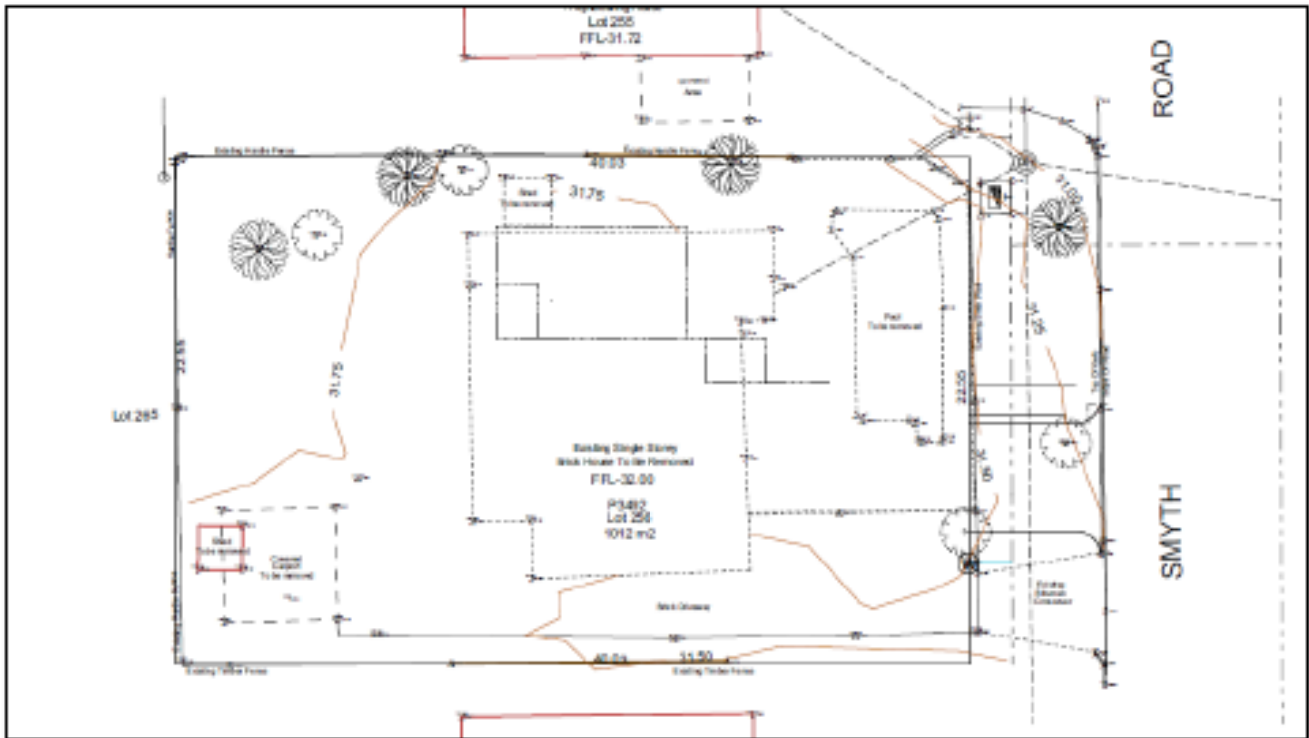
The site is situated a short 100m walk north of Stirling Highway and near to the City of Nedlands offices. The site is surrounded by a mix of Residential R160 and R60 sites along Smyth Road and R-AC1 zoned land on Stirling Highway.

The University of Western Australia is less than 200m to the east of the subject site, and the QEII Hospital and Swan River are both approximately 1km away to the north and south of the site respectively. There are a number of commercial and retail offerings throughout the local area on Broadway and Stirling Highway from food and beverage to medical, shopping, fitness, and business.

2.2 TOPOGRAPHY

The subject site slopes down approximately 1m from 32.5m AHD to the west to 31.5m AHD to the east.

The proposed ground floor FFL is 31.8m AHD, and car parking area FFL is 31.7m AHD. The development responds to the changing topography through averaging the extent of site works required to minimise the extent of soil disturbance, cutting, and fill. It is considered that the topography of the site is generally consistent and level and does not create any notable design constraints which have not been addressed in the building design. No issues in relation to stormwater drainage have been identified as a result of the topography of the site.



Existing Site Plan showing topography.

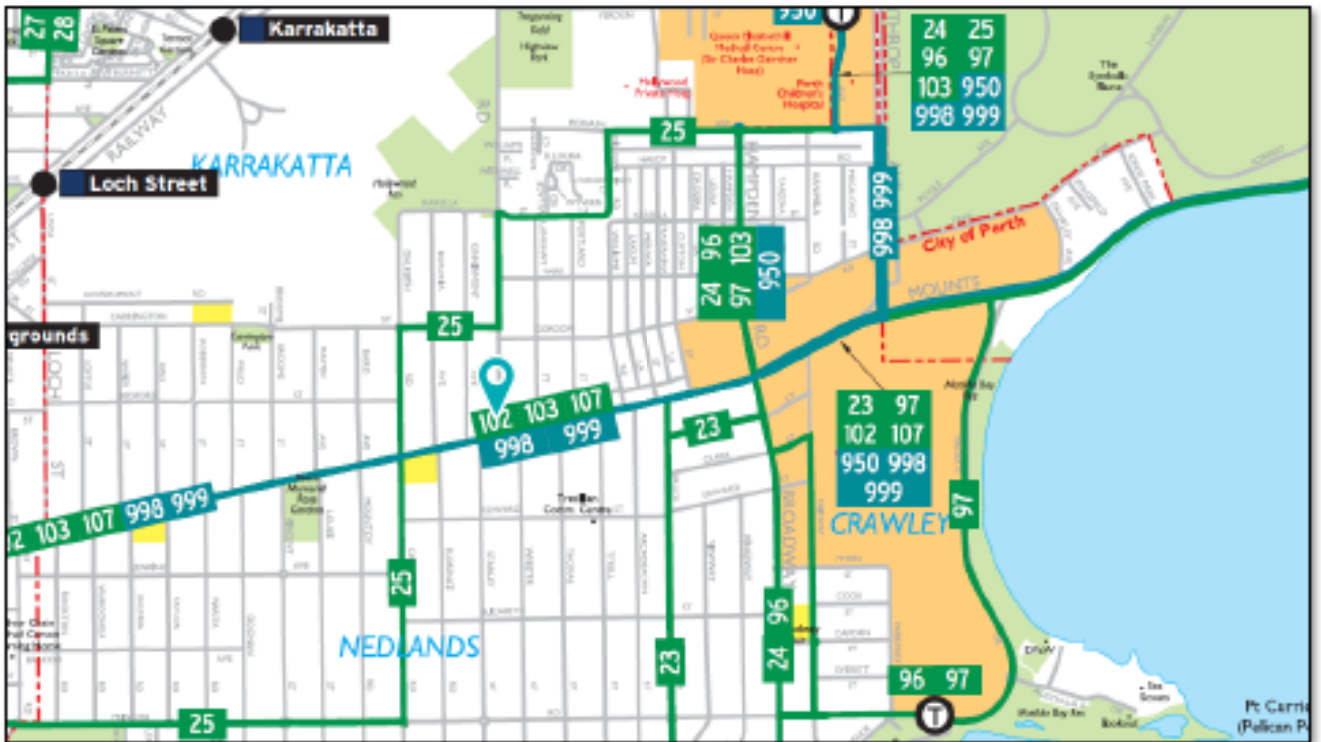
2.3 AMENITIES

The site is very well positioned in terms of services, amenity, and transport options, and presents an excellent opportunity for redevelopment of the area to bring in much needed housing diversity and additional options to the local area which is dominated by single houses. The site is approximately 6km from the Perth CBD. The existing pattern of development in the area is predominantly residential, however includes a mix of highway commercial businesses alongside Stirling Highway. Following the adoption of LPS No. 3 the local area has undergone extensive rezoning to enable redevelopment in this high amenity area.

2.3.1 Transport

The site has excellent public transport links. Bus routes 25, 102, 103, 107, 998, and 999 are all located just a short distance from the site. Stops for bus routes 102, 103, 107, 998, and 999 are just 130m walking distance away, 900 series bus routes provide a minimum of one service every 15 minutes (each direction) from the morning to 7pm (for planning purposes, high frequency criteria are specified in the R-Codes). The nearest train station is the Loch Street Station (as well as Karrakatta), which is on the Fremantle line and located approximately 2km away from the subject site. A map illustrating the public transport network is shown in the image below.

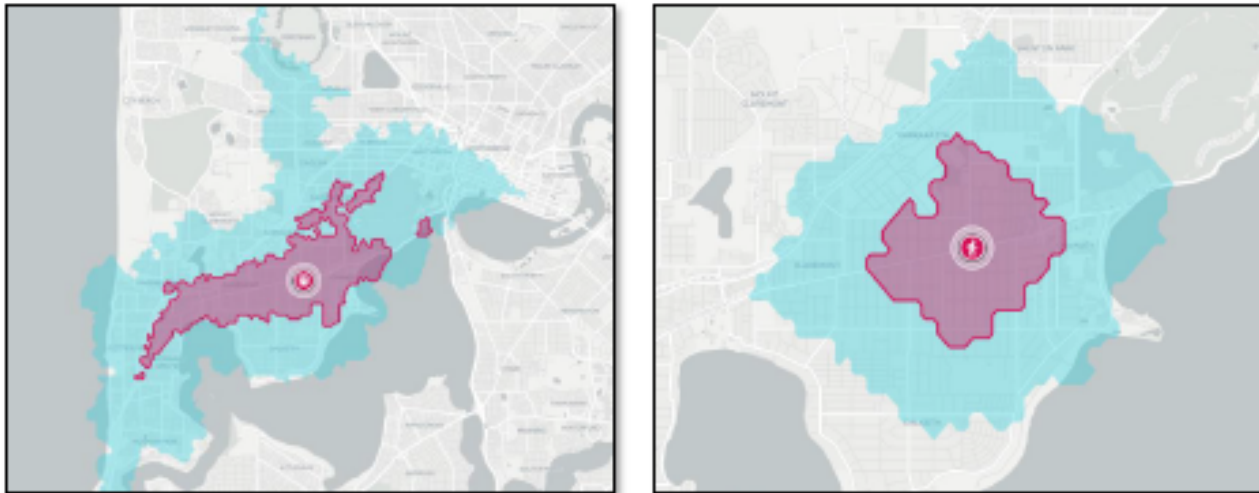
The local area includes bicycle friendly routes along the railway line to Perth and North Fremantle (to be extended to Fremantle in the coming five years), and along the river foreshore. While Stirling Highway and several local roads are not bicycle friendly, the local cyclist infrastructure is adequate for the local area. The City is proposing a "bicycle boulevard along Elizabeth Street and Jenkins Avenue. An extract of the 2016 Department of Transport Your Move Active Transport Map is provided below. Pedestrian infrastructure is good and expected to improve following the redevelopment of the wider Nedlands area. A footpath is located on the road verge adjacent to the subject site, and most roads in the area include high-quality pedestrian paths.



Transperth Network Map 5. Source: Transperth 2020.



Perth, Fremantle and Stirling Your Move Active Transport Map indicating cycling routes.
 Source: Department of Transport 2016.



15-minute (red) and 30-minute (blue) Travel Time Isochrone Maps.
Source: TravelTime Platform 2020

2.3.2 Schools and education

There are several educational facilities within close proximity to the site. The University of Western Australia is located approximately 1km from the subject site. The nearest primary school is the Loreto Nedlands Primary School, which is approximately 600m from the site, while Hollywood Primary School and Nedlands Primary School are both about 1km from the site

Christ Church Grammar School, Scotch College, Presbyterian Ladies College, Methodist Ladies College (MLC) and Mercedes College are the nearest secondary schools and which are all about 3km from the site.

2.3.3 Parks, Nature, and Recreation

The site is located within about 1.0km from Highview Park, which includes a community garden and community sports facilities for Tennis, Bowls, Hockey, and several other sports. The site is also in close proximity to Kings Park and the Swan River foreshore reserves which are highly desirable for active and passive recreation.

The local public open space and reserve network is excellent and provides several other high amenity large and smaller reserves and parks close to and within 2km of the site, such as the Peace Memorial Rose Gardens and Melvista Park.

2.3.4 Shopping, Retail, Medical, Community, and Other Services

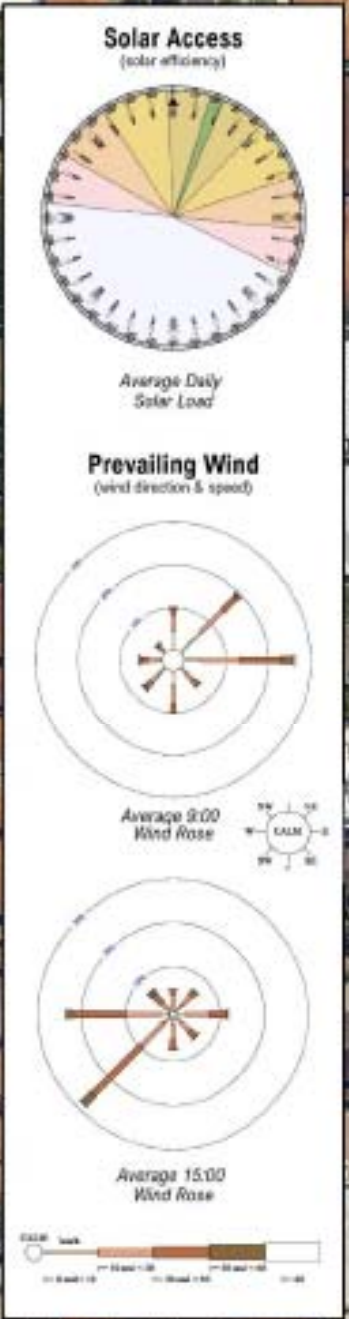
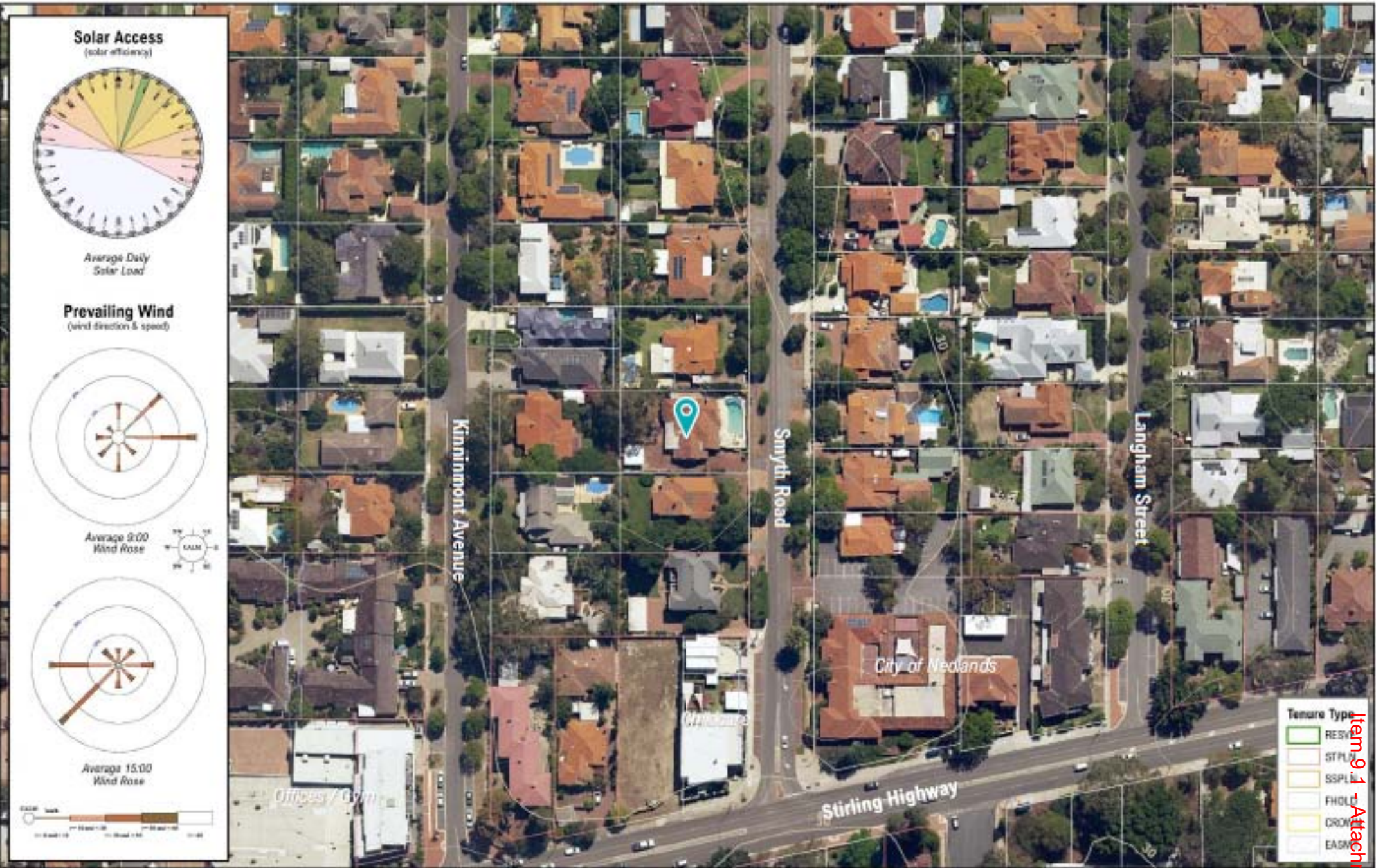
The site is well serviced for shopping, retail, medical, community, and other services. Notable nearby businesses and centres include:

- Broadway Fair (1.5km south east) is a neighbourhood activity centre which includes a range of retail options from an IGA grocery store, to a pharmacy, medical centre, and numerous food and dining options;
- The Taylor Road IGA (1km west along Stirling Highway), a conveniently accessible 24-hour grocery store;
- The nearby Captain Stirling Shopping Centre and future Nedlands Town Centre (200m south) which have a range of smaller retail options at present from a post office to pharmacy and is expected to be a great community focal point going forward with a range of grocery, food, and service options;
- A mixed-use corridor extends along Stirling Highway offering a range of retail shopping options and personal services. These are expected to be expanded on following recent upzoning and the City's planning framework position.

Claremont Shopping Centre (a large shopping centre) is located about 2km west of the site. The site is also located near several restaurants and take-away food outlets along Stirling Highway. The

There is a high availability of medical services in the local area given the proximity of the site to the QEII medical precinct including Sir Charles Gardiner Hospital and Perth Children's Hospital. This provides an opportunity for housing people who are employed in the medical precinct, as well as people who attend and use these services and are visiting the area.

The proposed apartments will also help contribute to changing the face of the wider Nedlands area providing much needed alternative housing options in a high amenity area.



LOCAL CONTEXT PLAN

97 SMYTH ROAD NEDLANDS

City of Nedlands
Received
11 August 2020



SCALE 1:1,500 @ A4



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Item 9.1 - Attachment 1



WIDER CONTEXT PLAN PUBLIC TRANSPORT

97 SMYTH ROAD NEDLANDS



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Item 9.1 - Attachment 1



WIDER CONTEXT PLAN ROADS

97 SMYTH ROAD NEDLANDS



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11 August 2020

WIDER CONTEXT PLAN CYCLING NETWORK

97 SMYTH ROAD NEDLANDS

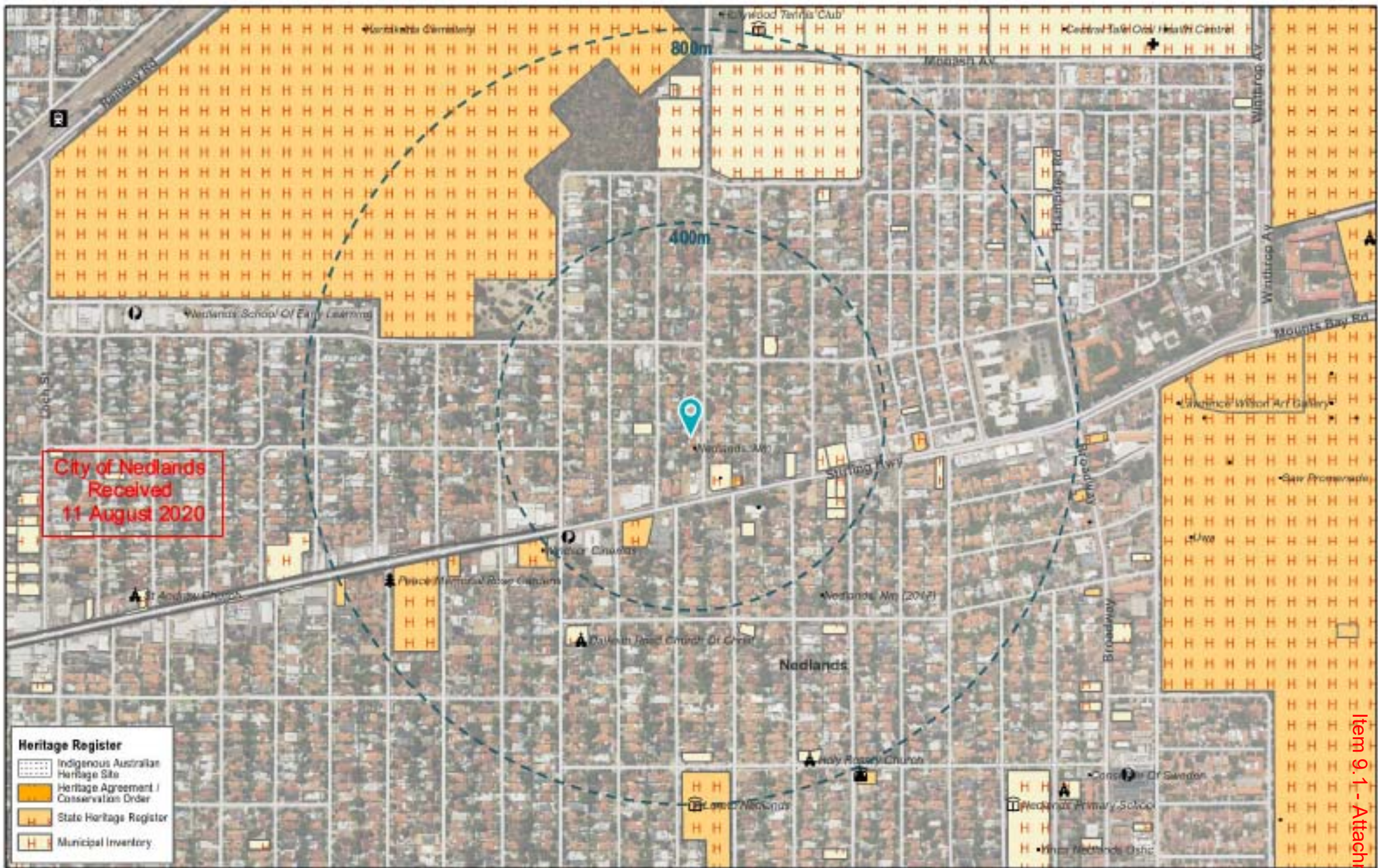


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Item 9.1 - Attachment 1



WIDER CONTEXT PLAN HERITAGE

97 SMYTH ROAD NEDLANDS



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Item 9.1 - Attachment 1

3 THE PROPOSAL

The subject development application is for the construction of a three-storey residential multiple dwelling building comprising of four studio apartments, one single-bedroom dwelling, and seven two-bedroom dwellings and two three-bedroom dwellings. The proposed development has been thoughtfully designed by The Development Consultancy on behalf of Aoyo Real Estate and has undergone an internal design revision process.

The apartments provide indentation and articulation over the building façade to reduce the appearance of bulk. This is complemented through colour and materials changes across the façade. Each of the ground floor apartments includes generous private open space areas, while unit 2 provides direct pedestrian access from the street.

The proposed garden areas exceed 200sqm (219.1sqm), and complement the overall green aesthetic which has achieved the acceptable outcome for deep soil areas, and then some, proposing 18% of the site as deep soil areas. A site responsive road verge landscaping treatment is also proposed. The well-resolved landscaping and greening design complements and softens the building's façade and improves and improves its response to the local streetscape character. The plant selection primarily includes native, WaterWise, and hardy plant varieties which have all given a suitably sized rootable soil zone and are capable of being maintained for the life of the development with minimal reliance on heavy upkeep.

The built form has been broken up through generous stepping and articulation of the façade to allow for improved access to natural daylight and airflow to all apartments and complements the multiple-aspect apartment form which is proposed throughout. A large multi-functional indoor and outdoor communal space area beneath the shade of a large retained tree is proposed at the rear which enables and allows for all year use.

A single width crossover is proposed to Smyth Road. 15 residential bays, and 3 bays for visitor car parking are proposed on the ground floor and screened from the street. The location of the site is near to good public transport links, and in combination with the parking space for 9 bicycles, encourages residents to consider using alternative transport options to a car.

Each apartment has been thoughtfully designed and provides a high amount of amenity for future residents. An open-plan living style is used throughout and complements the generous private open space and communal space that is proposed, to maximise the use, availability, amenity, and functionality of these spaces.

The façade itself includes varied materials and colours palettes with recycled face brick, stone feature cladding, glass and aluminium framing elements, and contrasting painted render to contribute to creating a cohesive overall design that responds to and celebrates the established character of the immediate local area.

Furthermore, there are no expected or identified issues with site servicing (such as those relating to reticulated sewerage, electricity, water, telephony, or waste). The attached plans, documentation, and consultants' reports provide further detailed information on the proposal.

3.1 FLOOR BY FLOOR COMPOSITION

Ground Floor

- 15 secure resident parking bays accessed from Smyth Road.
- 3 visitor car parking bays.
- Bicycle parking facilities for nine bicycles.
- Lift, stairs and building servicing infrastructure, allowing for access to apartments by the mobility impaired.
- 2 large and secure dwelling storerooms,
- Waste management and bin store facilities including the following:
 - A two-bin system for recyclable and general waste, with eight proposed 240L MRBs / MGBs;
 - tap and washing-down facilities;
 - drain and gross pollutant trap;
 - ventilation / lighting systems; and
 - a rubbish compactor.
- A clear and legible weather protected pedestrian entry to the apartments from Smyth Road and the car parking area.
- Units 1, and 2 which include large open plan living / kitchen areas with access to natural sunlight and ventilation accompanied by large 30sqm private terraces and yards suitable for outdoor living activities which encourages an indoor-outdoor lifestyle. These units are provided with the following design features and amenities:
 - Unit 1: Two-bedroom / bathroom, street facing 70sqm apartment. Unit 1 includes a large 30sqm yard. An additional direct pedestrian entry (via the pedestrian pathway) from Smyth Road into the apartment's private open space is also proposed. The unit also includes a study, closet-laundry, and north-oriented open plan living area.
 - Unit 2: Single-bedroom / bathroom 48sqm apartment, with large north-oriented terrace as well a study room and beautiful open plan living area.
- An attractive high amenity communal living and outdoor area beneath a large retained tree providing, seating, shade, a barbeque, and all-weather / all-year round amenities for use by the all residents.
- More than 9 trees and landscaping throughout provided in the generous setback areas.

First Floor

- Units 3, 4, 5, 6, and 7 which include generous open plan living / kitchen with access to natural sunlight and ventilation accompanied by large private balconies suitable for outdoor living activities which encourages an indoor-outdoor lifestyle. These units are provided with the following design features and amenities:
 - Unit 3: Two-bedroom / bathroom 76sqm apartment, including a large 17sqm balcony. Unit 3 includes generous access to natural sunlight and ventilation from multiple aspects.
 - Unit 4: Two-bedroom, street facing 78sqm apartment. Unit 4 includes two balconies totally 20sqm in area, as well as a walk-in-robe, study nook, and an open plan living area.
 - Unit 5: Studio 43sqm street-facing apartment, with a 9sqm balcony, a linen closet / walk-in-robe, and an open plan living area.

- Unit 6: Studio 46sqm apartment with a 8sqm balcony. The unit also includes a separate laundry and an open plan living area.
- Unit 7: Two-bedroom, two-bathroom 72sqm apartment with a 13sqm balcony. The unit also includes a large open plan living area / balcony with access to northern sunlight.
- Lift, stairs and building servicing infrastructure, allowing for access to apartments by the mobility impaired.
- Store rooms for each respective dwelling on this floor.
- A universally accessible step-free lobby and internal circulation areas which incorporate low-maintenance materials.

Second Floor

- Units 8, 9, 10, 11, and 12 which include generous open plan living / kitchen with access to natural sunlight and ventilation accompanied by large private balconies suitable for outdoor living activities which encourages an indoor-outdoor lifestyle. These units are provided with the following design features and amenities:
 - Unit 8: Two-bedroom / bathroom 76sqm apartment, including a large 17sqm balcony. Unit 8 includes generous access to natural sunlight and ventilation from multiple aspects.
 - Unit 9: Two-bedroom, street facing 78sqm apartment. Unit 4 includes two balconies totally 20sqm in area, as well as a walk-in-robe, study nook, and an open plan living area.
 - Unit 10: Studio 43sqm street-facing apartment, with a 9sqm balcony, a linen closet / walk-in-robe, and an open plan living area.
 - Unit 11: Studio 46sqm apartment with a 8sqm balcony. Unit 11 also includes a separate laundry and an open plan living area.
 - Unit 12: Two-bedroom, two-bathroom 72sqm apartment with a 13sqm balcony. The unit also includes a large open plan living area / balcony with access to northern sunlight.
- Lift, stairs and building servicing infrastructure, allowing for access to apartments by the mobility impaired.
- Store rooms for each respective dwelling on this floor.
- A universally accessible step-free lobby and internal circulation areas which incorporate low-maintenance materials.

Roof

- Low angle, non-intrusive pitched-roof design
- Concealed building services, and utilities.



Smyth Road Apartments Floor Plans

3.2 APARTMENT DESIGN SUMMARY

A summary of the apartment composition and design is provided in the table below.

Apartment Design Summary Table

Unit #	Floor Area	Bedrooms	Bathrooms / WC	Store	Outdoor Living
Unit 1 (Ground)	47.4sqm	1 bed	1 bath	5.4sqm	30.0sqm yard
Unit 2 (Ground)	71.0sqm	2 bed	2 bath	6.2sqm	73.0sqm yard
Unit 3 (First)	75.6sqm	2 bed	2 bath	7.9sqm	16.9sqm balc.
Unit 4 (First)	78.8sqm	2 bed	2 bath	5.4sqm	19.9sqm balc.
Unit 5 (First)	42.9sqm	Studio (0)	1 bath	7.7sqm	9.1sqm balc.
Unit 6 (First)	45.9sqm	Studio (0)	1 bath	8.8sqm	8.0sqm balc.
Unit 7 (First)	72.0sqm	2 bed	2 bath	8.6sqm	12.5sqm balc.
Unit 8 (Second)	75.6sqm	2 bed	2 bath	7.9sqm	16.9sqm balc.
Unit 9 (Second)	78.8sqm	2 bed	2 bath	5.4sqm	19.9sqm balc.
Unit 10 (Second)	42.9sqm	Studio (0)	1 bath	7.7sqm	9.1sqm balc.
Unit 11 (Second)	45.9sqm	Studio (0)	1 bath	8.8sqm	8.0sqm balc.
Unit 12 (Second)	72.0sqm	2 bed	2 bath	8.6sqm	12.5sqm balc.

3.3 SUPPORTING INFORMATION & REPORTS

Consultant reports and other supporting information has been duly prepared to assist in the assessment of this planning application, and to compliment and assist the planning approval process. The reports and documentation which have been provided are detailed in the table below.

Consultant	Plan / Document	Dated
The Development Consultancy	Development Plans	28 July 2020
Kelsie Davies Landscape Architecture	Landscape Plan	7 July 2020
i3 Consultants WA	Transport Impact Statement	1 August 2020
Dallywater Consulting	Waste Management Plan	16 July 2020

4 PLANNING FRAMEWORK

The planning framework comprises numerous state and local laws, policies, regulations, and reports. Critical key planning framework documents have been highlighted and discussed in this section. The discussion includes background on these documents, details how they apply, and deliberates important considerations which apply to the proposed development.

A summary table of the statutory and non-statutory planning framework is provided in the table below.

Key Statutory Planning Framework Documents	
1	State Planning Policy 7.3 Volume 2 (and associated WAPC Position Statements)
2	State Planning Policy 7.0 Design of the Built Environment
3	City of Nedlands Local Planning Scheme No. 3

Key Non-Statutory and Strategic Planning Framework Documents	
1	Perth and Peel@3.5million
2	State Planning Policy 5.4 Road and Rail Noise
3	City of Nedlands Fill and Fencing Local Planning Policy
4	City of Nedlands Landscaping Plans Local Planning Policy
5	City of Nedlands Waste Management Guidelines Local Planning Policy

4.1 STATUTORY PLANNING FRAMEWORK

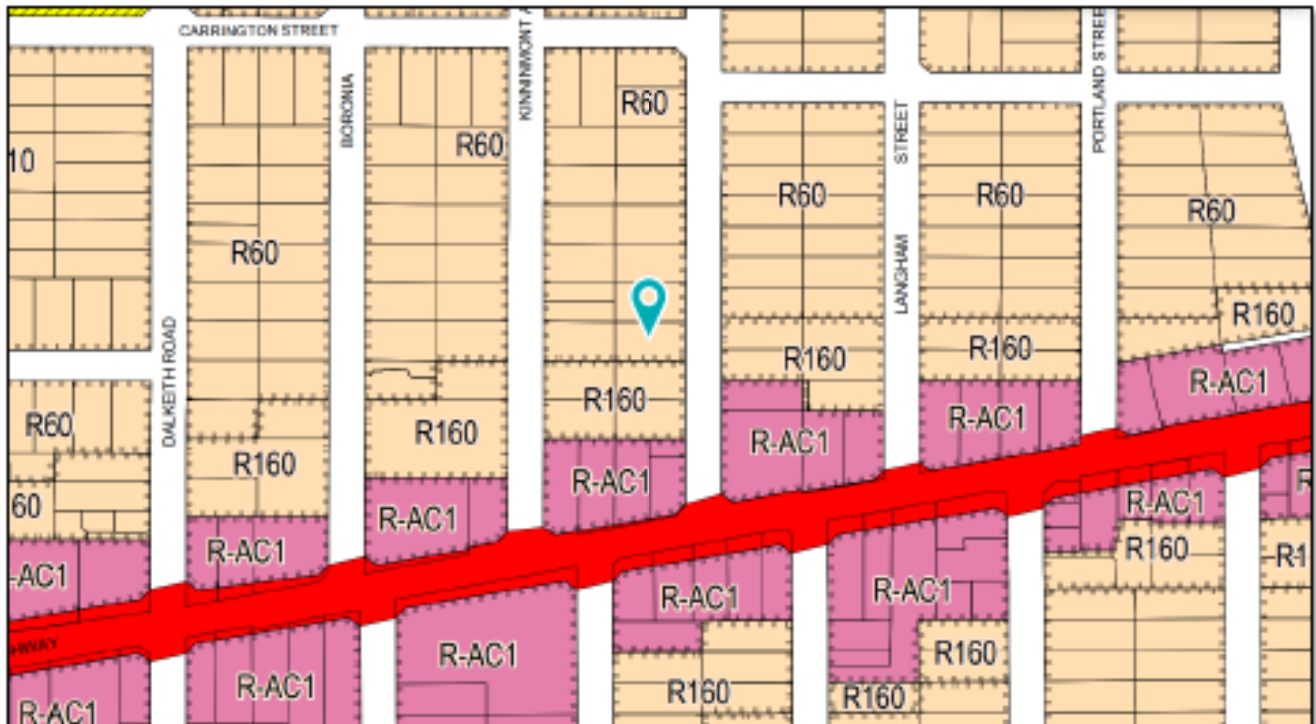
This section identifies and discusses the statutory planning framework applicable to the proposal.

4.1.1 City of Nedlands Local Planning Scheme No. 3

The City of Nedlands Local Planning Scheme No. 3 (LPS No. 3) is a statutory Scheme that provides guidance for the development and use of land and buildings in the City. The lot is zoned "Residential" under LPS No. 3, with a density of R60. The site is situated just north of Stirling Highway and adjoins R160 land to the south with R-AC1 Mixed Use land located along Stirling Highway, as illustrated in the figure below.

The "Residential Zone" has the following objectives:

- a) *To provide for a range of housing and a choice of residential densities to meet the needs of the community.*
- b) *To facilitate and encourage high quality design, built form and streetscapes throughout residential areas.*
- c) *To provide for a range of non-residential uses, which are compatible with and complementary to residential development.*
- d) *To ensure development maintains compatibility with the desired streetscape in terms of bulk, scale, height, street alignment and setbacks.*



City of Nedlands Local Planning Scheme No. 3 Map 4 of 5 Nedlands Localities. Source WAPC 2020.

It is considered that the proposed development achieves the objectives of the Residential Zone as follows:

- The proposed design increases the choice and range of housing options available in the local area responding to community needs for increased housing choice and housing density in the near to the future Nedlands Town Centre and the University of Western Australia. The design includes studio, single bedroom, and two bedroom apartments.
- The proposed high-quality design addresses and achieves the objectives and intent of SPP 7.3 Vol. 2 and urban densification objectives of the City's new Local Planning Scheme as discussed subsequently, from its aesthetic appearance, to its amenity impact and functional build quality and design response.

It is considered that the proposed development is wholly consistent with the objectives of "Residential" zoned land, as elaborated on and detailed in the Planning Assessment and Justification section of this report.

4.1.2 State Planning Policy 7.3 Volume 2 (Design WA)

State Planning Policy 7.3 Volume 2 (and SPP 7.0) came into effect on 24 May 2019 and is the primary planning control document for multiple dwelling and mixed-use development in Western Australia coded R40 and above. The proposed development is subject to SPP 7.3 Volume 2. As outlined in SPP 7.3 Volume 2, each design element includes the following sections to inform assessment of applications for development approval:

- A statement of intent for each element that explains the intended outcome and why it is important;
- Element objectives that define the intended outcome for the element;
- Acceptable outcomes that are specific measures and outcomes to assist in meeting the element objectives;
- Guidance including matters to be considered and design responses that can achieve the objectives:

- in Part 2 the Planning Guidance is for local governments in preparing modifications to the Primary Controls through the local planning framework to respond to local character and contexts;
- in Parts 3 and 4 the Design Guidance is for designers and development assessors.

In accordance with this planning framework, a design should demonstrate that it meets the Statement of Intent and Element Objectives of each design element, this includes satisfying the objectives and content of State Planning Policy 7.0. These planning applications are assessed in context of their entire development design and present a new way to consider development proposals. The proposed development has clearly demonstrated that it has achieved the State Planning Policy 7 suite of policies as has been detailed in the Planning Assessment & Justification section of this report.

Advice on the application of local planning frameworks is provided in part 1.2 of SPP 7.3 Vol. 2, in addition to a Position Statement released by the WAPC on the same matter dated May 2019. Certain elements listed in clause 1.2.2 of SPP 7.3 Vol. 2 are capable of being amended or replaced by a properly adopted local planning policy or local development plan. Clause 1.2.3 details additional sections of SPP 7.3 Vol. 2 which are capable of modification by a local planning framework document with the express approval of the Western Australian Planning Commission. Application of the City of Nedlands' Local Planning Framework is subject to these requirements.

The use of a grounded "holistic" approach to the assessment of development has been further entrenched by the introduction of SPP 7.3 Vol. 2 in May 2019.

4.2 NON-STATUTORY PLANNING FRAMEWORK

4.2.1 State Planning Policy Framework

Except for State Planning Policy 7.3 (Residential Design Codes) — as affirmed through a SAT decision — all other State Planning Policies are planning instruments of "due regard", as per clause 67c of Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015 (W.A.)*, the guidance provided in State Planning Policy 1 SPP1, and elsewhere.

The following location specific State Planning Policies are applicable to the proposed development site.

- State Planning Policy 5.4 Road and Rail Noise

4.2.2 SPP 5.4 Road and Rail Noise

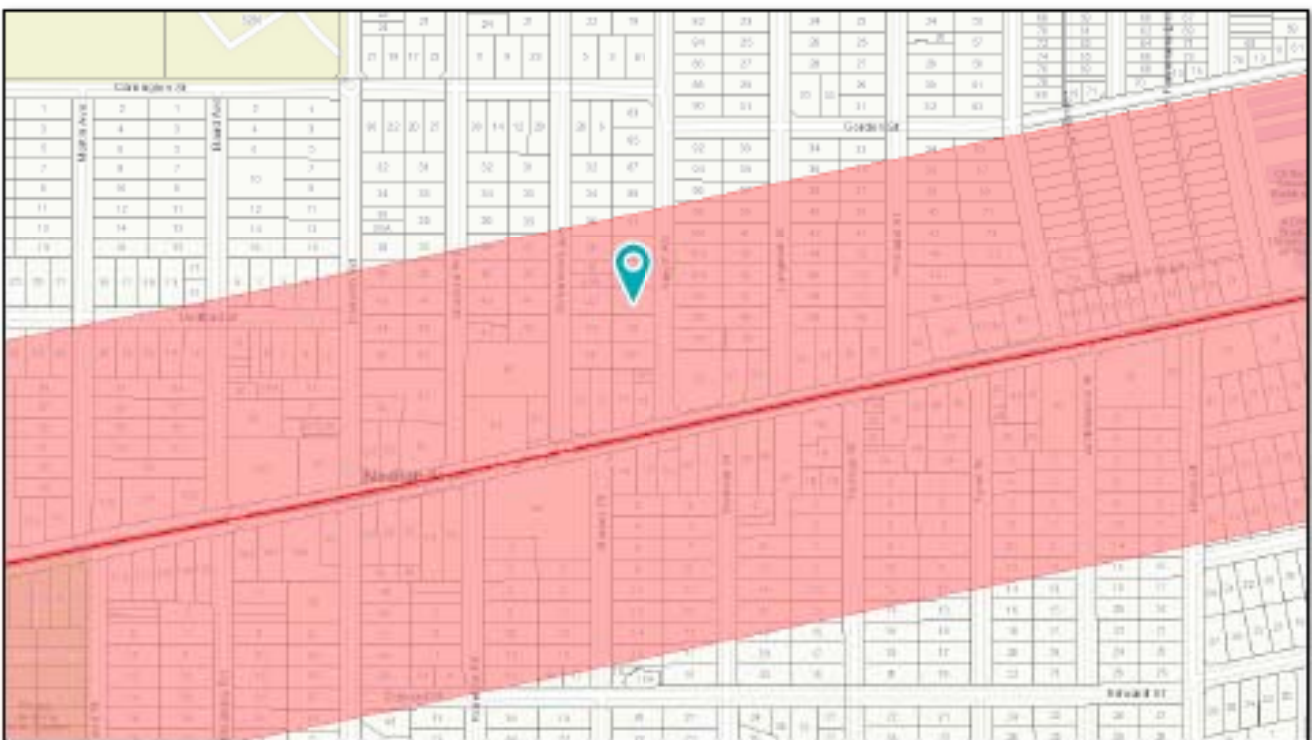
The site is located within a strategic freight or major traffic route trigger area (about 100m from Stirling Highway). SPP 5.4 aims to minimise the adverse impact of road and rail noise on noise-sensitive land-uses and developments within the specified trigger distance of strategic freight and major traffic routes. SPP 5.4 has the following objectives:

- 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.*

The site has been identified as being in a Quiet House A area. The proposed development is considered to have achieved and addressed the objectives of SPP 5.4, and is supportable in development application approval for (but not limited to) the following reasons:

- All dwellings will exceed the requirements of the National Construction Code, including with relation to noise mitigation treatments.
- Mechanical building services and vehicle car parking and manoeuvring areas are screened and located away from sensitive residential apartment uses, and sensitive areas on neighbouring sites.
- The screening nature of current and future development to the south will form a barrier to, and improve the acoustic outcomes, of the proposed development
- Noise mitigation treatments will include the use of fire-proof dividing walls, window / door orientation and glazing, and the positioning of the more sensitive private and public areas of the development away from noise generation sources.

These treatments will contribute to reducing the impact of noise between apartments and neighbouring sites, and based on these treatments and the proposed design, it is considered that an appropriate degree of acoustic and noise impact mitigation treatment has been achieved.



SPP 5.4 Road and Rail Noise. Source: Dept. of Planning, Lands and Heritage 2020.

Transport Corridor Classification	Number of lanes (both directions), including bus/priority lanes and entrance/exit ramps	Forecast noise exposure category based on lot distance(m) from edge of nearest main road carriageway (net entrance/exit ramps)																
		adjacent	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	175
Strategic freight/major traffic route • 500 or more Class 7-12 A-roads vehicles per day, or • 50,000+ vehicles per day	2 to 4 lanes	72	68	66	65	63	62	61	61	60	59	59	58	57	57	56	55	
	5 to 6 lanes	74	70	68	66	65	64	63	62	61	61	60	59	59	58	58	57	
	7 to 8 lanes	76	72	69	68	66	65	64	64	63	62	62	61	60	60	59	58	
	9 to 10 lanes	77	73	70	69	67	66	65	65	64	63	63	62	61	61	60	59	
	11 or more lanes	78	74	71	70	68	67	66	66	65	64	64	63	62	62	61	60	

Noise Exposure Forecast table of the Road and Rail Noise Guidelines. Source: WAPC 2019.

4.3 STRATEGIC PLANNING FRAMEWORK

4.3.1 Perth and Peel@3.5million

Perth and Peel@3.5million is the overarching strategic planning framework for the Perth and Peel metropolitan regions. Perth and Peel@3.5million proposes five strategic themes for a liveable, prosperous, connected, sustainable and collaborative City. The framework aspires to a city that provides:

...a network of connected activity centres which deliver employment, entertainment and high-density lifestyle choices'. The framework further identifies that additional 800,000 dwellings will be required to the year over the 35 years to 2050.

This consists of 4,300 additional dwellings, or 9,500 residents within the City of Nedlands within brownfield land.

The strategy identifies that: 'The aim is for the majority of all new infill residential development to occur within the preferred urban consolidation precincts of activity centres, urban corridors and station precincts to accommodate the majority of the infill dwellings required by 2050. The principle of activity centres in accordance with Perth and Peel@3.5million is to:

Support urban and economic development of the activity centres network as places that attract people to live and work by optimising land use and transport linkages between centres; protecting identified employment land from residential encroachment, where appropriate, and avoiding contiguous linear or ribbon development of commercial activities beyond activity centres.

The proposed development seeks to consolidate density into the Nedlands area, to help enable the City to meet its strategic dwelling targets set by the State government. The site is in close proximity to employment nodes, high-frequency multi-modal transport routes, public and private business nodes and centres, and numerous retail options as detailed in the Amenities section of this report.



Perth and Peel@3.5 million Plan 1 Central sub-regional planning framework. Source WAPC 2016.

5 PLANNING ASSESSMENT & JUSTIFICATION

An assessment of the proposed development's performance against the various relevant provisions of the planning framework is detailed in this section of the report. This report provides evidence to support development approval by demonstrating how the proposal satisfies these relevant development standards, design guidance, and objectives, and why it is capable of planning approval.

5.1 SPP 7.0 PLANNING ASSESSMENT

State Planning Policy 7.0 sets out the objectives, measures, principles, and processes which apply to the design and assessment of built environment proposals through the planning system. SPP 7.0 outlines ten key overarching design principles which establish a definition of "good design" to inform planning processes. An assessment of the proposed development has been provided accordingly below in accordance with these ten design principles.

State Planning Policy 7.0 Design of The Built Environment Design Principles		Objective Achieved
1. Context & Character	<i>Good design responds to and enhances the distinctive characteristics of a local area contributing to a sense of place</i>	✓
<p>The local area is in transition. Greater density of development is now allowable and encouraged following changes made after the introduction of SPP 7.3 Vol. 2 and the City's new LPS No. 3. In the future there will be further higher-density development in the local area both as part of the adjoining and adjacent R160 sites, and the Nedlands Town Centre R-AC1 sites a few metres further to the south.</p> <p>The design has responded to and references the built form of the immediate local area by its use of building materials and colours scheme. The proposed façade materials consist of a feature recycled face-brick façade, aluminium window frames, a stone feature clad wall which frames the pedestrian entry, as well as glass, and contrasting painted finish rendered walls. The street façade is softened by the landscaping treatment proposed to Smyth Road.</p> <p>This immediate built form character north of Stirling Highway at this location is currently predominantly single houses, with highway commercial businesses along Stirling Highway. The emerging and future built form includes a greater number of multiple dwelling apartment developments.</p> <p>The design and material selection for the proposed building seeks to complement and reference the local character of the area, including the "red-brick character houses", and "limestone" geology of the area.</p> <p>By drawing on and sympathetically interpreting these character elements — which have been previously identified as desirable by the City — the design has formed a unique and distinct development which will positively contribute to the streetscape.</p> <p>The design also respects the existing (and emerging) character of the area by proposing generous setbacks and separations well in excess of the acceptable outcomes, and a very high amenity communal space, which understands the limited availability of public open space in the immediate area.</p> <p>Overall, it is considered that the design addresses, responds to, and enhances the character of the area, and will be a suitable and welcome addition. This is achieved through the façade and building design treatment referencing local building materials and the accompanying landscaping which will enhance and contribute to this green aesthetic.</p>		
2. Landscape Quality	<i>Good design recognises that together landscape and buildings operate as an integrated and sustainable system within a broader ecological context</i>	✓
<p>A high-quality and well refined landscaping design has been prepared for the development by Kelsie Davies Landscape Architecture. The landscaping recognises the importance of greenery to mental and physical health and wellbeing outcomes, especially in urban environments. The Smyth Road apartments propose generous landscaping deep soil areas (well in excess of the acceptable outcomes) surrounding the building, and within the street setback areas. This</p>		

State Planning Policy 7.0 Design of The Built Environment Design Principles		Objective Achieved
<p>landscaping design includes a low maintenance plant selection with a number of native species, alongside suitably sized and drained deep soil areas throughout.</p> <p>The proposed tree planting will consist of eight medium and small trees (Chinese Tallow and Natchex Crêpe Myrtle), and one large retained tree which is associated with the high amenity communal open space at the rear of the property. These trees will provide a shade and tree canopy which will help in combatting the Urban Heat Island Effect, and improve the amenity of the communal open space, the streetscape, and each individual dwelling.</p> <p>The landscaping will also help improve mental and physical health outcomes of residents. A large existing Queensland Box street will also be retained and protected during construction. The landscaping solution has recognised the need to include a variety of low-maintenance hardy plants and the benefits of providing these plants in human health and wellbeing, in the context of an apartment development. The landscaping selection will also help to complement and soften the built form.</p> <p>Landscaped areas are also easily accessible and will be able to be maintained through the life of the development by the strata body. An inspection by the strata company will be conducted on at least an annual basis to monitor the health of landscaping and building infrastructure. All landscaped areas will be reticulated and mulched as necessary to reduce the burden of their upkeep, and will be regularly inspected and maintained on an ongoing basis by the strata company caretaker. Water falling on rooves will be directed into garden beds and collected and stored for future use in garden areas reducing the ongoing water use of the apartments.</p> <p>Overall, the landscaping solution is considered to be a welcome and much needed addition which will provide a great benefit to the future residents of the Smyth Road apartments and to the amenity and streetscape, for the wider community.</p>		
3. Built form & scale	<i>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.</i>	✓
<p>The proposed built form and scale is consistent with the zoning and desired future character of the area as established by the City's planning framework for R60 sites. The proposed height is consistent with the planning framework, and the proposed development falls entirely within the "building envelope" established by setback, separation, visual privacy and other design elements in SPP 7.3 Vol. 2.</p> <p>The built form is broken up by the articulated form throughout and the use of recessing, stepping, voids, and materiality. The exterior is clean and refined in its expression through its choice and variation of materials, textures, and colours across the façades.</p> <p>The local area is undergoing transition. The proposed design recognises the future development character of the area and has responded accordingly by seeking to reduce the effects of massing to the streetscape. The proposed apartments have respected the existing residential aspect of the area and provided setbacks and a built form considerate of the locality and neighbours, while understanding and acknowledging the future built form character intent set-out by the planning framework.</p>		
4. Functionality & build quality	<i>Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full lifecycle.</i>	✓
<p>The proposal is for a low-maintenance, aesthetically pleasing design which will use durable materials, finishes, and design elements. The design also does not excessively rely on artificial or mechanical heating, or lighting methods (which require regular upkeep) and considers and responds to the potential for future changes in climate. The building will be administered by a strata company and caretaker who will monitor and address any future building issues as they arise in a timely manner.</p> <p>The design has accommodated building utilities and services in an integrated manner, without detriment to the appearance, functionality and serviceability of the development and its future residents.</p>		

State Planning Policy 7.0 Design of The Built Environment Design Principles		Objective Achieved
5. Sustainability	<i>Good design optimises the sustainability of the built environment, delivering positive environmental, social, and economic outcomes.</i>	✓
<p>As elaborated further in the energy efficiency section of the SPP 7.3 Vol. 2 assessment, the design prides itself on being sustainable. The proposal considers key environmental aspects of its materials with several key overarching priorities:</p> <ul style="list-style-type: none"> • Maximising solar access and natural ventilation opportunity for each apartment. • Providing a well-resolved landscaping solution that contributes to increasing tree canopy and reducing heat-loads. • Using low-maintenance materials with low whole-of-life costs to reduce the need for replacement, repairs, and maintenance. • Use of a two-bin system with room for recyclables, as well as scope for future FOGO bins. • Glazing types and sizing assist winter heat gain into the building, whilst minimising heat gain in the summer. • Dwelling and room orientation and positioning to improve solar access outcomes. • The installation of an integrated network system utilising onsite renewable energy via photo-voltaic cells. • Use of water efficient fittings and fixtures throughout, in bathrooms, kitchens, and toilets. • Reducing water use in the garden from using a thick 70mm mulch and using bubblers instead of sprinklers, to implementing a rain / weather sensing retic system and directing water falling on rooves into garden beds. • Use of LED lighting throughout and light sensors to public areas to reduce power consumption. • Use of high-quality insulation throughout. 		
6. Amenity	<i>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.</i>	✓
<p>The proposed development prides itself on providing a high level of amenity to its future residents. Each apartment is provided with large bedrooms and living areas complemented by balconies or terraces suitable for outdoor living pursuits. Each apartment has also is provided with ample access to daylight and natural ventilation. The proposed landscaping and greening solution further enhances the amenity of the apartments and streetscape. Notably, the communal open space is very high amenity, and has a rooved alfresco, an indoor area, and a shaded outdoor landscaped area — the communal open space will form a fantastic place for residents to gather, socialise, and relax, without need to leave their homes. It is noted that all floors of the development are also accessible by lift and amenable for a wide range of users, including those with movement difficulties.</p> <p>With respect to the situation of the development the site is only about 1km from the University of Western Australian campus, the QEII Medical Precinct, and the Taylor Road IGA (a 24/7 grocery store). The site is also only a short stroll away from Stirling Highway, which is undergoing redevelopment at the moment as part of the Nedlands Town Centre.</p> <p>Stirling Highway itself includes a range of high frequency public-transport options which make it possible to access Perth CBD in less than 15 minutes. Notable bus services include the CircleRoute bus 998 and 999.</p> <p>Nearby businesses from cafés to restaurants, take-away, service businesses and a range of small businesses and shops along Stirling Highway and throughout the local area. This is supported by the redevelopment occurring as part of Nedlands Town Centre. U.W.A, QEII, and Perth are all large employment centres and located within a stone's throw of the site, while Claremont (3km west) includes a range of commercial and retail offerings.</p> <p>The nearby local amenity is excellent and the siting of such a proposal for twelve multiple dwellings at this location is highly desirable and suitable.</p>		

State Planning Policy 7.0 Design of The Built Environment Design Principles		Objective Achieved
7. Legibility	<i>Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.</i>	✓
<p>The apartment design is clearly legible and intuitive for residents and visitors to use. There is a clear differentiation between the public and private realm and clear and separate access routes for pedestrians and vehicles into the development. The amount of unnecessary circulation space has been minimised, and the access lobby, lift, and stairwell have been conveniently and clearly located at the centre of the site. Visitor access (for pedestrians and vehicles) is managed by an intercom system. The entry to the development from the street and from the car parking area are clearly defined, and easy and safe to use. There is a clear hierarchy of space proposed within the development.</p> <p>With regard to waste management, the use of the bin store will be aided by signage and ongoing monitoring by a caretaker, while its location, and the ease of moving the bins for presentation is considered to be minimal and amenable given the proposal for twelve multiple dwellings. Waste management will operate in accordance with the submitted approved waste management plan. The operation of the building will be reviewed by the strata company and caretaker on an ongoing basis, and as issues arise these will be addressed.</p>		
8. Safety	<i>Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.</i>	✓
<p>The design is considered to achieve the safety design principle. All street fronting apartments overlook and provide passive surveillance to the street, without compromising their ability to provide visual privacy for their residents. A clear hierarchy of defensible space has been created.</p> <p>In relation to vehicle manoeuvring, adequate sightlines are maintained through the development and driveway through to the crossover and street. A separate pedestrian entry is proposed. Pedestrian areas are clearly delineated from vehicle areas.</p> <p>The design attempts to limit areas for concealment, and the amount of exposed blank façade (in relation to graffiti). A secure access system to the apartments is proposed, which otherwise prevents any unauthorised person from accessing the site beyond the public street frontage interface area.</p> <p>The design achieves the underlying principles of Crime Prevention Through Environmental Design.</p> <p>The development has also ensured passive visual surveillance of the street throughout and provided clear sightlines to public spaces to maximise opportunities for natural light penetration. All public areas are to be provided with lighting to improve visibility — operated by sensor where appropriate to reduce energy consumption and lightspill.</p>		
9. Community	<i>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.</i>	✓
<p>The proposed design recognises and responds to the needs of providing opportunities for community interaction, while acknowledging the smaller scale of the proposal and its situation as part of a residential only development. A very high amenity communal space with an indoor room, rooved alfresco area, and shaded landscaped outdoor area is proposed which will be a significant benefit and point of difference of this development. The communal area includes a barbeque, seating, and other amenities.</p> <p>This communal area will help promote incidental interaction and sense of community between residents, and improve the health and wellbeing outcomes for those who call the Smyth Road apartments their home.</p> <p>Given the design does not include a mixed-use component, public interface is unnecessary and inappropriate for this site. The design provides a friendly and appealing streetscape interface and appearance through its use of direct street access, private open space, landscaping, and façade treatment. This improves the sense of connection for residents to their community and street, and vice-versa of “inviting” the community to feel a sense of connection to this development (without compromising CPTED).</p> <p>A range of dwelling types and sizes have also been proposed to improve the housing diversity both in the local area, and within the development. The design allows for occupation by a range of persons of different ages and backgrounds.</p>		

State Planning Policy 7.0 Design of The Built Environment Design Principles		Objective Achieved
10. Aesthetics	<i>Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.</i>	✓
<p>The design provides a well resolved façade, colours, and materials solution. The contemporary design uses a mixture materials and colours from recycled face brick to stone cladding, glass and metallic elements, to painted render, in combination with articulation, recessing, and variation in height to provide a cohesive design solution respectful and responsive to the streetscape and neighbouring properties.</p> <p>The design is respectful of the evolving character of the area and understands and has created a coherent, well-resolved built form, responsive to the future character. The streetscape appearance and façade treatment creates an attractive interface with the wider local area. The built form is also not overbearing, and proposes generous setbacks, separations and articulation of the built form. The proposed development considers the existing vernacular in the surrounding area. Through investigation of the geometric articulation, the building presents a refined contemporary design and sets a benchmark performance for all future builds in the locality.</p> <p>The landscaping treatment is no exception, with deep soil areas and landscaping proposed throughout. The proposed deep soil areas (for example) being well over the acceptable outcome measure.</p>		

5.2 SPP 7.3 VOL. 2 PLANNING ASSESSMENT

This section of the report provides a comprehensive assessment of the proposed development in accordance with SPP7.3 – Residential Design Codes Volume 2.

The following assessment with the relevant element objectives has been prepared. This assessment has been segmented into three parts based on the layout of SPP 7.3 Vol. 2; these are: primary controls; siting the development; and designing the building. This planning assessment demonstrates the suitability of the proposed multiple dwellings and substantiates the design.

5.2.1 Element Objectives Achievement Summary Table

A summary of the achievement of the element objectives has been provided in the table below. Based on the detailed assessment provided subsequently, the design is considered to achieve all of the applicable element objectives. Design elements 2.8 and 3.1 do not have element objectives. Design elements 4.13 and 4.14 are not applicable to this proposal.

Part 2: Primary Controls	
2.2 Building Height	✓
2.3 Street Setbacks	✓
2.4 Side & Rear Setbacks	✓
2.5 Plot Ratio	✓
2.6 Building Depth	✓
2.7 Building Separation	✓
2.8 Development Incentives for Community Benefit	

Part 3: Siting the Development	
3.1 Site Analysis & Design Response	
3.2 Orientation	✓
3.3 Tree Canopy & Deep Soil Areas	✓
3.4 Communal Open Space	✓
3.5 Visual Privacy	✓
3.6 Public Domain Interface	✓
3.7 Pedestrian Access & Entries	✓
3.8 Vehicle Access	✓
3.9 Car & Bicycle Parking	✓

Part 4: Designing the Building	
4.1 Solar & Daylight Access	✓
4.2 Natural Ventilation	✓
4.3 Size & Layout of Dwellings	✓
4.4 Private Open Space & Balconies	✓
4.5 Circulation & Common Spaces	✓
4.6 Storage	✓
4.7 Managing the Impact of Noise	✓
4.8 Dwelling Mix	✓
4.9 Universal Design	✓
4.10 Façade Design	✓
4.11 Roof Design	✓
4.12 Landscape Design	✓
4.13 Adaptive Reuse	—
4.14 Mixed Use	—
4.15 Energy Efficiency	✓
4.16 Water Management & Conservation	✓
4.17 Waste Management	✓
4.18 Utilities	✓

5.2.2 Part 2: Primary Controls

Part 2 provides the primary controls that relate to the residential coding of the site. A table detailing how the proposed development achieves the design elements of Part 2 of State Planning Policy 7.3 Volume 2 is provided in the table below.

Element Objectives		Justification and Comment
2.2	Building Height	
02.2.1	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.	<p>The acceptable outcomes for height are for buildings with up to three storeys. The proposed built form is three storeys in height. The local area is expected to see change and increases in density following the introduction of SPP 7.3 Vol. 2 and the City's new LPS No. 3. The proposed apartments are consistent with the desired future character as set out by the planning framework.</p> <p>The street setback and façade treatment also help to ensure that the height of the building does not dominate the existing streetscape character (which is currently predominant single storey development).</p> <p>Notwithstanding, the street and local area are expected to transform as more development occurs in accordance with the zonings adopted under LPS No. 42, to 3m in height and setbacks similar to the proposed.</p> <p>Given this context, the proposed height of the building is entirely appropriate and consistent with the desired future character as set out by the planning framework.</p>
02.2.2	The height of buildings within a development responds to changes in topography.	<p>The site has a sloping topography of approximately 1.0m from west (32.5m AHD) to east (31.5m AHD). The proposed apartments balance the extent of fill and excavation, and proposes a ground FFL of 31.8m AHD. The land in the immediate area is coded with the same or greater density.</p>
02.2.3	Development incorporates articulated roof design and/or roof top communal open space where appropriate.	<p>The design does not include roof-top communal areas, which are impractical given the scale of development proposed. Notwithstanding, a high-amenity communal space is proposed on the ground floor at the rear north which will help to contribute to resident amenity.</p> <p>The form of the roof includes varying roof heights and parapet walls / articulation to the front and side elevation which improve the visual interest and reduce the appearance of bulk and scale of the proposal.</p>
02.2.4	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.	<p>The Wyong Road apartments do not compromise the ability of any neighbouring site to achieve sufficient daylight (and natural ventilation) access.</p> <p>The building has a lowered height and sufficient side setbacks to ensure that overshadowing to adjoining properties at midday 21st June is less than 50%.</p> <p>The Smyth Road apartments have also been carefully designed to respect the need for daylight and solar access to the neighbouring properties — which are also zoned Residential R60 but are yet to be developed. The proposed building height has respected neighbouring sites and understood the context of the planning framework for future development and responded accordingly through the modest built form, bulk, and scale demonstrated in the proposed design.</p>

	The development is designed to achieve ample solar access to apartments and communal spaces, with all apartments provided with a multiple-aspect outlook.
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2.3 Street Setbacks	
<p>02.3.1 The setback of the development from the street reinforces and/or complements the existing or proposed landscape character of the street.</p>	<p>The acceptable outcome is for a 2.0m street setback. The façade of the building is separated by more than 2.0m from the street.</p> <p>The built form includes balconies and direct access for Unit 2 via a pedestrian pathway (a street facing apartment) to improve the interface with the street. The street setback is consistent with the desired future built form as set-out by the planning framework and associated prescribed density coding of R60.</p> <p>The increased setback allows the development to utilise the space between the building and the street for landscaping. This helps to reinforce the existing landscaped character of the street.</p>
<p>02.3.2 The street setback provides a clear transition between the public and private realm.</p>	<p>The site provides a clear transition between the public and private realm through the street setback area which has been provided.</p> <p>The proposed apartments do not have a mixed-use or commercial component, and the general public is not expected to interface with the apartments beyond the street façade. A semi-permeable street facing fence is proposed to improve the streetscape interface.</p> <p>The separation between the public and private realm is clearly communicated by the design and reinforced by measures including secure access door and gate systems. The site provides a clear transition between the public and private realm.</p>
<p>02.3.3 The street setback assists in achieving visual privacy to apartments from the street.</p>	<p>The proposed street setbacks (~2.0m) do not impact nor affect visual privacy. A good level of visual privacy is maintained for all street facing apartments, between apartments within the site, and to neighbouring sites.</p> <p>The design includes living areas and private open space (including balconies) that overlook the street. Notwithstanding the proposed street setback (namely the street facing balconies) improves the interface with the street and provides for passive surveillance, while maintaining suitable visual privacy for private open space to the street.</p>
<p>02.3.4 The setback of the development enables passive surveillance and outlook to the street.</p>	<p>The proposed street setback allows for passive surveillance of the street, pedestrian entries, and the driveway.</p> <p>The balcony elements improve the interface of the apartments with the street and provide opportunity for improved “ownership” of the street space for residents to engage, interact, and provide passive surveillance to the street. Behind these balconies are living spaces which seamlessly connect with the private outdoor space and street beyond.</p> <p>The development is designed to optimise passive surveillance and outlook to the street to create a safer environment for the local community.</p>

2.4	Side and Rear Setbacks
<p>02.4.1 Building boundary setbacks provide for adequate separation between neighbouring properties.</p>	<p>The acceptable outcome recommendations for R60 density coded land is as follows:</p> <ul style="list-style-type: none"> • Side Setback — 3.0m • Rear Setback — 3.0m • Avg. Setback — 3.5m (for buildings over 16m long) • Boundary wall height — 1 storey* • Meets Element Obj's. of Design Element 3.5 • Meets Element Obj's. of Design Elements 2.7, 3.5, 3.3, & 4.1. <p>Consideration should be given to the performance-based nature of SPP 7.3 Vol. 2 and the element objectives, with respect to the scope, purpose, and application of acceptable outcomes. The term "recommendation" is used to emphasise that element objectives are not a quantitative (pass / fail) based assessment, but rather a qualitative based assessment.</p> <p>The proposed design meets acceptable outcome recommendations related to side / rear setback and is fully consistent with average setback and boundary wall height. The design also achieves (and exceeds) all element objectives listed, including the element objectives for visual privacy (design element 3.5).</p>
<p>02.4.2 Building boundary setbacks are consistent with the existing streetscape pattern or the desired streetscape character.</p>	<p>The proposed built form is consistent with the desired future character established by the zoning and density coding of LPS No. 3.</p> <p>The proposed design is consistent with the desired and permitted streetscape character encouraged by the City's local planning framework. The proposal is considered to respect and respond to the future streetscape character intent set-out by this framework. The proposed setbacks are well in excess of the side and rear setbacks acceptable outcomes.</p>
<p>02.4.3 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.</p>	<p>The proposed setbacks allow for the planting of trees throughout the site and which reinforce the green aesthetic that is proposed. The development proposes deep soil areas which are greater than the acceptable outcome recommendations of design element 3.3, which relates to tree canopy and deep soil area. In-fact the proposed deep soil area equates to 18% of the site, where the acceptable outcome is 7% — this is 11% more!</p> <p>The proposal allows for the retention of one large tree on the site, as well as for the retention of a large mature street tree on the road verge.</p> <p>Stormwater will also be directed into garden beds where possible, before infiltration into soakwells, in accordance with principles of Water Sensitive Urban Design. Items related to stormwater are expected to be conditioned as standard items of development application approval.</p> <p>The proposed landscaping solution represents a dramatic increase in mature tree canopy compared to the pre-development condition.</p>
<p>02.4.4 The setback of development from side and rear boundaries provides a transition between sites with different land uses or intensity of development.</p>	<p>The site is surrounded by land zoned R160 (a greater density) and R60. Stirling Highway is a short distance away to the south, and includes R-AC1 land fronting it. Although most of the properties immediately surrounding the site have yet to be developed, it is expected that they will be in the near future and to a form and scale which is similar to the proposed development.</p>

	Notwithstanding, the development does well to integrate itself amongst the single residential properties in the interim by providing substantial side and rear setbacks, especially to the upper floors. The Smyth Road apartments provide side and rear setbacks which are consistent with development for a R60 site and also respectful of the existing lower density single houses which are currently present in the immediate local area.
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2.5	Plot Ratio
02.5.1 The overall bulk and scale of development is appropriate for the existing or planned character of the area.	<p>The acceptable outcome recommendation is for a plot ratio of up to 0.8:1 or a plot ratio area of 809.36sqm. The proposed plot ratio area is 809.26sqm or ~0.8:1, easily meeting the acceptable outcome recommendation.</p> <p>The built form is largely contained within the “envelope” established by setback, separation, and height design criteria, and provides good and highly functional dwelling sizes without impacting on other design elements and the intent of DesignWA and SPP 7.3 Vol. 2.</p> <p>It should be noted that plot ratio is not directly correlated to the number of apartments provided in a development. Two sites with the same plot ratio could be delivered — with one having a less efficient, bulkier built form envelope, lacking important landscaping and deep soil features, with dull boxy blank façades, and with significant issues with access to daylight and natural ventilation. This is the importance of not relying on the acceptable outcomes in assessing the merit of a development.</p> <p>For the reasons outlined above, the overall bulk and scale of the apartments are considered entirely appropriate, having regard for the existing and planned character of the area.</p>

2.6	Building Depth
02.6.1 Building depth supports apartment layouts that optimise daylight and solar access and natural ventilation.	The proposed apartments are well planned and propose a building depth which provides sufficient access to daylight and natural ventilation. Each apartment includes an outdoor living area and several major openings which allows for optimal daylight, solar access and natural ventilation to penetrate the building. No single-aspect apartments are proposed.
02.6.2 Articulation of building form to allow adequate access to daylight and natural ventilation where greater building depths are proposed.	<p>The built form has been broken up through the use of stepping and articulation to improve solar access and natural ventilation.</p> <p>The generous articulation of the façades and built form throughout will further improve the visual aesthetic of the development, and improve and protect the ability for residents and neighbours access to daylight and natural ventilation.</p> <p>The proposed balconies on the upper floors also help to articulate the building and its appearance. This has the effect of reducing the impact of building bulk and scale to neighbouring properties and the street, while also improving natural daylight and ventilation across the site. Design features and variation in materials, textures, and colours across the façade will further improve the interface of the development with neighbouring properties and the Smyth Road streetscape.</p>

<p>02.6.3 Room depths and/or ceiling heights optimise daylight and solar access and natural ventilation.</p>	<p>The well-proportioned room depths and heights in the proposed development achieve and allow for good access to daylight and natural ventilation throughout and across each apartment. This has been demonstrated in the plans submitted with this application.</p>
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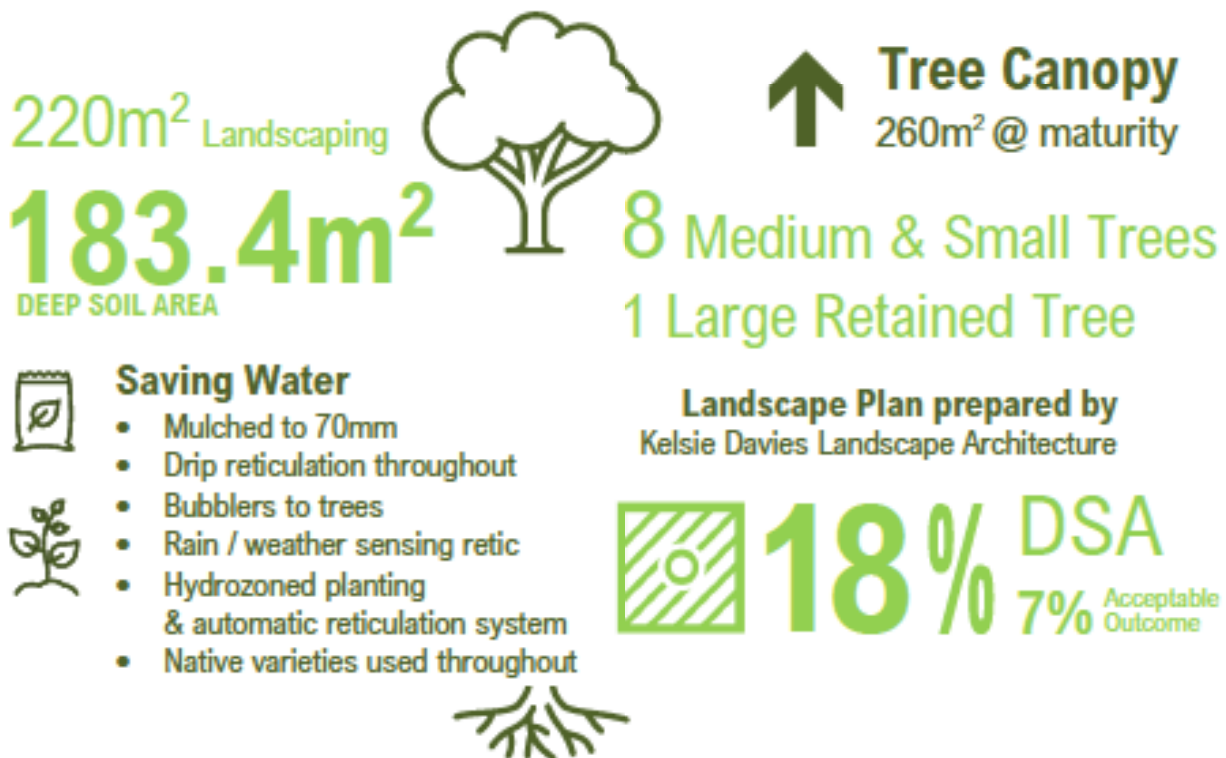
<p>2.7 Building Separation</p>	
<p>02.7.1 New development supports the desired future streetscape character with spaces between buildings.</p>	<p>The proposed building height is less than 5 storeys, as a result there are no explicit acceptable outcome recommendations. The desired future character would be for development consistent with a R60 density coded area. The adjoining sites are yet to be developed. The proposed setbacks, and visual privacy cone-of-vision setbacks are consistent with the planning framework. Both within the site and to neighbouring sites, a good degree of separation is maintained.</p> <p>There are no areas of the Smyth Road apartments which appear constrained, and the design represent a well-thought-out and resolved design which naturally flows between one apartment and the next, and across the façade.</p>
<p>02.7.2 Building separation is in proportion to building height.</p>	<p>A stepped and articulated built form has been utilised which has been setback from lot boundaries in response to visual privacy considerations of design element 3.5, and setback considerations of design elements 2.3 and 2.4. The proposed separation is considered to be in proportion to the proposed modest two-storey built form.</p>
<p>02.7.3 Buildings are separated sufficiently to provide for residential amenity including visual and acoustic privacy, natural ventilation, sunlight and daylight access and outlook.</p>	<p>The separation of the built form into two separate building blocks provides opportunities for increased landscaping areas, solar access, and natural ventilation.</p> <p>Residential amenity is improved by the multiple-aspect form of the individual apartments — which in combination with the window and façade treatment, and location of living and bedroom areas to the exterior of the built form — have allowed for and improved sunlight and daylight access throughout. For further detail, refer to each respective design element.</p> <p>The proposed building separation allows for the provision of deep soil landscaping around the site that assists with acoustic privacy and visual amenity.</p>
<p>02.7.4 Suitable areas are provided for communal and private open space, deep soil areas and landscaping between buildings.</p>	<p>The proposed separation supports landscaped areas, private open space, and deep soil areas throughout and surrounding the apartments, whilst maintaining the opportunity for solar access and natural ventilation within the site.</p>

5.2.3 Part 3: Siting the Development

Siting the development provides guidance on the design and configuration of apartment development at a site scale. A table detailing how the proposed development achieves the design elements of Part 3 of State Planning Policy 7.3 Volume 2 is provided in the table:

Element Objectives		Justification and Comment
3.2	Orientation	
03.2.1	Building layouts respond to the streetscape, topography and site attributes while optimising solar and daylight access within the development.	<p>The layout of the building is considered to respond to the streetscape and topography attributes and has located the ground floor FFL at a similar height as the adjacent NGL. Unit 2 incorporates direct access from the street via a pedestrian pathway.</p> <p>All units and the building overall have access to direct sunlight, and windows positioned on multiple aspects. The stepping and articulation of the built form further improves the solar orientation outcomes for the site.</p> <p>The design provides ample solar access across the site. This is further demonstrated in the plans which have been prepared for the proposed development.</p> <p>The extent of “overshadow” to neighbouring sites meets acceptable outcome recommendations. The design has thoughtfully considered its solar orientation and ensured that all units have generous availability of solar access without compromising the ability of neighbouring sites to do the same.</p> <p>Further discussion is provided in the under the “solar and daylight access” element objective.</p>
03.2.2	Building form and orientation minimises overshadowing of the habitable rooms, open space and solar collectors of neighbouring properties during mid-winter.	<p>Overshadowing to neighbouring properties meets the acceptable outcome recommendations of SPP 7.3 Vol. 2, and is expected to be negligible.</p> <p>There are also no solar collectors present on neighbouring properties affected by proposed development.</p>
3.3	Tree Canopy	
03.3.1	Site planning maximises retention of existing healthy and appropriate and protects the viability of adjoining trees.	<p>An existing street trees (Queensland Box tree) will be retained, with sufficient clearance to ensure minimal disturbance to root systems. Another existing street tree — more recently planted in 2013 — is proposed to be removed. The proponent welcomes the planting of a replacement to help contribute to and complement the green aesthetic of the Smyth Road apartments.</p> <p>An additional large tree will be retained on site, with eight more to be planted (totalling nine trees), as well as a generous amount of further landscaping throughout.</p> <p>The post-development tree canopy and landscaping will significantly improve on the pre-development condition.</p>
03.3.2	Adequate measures are taken to improve tree canopy (long term) or to offset	<p>The proposed development provides a significant improvement in the pre-development tree canopy. The current site contains a mixture smaller bushes and trees, with some medium and larger trees—of which</p>

Element Objectives	Justification and Comment
reduction of tree canopy from pre-development condition.	<p>three are to be retained. The retention of the remainder would be unviable and not feasible in the context of multiple dwelling development and the wider proposal.</p> <p>The proposed landscaping solution at maturity will significantly increase the amount of landscaping through and across the site when compared with the pre-development condition.</p>
03.3.3 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.	<p>The development proposes 183.4sqm of on-ground Deep Soil Areas across the site, as well as further space for on-structure DSA on balconies (credited at half the ratio of on-ground DSA). The 12.5% Deep Soil Area proposed is well in excess of the 7% (63.7sqm) acceptable outcome (with retained trees).</p> <p>Sufficient rootable soil zone is provided around each tree to enable growth to full canopy at maturity, and stormwater will be directed / and stored where possible for use in garden beds.</p> <p>The landscape plan prepared by Kelsie Davies Landscape Architecture proposes a total of more than nine trees across the site. Proposed tree varieties will include Chinese Tallow and Natchex Crêpe Myrtle trees.</p> <p>The plant selection has been development with consideration of the City of Nedlands' approved tree species list, their functional benefit to residents, ongoing maintenance, and their water use.</p>



Element Objectives		Justification and Comment
3.4	Communal Open Space	
03.4.1	Provision of quality communal open space that enhances resident amenity and provides opportunities for landscaping, tree retention and deep soil areas.	<p>A landscaped communal open space including a large multi-functional common room and rooved communal space is proposed. The communal space (which will allow for all weather use) will provide a great place for residents to gather.</p> <p>This communal space will also allow for incidental interaction between residents, and help to improve the “friendliness” and amenity of the development.</p> <p>The communal space will include a barbeque and seating, as well as an external landscaped area situated beneath the shade of a large retained tree. The high-quality, high-amenity communal space, which will dramatically improve the amenity of the apartments for all future residents is considered to be a welcome addition to the Smyth Road apartments, and a further demonstration of the design going above and beyond to improve amenity for the sake of good design.</p>
03.4.2	Communal open space is safe, universally accessible and provides a high level of amenity for residents.	<p>The proposed communal open space is located at-grade on the ground floor on step-free ground. It is safe and universally acceptable, while also providing a high level of amenity for residents due to its position in a landscaped setting.</p>
03.4.3	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.	<p>The proposed communal open space is positioned so that it does not impact on the habitable rooms and private open spaces of apartments within the development and on neighbouring properties.</p> <p>The communal open space is located within proximity to communal facilities such as the lifts, storerooms and bin store. As visible in the image below, this not only positions it away from dwellings and habitable rooms but will increase incidental social interaction between residents.</p>
3.5	Visual Privacy	
03.5.1	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.	<p>The acceptable outcome recommendations for R60 density coded land is as follows:</p> <ul style="list-style-type: none"> • 3.0m to major opening of bedroom, study, or open access walkway [sic]; • 4.5m to other major openings; and • 6.0m to unenclosed [sic] private open spaces. <p>As before consideration should be given to the performance-based nature of SPP 7.3 Vol. 2 and the element objectives, with respect to the scope, purpose, and application of acceptable outcomes.</p> <p>Regardless, the design has achieved (wholly) <u>all</u> acceptable outcomes related to visual privacy, both within the site and to neighbouring site.</p> <p>Screening is proposed on selected balconies to improve visual privacy — a particular consideration within the City of Nedlands.</p> <p>Visual privacy has been achieved without adversely compromising daylight or natural ventilation access, and has not relied excessively or unduly on windows with high sill levels, or fixed and obscure.</p> <p>By making these windows major openings — and not high-sill level or obscure — provides a significant functional benefit in terms of amenity</p>

Element Objectives	Justification and Comment
	<p>and usability outcomes (associated with the reasons detailed above) for the future resident of the apartments, as well as improving the interface and façade appearance of the development to neighbouring properties.</p>
<p>3.6 Public Domain Interface</p>	
<p>03.6.1 The transition between the private and public domain enhances the privacy and safety of residents.</p>	<p>The development proposes a clear transition between the private and public realm.</p> <p>The transition between the public and private realm is clearly delineated. Defensible space responding to CPTED principles is provided, and the design limits opportunities for concealment. Passive surveillance to the driveway, street, and other public areas is provided from the dwellings.</p> <p>Street-facing balconies, bedrooms, and other living areas provide an interface with the street appropriate for a residential only development (not containing mixed-use).</p>
<p>03.6.2 Street facing development and landscape design retains and enhances the amenity and safety of the adjoining public domain, including the provision of shade.</p>	<p>The design retains and enhances the amenity of the public domain. The design is considered to achieve this through the provision of a complimentary landscaping and façade design which addresses the street.</p> <p>This includes the planting of three new trees to the front of the development within the site (and the retention of an existing street tree as well as the landscaping of the road verge). These proposed tree plantings will complement the green aesthetic and landscaping treatment provided throughout.</p> <p>A visually permeable fence, as well as direct street access via a side-gate for Unit 2 located on the ground floor is also proposed. The low-height semi-permeable street fence also helps contribute to providing an active interface between the apartments and the street appropriate for a residential only development.</p> <p>No building services or utilities are located or visible from the street, and there is no substantial difference in height between the road verge and the parking and landscaping area within the site.</p> <p>The design retains and enhances the amenity of the public domain through the provision of a complimentary landscaping and façade design which addresses the street.</p>
<p>3.7 Pedestrian Access and Entries</p>	
<p>03.7.1 Entries and pathways are universally accessible, easy to identify and safe for residents and visitors.</p>	<p>The primary pedestrian entry is from Smyth Road, near the driveway.</p> <p>The pedestrian entry provides access to the dwellings over level step-free ground to the lift lobby as well as to the communal open space. Alternative pedestrian entry from the car parking area is also provided. The pedestrian entry is clearly legible and easy to identify for residents and visitors.</p> <p>The entry is framed by street fencing and the built form of the apartments and balconies above.</p> <p>All pedestrian entries are protected from the weather by awnings and require minimal upkeep and ongoing maintenance given their outdoor</p>

Element Objectives	Justification and Comment
	<p>location and construction of durable hardy low-maintenance materials. The pedestrian entries are surrounded by deep soil areas and landscaping.</p> <p>The pedestrian circulation areas will be provided with a lighting treatment to ensure safe access day and night, without excessive light-spill through the use of sensor lights, and ankle height floor illumination lights.</p> <p>Passive surveillance is provided over the pedestrian entry from windows and openings on the street facing apartments above, and on the ground floor.</p> <p>The pedestrian entries are provided with opportunity for passive surveillance through the siting of windows and living areas oriented toward the street.</p> <p>It is noted that a footpath is not currently constructed along this side of Smyth Road, however there is one on the opposite side of the road.</p>
<p>03.7.2 Entries to the development connect to and address the public domain with an attractive street presence.</p>	<p>The design provides a clear and connected interface between the public domain and the street. The design utilises a variety of materials and colours, in combination with landscaping to provide an attractive street presence. These materials and colours include brick, feature stone, metallic framing and slats, as well as contrasting render. The entry is clearly legible without dominating the streetscape, consistent with the character of the area.</p>
<p>3.8 Vehicle Access</p>	
<p>03.8.1 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.</p>	<p>Only a one single width crossover is proposed. A separate pedestrian entry is provided. There are no blind corners in the proposed car parking solution. Traffic volumes are not expected to be significant, and the chance for vehicle conflict is expected to be minimal. The manoeuvring does not allow for high-speed traffic, which reduces the chance for vehicle conflict.</p> <p>The applicant looks forward to working with the City to ensure that matters related to pedestrian safety are resolved to a mutually agreeable solution.</p>
<p>03.8.2 Vehicle access points are designed and located to reduce visual impact on the streetscape.</p>	<p>As above only one single width crossover is proposed. Car parking is located at-grade in an undercroft, and as a result there are no car parking entry structures dominating the streetscape. All on-site car parking is located behind the street setback area, and is not readily visible from the street.</p> <p>Landscaping will further reduce and screen the crossover's and driveway's presence to the street.</p>
<p>3.9 Car and Bicycle Parking</p>	
<p>03.9.1 Parking and facilities are provided for cyclists and other modes of transport.</p>	<p>The site is in a location A area within 250m of the nearby high frequency bus routes 998 and 999 (among others).</p> <p>It is considered that the facilities provided for bicycles and other modes of transport are suitable for the proposed development. The individual apartments each provide suitable end-of-trip facilities for cyclists and</p>

Element Objectives	Justification and Comment
	<p>pedestrians. Dedicated or separate facilities are not appropriate given no mixed-use / commercial is proposed.</p> <p>The acceptable outcome recommendation for bicycle parking is:</p> <ul style="list-style-type: none"> • 0.5 resident bicycle parking spaces per dwelling (6.0 spaces); • 1 bicycle parking space per 10 dwellings for visitors (1.2 spaces). • 7 spaces in total. <p>The proposed bicycle parking consists of ~9 dedicated spaces provided by well-located bicycle rack parking (near to a pedestrian entry), with additional space within each resident's dwelling store to accommodate the parking of an additional bicycle.</p>
<p>03.9.2 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.</p>	<p>The development is located in a Location A area (as detailed previously) and the following car parking bays are required to be provided:</p> <ul style="list-style-type: none"> • 0.75 bays per single bedroom dwellings (3.75 spaces) and 1 bay per multi-bedroom dwelling (7 spaces) (total 10.75); with • 1 bay per four dwellings up to 12 dwellings for visitor car parking (3 spaces) <p>The development proposes a total of 18 car bays, comprising of 15 on-site car parking spaces for residents, and 3 visitor bays, which exceeds the 14 bays acceptable outcome recommendation.</p>
<p>03.9.3 Car parking is designed to be safe and accessible.</p>	<p>The proposed car parking design is considered to be safe and accessible and will be designed to meet Australian Standards AS2890.1, as demonstrated in the Transport Impact Statement prepared by i3 Consultants WA for this proposal.</p> <p>i3 consultants WA, traffic and engineering consultants, prepared a Transport Impact Statement for the proposed development and found that the peak motor vehicle trip generation rate of the development would be 10 vehicles per hour (vph). A summary of the report is as follows:</p> <ul style="list-style-type: none"> • The peak vph trip generation rate is low, and wholly capable of being accommodated in the site and surrounding road network, without any burden. • The forecasted vpd is 50, based on N.S.W. RTA standards, which is a low number trip generation rate. • Single car width crossover is supported by KCTT given traffic volumes and site context, increasing amenity and safety. • No issues with vehicle manoeuvring or sight lines. • Great pedestrian and public transport amenity and infrastructure in the local area. <p>Car parking areas will be secured behind a gate with a secure access intercom system. Visitor parking will be accessible via an intercom (or similar) system.</p> <p>Given the low volumes of traffic a basic linear layout of the driveway a single width driveway and crossover has been proposed which reduces the presence and dominance of the car parking to the streetscape. There are not expected to be any issues with regard to vehicle conflict, given</p>

Element Objectives	Justification and Comment
	<p>these traffic volumes and that clear sight lines are maintained from the street into the car parking area and vice-versa.</p> <p>Access to the apartments from the car parking area will be possible via the lift or stairs from the car parking area. A separate and safe means of pedestrian entry into the apartments has also been proposed.</p>
<p>03.9.4 The design and location of car parking minimises negative visual and environmental impacts on amenity and the streetscape.</p>	<p>The proposed development achieves this element objective and the related acceptable outcomes for design and location of car parking. All on-site car parking is located behind the street setback area, and is not readily visible from the street.</p> <p>The proposed development does not exceed 21.5 residential car parking bays as set out by acceptable outcome A3.9.3.</p>

5.2.4 Part 4: Designing the Building

Part 4 provides Element Objectives, Acceptable Outcomes and Design Guidance for building form, layout, functionality, landscape design, environmental performance and residential amenity. A table detailing how the proposed development achieves the design elements of Part 4 of State Planning Policy 7.3 Volume 2 is provided in the table below:

Element Objectives		Justification and Comment
4.1 Solar and Daylight Access		
04.1.1 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.	<p>The site is located in climate zone 5. All individual dwellings are capable of receiving direct solar access to each habitable room. Each habitable room has a light-permeable window for access to natural daylight.</p> <p>Bedrooms and living areas are located on the exterior of the apartment block to improve their solar access outcomes.</p> <p>The built form of the apartment has sizable setbacks and building articulation to help improve access to daylight throughout each floor of the development. This maximises the exposure of the northern aspect to sunlight.</p>	
04.1.2 Windows are designed and positioned to optimise daylight access for habitable rooms.	<p>All apartments have access to multiple aspects to enable improved year-round use. Floor to ceiling glazed windows have been provided to the balcony and living room aspects in order to maximise solar access. All habitable rooms are provided with windows to allow for improved daylight access, while acknowledging visual privacy considerations which are a particular consideration point within the City of Nedlands.</p>	
<p>04.1.3 The development incorporates shading and glare control to minimise heat gain and glare:</p> <ul style="list-style-type: none"> - from mid-spring to autumn in climate zones 4, 5 and 6 AND - year-round in climate zones 1 and 3. 	<p>Balconies are covered to provide shade during the summer months, to assist in the control of heat gain. Living rooms and other rooms are recessed away from balconies to further help control heat gain and heat loss.</p> <p>Other measures include the proposed landscaping treatment, and extensive tree planting and retention which will provide a shade-canopy and help to dramatically reduce heat loads.</p> <p>Materials selection also plays an important part in reducing the need for mechanical heating and cooling. The lighter coloured materials used in these apartments will help reduce heat loading.</p>	
4.2 Natural Ventilation		
04.2.1 Development maximises the number of apartments with natural ventilation.	<p>Every apartment is provided with a means of natural ventilation through openable windows and doors and across and the articulated built form.</p> <p>The well resolved and modest design prioritises access to natural ventilation for each apartment by providing a multiple-aspect apartment form, which orients living areas and bedrooms to the exterior of the apartment block.</p> <p>The window design and orientation will help reduce latent heat gain. This will improve the effectiveness of air circulation and outcomes.</p> <p>Every living room has openable windows and doors to improve air circulation, and all apartments have a means of "cross-ventilation" exceeding the 60% of apartments acceptable outcomes criteria.</p>	

Element Objectives	Justification and Comment
04.2.2 Individual dwellings are designed to optimise natural ventilation of habitable rooms.	<p>As before the built form is broken up using a stepped articulated built form with generous setbacks to improves the access to natural ventilation.</p> <p>Most dwellings have been designed to position an internal door opposite an openable window in habitable rooms, which lengthens and improves the ability for ventilation across each dwelling.</p> <p>All apartments include large sliding doors and other openings associated with open plan living rooms to further improve natural ventilation and reduce the reliance on mechanical heating or cooling.</p>
04.2.3 Single aspect apartments are designed to maximise and benefit from natural ventilation.	<p><i>No single aspect apartments are proposed.</i></p> <p>Each individual apartment receives ample opportunity to access to sunlight and natural ventilation.</p>

4.3 Size and Layout of Dwellings	
04.3.1 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.	<p>All dwellings exceed the size recommendations of the acceptable outcomes (being 47sqm for 1-bed, 1-bath; 72sqm for 2-bed, 2-bath; 95sqm for 3-bed, 2 bath; and 100qm for 3-bed, 3-bath). All individual rooms are consistent with the acceptable outcome sizing recommendations.</p> <p>The internal size and layouts of the dwellings are functional and provides the ability for reuse in the future to suit and be customised to different residents. The size and layout of each apartment is considered appropriate for the expected household size. The apartment composition is for a mix of single-bedroom, two-bedroom and three-bedroom apartments.</p>
04.3.2 Ceiling heights and room dimensions provide for well-proportioned spaces that facilitate good natural ventilation and daylight access.	<p>The proposed room dimensions and proportions facilitate good access to natural ventilation and daylight in combination with the location of windows and other openings to each apartment.</p> <p>Each individual floor is ~2.7m high, meeting acceptable outcome A4.3.3. Further detail is provided in the architectural plans.</p>

4.4 Private Open Space and Balconies	
04.4.1 Dwellings have good access to appropriately sized private open space that enhances residential amenity.	<p>All apartments have good access to an appropriately sized private open space. All private open space meets the minimum dimension and area requirements of the acceptable outcome A4.4.1.</p> <p>Some screening has been incorporated to improve visual privacy — a particular concern in the City of Nedlands — without compromising the ability of each apartment to receive adequate natural ventilation or solar access, as per and with respect to visual privacy considerations of acceptable outcome A4.4.2.</p>
04.4.2 Private open space is sited, oriented and designed to enhance liveability for residents.	<p>All apartments include a suitably sized balcony area or yard for future residents to use.</p> <p>The areas and dimensions of each private open space meets the applicable acceptable outcomes. The design and orientation of these balconies and terraces, which have been located on the northern aspect</p>

Element Objectives	Justification and Comment
	<p>where possible, help improve the solar access and the functionality of each apartment and individual rooms.</p> <p>The private open space is sited and provided to enhance the liveability for residents. All private open space receives direct sun. All private open space is also directly accessible from a room of the apartment and secure.</p> <p>Unit 2 is provided with a yard that includes direct street access, while a visually permeable street fencing design is also proposed to improve the interface of the Smyth Road apartments with the street.</p>
<p>04.4.3 Private open space and balconies are integrated into the overall architectural form and detail of the building.</p>	<p>The proposed development design thoughtfully integrates the balconies and ground floor private open space into the building design and architectural form. The private open space is framed by the façade treatment which complements the overall design and aesthetic.</p> <p>Overall, the private open space is thoroughly integrated into the design of the building, providing a thoughtful and functional design. No private open space is proposed to include external fixtures such as air conditioner condensers or other servicing infrastructure — the details of which are to be confirmed.</p>

4.5 Circulation and Common Spaces	
<p>04.5.1 Circulation spaces have adequate size and capacity to provide safe and convenient access for all residents and visitors.</p>	<p>All circulation corridors and walkways are all at least 1.5m in width, this includes lobbies and external circulation spaces, designed with universal access considerations in mind.</p> <p>All circulation areas are designed with dimensions to allow people with mobility impairments/equipment to use them. All floors of the apartments are accessible via lift.</p> <p>Direct, convenient, and safe pedestrian access is provided for all residents and visitors from the street and from vehicle parking areas to each apartment. The lift is positioned in a central location reinforced by the building façade treatment/articulation to enhance legibility between the street and the common areas of the proposal.</p> <p>The design achieves CPTED principles, and provides defensible space.</p> <p>A security system (consisting of a keycode, swipe card, or similar system) is proposed to be installed to manage the means of access from the street and will be complemented by a lighting in circulation spaces that are communally accessed or used by the public. Each apartment is also proposed to be secured in accordance with the requirements of the National Construction Code. The impact of noise from circulation areas is minimal.</p>
<p>04.5.2 Circulation and common spaces are attractive, have good amenity and support opportunities for social interaction between residents.</p>	<p>Circulation spaces, including the pedestrian entry from Smyth Road, and car parking areas will be illuminated at night without light spill into the habitable rooms of dwellings of this site or any neighbouring site.</p> <p>The circulation spaces, including external walkways, have generous spatial dimensions and will be constructed of hardy materials requiring minimal ongoing maintenance.</p> <p>The proposed communal open space will encourage social interaction between residents.</p>

Element Objectives		Justification and Comment
4.6	Storage	
04.6.1	Well-designed, functional and conveniently located storage is provided for each dwelling	<p>A total of 12 storerooms are proposed and have been co-located with each respective dwelling for ease of access and use.</p> <p>The stores range in size between 5.4sqm and 8.8sqm and exceed the size recommendations of acceptable outcome 4.6.1 in both area and height (being 3sqm for 1-beds, 4sqm for 2-beds)</p> <p>All secure lockable stores will be provided with a means of lighting and can accommodate bicycles.</p>
4.7	Managing the Impact of Noise	
04.7.1	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.	All dwellings will exceed the requirements of the National Construction Code. The location of mechanical building services and vehicle car parking and manoeuvring areas are screened and located away from sensitive residential apartment uses, and adjoining sites.
04.7.2	Acoustic treatments are used to reduce sound transfer within and between dwellings and to reduce noise transmission from external noise sources.	In addition to the above, noise mitigation treatments will include the use of fire-proof dividing walls and window / door orientation and glazing which will further contribute to reducing the impact of noise between apartments and neighbouring sites.
4.8	Dwelling Mix	
04.8.1	A range of dwelling types, sizes and configurations is provided that caters for diverse household types and changing community demographics.	<p>A mix of single-bedroom and two-bedroom apartments has been proposed, in various configurations. The apartment composition is as follows:</p> <ul style="list-style-type: none"> • 4 x studio apartments • 1 x single-bedroom • 7 x two-bedroom <p>The housing typology and layout is considered appropriate for the location with a mix of studio, one-bedroom, and two-bedroom apartments. More than 20% of the 12 apartments are a different dwelling mix. These are spread evenly through each floor. All apartments are suitable for use by those with a mobility impairment and are step-free throughout.</p>
4.9	Universal Design	
04.9.1	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.	<p>All apartments, and public entries are step-free and generously proportioned (reference to plot ratio) to allow for ease of manoeuvring by the aged, and those with a mobility impairment.</p> <p>While not more than 20% of the apartments exceed the "Silver Level" requirements of the <i>Liveable Housing Design Guidelines</i>, the scope of the difference between the "Silver" standard and what has been achieved is insignificant.</p> <p>All floors are accessible via lift. Each apartment provides a suitable amount of amenity to support its users to age in place. The location of the site itself near medical facilities (such as those near the QEII medical</p>

Element Objectives	Justification and Comment
	precinct) and transport options will further support and allow for a wide range of people to call the Smyth Road apartments their home.

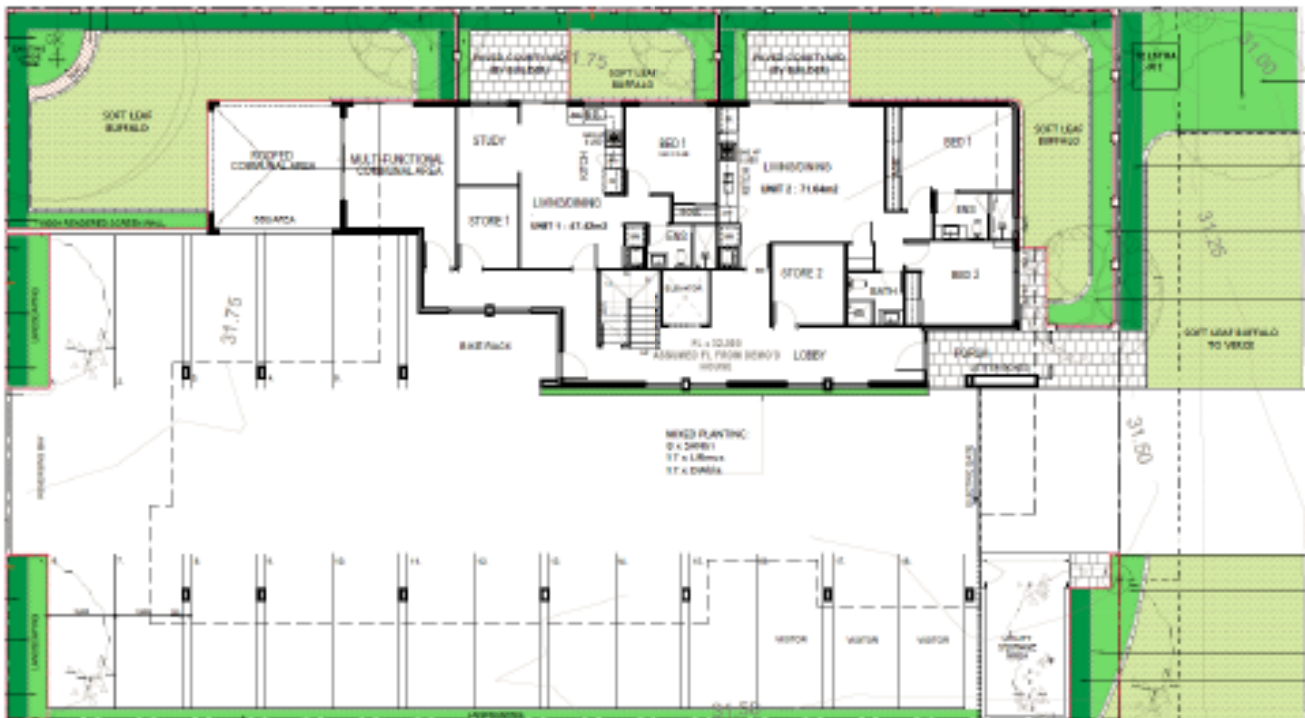
4.10	Façade Design
<p>04.10.1 Building façades incorporate proportions, materials and design elements that respect and reference the character of the local area.</p>	<p>The façade provides articulation and visual interest to improve its appearance and interface with the streetscape and neighbouring properties.</p> <p>The built form includes a mixture of colours and materials from striking metallic and aluminium elements, and feature stone cladding, to exposed feature recycled face brick, and contrasting painted rendered walls in charcoal grey and white, as well as large window glazes.</p> <p>The built form references materials evident in the local area and responds to an emerging character of the area (following recent changes to the planning framework and adoption of LPS No. 3)</p> <p>The façade includes articulation and scaling elements to improve its appearance to the street. The design also includes landscaping to the street frontage which will complement and soften the design and its appearance to the street.</p> <p>The proposed design achieves the acceptable outcomes as it provides façade treatment that includes:</p> <ul style="list-style-type: none"> • Site responsive mix of materials and colour palette; • Building articulation and scaling; • Clearly defined and legible building entries; • Vertical and horizontal defining design elements; • A complementary landscaping treatment; and • Concealed building services.
<p>04.10.2 Building façades express internal functions and provide visual interest when viewed from the public realm.</p>	<p>The proposed design provides a variety of responsive materials, colours, and other design elements to the building façade. As discussed previously, this includes brick, rendered walls, metal slats and surrounds, and stone cladding.</p> <p>The built form is also broken up by the articulation and recessing provided throughout the development.</p> <p>Together this provides visual interest for the development when viewed from the street. The building communicates and interfaces with the street providing a clear hierarchy and expression of the building's function and purpose. This is supported by the proposed communal open space, which will be accompanied by landscaping, seating, and a barbeque for residents.</p>



Streetscape perspective render of the Smyth Road apartments (former preliminary design)

Element Objectives		Justification and Comment
4.11	Roof Design	
	04.11.1 Roof forms are well integrated into the building design and respond positively to the street.	A concealed roof design is proposed. The concealed roof design will reduce the impact and appearance of bulk to the street. The proposed design is consistent and responsive to the current established character of the area.
	04.11.2 Where possible, roof spaces are utilised to add open space, amenity, solar energy generation or other benefits to the development.	<p>The roof form is pitched to reference the pitched rooves of the area, and separated into separate portions to help provide visual interest and break-up the built form.</p> <p>A standard lift overrun above the roof height is proposed, concealed within the roof space.</p> <p>The roof form respects the amenity of the immediate neighbourhood, the site's context, and allows these building utilities to be provided without impacting on the amenity of the apartments. Given the small scale of the design and minimal benefit potential offered, an additional roof function has not been incorporated in these apartments.</p>

Element Objectives	Justification and Comment
	<p>As per the submitted Landscape Plan, the proposed landscaping treatment will include the following plant varieties:</p> <ul style="list-style-type: none"> • Chinese Tallow • Natchex Crêpe Myrtle • Dianella Blaze, Tas Red, and Wyeena • Eremophila Blue Horizon • Grevillea Gin Gin Gem • Rhipiolepis Cosmic White • Dwarf Bamboo • Lily Pilly • Mother-in-law's tongue
<p>04.12.3 Landscape design includes water efficient irrigation systems and where appropriate incorporates water harvesting or water re-use technologies.</p>	<p>All landscaped areas will be reticulated using a variety of systems. These systems will include drip-feed and bubbler systems. A smart monitoring sensor network will help manage plant health and watering. All landscaping beds will be mulched to a minimum depth of 70mm, which is double the nominal rate. This will minimise the extent of water loss through evaporation.</p> <p>Stormwater will also be directed and stored in water tanks or similar where appropriate for use on gardens, reducing the need for the use of reticulated watering.</p> <p>The proposed design is considered to achieve and be consistent with the intent of this element objective.</p>
<p>04.12.4 Landscape design is integrated with the design intent of the architecture including its built form, materiality, key functional areas and sustainability strategies.</p>	<p>The proposed landscaping is integrated into the design and complements the built form of the development overall.</p>



Landscape Plan prepared by Kelsie Davies Landscape Architecture.



Proposed Tree and Ground Cover plant selection

Element Objectives		Justification and Comment
4.13	Adaptative Reuse	
04.13.1	New additions to existing buildings are contemporary and complementary and do not detract from the character and scale of the existing building.	<i>Not applicable</i>
04.13.2	Residential dwellings within an adapted building provide good amenity for residents, generally in accordance with the requirements of this policy.	<i>Not applicable</i>
4.14	Mixed Use	
04.14.1	Mixed use development enhances the streetscape and activates the street.	<i>Not applicable</i>
04.14.2	A safe and secure living environment for residents is maintained through the design and management of the impacts of non-residential uses such as noise, light, odour, traffic and waste.	<i>Not applicable</i>
4.15	Energy Efficiency	
04.15.1	Reduce energy consumption and greenhouse gas emissions from the development.	<p>The following energy efficiency measures are incorporated in the design:</p> <ul style="list-style-type: none"> • The use of light sensors and LED lights in all public areas to reduce electricity consumption across the site when areas are not in use. • All apartments will be fitted with high quality insulation. • Each apartment will be provided with a means of natural ventilation, and all apartments have been provided with openings to improve daylight and natural ventilation access. • Bedrooms and living areas are positioned near the façade of the apartments to allow for improved access to daylight, natural ventilation, and opportunity for outlook to the street —

Element Objectives	Justification and Comment
	<p>improving their liveability, usability, and reducing the need for mechanical heating and cooling.</p> <ul style="list-style-type: none"> • Materials with low ongoing maintenance requirements, and low embodied energy will be used throughout. • All individual apartments will be sub-metered.
4.16 Water Management and Conservation	
04.16.1 Minimise potable water consumption throughout the development.	<p>Each apartment will utilise water efficient fixtures and fittings for the toilets, kitchen, and bathroom taps and shower heads to reduce water consumption. Stormwater will be directed into garden-beds with overflow into soak-wells.</p> <p>Each apartment will be individually metered for water and power use, which will reduce the amount of potable water consumption (as each resident will be individually liable for their own use).</p>
04.16.2 Stormwater runoff from small rainfall events is managed on-site, wherever practical.	<p>Specific details relating to water management and conservation are expected to be conditioned as a standard condition of approval / addressed at building permit stage. The site is capable of accommodating 1 in 1-year average recurrence interval (ARI) rainfall events.</p> <p>The design proposes to retain all stormwater on-site through soak wells and stormwater infrastructure and may direct stormwater into garden beds to improve water usage across the development. It is expected that this will be conditioned as a standard condition of development approval. Specific details relating to water management and conservation are expected to be conditioned / addressed at building permit stage.</p>
04.16.3 Reduce the risk of flooding so that the likely impacts of major rainfall events will be minimal.	<p>The Smyth Road apartments will be capable of wholly accommodating 1 in 1 year ARI rainfall events on site. No basement is proposed and all floors are located above the surrounding natural ground level.</p> <p>The development is on an elevated site, there is minimal expected risk associated with flooding. The development will also meet the requirements of the National Construction Code.</p>
4.17 Waste Management	
04.17.1 Waste storage facilities minimise negative impacts on the streetscape, building entries and the amenity of residents.	<p>A Waste Management Plan has been prepared by Dallywater Consulting for the proposed development.</p> <p>The proposed bin store is located near the front of the property, away from sensitive uses, and a very short distance from the bin presentation point on the road verge. A hardstand area on the verge is also proposed, to minimise the impact on verge landscaping, and maintain the well-kept appearance of the street.</p> <p>The bin store is full enclosed and concealed from view from the street.</p> <p>The bin store is also setback 2.0m from the street, meeting the applicable street setback acceptable outcome. The bin store is located behind the street setback area and not readily visible from the street, the apartments, or communal areas. The negative amenity impact of the proposed bin storage is minimal.</p>

Element Objectives	Justification and Comment
	<p>The bin store contributes to the streetscape appearance by providing an architectural “recycled brick” wall which further contributes to the street appearance by screening the car parking areas from Smyth Road.</p> <p>The bin store will also include a washdown area, tap, and suitable drain with gross pollutant trap. A rubbish compactor has also been proposed.</p> <p>The bin store will also include a means of natural and mechanical ventilation.</p> <p>A suitable waste presentation area will also be proposed subject to conditioning in consultation with the City of Nedlands.</p> <p>The bin store will be managed by the strata company and strata company caretaker in accordance with the waste management plan and reviewed on a regular ongoing basis.</p>
<p>04.17.2 Waste to landfill is minimised by providing safe and convenient bins and information for the separation and recycling of waste.</p>	<p>The Waste Management Plan proposes the use of a two-bin system to separate recyclable waste and general waste.</p> <p>The proposed bin composition consists of 240L MGB (Mobile General Waste Bins) and 240L MRB (Mobile Recyclable Waste Bins) bins. The bin composition is as follows:</p> <ul style="list-style-type: none"> • 3x 240L MGB (720L capacity, collected weekly); and • 5x 240L MRB (1,200L capacity, collected fortnightly). <p>Additional storage space is included to accommodate future bin systems.</p> <p>This includes scope for the future FOGO (MOB) bin system to be adopted by the City by 2025, as well as garden organics. Waste collection will be through the City’s waste contractor via standard kerbside collection.</p> <p>The waste generation forecast is:</p> <ul style="list-style-type: none"> • 1,240L per week General Waste; and • 1,140L per week Recyclable Waste. <p>Using a waste compactor, at a rough 50% compaction rate, the resultant waste generation and bin capacity would be as follows:</p> <ul style="list-style-type: none"> • 620L per week General Waste; and • 570L per week Recyclable Waste (1,140L storage requirement). <p>The use of this two-bin system is considered to minimise the amount of waste which will go through to landfill. Information signage will be provided within the bin store to assist with informing residents of how to use this bin system and to reduce contamination, subject to the waste management plan.</p> <p>The developer is required to satisfy the Waste Management Plan which has been prepared. Ongoing up-keep and compliance with the Waste Management Plan will be the responsibility of the future strata company. The day-to-day upkeep of the bin stores and waste store areas will be the responsibility of the strata company caretaker.</p>

Element Objectives		Justification and Comment
4.18	Utilities	
04.18.1	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.	<p>The proposed building services will include power, potable water, natural gas, reticulated sewerage, and NBN. These services will be fit for purpose and meet the performance and access requirements of the respective service providers.</p> <p>The location of the utilities and plant services are shown on the plans and are not directly visible from the street. NBN and underground power are proposed to service the site.</p> <p>While no utility upgrades are required to service the apartments, should any costs arise these will be borne by the developer in proportionate share.</p>
04.18.2	All utilities are located such that they are accessible for maintenance and do not restrict safe movement of vehicles or pedestrians.	<p>The design and location of building utilities including laundries, stores, site servicing infrastructure, waste collection rooms, and other utilities are located to be conveniently accessible without obstructing visual or acoustic amenity. These utilities will be located outside of pedestrian and vehicle movement areas.</p>
04.18.3	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.	<p>The proposed utilities will be primarily located within plant rooms or utility cabinets. Services including air-conditioning condenser units, hot water systems, and antennae, will be concealed from view and integrated into the design of the development.</p> <p>The proposed water meters are to be located in an enclosed receptacle, integrated into the design of the apartments and the recycled brick façade where they are located. This is expected to be conditioned as a standard condition of approval.</p> <p>All utilities like that described will not be readily visible from the street.</p> <p>The location of the proposed meter boxes is in a suitable location which is visible from the street, or other public areas and open space of the development. The proposed meter boxes are located near to the bin store.</p> <p>The specifics of utilities are expected to be conditioned as a standard condition of planning approval, subject to an approved design and specific advice at the building permit stage.</p>
04.18.4	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.	<p>There is not considered to be any adverse negative impact which will arise from the proposed development in relation to noise or air quality impacts from utilities within individual apartments. This includes from laundry rooms, store rooms, or bin stores. The specifics of utilities are expected to be conditioned as a standard condition of planning approval.</p>

5.3 PLANNING & DEVELOPMENT (LOCAL PLANNING SCHEMES) REGULATIONS 2015

The decision maker is to have due regard to various matters contained within clause 67 of Schedule 2 Deemed Provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015* (W.A.). It is noted that the development satisfies the matters to be considered by local government within clause 67 of these regulations. In considering an application for development approval the local government (or delegated decision-making authority / decision-maker) is to have due regard to the following matters to the extent that, in the opinion of the local government, those matters are relevant to the development the subject of the application —

Provision		Justification and Comment
Clause 67 Deemed Provisions		Matters to be considered by local government / decision maker
a.	the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area;	Satisfies aims and provisions of the Local Planning Scheme as discussed prior.
b.	any approved State planning policy;	Satisfies State Planning Policy framework.
c.	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 the requirements of orderly and proper planning.
d.	any environmental protection policy approved under the Environmental Protection Act 1986 section 31(d);	Not applicable to this site.
e.	any policy of the Commission;	Satisfies WAPC policies.
f.	any policy of the State;	Satisfies State policies.
g.	any local planning policy for the Scheme area;	Satisfies Local Planning Policy framework as detailed in the planning assessment section of this report.
h.	any structure plan, activity centre plan or local development plan that relates to the development;	Not applicable to this site.
i.	any report of the review of the local planning scheme that has been published under the Planning and Development (Local Planning Schemes) Regulations 2015;	Not applicable to this site.
j.	in the case of land reserved under this Scheme, the objectives for the reserve and the additional and permitted uses identified in this Scheme for the reserve;	Not applicable to this site.
k.	the built heritage conservation of any place that is of cultural significance;	Satisfied. The lot does not contain registered places of Indigenous Australian or Australian heritage significance.
l.	the effect of the proposal on the cultural heritage significance of the area in which the development is located;	Satisfied. The lot does not contain registered places of Indigenous Australian or Australian heritage significance.
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 sub-clause m. The proposed development is considered to be compatible with its setting. Multiple dwellings are permissible and encouraged by planning framework set out by the City of Nedlands.
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 sub-clause n. The design considers the established character of the locality and associated environmental and social impacts. No significant adverse impact has been identified.

	Provision	Justification and Comment
o.	the likely effect of the development on the natural environment or water resources and any means that are proposed to protect or to mitigate impacts on the natural environment or the water resource;	Satisfies sub-clause o. No significant adverse impact has been identified in relation to the impact of the proposed development on the natural environment. Minimal excavation and fill works are proposed.
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;	The proposal satisfies sub-clause p. Landscaping and deep soil areas are provided throughout as shown on the submitted plans, which create an aesthetically pleasing outlook for future residents.
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;	The site is not within a bush fire risk area or 1 in 100-year flood area. No other specific site constraints related to clause q have been identified.
r.	the suitability of the land for the development taking into account the possible risk to human health or safety;	The land is suitable to be developed to the standard proposed. The site proposes minimal risk to human health and safety and will meet (and be required to meet) the standards on the National Construction Code.
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;	The proposed vehicular and pedestrian access is adequate, clearly legible and suitable for the proposed development.
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;	The site is in close proximity to multi-modal transport options. Expected traffic volumes capable of being handled within the site and proposed development. The site is within a location A area. Car parking provision suitable for local area.
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;	The site is in close proximity to multi-modal transport options. The development proposes a suitable amount of amenity for pedestrians and cyclists. Waste and site servicing requirements are to standard. Design provides suitable access options for older people and people with a movement disability.
v.	the potential loss of any community service or benefit resulting from the development other than potential loss that may result from economic competition between new and existing businesses;	The development satisfies sub-clause v. No adverse negative impact to community service or community benefit identified.
w.	the history of the site where the development is to be located;	Development in the local area has been traditionally residential suburban development. No historical issues of note have been identified for the subject site.
x.	the impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals;	The design is considered to increase the opportunity for interaction and activity on the street and provide an overall community benefit. The design satisfies sub-clause x.
y.	any submissions received on the application;	The development is subject to advertising.
za.	the comments or submissions received from any authority consulted under clause 66;	<i>Not applicable.</i>
zb.	any other planning consideration the local government considers appropriate.	<i>Not applicable.</i>

6 CONCLUSION

The proposed development at 97 Smyth Road in Nedlands has been duly considered in the sections above in accordance with City of Nedlands' and the State's planning framework, including State Planning Policy 7.3 Volume 2. As demonstrated in this submission, the proposed design satisfies the objectives and design guidance, and the City's support in development application approval is therefore welcomed.

The application prepared and submitted for development approval to the JDAP showcases a proposal which has considered its site and immediate locality to produce a development outcome and which is responsive to and respectful of the established streetscape and local development character.

This proposal will bring in much needed vibrancy, density, and activity to the wider Nedlands precinct, and positively contribute to the growth and vitality of the area as part of wider development.

It is recommended that the JDAP welcome this addition to the local area and assist the City of Nedlands in meeting their dwelling diversity and housing targets, by approving the application subject to appropriate conditions.

Should you have any question in relation to the details provided in this submission, please contact Petar Mrdja on [6444 9171](tel:64449171).

WASTE MANAGEMENT PLAN

12 Apartments



97 Smyth Road, Nedlands

July 2020



**DALLYWATER
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TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	4
2	INTRODUCTION	6
2.1	The Development	6
	Table 1: Number and Type of Apartments	6
2.2	WMP Variation	8
2.2.1	Variation 1 – Compaction of Waste and Recycling	8
2.2.2	Variation 2 - Hard Waste Storage	9
3	ONSITE WASTE MANAGEMENT	10
4	LOCAL GOVERNMENT WASTE MANAGEMENT REQUIREMENTS	11
4.1	Waste Management Guidelines	11
4.2	Waste Generation	11
	Table 2: Waste Generation Rates	11
4.3	Bin Storage	11
4.4	Bin Presentation	11
4.5	Waste Capacity	11
	Table 3: Estimated Weekly Volumes	12
4.6	Number of Bins	12
	Table 4: Required Bin Numbers	12
4.7	Summary	12
5	REQUIRED CAPACITY	13
5.1	Compaction	13
5.2	Summation	13
6	BIN STORAGE AND MANAGEMENT	14
6.1	Bin Storage	14
6.2	Bin Management	15
6.3	Bin Presentation and Collection	15
6.4	Review	15
7	WASTE MANAGEMENT RESPONSIBILITIES	18
7.1	Building Owners/Strata Management	18
7.2	Building Caretaker/Cleaner	18
7.3	Residents	18
8	COMPLIANCE WITH LEGISLATION/GUIDELINES	19
9	REFERENCES	23

1 EXECUTIVE SUMMARY

The Development Consultancy (TDC), on behalf of its client, AOYO Group, is applying to the City of Nedlands (the "City") to develop a property at 97 Smyth Road, Nedlands. The development is proposed to consist of 12 apartments.

As part of the Development Approval process, the developer is required to submit a Waste Management Plan (WMP) for the development to the City. TDC employed the services of waste management specialists Dallywater Consulting to investigate the City's requirements in this regard and to develop this WMP.

Based on the City's requirements, it is proposed that the following initiatives will be implemented for the waste servicing at 97 Smyth Road, Nedlands.

- Use of 240 litre receptacles for waste and recycling;
- Use of a compactor to compact the waste and recycling material at a rate of 2:1;
- Weekly collections of the residential waste and fortnightly collections for the recycling material.

These initiatives will result in the following requirements for receptacles;

- Waste – three 240 litre bins collected weekly; and
- Recycling – five 240 litre bins collected fortnightly.

Servicing of the bins will occur from the kerb.

If the FOGO system is implemented with weekly FOGO collections and waste and recycling collections on alternating fortnights, the total number of shared bins required would be two 360 litre MGBs, four 240 litre FOGO bins and four 360 litre MRBs, with a maximum of 8 bins being presented on any one collection day (i.e. recycling week – four MRBs and four FOGO bins).

These initiatives, and all of the arrangements in this Waste Management Plan, will be formalised in the Strata Management arrangements.

Review

All of the above-mentioned waste servicing arrangements will be reviewed as a matter of course on an ongoing basis to ensure that the most efficient arrangements to manage the waste and recycling material generated by all aspects of the facility are in place and are maintained.

DEFINITIONS

240: A 240 litre waste or recycling receptacle.

360: A 360 litre waste or recycling receptacle

FOGO (service): Food Organics and Garden Organics - a local government kerbside collection service for food and garden organic material.

Greenwaste: Includes leaves, twigs, small branches, grass, tree trimming and garden trimmings.

Mobile Garbage Bin (MGB): A wheeled receptacle used by domestic residences and commercial premises within a local government municipality to deposit waste materials for emptying by the local government or a collection contractor.

Mobile Recycling Bin (MRB): A wheeled receptacle used by domestic residences and commercial premises within a local government municipality to deposit recycling materials for emptying by the local government or a collection contractor.

Recycling: Any material accepted by the local government's recycling collection contract or the State's container deposit scheme.

Strata Management: For the purposes of this document, the selected legal entity charged with managing the soft services of the built structure (i.e. waste management, cleaning, landscaping, security and other similar human-sourced services) on behalf of the owners and tenants of the building.

Waste: Any recyclable and non-recyclable discarded solid, semi-solid, liquid or contained gaseous materials not accepted by the local government's recycling collection contract.

Waste Minimisation: A process to minimise the amount of waste requiring disposal via hierarchical activities such as behaviour and product modification, waste avoidance, reduction, reuse and recycling.

Total Waste Stream: The combined waste, recyclables and compostables.

2 INTRODUCTION

2.1 The Development

The Development Consultancy (TDC), on behalf of its client, AOYO Group, is applying to the City of Nedlands (the "City") to develop a property at 97 Smyth Road, Nedlands. The development is proposed to consist of 12 apartments.

As part of the Development Approval process, the developer is required to submit a Waste Management Plan (WMP) for the development to the City. TDC employed the services of waste management specialists Dallywater Consulting to investigate the City's requirements in this regards and to develop this WMP.

Figure 1: Location Plan

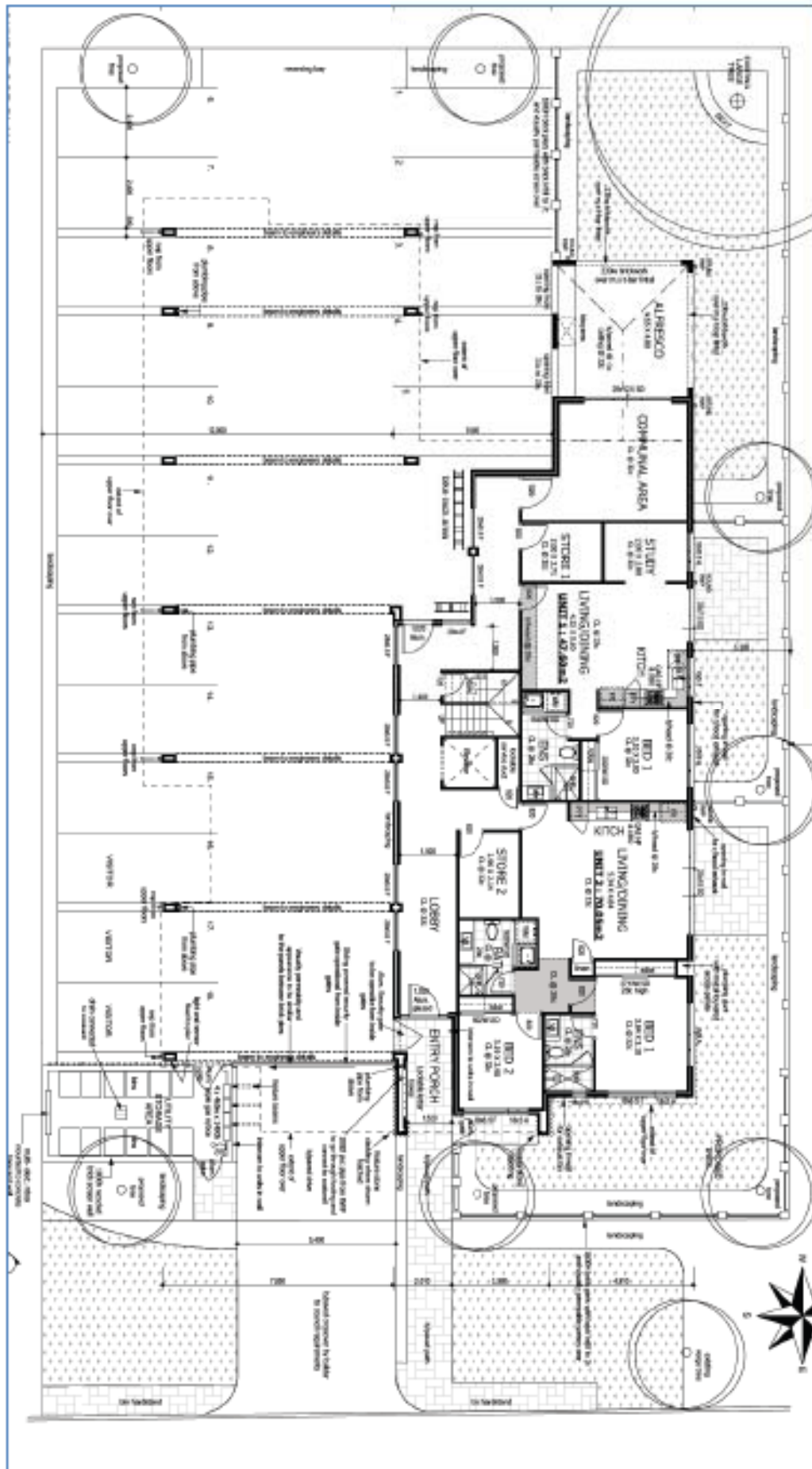


The following table details the number of dwelling units proposed for the development.

Table 1: Number and Type of Apartments

UNIT TYPE	Number
APARTMENTS	
1 Bed	5
2 Bed	7
Total Apartments	12

Figure 2: Site Plan



2.2 WMP Variation

As a preamble, it should be noted that the arrangements for the storage and management of the waste and recycling bins in this WMP are at minor variance to the City's waste guidelines for this type of development. However, the proposed alternative management methodologies meet and potentially improve on the intended outcomes sought by the City's laws and guidelines and meet the Element Objectives.

2.2.1 Variation 1 – Compaction of Waste and Recycling

Because of the size of the property, the City's requirement to service the bins within the site by using a rear load vehicle which can enter and leave the site in forward gear is problematic. The alternative is to present the bins to the street verge however the City will not allow the larger 660s to be serviced from the road and the maximum number of the smaller bins able to be presented at any one time is eight bins.

Variation

The only alternative for this development therefore is to compact the waste and recycling material. This would reduce the number of waste bins to three at weekly collections and the number of recycling bins to five at fortnightly collections.

The City has presented two concerns around these arrangements, namely noise from the compaction equipment and perceived issues around the compaction of recycling material.

Substantiation

1. Noise

To reduce the likelihood of any impact on the neighbouring properties (or on residents of this development) from the operation of the compaction equipment, the following parameters are being met:

- **Power Source:** the selected unit will be electric;
- **Operating Hours:** the unit will only be operated in the daytime hours between 7a.m. and 7 p.m.;
- **Operation Cycle:** the operating cycle of the equipment is very short (i.e. less than 30 seconds per bin which, for eight bins, represents less than 4 minutes of operation on a "compaction day");
- **Attenuation:** the unit will be located within the bin store which is constructed of brick, is fully enclosed and has the ability to be attenuated (e.g. with insulation) if required; and
- **Operating Noise Level:** a unit with a low operating noise level will be selected. The suppliers of an indicative unit have advised that the operating SPL for the equipment is 62dB, that these noise levels were established by carrying out tests on identical machines and measurements were taken 1m from the surface of the machine, on all sides.

2. Compaction of Recyclables

While there is no issue with the compaction of waste material, the City's Waste Management LPP and Waste Management Guidelines (Version 17/4/20) states:

"The use of chutes and compactors for the recyclable waste stream may not be appropriate, and compaction of organic waste streams is not appropriate (Ref. WALGA Multiple Dwelling Waste Management Plan Guidelines Appendix 2)."

Compaction of recyclables is used in other developments to reduce the numbers of bins presented to the kerb and improve the visual amenity of developments. The two main concerns around compaction of any recyclable material are overweight and tightly consolidated bins and sorting issues at the Materials Recovery Facility. These issues are addressed as follows:

- The author has considerable kerbside audit experience and conducted an audit of the City of Nedlands' own kerbside collections in 2019. The average weight of the contents of a recycling bin in that audit was less than

20kg1 (averaged around 10.5kg) and for several other local government audits, weights of the contents of recycling bins averaged around 11kg.

This means that, at a maximum of 2:1 compaction, the total combined weight of recyclables and the 13kg bin is likely to be around 35kg which is far less than the 70kg limit imposed by the City.

- The compaction ratio limit of 2:1 to be applied has been proved to limit any over-consolidation issues occurring (i.e. jamming of recyclables, particularly cardboard, in the bins). In addition, the required use of onsite waste management personnel (e.g. common-areas cleaner) allows for regular supervision of the use of the bins and correction of any over- consolidation by residents.
- Compaction of the material to a limit of 2:1 means that the recyclables in the bin are compacted to a density less than occurs in the back of the collection vehicle, negating any concerns around issues at the MRF from consolidation.

In addition to the above, it is also noted that the advent of the State's Container Deposit Scheme in the near future should see a reduction in recyclables disposed of into the kerbside system and thus, increased capacity in these bins and a lesser requirement to fully compact to the 2:1 limit.

2.2.2 Variation 2 - Hard Waste Storage

The City's Guidelines require 5m² of bulky/hard waste storage for this development. This space is generally allocated in the bin store.

Variation

Rather than providing 5m² of hard waste storage area in the bin store, space for this purpose is identified in the residents' stores. All the stores have been designed to be larger than the minimum requirements and in each, there is an allocation of at least 1m² for the temporary storage of bulk or hard waste prior to it being disposed of by the residents. It is noted that residents are required to organise the removal of their own bulky or hard waste items.

Substantiation

Placement of hard waste items in a shared bin store for this size of development can be problematic, both from a space perspective (additional floor space and thus larger store required) and also from a management perspective (coordinating multiple requests for storage of items, tidiness of storage, type of hardwaste, amenity impacts etc).

For developments such as these, where additional storage capacity has been made available in individual stores, responsibility can be allocated to residents to manage and dispose of their own hard waste.

Comment

As described above, these variations are considered intrinsically beneficial to the development and the waste management activities there-of.

The management practices detailed above are to be incorporated into the Strata Management arrangements for this development.

3 ONSITE WASTE MANAGEMENT

The following provisions have been made for waste and recycling on the site:

- **Dwellings**
 - The residents will put their bagged waste and recycling material into bins located in the Bin Store on the ground level.
 - Because of the limit on numbers of bins able to be presented to the verge and the current frequency of recycling collections, residents of this development will not be able to take up the City's second recycling bin option.
 - Contracted staff will consolidate the material in the bins as required to ensure capacity (i.e. room in the bins) is available to the residents at all times.

- **Hardwaste/Bulky Items**
 - Residents will be required to organise their own immediate disposal of large or bulky items not suitable for disposal to the bins. There is adequate room in resident's stores for placement of these items prior to their removal.
 - The management of deposit of hardwaste material on the verge for the City's annual collections would be negotiated with the City.
 - No hard or bulky waste can be stored external to the buildings.

- **Greenwaste/FOGO**
 - Greenwaste will be removed offsite by gardening contractors employed to manage the common garden areas around the development.
 - In the future, food and garden organics may be collected in combined food organics and garden organics (FOGO) bins.

- **Waste Collection**
 - The City provides various services for the collection of waste, recycling and greenwaste bins.
 - The City sets the specifications for acceptable collection parameters (e.g. number of bins, frequency of collections, maximum bin weights, etc).
 - The collection of waste, recycling and greenwaste would be from the kerbside.

- **Bulk Waste Collection**
 - The City provides a service for the collection of bulk waste.
 - There is adequate space on the front verge of this development for the placement of a 10m³ bin for the collection of bulk waste material.

4 LOCAL GOVERNMENT WASTE MANAGEMENT REQUIREMENTS

4.1 Waste Management Guidelines

The following provisions have been sourced from the City's Waste Minimisation Coordinator and the City's latest Waste Management LPP and Waste Guidelines (Version 17/4/20) which been used as the basis for waste generation calculations here-in.

4.2 Waste Generation

The City's requirements for the provision of waste storage for this type of development are as follows:

- While 660 litre receptacles are the preferred receptacle size for waste and recycling material in multi-unit developments with more than 4 units, waste and recycling material can be collected in smaller receptacles for this development;
- Using the smaller bins and the kerbside collection service, waste is collected weekly and recycling fortnightly; and
- Waste and recycling receptacles are to be provided in sufficient numbers to cater for the waste generation requirements detailed in the following table.

Table 2: Waste Generation Rates

UNIT TYPE	Number	Weekly Waste/Dwelling (m3)	Fortnightly Recycling/Dwelling (m3)
APARTMENTS			
1 Bed	5	0.08	0.12
2 Bed	7	0.12	0.24
Total Apartments	12		

4.3 Bin Storage

- Waste and recycling material will be stored in a bin store located at the front of the development.
- Residents will be able to access the bin store direct and dispose of their own material. An entity contracted by the strata management would monitor and consolidate the bins as required.

The bins store will meet or exceed the following requirements:

- be constructed of brick, concrete, corrugated compressed fibre cement sheet or other material of suitable thickness approved by the Manager Health and Compliance;
- have walls not less than 1.8 metres in height and have an access way of not less than 1 metre in width and be fitted with a self closing gate;
- be fitted with a tap attached to the scheme supply;
- contain a smooth and impervious floor –
 - of not less than 75 millimetres in thickness;
 - which is evenly graded to an approved liquid refuse disposal system; and
 - which is easily accessible to allow for the removal of the receptacles.

4.4 Bin Presentation

- Because of the limited clearance height within the property and restricted manoeuvrability within the building, a small waste vehicle which can enter and exit the site in forward gear cannot be accommodated.
- Bins will therefore be presented to the verge.

4.5 Waste Capacity

Based on the above requirements, the weekly storage capacity required by the City for waste and recycling from the proposed development is detailed in the following table.

Table 3: Estimated Weekly Volumes

Residential	No. of Dwellings	Waste Generation Rate (m3)	Recycling Generation Rate (m3)	Waste/Week (m3)	Recycling/Fortnight (m3)
1 Bed	5	0.08	0.12	0.4	0.6
2 Bed	7	0.12	0.24	0.84	1.68
Total	12			1.24	2.28

4.6 Number of Bins

Based on the preceding table, the number of 240 litre bins required to accommodate the waste and recycling generated from the development are detailed in the following table.

Table 4: Required Bin Numbers

RECEPTACLES	Waste	Recycling
Weekly Generation (m3)	1.24	2.28
No. of 240 litre receptacles/week	5.17	9.50

4.7 Summary

Based on the above and on weekly waste and fortnightly recycling collections, the number of receptacles required for this development at current collection arrangements would be six 240 litre waste MGBs and ten 240 litre recycling MRBs.

As the City has placed a limit of eight bins which can be presented to the kerb on any one collection day, alternative management practices have to be found to reduce the number of bins.

5 REQUIRED CAPACITY

As discussed previously, there are restrictions on the number of bins that can be presented to the kerbside (i.e. maximum of 8) and ways of reducing the bin numbers have been considered. The methodology selected is compaction of the waste and recycling.

5.1 Compaction

The development is not suited for rear-load vehicle access for internal servicing of larger 660 litre bins and advice from the City's Waste Minimisation Coordinator was that smaller bins can be used for this development, to be serviced by the City's weekly waste and fortnightly recycling side-arm kerbside collection contract. However, the number of waste and recycling bins required to be presented on a combined collection day for this servicing scenario without consolidation of the material could be up to sixteen 240 litre bins (i.e. six waste MGBs and ten recycling MRBs).

To reduce this to an acceptable number of bins (i.e. maximum of eight bins for kerbside presentation), it is proposed that the waste and recycling bins are compacted at a maximum ratio of 2:1. This will reduce the required number of receptacles to three MGBs collected weekly and five MRBs collected fortnightly.

The type of compactor proposed to be used will be an ORWAK 4240–4360 Bin Press or similar equipment from another supplier. A specification for that unit has been attached to this Plan (Attachment 1). It should be noted that regardless of the final unit type, the following management arrangements will be observed:

- The unit will be required to be supported by local 24/7 servicing;
- A written service arrangement will be confirmed before installation;
- Power Source: the selected unit will be electric;
- Operating Hours: the unit will only be operated in the daytime hours between 7a.m. and 7 p.m.;
- Operation Cycle: the operating cycle of the equipment is to be very short (i.e. less than 30 seconds per bin which, for eight bins, represents less than 4 minutes of operation on a "compaction day");
- Attenuation: the unit will be located within the bin store which is constructed of brick, is fully enclosed and has the ability to be attenuated (e.g. with insulation) if required; and
- Operating Noise Level: a unit with a low operating noise level will be selected. The operating SPLs for the various available equipment range from 62dB to 70dB.

5.2 Summation

It is proposed that the following initiatives will be implemented for the waste servicing at 97 Smyth Road, Nedlands.

- Use of 240 litre receptacles for waste and recycling;
- Compaction of the waste and recycling materials; and
- Weekly collections of the residential waste and fortnightly collections for the recycling material.

These initiatives will result in the following requirements for receptacles;

- Waste – three 240 litre bins collected weekly; and
- Recycling – five 240 litre bins collected fortnightly.
- A greenwaste bin will be available for as-required presentation on alternating weeks to the recycling bins.

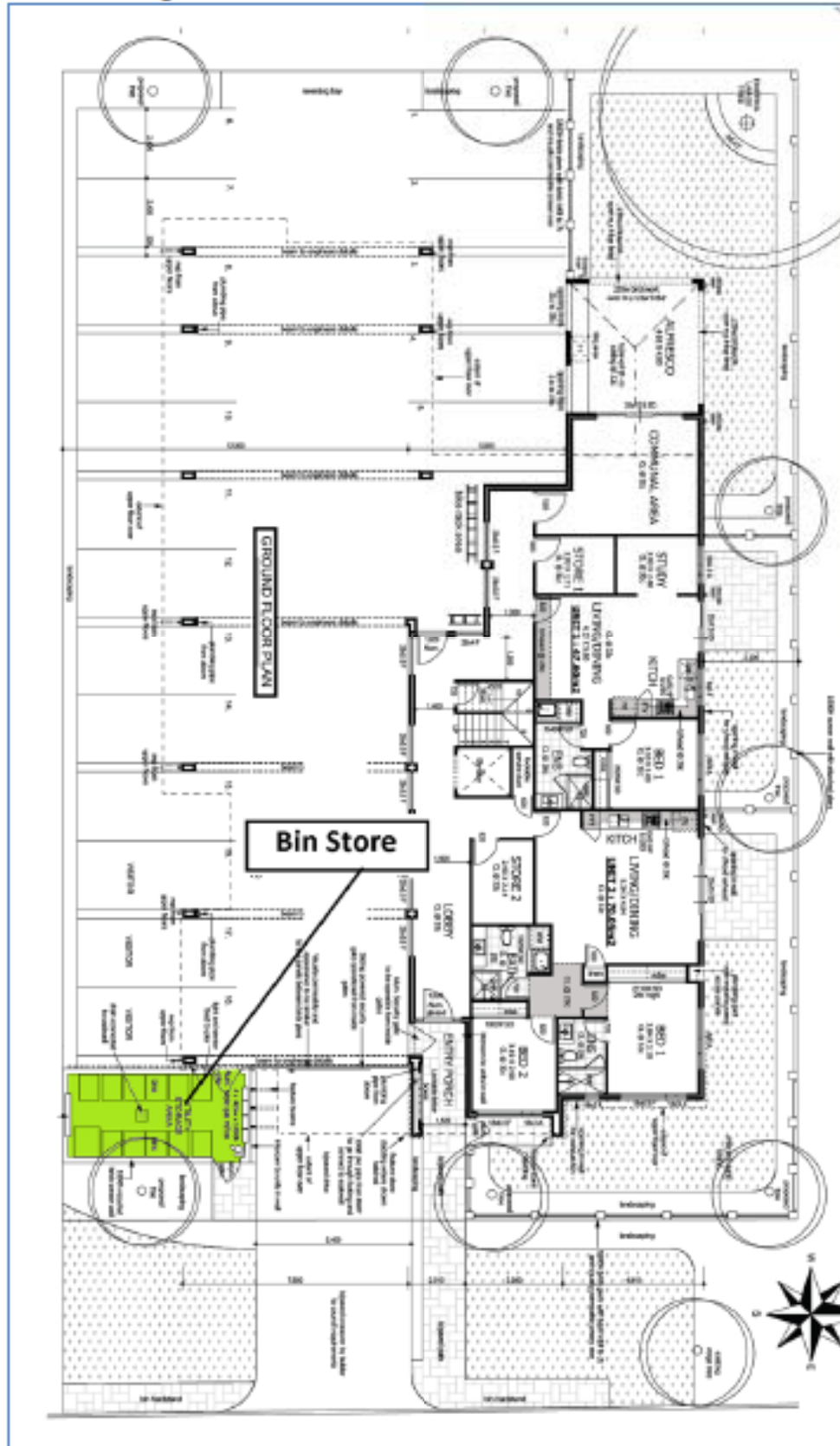
If the FOGO system is implemented with weekly FOGO collections and waste and recycling collections on alternating fortnights, the total number of bins required would be two 360 litre MGBs, four 240 litre FOGO bins and four 360 litre MRBs, with a maximum of eight bins being presented on any one collection day (i.e. recycling week – four MRBs and four FOGO bins).

6 BIN STORAGE AND MANAGEMENT

6.1 Bin Storage

A roofed enclosed bin store has been provided at the front of the property.

Figure 3: Residential Bin Storage



6.2 Bin Management

Residents will be required to bag all waste material prior to it being placed in the waste bins.

The management of the bins will be coordinated by the Strata Management and written into the strata management arrangements. A cleaner or similar personnel is to be either employed or contracted directly by the Strata Management to supervise waste management throughout the facility and as such, will be made aware of the expectations regarding presentation and collection arrangements.

Those personnel will be responsible for ensuring that the bins in the bin store are presented to the collection vehicle on collection days and are returned to the store once they have been emptied. They will also be responsible for consolidation of the material in the MGBs and MRBs.

6.3 Bin Presentation and Collection

On each collection day, the onsite waste person will retrieve the bins from the bin store and present them to and collect them from the road verge.

A figure showing the bin presentation on the front verge, the suggested location of the bulk bin set down and the temporary 1m² of hard or bulk waste storage within the stores is included on the following page.

6.4 Review

All of the above-mentioned waste servicing arrangements will be reviewed as a matter of course on an ongoing basis to ensure that the most efficient arrangements to manage the waste and recycling material generated by all aspects of the facility are in place and are maintained.

Figure 4: Bin Presentation, Bulk Waste, and Bulk Bin Set Down Arrangements

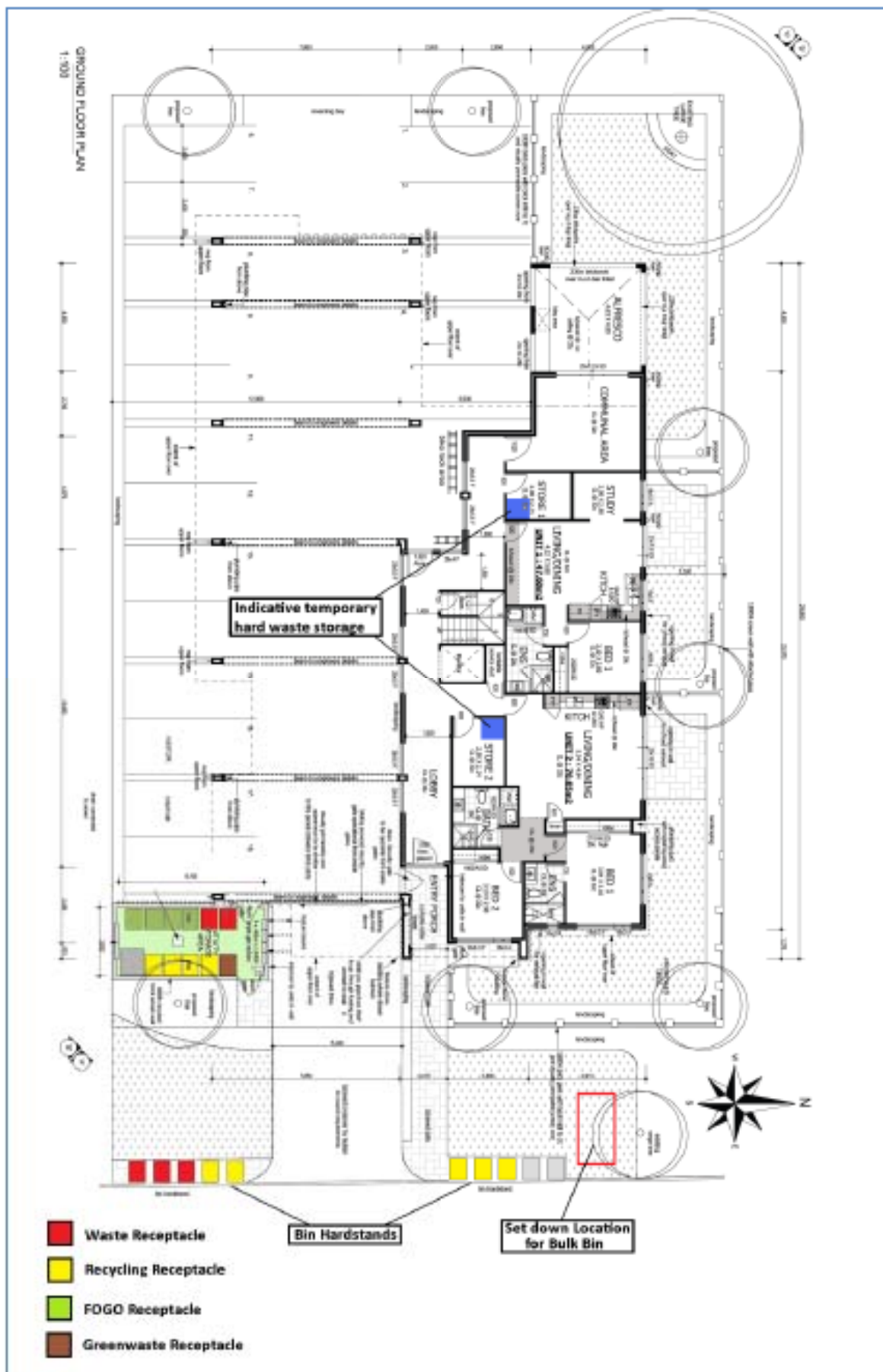
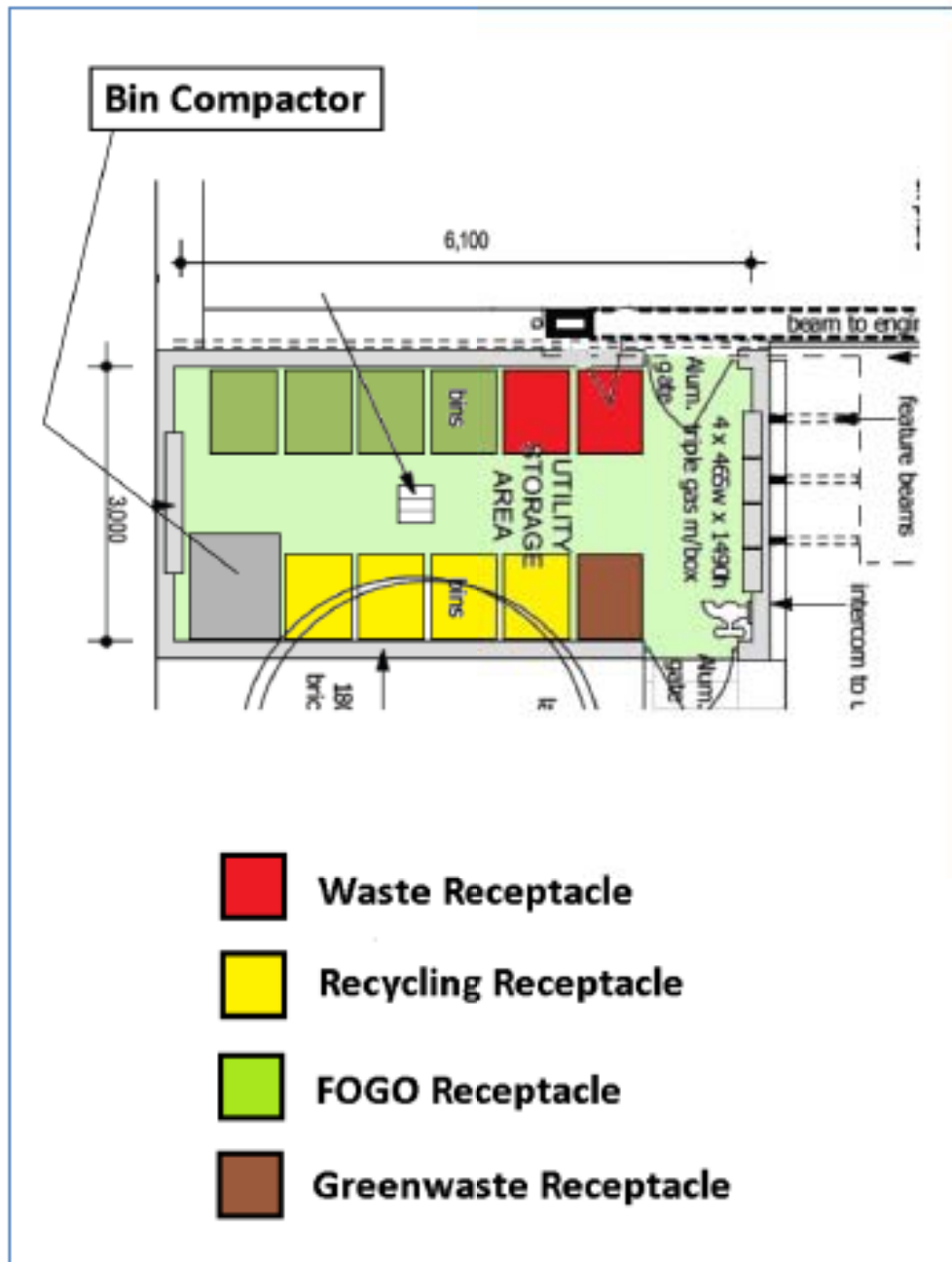


Figure 5: Bin Store Showing FOGO Configuration



- Waste Receptacle**
- Recycling Receptacle**
- FOGO Receptacle**
- Greenwaste Receptacle**

7 WASTE MANAGEMENT RESPONSIBILITIES

7.1 Building Owners/Strata Management

The Strata Management body will have responsibility for ensuring that the residential waste management activities are appropriately conducted and that residents meet their waste management responsibilities. To enable this, this document and the responsibilities here-in will be adopted into the strata management bylaws or other suitable enabling document.

The strata management will allocate responsibility for all waste management activities to either a Building Caretaker or Cleaner (Waste Personnel). This position will be responsible for the management of waste throughout the complex and they will be trained in all facets of the role.

7.2 Building Caretaker/Cleaner

At a minimum, the person or entity employed or contracted by the strata body to act as waste personnel will undertake the following bin servicing and waste management functions on behalf of the strata management;

- Consolidation of the waste and recycling material into the correct bins in the bin store;
- Presentation and retrieval of those bins on collection day;
- Cleaning of bins and the bin store; and
- Coordination of bulk and hard waste management where requested.

In addition, the education of existing and new residents will be a responsibility for these staff including promotion of the City's various waste minimisation services.

7.3 Residents

All residents would be instructed via the strata management of the various waste requirements. This would include expectations of the managing body with regards to management of bulky or problematic waste (e.g. from renovations or building activities, for annual kerbside collections etc).

Residents will be required to;

- store all bulky and hard waste within their stores until they have organised for it to be collected or removed;
- bag all their waste material before placing it in the waste bins; and
- Observe the arrangements in this Waste Management Plan.

In the absence of any other individual arrangement with the waste person, residents (and their contractors) would be responsible for the immediate removal and disposal off-site of any waste unsuitable for placement in the residential bins. This would include large bulky waste and electronic items and waste from any building maintenance activities.

8 COMPLIANCE WITH LEGISLATION/GUIDELINES

The following table provides WMP commentary against the relevant waste management criteria drawn from the City's Local Laws, LPP and Guidelines.

Table 4: Compliance with Legislation and Guidelines

HEALTH LOCAL LAW		
Section/Bylaw	Requirement	Comment
35. Suitable Enclosure	1) An owner or occupier of premises— (a) consisting of more than 3 dwellings; or (b) used for commercial, industrial purposes, or as a food premises; shall if required by the Manager Health and Compliance provide a suitable enclosure for the storage and cleaning of receptacles on the premises.	Bin Enclosure provided for waste MGBs, recycling MRBs, greenwaste MGWB and future FOGO bins
	2) An owner or occupier of premises required to provide a suitable enclosure under this Division shall keep the enclosure thoroughly clean and disinfected.	Written into responsibilities of onsite waste person.
	(3) For the purposes of this Division, a "suitable enclosure" means an enclosure—	
	(a) of sufficient size to accommodate all receptacles used on the premises but in any event having a floor area not less than a size approved by the Manager Health and Compliance;	A bin store is being provided to house waste and recycling bins, greenwaste and FOGO bins.
	(b) constructed of brick, concrete, corrugated compressed fibre cement sheet or other material of suitable thickness approved by the Manager Health and Compliance	Complies
	(c) having walls not less than 1.8 metres in height and having an access way of not less than 1 metre in width and fitted with a self-closing gate;	Complies
	(d) containing a smooth and impervious floor—	Complies
	(i) of not less than 75 millimetres in thickness; and	Complies
	(ii) which is evenly graded to an approved liquid refuse disposal system;	Complies
	(e) which is easily accessible to allow for the removal of the receptacles;	Complies
(f) provided with a ramp into the enclosure having a gradient no steeper than 1:8 unless otherwise approved by the Manager Health and Compliance	n/a	
LOCAL PLANNING POLICY – WASTE MANAGEMENT		
4.1 Waste Management Plans		
4.1.1	A Waste Management Plan shall be submitted as part of the following categories of Development Application: (a) Residential (i) 5 or more multiple dwellings; (ii) 5 or more grouped dwellings;	This document.
4.1.2	Waste Management Plan (WMP) must include details but not limited to - (a) Land use type and Built Form (including but not limited to number of dwellings, bedrooms and storeys, size of commercial tenancy); (b) Bin Access and Storage; (c) Waste generation/Capacity; (d) Truck accessibility and manoeuvring; (e) Internal service collection arrangements (including swept path analysis where applicable); (f) Waste systems; (g) Signage; (h) Collection/placement options; and (i) Additional waste requirements.	Complies Complies Complies n/a n/a Complies Complies Complies n/a
4.1.3	The development shall be undertaken and operate in conformity with the Waste Management Plan approved by the City. This will be	Waste Management Plan and its arrangements will be

	ensured in perpetuity via an appropriate condition of the development approval.	referenced in the Strata Management arrangements/bylaws and supported in legislation via a condition referencing the WMP in the development approval for the development.
WASTE MANAGEMENT GUIDELINES		
3.0 WASTE AND RECYCLING GENERATION		
3.1.2	The City's minimum residential waste and recycling allocation per rateable property is 1 x 120 litres per week for waste and 1 x 240 litres per fortnight for recycling. The waste and recycling requirements for residents in multi-unit dwellings are as shown in Table 1.	The required waste generation rates have been observed in the preparation of the WMP.
3.1.3	The City provides second recycling bins to residents free of charge. Therefore, developers should consider extra space for storage of additional recycling bins. Also, green waste will also need to be catered for onsite, depending on the scale and nature of the development. The Waste Management Plan will also need to take this into consideration.	WMP notes that, because of the limit on numbers of bins able to be presented to the verge and the current frequency of recycling collections, residents of this development will not be able to avail themselves of this service at this time.
3.1.4	The City may introduce Food organic and Garden organic (FOGO) bin in the future. Bin allocation for (FOGO) 240L bin will also need to be catered for onsite. The minimum of 40L waste generation rate allocation per property per week is acceptable.	Consideration has been given to the proposed FOGO service throughout the WMP.
3.1.5	The City will allow for a maximum of 4 x 240L waste bins and 4 x 240L recycle bins to be placed on the verge for kerbside collection. More than 8 bins will require internal service arrangements.	Complies
4.0 BIN SIZE AND COLOUR		
4.1	The Waste Management Plan must provide details on the proposed bin sizes. The City's available bin sizes and dimensions are shown in Table 2 and 3.	Standard City-issued bins will be used. Bins will need to be changed up when FOGO is introduced.
7.0 WASTE TRUCK ACCESSIBILITY AND MANOEUVRING-		
7.1	Any development of 5 or more dwellings shall require waste trucks to service all waste from within the property as verge presentation is not permitted. The design shall demonstrate the City's minimum compliance requirement of: ~.....	The City has approved a variation to this guideline (i.e. kerbside presentation) subject to no more than 8 bins being presented on any one collection day.
9.0 BIN STORAGE AREA		
9.1	Depending on the number of dwellings residents may have individual bin areas or shared communal bin areas shown in Table 4 (.....)	Bin store has been provided
9.2	Developments with shared bins must include an easily accessible communal bin storage area within the development. In the case of mixed-use developments separate residential and commercial bin storage areas are required.	Complies
9.3	A bin storage area (or enclosure) must be provided on the premises where bins are stored and collected from as per the following requirements:	
	(a) Easily accessible to allow for the removal of the receptacles;	Complies
	(b) Adequate circulation space for manoeuvring bins within the storage area must be allowed;	Complies
	(c) Provide for collection that limits pedestrian and vehicle disruption;	Kerbside collection – bins do not obstruct pathway
	(d) The bin storage area is to be provided with a permanent water supply and drainage facility; for washdown. The bin area is to be screened by a gate, brick walls or other suitable materials to a height of not less than 1.8m;	Complies
	(e) Each waste stream must be separated and clearly labelled;	Complies
	(f) Residential waste needs to have a separate area from commercial waste;	n/a
	(g) Developments that include residential dwellings shall include a dedicated area for the temporary storage of large bulky items awaiting disposal	Sufficient area exists within each resident's store for this purpose – no storage of bulky waste is to occur outside the stores.
	(h) Designs should not encourage the emission of odour outside the bin enclosure area;	Onsite waste management supervision, bagging of waste material and bin type will control any odours
	(i) Bin storage areas shall be located within the building (not on the verge), so they are not visible from the public realm, or screened from public view with a quality material compatible with the building design	Complies

	(j) The bin area is to be accessible via a suitably constructed service road that will allow waste truck vehicle movement;	n/a
	(k) Provided with a ramp into the bin storage area having a gradient of no steeper than 1:8 unless otherwise approved by the City; and	n/a
	(l) Where a mixed-use development is proposed (residential and any other use), the residential waste and recycling bin storage areas are to be self-contained and separate from commercial bin storage areas.	n/a
	(m) For all properties that have a loadable waste presentation point, the City requires relevant access i.e. key or remote device.	n/a
10.0 COLLECTION OF BINS		
10.1	Bins, ready for collection, shall be presented in a manner that has minimal impact on the public realm.	Bins will be presented to the kerb with sufficient space between the bins to facilitate emptying.
10.2	Where it cannot be demonstrated that the required number of bins for 4 dwellings or less can be practically accommodated on the verge for collection, bin storage areas shall be designed to allow for collection of waste from within the private site.	The City's Waste Minimisation Coordinator has approved a variation to this guideline (i.e. kerbside presentation) subject to no more than 8 bins being presented on any one collection day.
10.3	Any development of 5 or more dwellings, a bin storage area shall be designed to allow collection of all waste bins from within the site. All waste bins shall not be placed on the verge area for collection.	The City's Waste Minimisation Coordinator has approved a variation to this guideline (i.e. kerbside presentation) subject to no more than 8 bins being presented on any one collection day.
11.0 WASTE SYSTEMS FOR MULTI-UNIT DWELLINGS		
11.1	A detailed description of the waste system proposed must be provided, which shall include in-apartment source separation systems, chutes, carousels, in chute compaction equipment, transportable compactors, bin lifters and tugs or towing devices. Developers must ensure that it is as easy to dispose of recyclable materials as a waste stream and that there is an adequate provision for the segregation of waste streams without contamination. Hard waste and charity goods should be taken to an easily accessible, secure and safe drop-off point on-site.	n/a
11.2	The following waste options exist for multiunit developments: (a) Option 1: Use 660L bins for waste and 660L bins for recycling with bins stored in communal storage area(s). Residents may be required to transfer all waste and recycling from their dwelling direct to the bin storage area(s). (b) Option 2: A dual chute system for waste and recycling leading to a central waste and recycling collection area in the basement or ground level.....	n/a
14.0 SIGNAGE		
14.1	Signs within the bin storage area must demonstrate correct recycling and reduce contamination.	Signage will be provided by the Strata Management detailing correct material disposal behaviour and the use of the City's various waste minimisation opportunities.
14.2	Clear signage and coloured bins (red for waste) and (yellow for recycling) to be placed in each bin storage area on each level.	Complies
15.0 BULK WASTE (Residential properties only)-		
15.1	Development plans shall indicate the allocation of a dedicated area to place bulk bins (twice a year) for bulk rubbish collections. The City offers two hard waste collections and two green waste collections for residents.	A site for the placement of bulk bins is available on the front verge.
15.2	The City's bulk collection contractor will provide a 10m ² bulk bin during the bulk collection (twice per annum). Hard waste items from multi-unit developments are not permitted to be placed on the verge area for collection.	As above
15.3	On-site hard waste storage must be provided as follows: (a) 1 to 55 apartments = Minimum area of 5m ² (b) 56 - 200 apartments = Minimum area of 10m ²	Complies - Sufficient area exists within each resident's store for this purpose – no storage of hard waste is to occur outside the garages.
15.4	A hard waste collection area must be provided for collection contractors that is immediate to the truck collection location.	Complies
16.0 COLLECTION AND CONTRACTORS		
16.1	All residential properties must utilise the City's waste service. However, commercial properties can engage private contractors for the services.	Complies
17.0 COMPLIANCE WITH WASTE MANAGEMENT PLAN		

17.1	Responsibility for ensuring compliance with the Waste Management Plan and the cleaning of the bin storage area/s and facilities must be allocated to a person of appropriate authority (i.e. property manager, strata manager, caretaker).	Complies – Responsibility arrangements allocate this responsibility to an onsite waste person employed by the Strata Management.
19.0 ADDITIONAL INFORMATION REQUIRED		
19.1	Please ensure that all plans included in the Waste Management Plan are drawn to either a 1:100 or 1:200 to assist with the assessment process with information below:	
	(a) Typical commercial floor showing waste and recycling drop-off points;	n/a
	(b) Bin rooms including any bins and compactors;	Complies
	(c) Bin presentation location (on-site) with bin alignment shown;	Complies
	(d) Residential and commercial floor levels illustrating waste and recycling storage;	n/a
	(e) Bin storage areas including any chutes, carousels and bins;	Complies
	(f) Bin numbers and size of bins;	Complies
	(g) Bin presentation location with bin alignment (verge presentation - if applicable) shown;	Complies
	(h) Ramp grades;	n/a
	(i) Access to bin storage area and/or chutes; and	Complies
	(j) Swept path analysis illustrating sufficient access to collect bins	n/a

9 REFERENCES

- City of Nedlands: Health Local Law 2017
- City of Nedlands: Local Planning Policy – Waste Management 2020
- City of Nedlands: Waste Management Guidelines (2020)

ATTACHMENT 1 – WASTE COMPACTOR

Edition 3, From serial no. 134235-
Publ. no 4875571-00
OM 4240 4360, 2018-03

ORWAK
4240 · 4360



ORIGINAL OPERATING INSTRUCTIONS



 **ORWAK**[®]

English

TECHNICAL SPECIFICATIONS

GENERAL DATA	4240	4360
Total weight single:	220 kg	240 kg
Total weight double:	320 kg	360 kg
Transport height:	2,100 mm	2,160 mm
Dimensions:		
A - Height, min:	2,100 mm	2,160 mm
max:	2,275 mm	2,275 mm
B - Width single:	750 mm	950 mm
C - Depth single:	920 mm	980 mm
D - Width double:	1,475 mm	1,960 mm
E - Depth double, min:	900 mm	970 mm
max:	990 mm	1060 mm
Depth with open door:	1,515 mm	1,780 mm
Recommended space for machine in operation (working area):		
Height:	2,275 mm	2,275 mm
Width single:	1,950 mm	2,150 mm
Width double:	2,575 mm	3,160 mm
Depth with open door:	2,115 mm	2,380 mm
Noise level:	< 62,3 (± 1,0) dB (A) (ISO 11203 & 11202)	

Paint:

Two-part paint and powder coat with phosphatising as base.

Colours:

Orange RAL 2001

Grey RAL 7037

ELECTRICAL DATA

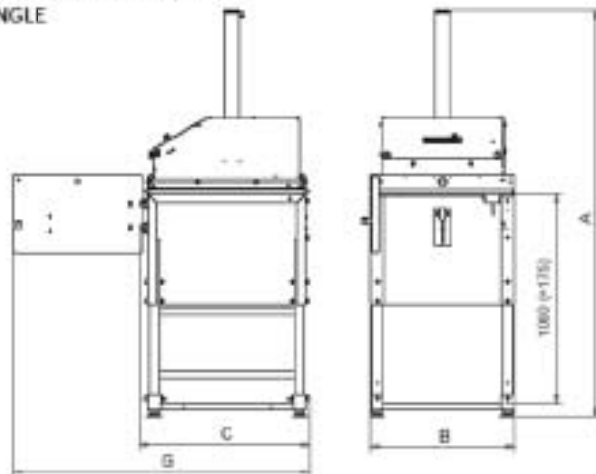
Operating power:	230V, 50Hz
Operating voltage:	24V
Electric motor:	1,1 kW
Fuse rating:	10A
Protection class:	IP 55

HYDRAULIC DATA

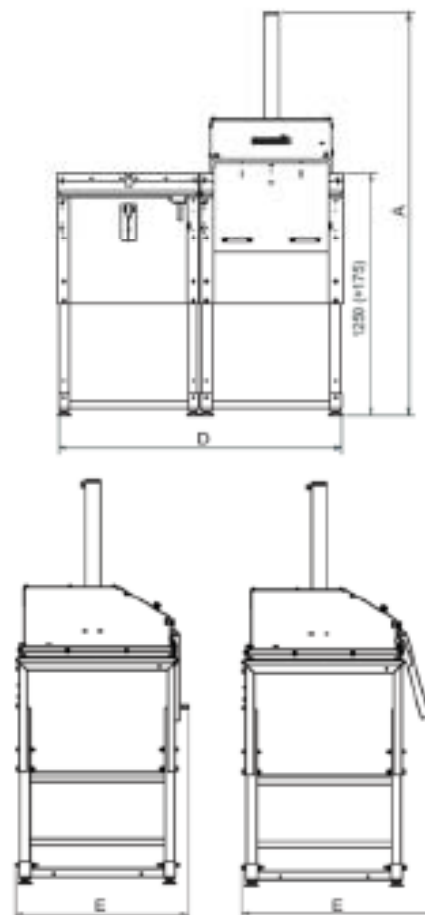
Working pressure:	55 bar
Overload pressure:	90 bar
Press force:	1,5 ton
Surface pressure:	1,17 kg/cm ²
Cycle time total:	29 sek.
Cylinder stroke length:	640 mm
Oil volume:	6,0 liter
Recommended oil: +5°C till +40°C	ISO VG 32-68, Mineraloil
Below +5°C	A special oil or heater should be used at lower temperatures.

DIMENSIONAL DIAGRAM

SINGLE



DOUBLE



Hewshott

Acoustics

International

INDEPENDENT CONSULTANTS

AUDIO VISUAL

ACOUSTICS

INFORMATION TECHNOLOGY

PROJECT MANAGEMENT

UK
USA
Singapore
Hong Kong
Australia
India

2031a/CC

5 August 2020

Urbanista Town Planning

97 Smyth Road, Nedlands – Acoustic Report

Acoustic Report for Development Application Rev. A

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green building council australia
MEMBER 2016-2017




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Table of contents

1. Executive Summary	5
2. Design and Test Standards	6
2.1. Noise	6
2.1.1 Internal Noise	6
2.1.2 External Noise Emission	6
2.1.3 Room Acoustics	6
2.1.4 Sound Insulation (Speech Privacy)	6
2.2. Vibration	7
2.2.1 Human Response	7
2.2.2 Machinery	7
2.2.3 Structures	7
3. Project Location	8
4. Environmental Noise Impact Criteria	9
4.1. EPNR 1997 Assigned Noise Levels Table	9
4.2. EPNR 1997 Noise Character Adjustments	10
4.3. Nearest Noise Sensitive Receiver (NSR)	10
4.4. Calculation of Assigned Noise Levels	10
4.4.3 Traffic/Transport Factor	11
4.4.5 EPNR 1997 Assigned Noise Levels Table – NSR	12
4.5. Noise emissions – Mechanical Services	12
4.6. Vibration mitigation	13
5. Indoor Ambient Noise Criteria	14
5.1. Internal Ambient Noise and RT Requirements	14
5.2. Internal Background Noise and Reverberation Time for the Project	14
6. Residential Internal Sound Insulation	15
6.1. NCC 2016 F5 Requirements	15
6.2. Walls	15
6.3. Floors	15
6.4. Doors	16
6.5. Internal Services	16
7. External Sound Insulation	17
7.1. Existing Noise Levels	17
7.2. External Façade Construction	18
7.3. Indoor Ambient Noise Level Associated with External Sources	18
7.4. Sliding Doors	19
8. External Sound Insulation – General Advice	20

8.1. Road Traffic Noise	20
8.2. Aircraft Noise	20
8.3. Rain Noise	20
8.4. Roof	20
8.5. Façade	20
8.6. External Elements	20
9. Vibration Isolation – General Advice	21
9.1. Partition penetrations	21
9.2. Cabling, ducting and Piping	21
9.3. Rotating machinery	21
9.4. Vibration Isolation	22
A. Glossary	26
B. Acoustic Mark-up	28

1. Executive Summary

Hewshott International has been engaged by Urbanista Town Planning to undertake the acoustic consultancy services for Development Application for the proposed development at 97 Smyth Road, Nedlands.

This desktop review has identified key aspects of the acoustic design of the development.

The key aspects are:

- Environmental noise emission from the development,
- Internal indoor ambient noise levels,
- Reverberation time,
- Walls, floors, ceilings and services separation,
- Mechanical services and waste unit noise and vibration.

To ensure that the final design of the building achieves the recommended acoustic design criteria, we recommend that a further acoustic assessment is undertaken at subsequent phases of the project (e.g. detailed design).

2. Design and Test Standards

Australian Standards (AS) are now equivalent of International Standards (ISO), although some additional Australian Standards are referenced in this briefing document which have not yet been introduced into an ISO version. Note that British and European Standards are now being merged with ISO Standards.

2.1. Noise

2.1.1 Internal Noise

- AS 2021-2015, "Acoustics - Aircraft Noise Intrusion-Building Siting and Construction".
- AS 2107-2016, "Acoustics - Recommended design sound levels and reverberation times for building interiors".

2.1.2 External Noise Emission

- AS 1055-1997 "Acoustics - Description and measurement of environmental noise-general procedures"

The above standard is similar to ISO 1996:2016 "Acoustics - Description, measurement and assessment of environmental noise".

- Environmental Protection (Noise) Regulations 1997

2.1.3 Room Acoustics

- AS ISO 354-2006 "Acoustics - Measurement of sound absorption in a reverberation room"
 - AS ISO 11654-2002 "Acoustics - Rating of sound absorption - Materials and systems"
- Also refer to AS 2107 above.

2.1.4 Sound Insulation (Speech Privacy)

- National Construction Code 2016 (NCC 2016) Building Code of Australia
- AS ISO 140-2006 "Acoustics – Measurements of sound insulation in building and of building elements"
- AS/NZS ISO 717-1:2013 "Acoustics - Rating of Sound Insulation in Buildings and of Building Elements-Airborne Sound Insulation".
- AS 2822-1985 "Acoustics-Methods of Assessing and Predicting Speech Privacy and Speech Intelligibility".
- BS EN 12354-3:2017 Part 3: Building Acoustics – Estimation of acoustic performance of buildings from the performance of elements – Part 3: Airborne sound insulation against outdoor sound.

2.2. Vibration

2.2.1 Human Response

These standards relate to the response of humans within a building, when subjected to continuous or intermittent vibration (e.g. footfall, transportation), or transient vibration (e.g. piling during construction). The excitation frequency considered is between 1Hz and 80Hz.

- AS 2670-2001 "Evaluation of human exposure to whole-body vibration"

Equivalent to ISO 2631-2003 "Mechanical vibration and shock - Evaluation of human exposure to whole-body vibration".

Where resonance of a building structure results from wind excitation with a resonance frequency less than 1Hz, the following standard is relevant:

- ISO 6897-1984 "Guidelines for the evaluation of the response of occupants of fixed structures, especially buildings and off-shore structures, to low-frequency horizontal motion (0.063 to 1Hz)"

2.2.2 Machinery

These standards relate to allowable vibration limits for machinery installed within a building.

- ISO 10816:2015 "Mechanical vibration - Evaluation of machine vibration by measurements on non-rotating parts"

2.2.3 Structures

These standards refer to compromise of the integrity of structures subject to vibration from ground-borne sources such as construction, demolition and transportation.

- ISO 4866:2010: Mechanical vibration and shock - Vibration of fixed structures (equivalent to BS ISO 4866:2010)

Other standards for consideration include DIN 4150-3 (1999-02): "Structural vibration - Effects of vibration on structures". The Australian Standard AS 2187-2006 "Explosives-Storage and Use of explosives" also provides guidance.

3. Project Location

97 Smyth Road, Nedlands WA is located in Residential Zone, according to Local Planning Scheme 3, City of Nedlands. It is surrounded by single storey residential buildings and located in close proximity to Mixed Use Zone with the majority of buildings designated as commercial type buildings.

Each individual unit on the development at 97 Smyth Rd is to be classified as a noise sensitive premises, therefore the nearest noise sensitive receivers (NSR) have been reviewed and it are located at:

- 97 Smyth Road, the development,
- 95 Smyth Road, to the north of the development,
- 99 Smyth Road, to the south of the development
- 40, 42 and 44 Kinninmont Avenue, to the west of the development.

Perth Airport is located approximately 14km to the east of the proposed development, therefore the proposed site falls outside the ANEF Contours stated in AS 2021-2015. The proposed development is not expected to require additional sound insulation for aircraft noise.

Figure 3.1: Aerial view of site and its surroundings – source: Google Maps.



4. Environmental Noise Impact Criteria

In Western Australia, the noise emissions from a development to a receiver are assessed in accordance with the Environmental Protection (Noise) Regulations 1997 (EPNR 1997). The noise emissions from the development are compared with calculated assigned noise levels at a given noise sensitive receiver.

4.1. EPNR 1997 Assigned Noise Levels Table

The Western Australian Department of Environmental Protection Noise Regulations (EPNR 1997), operate under the Environmental Protection Act 1986. The Regulations specify maximum noise levels that can be received at noise sensitive premises, including industrial, commercial and residential premises.

EPNR 1997 provides a methodology and stipulates clear procedures relating to noise assessments and control. The regulations provide limits for three types of assigned noise level:

- L_{Amax} assigned noise level which cannot be exceeded at any time;
- L_{A1} assigned noise level that cannot be exceeded for more than 1% of the time;
- L_{A10} assigned noise level that cannot be exceeded for more than 10% of the time.

The resulting assigned noise levels are displayed in Table 4.1.1 below.

Table 4.1.1: Assigned noise levels

Type of premises receiving noise	Time of day	Assigned noise level (dB _A)		
		L_{A10}	L_{A1}	L_{Amax}
Noise sensitive premises at locations within 15 metres of a building directly associated with a noise sensitive use	07:00 to 19:00 Monday to Saturday	45+IF	55+IF	65+IF
	09:00 to 19:00 Sunday and Public holidays	40+IF	50+IF	65+IF
	19:00 to 22:00 All days	40+IF	50+IF	55+IF
	22:00 to 07:00 All days	35+IF	45+IF	55+IF
Noise sensitive premises at locations further than 15 metres from a building directly associated with a noise sensitive use	All hours	60	75	80
Commercial premises	All times	60	75	80
Industrial and utility premises	All times	60	75	80

The “influencing factor” (IF) is calculated for each of noise-sensitive premises receiving noise. It takes into account the amount of industrial and commercial land and the presence of major roads within a 450m radius around the noise receiver.

4.2. EPNR 1997 Noise Character Adjustments

It is a requirement of EPNR 1997 that the noise character of any breakout noise from a development be free of annoying characteristics, namely –

- Tonality, e.g. whining, droning;
- Modulation, e.g. like a siren; and
- Impulsiveness, e.g. banging, thumping.

According to EPNR 1997, “if these characteristics cannot be reasonably and practicably removed, e.g. in the case of an emission like music, then a series of adjustments to the measured levels are set out, and the adjusted level must comply with the assigned level”. The adjustments are set out below.

Table 4.2.1: EPNR 1997 noise character adjustments

Adjustment where noise emission is not music These adjustments are cumulative to a maximum of 15 dB			Adjustment where noise emission is music	
Where tonality is present	Where modulation is present	Where impulsiveness is present	Where impulsiveness is not present	Where impulsiveness is present
+5 dB	+5 dB	+10 dB	+10 dB	+15 dB

4.3. Nearest Noise Sensitive Receiver (NSR)

The assigned noise levels defined in the regulations have been calculated for the following nearest noise sensitive receiver (NSR) below:

- 95, 97 and 99 Smyth Road,
- 40, 42 and 44 Kinninmont Avenue.

4.4. Calculation of Assigned Noise Levels

Based on the regulations set out in the WA Environmental Protection (Noise) Regulations 1997, the maximum allowable noise levels are determined using the assigned noise level base values and the influencing factor (IF). The influencing factor takes into account zoning and road traffic around the receiver of interest within a 100 and 450m radius. In figure 4.4.1, the red circle is the 100m radius circle, and the blue circle is the 450m radius circle. Their centre are the noise-sensitive receivers under consideration.

Figure 4.4.1: Composite map showing zoning around proposed development – source: City of Nedlands Intramaps



4.4.1 100-Metre-Radius Circle

Based on the available information the percentage of commercial use within the 100-metre-radius circle is 14%, and 0% industrial activity has been identified within this area.

4.4.2 450-Metre-Radius Circle

Based on the available information, the percentage of commercial use within the 450-metre-radius circle is 12%, and 0% industrial activity has been identified within this area.

4.4.3 Traffic/Transport Factor

There are no major (more than 15,000 vehicles per day) or secondary (6,000 – 15,000 vehicles per day) roads within the 100m radius area. There is one major road within the 450m radius area.

From information provided by Main Roads WA, which is summarised in table below, the transport factor is 2.

Table 4.4.3.1: Traffic Volume in the Area.

Road	Vehicles per day	Classification
Stirling Highway	39277	Major

4.4.4 Influencing Factor

Based on calculations, and taking into account the percentage of commercial, industrial and residential areas as well as secondary and major roads in the 100 and 450 metre radius circles, the influencing factor is 3 dB.

4.4.5 EPNR 1997 Assigned Noise Levels Table – NSR

The resulting assigned noise levels for the NSR are displayed in Table 4.4.5.1 below.

Table 4.4.5.1: Assigned Noise Levels at Smyth Road

Type of premises receiving noise	Time of the day	Assigned Noise Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
Noise sensitive premises at locations within 15 metres of a building directly associated with a noise sensitive use	07.00 to 19.00 hrs Monday To Saturday	48	58	68
	09.00 to 19.00 hrs Sunday and Public holidays	43	53	68
	19.00 to 22.00 hrs All days	43	53	58
	22.00 to 07.00 hours all days	38	48	58
Commercial premises	All times	60	75	80
Industrial and utility premises	All times	65	80	90

The most sensitive period is highlighted in bold.

L_{A10} is an acoustic descriptor which corresponds to the noise level exceeded for ten per cent of the time period under consideration; this may be considered to represent an “average maximum level” and is often used for the assessment of road traffic noise. The L_{A1} is the level exceeded for one per cent of the time; this is representative of the maximum levels recorded during the sample period. The L_{Amax} is the absolute maximum recorded level, which is most useful for assessing sounds of short duration.

4.5. Noise emissions – Mechanical Services

The mechanical services noise emissions must be kept to a level that is not exceeded at any nearby neighbours’ boundary. The night-time assigned noise level is 38 dB, L_{A10} and has been calculated in Table 4.4.5.1.

All noise from condenser units and exhaust fans must not exceed this value at the boundary of any nearby residential neighbour.

Due to the close proximity to residential neighbours, the noise from condenser units must be mitigated using the following options:

- All condenser units should be roof located, facing away from nearby residents. For exhaust fan outlets that are proposed to be roof located, it is the responsibility of the installer that noise at the outlet must be kept to a sound pressure level of 50 dBA or less at one metre, subject to the final location. A detailed mechanical noise assessment should be undertaken at subsequent phase of the project once detailed mechanical services design is undertaken, in order to confirm compliance with the assigned noise levels.

- For exhaust fan outlets that are proposed to be located in the external walls, it is the responsibility of the installer that noise at the outlet must be kept to a sound pressure level of 45 dBA or less at one metre, subject to the final location. This can be achieved by using internally lined ducts. A detailed mechanical noise assessment should be undertaken at subsequent phase of the project once detailed mechanical services design is undertaken, in order to confirm compliance with the assigned noise levels.
- As far as practicable, noise from mechanical services including condenser units and exhaust fans should be free from tonality and impulsiveness.
- Vibration from any condenser units would also need to be controlled appropriately to minimise structure borne noise. Guidance and general advice has been provided on how to mitigate vibration in Section 4.6 and Section 9.

Provided that condenser units and exhaust fans are carefully selected and mitigated, assigned noise levels will not be exceeded at nearby properties.

4.6. Vibration mitigation

It is the responsibility of the installer to ensure that any rotational equipment or pumps do not cause objectionable vibration. In order to minimise the transmission of vibration and noise from rotating reciprocating or vibrating equipment to building elements, it is necessary to provide vibration control comprising vibration isolators and inertia bases where necessary to limit building vibrations in occupied areas as follows:

Table 4.6.1: Maximum allowable RMS velocity levels

Equipment	Allowable rms velocity level mm/s
Pumps	3.3
Centrifugal compressors	3.3
Fans (vent sets, centrifugal, axial)	2.3

Isolator selection: Select mounts with static deflections to limit building vibration allowing for span, stiffness and mass of supporting structure, and mass, imbalance, and operating speed range of equipment.

All equipment must be balanced to minimise vibration.

Rotating and reciprocating machinery – within evaluation zone A measured in accordance with *ISO 10816-3:1998* and *AS 2625.4:2003*.

Vibration mounts are required except for external equipment which is not connected to the structure of any building, support rotating, reciprocating or vibrating equipment on vibration isolating mounts.

5. Indoor Ambient Noise Criteria

5.1. Internal Ambient Noise and RT Requirements

AS/NZS 2107 has been used to derive the indoor noise criteria.

The 'houses and apartments near major roads' category in AS/NZS 2107 has been considered appropriate due to the proximity of Stirling Highway.

Table 5.1.1: Recommended indoor noise levels summary according to AS/NZS 2107

Type of occupancy/activity	Recommended Design Sound Level Range L_{Aeq} (dB)		Recommended reverberation time RT [s]
	Minimum	Maximum	
RESIDENTIAL BUILDINGS			
Houses and apartments near <u>major</u> roads:			
Sleeping areas	35	40	-
Living areas	35	45	-
Common areas (e.g. foyer, lift lobby)	45	50	Note 2

NOTES:

1. The recommended indoor design sound levels are for a fully fitted out and completed building. Attention is drawn to the additive noise effect of many machines within the same area and adjacent areas. Allowance for the total number and type of noise sources should therefore be made in the selection of equipment and in the design of building spaces. A building owner or developer may consider an allowance of 3-5 dBA to be appropriate.
2. Reverberation time should be minimized for noise control.

Any mechanical services must be selected and installed so that the resultant indoor ambient noise levels in the proposed development do not exceed the values shown in Table 5.1.1.

5.2. Internal Background Noise and Reverberation Time for the Project

The acoustic requirements of the building with reference to the descriptors of performance in Section 5 and 6 are nominated in Table 5.2.1 below.

Table 5.2.1: Indoor Noise levels & Reverberation Time Design Criteria for the Project

Location	Design Sound Level Range L_{Aeq} dBA		Reverberation Time (seconds)
	Minimum	Maximum	
Sleeping Area – all levels	35	40	-
Living Area – all levels	35	45	-
Entry Lobby, Communal Area	45	50	Note 2

NOTES:

1. The recommended indoor design sound levels are for a fully fitted out and completed building. Attention is drawn to the additive noise effect of many machines within the same area and adjacent areas. Allowance for the total number and type of noise sources should therefore be made in the selection of equipment and in the design of building spaces. A building owner or developer may consider an allowance of 3-5 dBA to be appropriate.
2. Reverberation time should be minimised for noise control.

6. Residential Internal Sound Insulation

6.1. NCC 2016 F5 Requirements

The minimum sound insulation criteria for Class 2 buildings are set in NCC 2016 and have been summarised in Table 6.1.1 below. An SOU is a single occupancy unit i.e. an apartment.

Table 6.1.1: Summary of NCC 2016 Part F5 requirements (Class 2 buildings) - dB

Construction	R_w	$R_w + C_{tr}$	$L_{n,w} + C_i$	Discontinuous Required?
Walls separating habitable rooms in adjoining SOUs	-	≥ 50	-	-
Walls separating kitchens, toilets, bathrooms and laundries in adjoining SOUs	-	≥ 50	-	-
Walls between a bathroom, toilet, laundry or kitchen and a habitable room (other than a kitchen) in adjoining SOUs	-	≥ 50	-	Yes
Walls between a SOU and a public corridor, public lobby, stairway or the like or parts of a different classification	≥ 50	-	-	-
Walls between a SOU and a plant room or lift shaft	≥ 50	-	-	Yes
Walls or ceilings separating a duct, soil, waste or water supply pipe or storm water pipe from a habitable room	-	≥ 40	-	-
Walls or ceilings separating a duct, soil, waste or water supply pipe or storm water pipe from a kitchen or other non-habitable room	-	≥ 25	-	-
Floors between SOUs and between a SOU and a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification	-	≥ 50	≤ 62	-

Discontinuous construction means a wall having a minimum 20 mm cavity between two separate leaves, and:

- for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and
- for other than masonry, there is no mechanical linkage between leaves except at the periphery.

6.2. Walls

Party walls between tenancies must achieve BCA minimum requirement of $R_w + C_{tr} 50$.

Mark-ups showing NCC Part 5F requirements for walls are available in Appendix B.

6.3. Floors

In order to comply with the requirements of NCC 2016, the floors separating SOUs from other SOUs must achieve an airborne sound insulation rating of $R_w + C_{tr} \geq 50$; and an impact sound insulation rating of $L_{n,w} + C_i \leq 62$.

6.4. Doors

According to NCC 2016, all entry doors separating apartments from common areas to be minim 44 mm solid core timber (or equivalent performing to be approved by Hewshott) and tightly fit to the frame with acoustic seals to achieve the R_w 30 minim requirement of NCC 2016.

6.5. Internal Services

According to Part F5.6 of NCC 2016, 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 single-occupancy unit, the duct or pipe must be separated from the rooms of any single-occupancy unit by construction with an $R_w + C_{tr}$ (airborne) not less than:

- (i) 40 if the adjacent room is a habitable room (other than a kitchen); or
- (ii) 25 if the adjacent room is a kitchen or non-habitable room.

7. External Sound Insulation

7.1. Existing Noise Levels

A noise survey was undertaken in the vicinity of the proposed development, at 97 Smyth Road, in peak traffic afternoon hours to assess noise levels which are to be incident upon the façade of the development.

Sample measurements were undertaken on Tuesday 4th August 2020, approximately 4 meters from the side of the road on Smyth Road at the boundary of the 97 Smyth Road property.

The wind speed for the measurement duration was always below 5m/s; the weather was sunny, 15°C, with no rain.

Table 7.1.1: Measurement equipment and settings used in survey

Item	Description
Sound level meter	RION NA-28 Type 1 Sound Level Meter
Calibrator	RION NC-74 Sound Calibrator
Real time analysis	One-third octave band and octave band frequencies
Frequency weighting	Unweighted and A-weighted

The sound level meter was calibrated both before and after the survey and did not deviate from the calibration level of 94dB.

Results of the noise survey are given in table 7.1.2 for the measurement location, along with the traffic counts and the corresponding Leq spectral data.

Table 7.1.2: Sample measurement spectra L_{Aeq} [dB]

Location	Time	Vehicles per hour	Duration of sample measurement	L _{Aeq} [dB]	Octave band centre frequency [Hz]				
					125	250	500	1k	2k
97 Smyth Road	16:30 – 17:30	390	15 min	63	40	47	54	61	57
			15 min	63	41	48	54	61	57
			15 min	64	42	49	55	62	58

The measured on-site results have been used to determine noise levels breaking into the façade of the development.

7.2. External Façade Construction

The external construction of the building will consist of brick walls, standard glazing with metal roof. Based on the architectural drawings, the following building elements have been used to determine indoor noise levels from external sources (traffic noise), presented in table 7.2.1.

Table 7.2.1: Proposed façade construction

Building element	Sound Reduction Index (R) dB					R _w
	Octave band centre frequency [Hz]					
	125	250	500	1k	2k	
6mm glazing	19	24	28	32	31	31
Double brick	41	45	48	56	58	54

It is essential that the airspace between roof and ceiling is packed with at least R2.0 insulation. To ensure that the final design of the roof achieves the design criteria for internal noise levels, we recommend that a further acoustic assessment is undertaken at subsequent phases of the project (e.g. detailed design).

7.3. Indoor Ambient Noise Level Associated with External Sources

The indoor ambient noise levels within the development will be directly associated with the external noise environment and the external envelope of the building. For mechanical ventilation, the following internal ambient noise levels should be maintained and an accounted for the cumulative effect of the mechanical noise and the intrusive noise. Prediction are based on noise ingress from external sources and not services within the building.

Table 7.3.1 presents the predicted indoor ambient noise levels along with the specific design criteria for indoor ambient noise for typical living room and bedroom areas within units situated on the perimeter of the development, facing Smyth Road. The glazing system used in the calculation is also presented. Typical living areas have a volume of approximately 60-65m³ and bedroom areas have a volume of approximately 20-30m³.

All calculations have been undertaken in accordance with BS EN 12354-3:2017 Part 3: Building Acoustics – Estimation of acoustic performance of buildings from the performance of elements – Part 3: Airborne sound insulation against outdoor sound. Reverberation times used in calculation are based on a normalised level of 0.5 seconds.

Table 7.3.1: Estimated indoor ambient noise levels

Room/ Area	Predicted Indoor Ambient Noise Level L _{Aeq} (dB)	Specific Design Criteria L _{Aeq} (dB)	Glazing System
Ground Floor			
Bedroom	34	40	6 mm glazing
First Floor			
Bedroom	36	40	6 mm glazing
Living Area	31	45	6 mm glazing
Second Floor			
Bedroom	36	40	6 mm glazing
Living Area	31	45	6 mm glazing

All apartment areas achieve compliance with design criteria for all levels using 6mm glazing configuration. The predicted internal noise levels will have a safety factor of between 4-14 dB. This will take into account increased future traffic flows or any other factors in construction detailing that may occur. Using a safety factor will subsequently offer additional protection to the amenity of residents. Calculations have been undertaken using noise levels recorded for the peak traffic times. It is expected that night-time noise levels from the traffic will be lower, therefore a safety factor for bedrooms will increase.

Glazing frames and seals of insufficient sound insulation can compromise the performance of the building element. We recommend that doors with glazing, window frames and all seals are selected to match the acoustic performance of the glazing within it.

7.4. Sliding Doors

Laboratory airborne sound insulation data (R_w) for specific glazed door systems include the performance of the frame. We recommend that acoustic data for the proposed sliding door system is provided in order to confirm that the R_w value is adequate. Glazed sliding door frames must be selected ensuring that the composite sound insulation performance of the frame system and the glazed pane is not lower than the values in table 7.2.1.

Special attention must be taken during installation of any sliding doorset. It must be ensured that they are well fitted, with a robust closing mechanism to avoid introducing acoustically weak transmission paths for noise to enter through the façade.

Balcony doorsets and frames should be supplemented with compressible neoprene seals at both jambs, and a continuous double brush seal at the threshold and head to minimise transmission of noise into living areas. Any voids or gaps in the frame are recommended to be fully sealed, or the full extent of the sound transmission performance will not be achieved.

8. External Sound Insulation – General Advice

8.1. Road Traffic Noise

The extent of road traffic noise intrusion is dependent on the volume and proximity of traffic on nearby roads, the percentage of heavy vehicles, the type of road surface, the topography of the site, and the orientation and construction of the development.

8.2. Aircraft Noise

The proposed site location falls outside ANEF 20 zone of Perth Airport. In accordance with AS 2021-2015, this is “acceptable”; there is usually no need for the building construction to provide protection specifically against aircraft noise.

8.3. Rain Noise

Noise generated from rainfall is dependent on the intensity of rainfall which is given by the velocity and size of water drops. The ISO Standard for the measurement of rain noise in the laboratory is at the draft stage (current draft is ISO 140-18). Rainfall consists of drops of different sizes where the drop size depends on rainfall intensity as well as on temperature and humidity. In temperate climates, the upper size limit for rain drops is 5 to 6 mm (above this size the drops break up into smaller drops). In tropical climates, where the temperature and humidity are higher, larger drop sizes can occur. During a rain storm the rainfall rate is rarely constant, with the most intense rain falling for only a few minutes followed by more gentle rain. Even when the rainfall rate is approximately constant, the short-term intensity will vary because the larger drops will fall fastest.

The rainfall rate normally accepted in Australia for sensitive areas in subtropical regions is 30mm/hr, and this rate shall be used to determine appropriate roof and façade constructions to comply with the design criteria.

8.4. Roof

The construction of the roof shall ensure internal noise criteria are achieved with regard to incident airborne noise, impact noise from rainfall, and noise from thermal or wind induced loads. Airborne noise emissions include but are not limited to transportation (aircraft, traffic, etc.), as well as thermal plant. The interface of the roof with the façade shall be carefully detailed.

8.5. Façade

The construction of the facade shall ensure internal noise criteria are achieved with regard to incident airborne noise (including noise from adjoining mechanical plant floors), impact noise from rainfall, and noise from thermal or wind induced loads.

The interface of the façade with the adjoining structure and internal partitions and ceilings shall be carefully considered to ensure flanking noise is controlled.

8.6. External Elements

External elements such as sun shades, curtain wall framing and the like shall be designed to ensure that wind flow does not excite any acoustic resonances that will affect internal or external noise criteria.

9. Vibration Isolation – General Advice

This section's objective is to provide guidance on how to prevent the transmission of unwanted vibration or structure-borne noise to the building. Mechanical services noise sources, including hot water pumps, fresh air intake fan and air exhaust fan, will be located internally on basement levels. External condenser units will be located in semi-enclosed plant rooms at each levels in both towers.

Unwanted vibration has the potential to transmit through the structure and re-radiate as noise - known as structure borne noise - causing disturbance in occupied spaces. Mitigation of vibration must be implemented where machinery connects to ducts, pipes and conduits and to isolate the slab/plinth on which it rests.

9.1. Partition penetrations

Any duct or pipe penetrations through a wall's or a floor's penetrations must be detailed carefully. The plant room wall or floor must not be rigidly connected to any duct or pipework. 25mm is the minimum size for any opening around pipes/ducts penetrating plant room walls.

9.2. Cabling, ducting and Piping

Flexible couplings must be incorporated in all pipework to mitigate the transmission of vibration. The "decoupled pipe" should have a minimum of two 90 degrees elbows in order to provide a threefold degree of freedom of movement. Successive elbows and bends should be separated by comparable distances.

Resilient supports must be incorporated to any pipe connected to rotating mechanical equipment. The size of the support must meet the same static deflections as the isolators designated for the associated item of plant. Pipe work shall be resiliently supported over distances as per the table below.

Table 9.2.1: Pipework minimum resilient support length vs. pipework distance to vibration source/plant room

Pipework length	Distance to plant room/vibration source
40mm or less	3 m
40mm to 65mm	4 m
65mm to 100mm	5 m
100mm to 150mm	6 m
150mm and over	8 m

Pipes passing in ceiling voids must be suspended from the slab. It must be ensured there is no contact with any lightweight ceiling support members, stud wall framing or other services.

Where rotating equipment connects to electrical wiring, it must be in a 360° looped form. Rigid conduits should not be used as they short-circuit vibration isolators.

9.3. Rotating machinery

Static and dynamic balancing is required of all equipment rotating parts. The balancing in accordance with *ISO 1940: 2003 Mechanical Vibration - Balance Quality Requirements for Rotors in a Constant (Rigid) State – Part 1: Specification and Verification of Balance Tolerances* is to proceed to G6.3 quality grade.

Any equipment containing rotating parts or capable of transmitting vibration shall be isolated from the building structure. Suitable vibration isolation devices are specified in Section 9.4: Vibration isolation.

Large machines may require inertia bases. Examples of large machines that may require inertia bases are: high-pressure fans, air compressors, internal combustion engines, reciprocating refrigeration compressors and pumps.

All floor mounted mechanical and electrical equipment with a considerable size must have reinforced concrete housekeeping pads with minimum 100mm thickness.

9.4. Vibration Isolation

In order to prevent structure borne noise, it is absolutely crucial that any equipment capable of producing objectionable vibration is isolated from the building structure. The size and location of mounts and isolators should be carefully chosen to achieve the specified deflection under the static load of the machine to be isolated. This includes any associated components such as, but not limited to, fan transitions or silencers. Levelling screws are to be used in conjunction with all mounts and isolators.

All isolators and isolation materials shall be of the same manufacturer and shall be certified by the manufacturer.

Any mounts or plant items must be fitted with seismic limit stops to limit any horizontal or vertical movement to 12mm before striking a limit stop. The contact surface of the limit stop should be fixed to 6mm of resilient material as a minimum. Under normal operation there should be a clear air gap of at least 4mm between limit surfaces of the machine to be isolated.

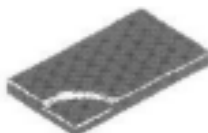
Manufacturer of vibration isolation and seismic control equipment shall have the following responsibilities:

1. Determine vibration isolation and seismic restraint sizes and locations.
2. Provide vibration isolation and seismic restraints as scheduled or specified.
3. Provide calculations and materials if required for restraint of non-isolated equipment.
4. Provide installation instructions, drawings and trained field supervision to insure proper installation and performance.

The isolator or base selected for a particular application depends on the required deflection, life cost and compatibility with associated structures and shall be nominated as follows:



Isolator types 1 and 2: Rubber isolators are available in pad (type 1) and molded (type 2) configurations. Pads are used in single or multiple layers. Molded isolators come in a range of 30 to 70 durometer (a measure of stiffness). Material in excess of 70 durometer is usually ineffective as an isolator. Isolators are designed for up to 13mm deflection but are used where 8mm or less deflection is required. Solid rubber and composite fabric and rubber pads are also available. They provide high load capacities and are used as noise barriers under columns and for pipe supports. These pad types work well only when they are properly loaded and the mass load is evenly distributed over the entire pad surface. Metal loading plates can be used for this purpose.



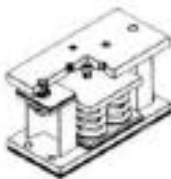
Isolator type 1: Glass fiber with elastic coating (type 1). This type of isolation is pre-compressed molded fiberglass pads individually coated with a flexible moisture impervious elastomeric membrane. Natural frequency of fiberglass vibration isolators should be essentially constant for the operating load range of the supported equipment. Mass load is evenly distributed over the entire pad surface. Metal loading plates can be used for this purpose.



Isolators type 3 and 4: Steel springs are the most popular and versatile isolators for HVAC applications because they are available for almost any deflection and have a virtually unlimited life. Spring isolators may have a rubber acoustical barrier to reduce transmission of high-frequency vibration and noise that can migrate down the steel spring coil. They should be corrosion-protect if installed outdoors or in a corrosive environment. The basic types include the following:



Isolator type 3: Open spring isolators (type 3) consist of top and bottom load plates with adjustment bolts for leveling equipment. Springs should be designed with a horizontal stiffness of at least 80% of the vertical stiffness to ensure stability. Similarly, the springs should have a mini-spring height.



Isolator type 4: Restrained spring isolators (type 4) have hold-down bolts to limit vertical as well as horizontal movement. They are used with (a) equipment with large variations in mass (e.g., boilers, chillers, cooling towers) to restrict movement and prevent strain on piping when water is removed, and (b) outdoor equipment, such as condensing units and cooling towers, to prevent excessive movement due to wind loads. Spring criteria should be the same as open spring isolators, and restraints should have adequate clearance so that they are activated only when a temporary restraint is needed. Closed mounts or housed spring isolators consist of two telescoping housings separated by a resilient material. These provide lateral snubbing and some vertical damping of equipment movement, but do not limit the vertical movement. Care should be taken selection and installation to minimize binding and short-circuiting.



Isolators 2 and 6: Air springs can be designed for any frequency, but are economical only in applications with natural frequencies of 1.33 Hz or less (150 mm or greater installations). A constant air supply (an air compressor with an air dryer) and leveling valves are typically required.



Isolator type 3: Isolation hangers (types 2 and 3) are used for suspended pipe and equipment and have rubber, springs, or a combination of spring and rubber elements. Criteria should be similar to open spring isolators, though lateral stability is less important. Where support rod angular misalignment is a concern use hangers that have sufficient clearance and/or incorporate rubber bushings to prevent the rod from touching the housing. Swivel or traveler means arrangements may be necessary for connections to piping systems subject to large thermal movements.

Pre-compressed spring hangers incorporate some means of pre-compression or preloading of the isolator spring to minimize movement of the isolated equipment or system. These are typically used on piping systems that can change mass substantially between installation and operation



Isolator type 5: Thrust restraints (type 5) are similar to spring hangers or isolators and are installed in pairs to resist the thrust caused by air pressure. These are typically sized to limit lateral movement to 106.4 mm or less.

Base type A: Direct isolation (type A) is used when equipment is unitary and rigid and does not require additional support. Direct isolation can be used with large chillers, some fans, packaged air-handling units, and air-cooled condensers. If there is any doubt that the equipment can be supported directly on isolators, use structural bases (type B) or inertia bases (type C), or consult the equipment manufacturer.

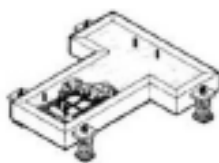


Base type B: Structural bases (type B) are used where equipment cannot be supported at individual locations and/or where some means is necessary to maintain alignment of component parts in equipment.

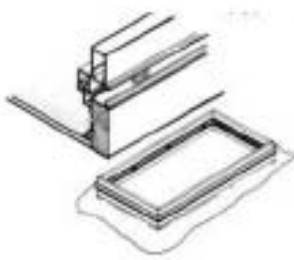
These bases can be used with spring or rubber isolators (types 2 and 3) and should have enough rigidity to resist all starting and operating forces without supplemental hold-down devices. Bases are made in rectangular configuration using structural members with a depth equal to one-tenth the longest span between isolators. Typical base depth is between 100 and 300 mm, except where structural or alignment considerations dictate otherwise.



Structural rails (type B) are used to support equipment that does not require a unitary base or where the isolators are outside the equipment and the rails act as a cradle. Structural rails can be used with spring or rubber isolators and should be rigid enough to support the equipment without flexing. Usual practice is to use structural members with a depth one-tenth of the longest span between isolators, typically between 100 and 300 mm, except where structural considerations dictate otherwise.



Base type C: Concrete bases (type C) are used where the supported equipment requires a rigid support (e.g. flexible coupled pumps) or excess heaving motion may occur with spring isolators. They consist of a steel pouring form usually with welded-in reinforcing bars, provision for equipment hold-down, and isolator brackets. Like structural bases, concrete bases should be sized to support piping elbow supports, rectangular or T-shaped, and for rigidity, have a depth equal to one-tenth the longest span between isolators. Base depth is typically between 150 and 300 mm unless additional depth is specifically required for mass, rigidity, or component alignment.



Base type D: Curb isolation systems (type D) are specifically designed for curb-supported roof top equipment and have spring isolation with a watertight, and sometimes airtight, assembly. Rooftop rails consist of upper and lower frames separated by nonadjustable springs and rest on top of architectural roof curbs.

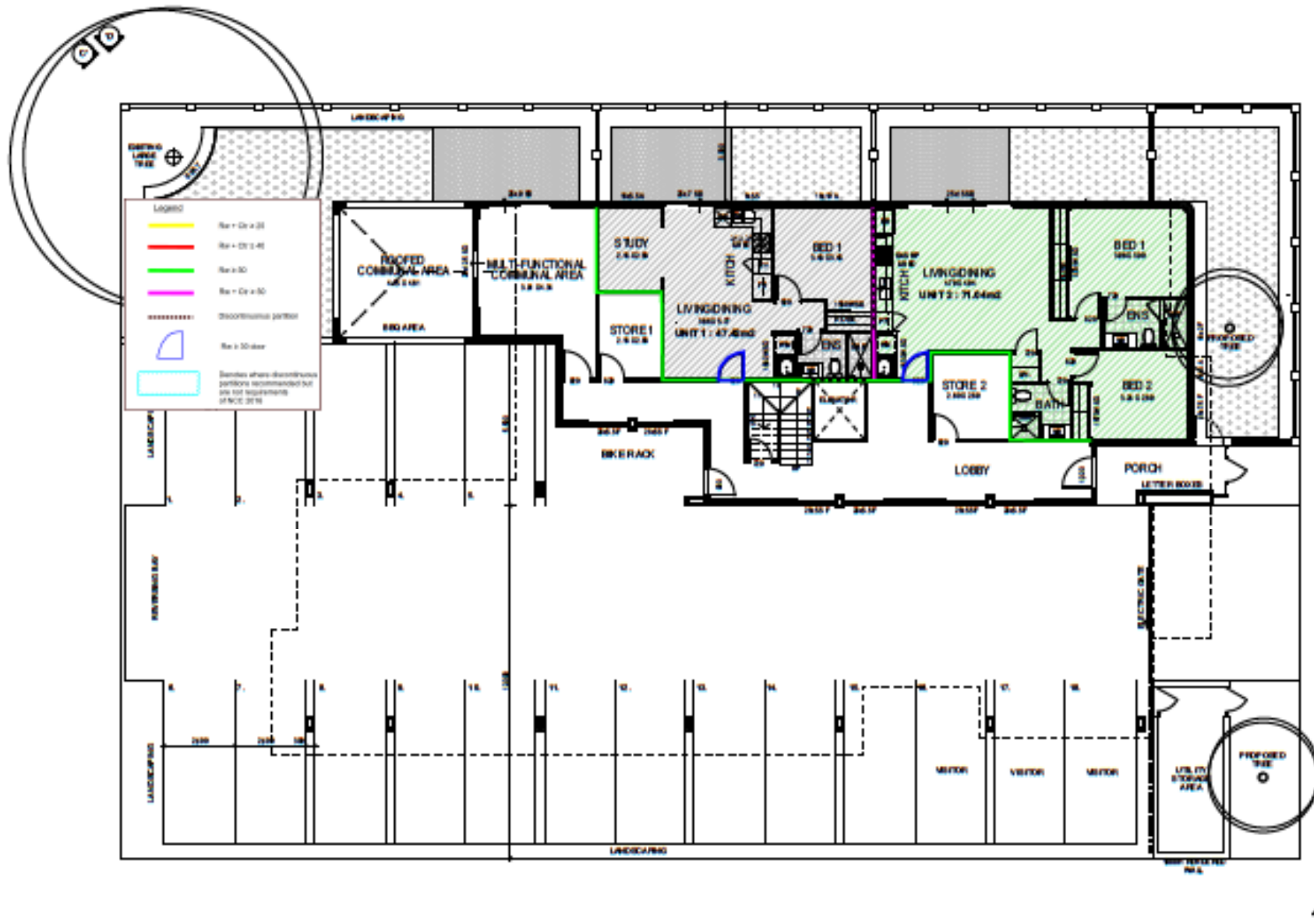
Isolation curbs incorporate the roof curb into their design as well. Both kinds are designed with springs that have static deflections 25 to 75mm range to meet design criteria described in type 3. Flexible elastomeric seals are typically most effective for weatherproofing between the upper and lower frames. A continuous sponge gasket around the perimeter of the top frame is typically applied to further weatherproof the installation.

A. Glossary

Term	Description
A-weighting:	Refers to a standardised frequency response used in sound measuring instruments, specified in Australian Standard AS 1259.1. Historically it was developed to model human ear response at low-level sounds. However A-weighting is now frequently specified for measuring sounds irrespective of level, and studies have shown a relationship between the long term exposure to A-weighted sound pressure levels and hearing damage risk.
Airborne sound:	Sound waves propagate within a construction (structure-borne sound) and are radiated into the air where their propagation continues (airborne sound).
AS:2107	AS/NZS 2107:2016 Acoustics -Recommended design sound levels and reverberation times for building interiors
Impact noise	Noise resulting from the direct impact on a building element (e.g. footfall, furniture movement on a floor).
C_{tr} , C	Spectrum adaptation term
D:	This value, in decibels, is the difference in sound pressure level values between two rooms.
dB:	Means the abbreviation for decibel.
dBA :	A-weighted sound pressure level in decibels.
D_{nT} :	The 'normalized level difference', in decibels, compares the sound pressure level values between two rooms by referring the result to a standard reverberation time value, typical in most residential rooms and office spaces.
$D_{nT,w}$:	The 'weighted standardized level difference' is a single-number value which is determined by applying ISO 717-1 to the D_{nT} results obtained in the field measurements. It is used to describe the ability to isolate noise. Higher values represent a better performance. This value is usually between 5 to 8 dB lower than the laboratory tests for a certain type of construction (R_w).
$D_{nT,w}$ (C; C_{tr}):	This is the complete expression that covers all values obtained from the test. If the result is 20 (-2; -3), it means the $D_{nT,w}$ is 20 dB, the $D_{nT,A}$ is 20-2=18, and the value of the equivalent D_{nT} related to traffic noise or other similar sources is 20-3=17.
$L_{Aeq,T}$:	The equivalent continuous A-weighted sound pressure level in dBA. It is often accompanied by an additional subscript suffix "T" such as $L_{Aeq,15min}$, which means it is evaluated over 15 minutes.
$L_{A10,T}$:	A-weighted sound pressure level in decibels which is not surpassed for more than 10% of the measurement time. This value is often similar to that of the L_{Aeq} for the same period of time.
$L_{A1,T}$:	A-weighted sound pressure level in decibels which is not surpassed for more than 1% of the measurement time. This value is often used to have a reference of the highest levels of the measured noise and is used to evaluate the presence of occasional impulsiveness in the noise.
$L_{A90,T}$:	A-weighted sound pressure level in decibels which is not surpassed for more than 90% of the measurement time. This value is often used to have a certain reference of the constant floor background noise level.
L_{Amax} :	Maximum A-weighted sound pressure level over a certain period of evaluation.
L_w	Impact sound level reduction L_w is an acoustic descriptor quantifying the improvement in impact noise isolation as a result of the installation of a floor covering or floating floor on a test floor in a laboratory (ISO717.2:1997)
$L_{r,w}$	The lower the $L_{r,w}$ rating the better the performance of a building element at insulating impact noise.
Perception of noise level differences:	Generally, a variation of 2-3 dB in a sound pressure level cannot be detected by most of the population; a 5 dB difference is perceived as a louder noise, and a 10 dB variation is perceived as a sound which is twice as loud.

Term	Description
Reverberation time:	RT, or T_{60} is the time that would be required for a sound to decrease by 60 dB after the source has stopped emitting sound. Rooms with high reverberation time values are reverberant or acoustically "live". If a room has a low reverberation time value, it is considered to be a quiet or "dead" space.
R_w :	The insulation of walls and doors against airborne sound is described by way of the sound reduction index R. This index specifies the number of decibels by which the sound is weakened as it passes through the component. The sound reduction index is therefore a component-related variable. As the sound insulation of components depends on frequency, the sound reduction index is also specified depending on the frequency, at least in one-third octave bands between 100 and 3150 Hz. For simplicity, a single value, the weighted sound reduction index R_w , is derived from the frequency-related values. R_w values provided by manufacturers must comply with standard international test regulation <i>ISO 140-3</i> .

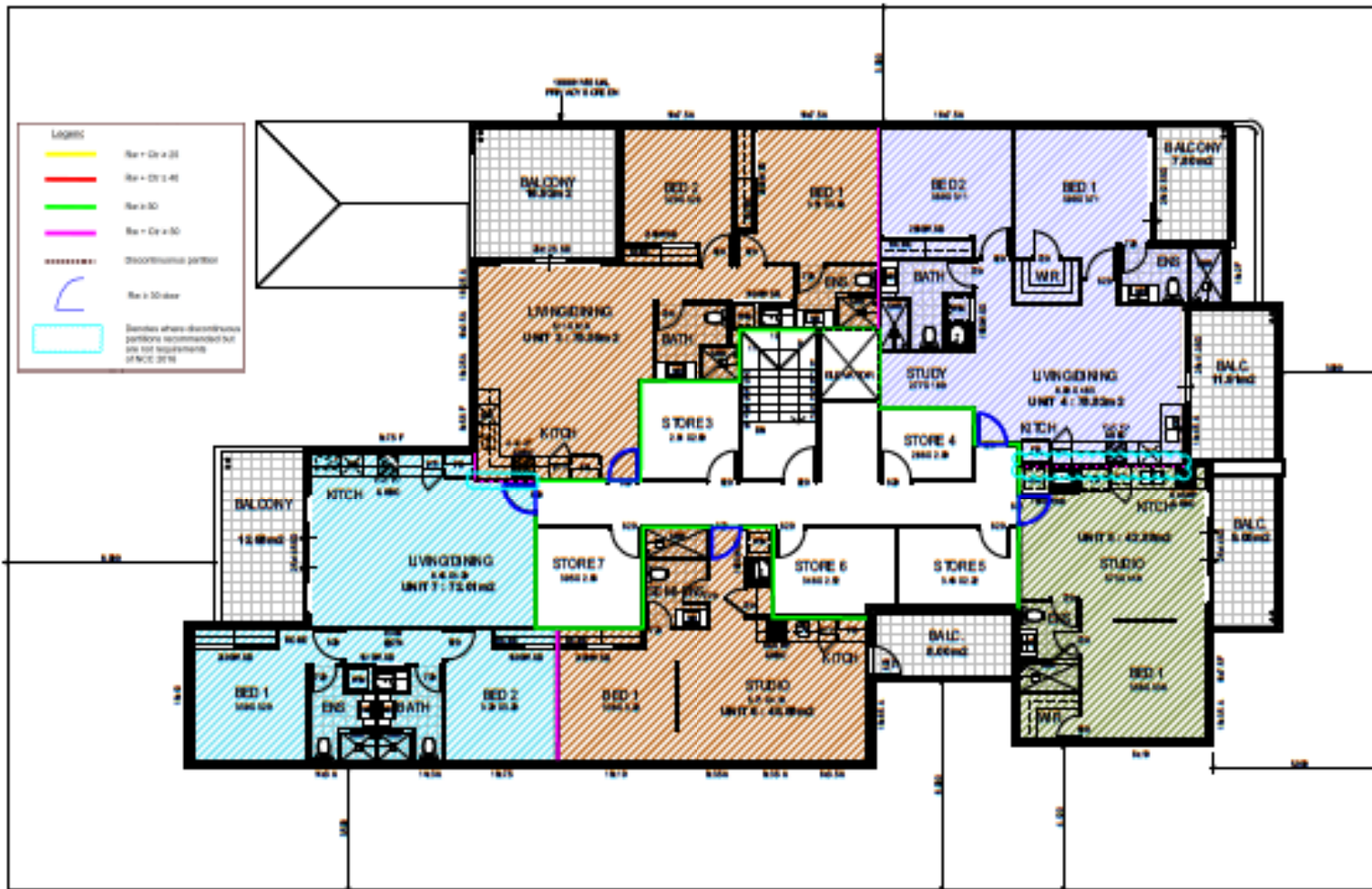
B. Acoustic Mark-up



GROUND FLOOR PLAN

 The Development Consultancy Address: 2001 1000 700 St Wellington, New Zealand	PREPARED FOR AOYO GROUP PTY LTD LOT 25 G (RPT) SMYTH ROAD, NEDLANDS	DETAILS DRAWN BY DATE 20/12/2020	SHEET 20-12 CW LOCAL AUTHORITY City of Wellington
	A3	JOB NO.	DATE

30



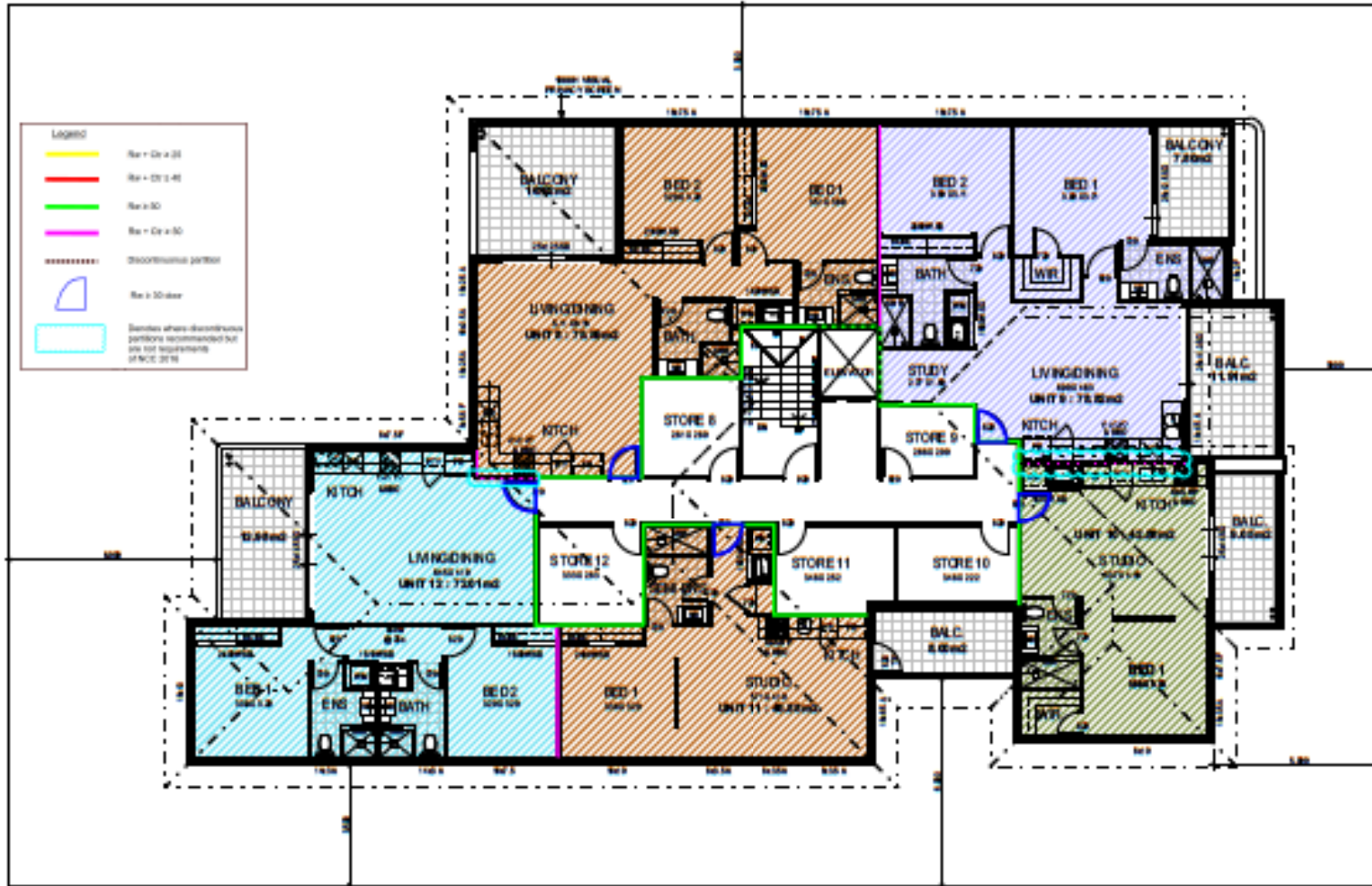
FIRST FLOOR PLAN

31

Item 9.1 - Attachment 1

(PAGE 15)

 The Development Consultancy Address: 2/100 7th St Perth WA 6000	PROPOSED RESIDENCE FOR AOYO GROUP PTY LTD LOT 25 6 (R97) SMYTH ROAD, NEDLANDS	DATE: 20/12/2019	SHEET: 20-12
	A3	DRAWN BY: CW	LOCAL AUTHORITY: City of Nedlands



SECOND FLOOR PLAN



Item 9.1 - Attachment 1

(PAGE)

 The Development Consultancy Address: 2001 1000 700 007 www.thedevelopmentconsultancy.co.za	PROPOSED RESIDENCE FOR AOYO GROUP PTY LTD LOT 25 6 (R97) SMYTH ROAD, MEDLANDS	DETAILS SHEET 1	DATE 20/12/2012	JOB NO 20-12	SHEET 1
	A3	DRAWN BY CW	LOCAL AUTHORITY City of Johannesburg		



PROPOSED APARTMENT DEVELOPMENT (12 RESIDENCES)

LOT 256 (97) SMYTH RD, NEDLANDS

TRANSPORT IMPACT STATEMENT



Final 2

Prepared by i3 consultants WA for
The Development Consultancy

Proposed Apartment Development (12 Residences) | Transport Impact Statement Lot 256 (97) Smyth Rd, Nedlands

Prepared by

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Description

A Transport Impact Statement for a proposed Apartment development containing 12 residential apartments on Lot 256 Street No 97 Smyth Street in the City of Nedlands suburb of Nedlands prepared in accordance with the WAPC 2016 Transport Impact Assessment Guidelines and State Planning Policy 7.3.

Client

The Development Consultancy

Project ID 35401

Version Final 2

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Pages 41

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This is not an approved document unless certified below

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David's specialist skills are in the management and development of transport infrastructure and planning, particularly with respect to road safety engineering, safe system assessments, roadworks traffic management, traffic engineering, crash investigation, road safety audits, alternative transport systems (TravelSmart, shared paths, cycle facilities), transport impact statements, transport impact assessments, parking demand management, local area traffic management, speed management, accessible environments and innovation.

David specialises in undertaking and preparing traffic impact assessments in accordance with either the WAPC *Transport Impact Assessment Guidelines* or Austroads *Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments*. He has authored over 200 of these since 2001.

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CONTENTS

1	Introduction.....	4
1.1	Assessment Level	4
1.2	Trip generation	6
2	Proposed development	7
2.1	Existing Land Uses	7
2.2	Proposed Land Use	7
2.3	Context with surrounds.....	8
3	Vehicle access and parking.....	10
3.1	Access arrangements	10
3.2	Public, private, 'disabled' parking, set-down/ pick-up.....	15
3.3	Swept path assessments	21
4	Service vehicles.....	22
4.1	Waste & recyclables collection	22
4.2	Emergency vehicle access	22
5	Traffic volumes and vehicle types.....	23
5.1	Existing Daily and peak traffic volumes.....	23
5.2	Existing Types of vehicles	25
5.3	Proposed Daily and peak traffic volumes.....	25
6	Traffic management on frontage street	28
7	Public transport access.....	29
8	Pedestrian access/ facilities.....	29
9	Cycle access/ facilities	29
10	Site specific issues.....	29
11	Safety issues	30
References	31
APPENDIX A	Development Drawings.....	32
APPENDIX B	WAPC Transport Impact Statement Checklist.....	40



1 INTRODUCTION

1.1 ASSESSMENT LEVEL

This Transport Impact Statement report has been prepared in accordance with the WAPC publication *Transport Impact Assessment Guidelines* (1). These guidelines indicate that a *Transport Impact Statement* (TIS) “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, (in accordance with Table 1.)”

LAND USE	MODERATE IMPACT	HIGH IMPACT
	Transport Impact Statement required 10 – 100 vehicle trips in the peak hour	Transport Impact Assessment required > 100 vehicle trips in the peak hour
Residential	10-100 dwellings	> 100 dwellings

Table 1 - Level of TIA required by land use and size (Source Table 1 WAPC Guidelines Vol 4)

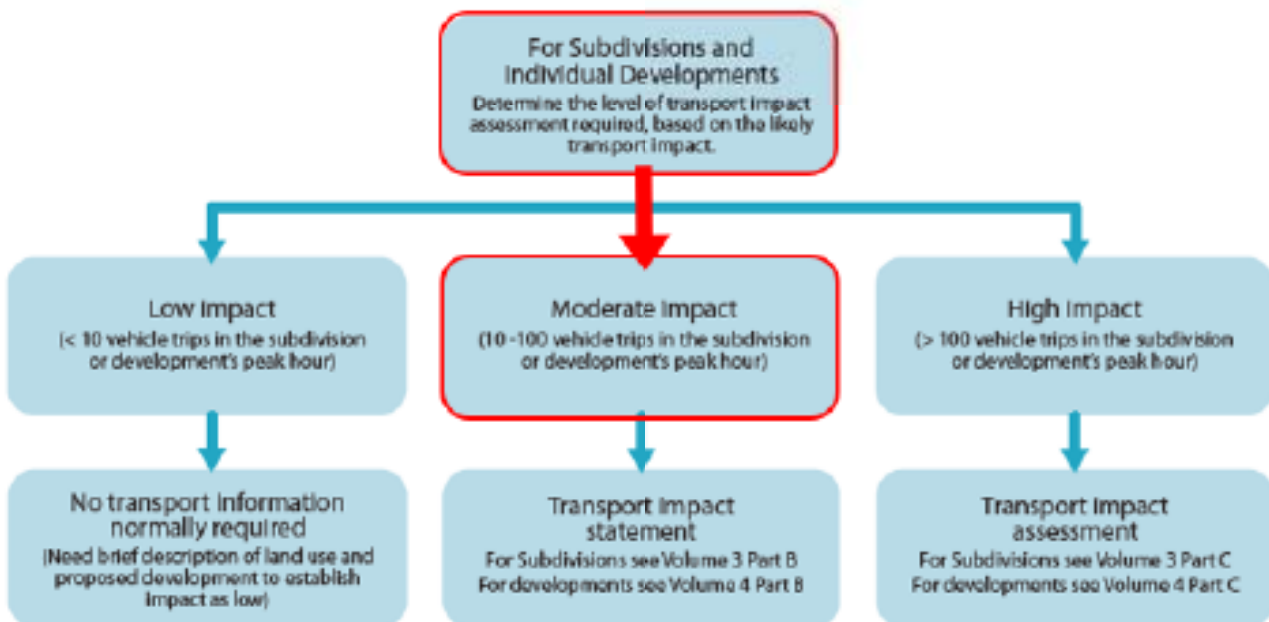


Figure 1 – Level of assessment required (Source Figure 2 WAPC Guidelines Vol 4)

The proposed development is within a 20-minute walk/ 6-minute cycle of the University of WA (UWA) and the QEII Medical Centre. The Perth CBD is 20 minutes by bicycle or public transport (Bus). All of this suggests that any resident of the development that works at UWA, QEII Medical Centre or the Perth CBD, or studies at UWA is likely to walk, cycle or use public transport for their daily commute. It is therefore highly likely that the development will generate less than the indicated 10 trips in the peak hour shown in Table 1 and Figure 1 above.



The WAPC Guidelines state that:

“A transport impact statement is a brief statement outlining the transport aspects of the proposed development. The intent of the statement is to provide the approving authority with sufficient transport information to confirm that the proponent has adequately considered the transport aspects of the development and that it would not have an adverse transport impact on the surrounding area. It is envisaged that the transport impact statement will generally be from two to three pages up to several pages in length, but this will depend upon the number and nature of any specific issues that need to be addressed. It is expected that most, if not all, of the information to be provided will be of a nontechnical nature, that is, will not require input from a specialist in transportation planning or traffic engineering. This will, however, depend upon the nature of the specific issues to be addressed and specialist technical input may be required on occasions.”

The proponent has held discussions with the City of Nedlands, and it has been determined that the key issues to be covered in Apartment Development TIS's are those related to parking and vehicular access. This TIS has therefore been prepared in accordance with the WAPC Guidelines with an emphasis on detailed assessment of the parking and vehicular access and a regular assessment of the other items in the Transport Impact Statement checklist, as shown in Appendix B.



1.2 TRIP GENERATION

The most recent trip generation data for residential developments is included in the RMS NSW *Guide to Traffic Generating Developments Updated traffic surveys* (2). This data is for 'Low Density' and 'High Density' residential developments in the Urban Rural areas of Sydney. 'Low Density' is defined as 130 persons/ hectare Medium Density 365 persons/ hectare and High Density 600 persons/ hectare. The area of Lot 256 is 0.10117 Hectares. There are Five (5) 1-bedroom apartments and seven (7) 2-bedroom apartments and therefore is likely to have a total of between 12 and 38 people, which equates to between 119 and 376 people per hectare, ranging between Low and Medium Density.

The forecast maximum trip generation for the site, based on the RMS data with 12 units/ apartments is 11 trips, as shown in Table 2 below.

Land Use	Source	Trip Generation Rates	Units	Peak Hour Trips	rounded up				
					IN	OUT	IN	OUT	Pass-By (ITE)
Low Density Residential (Sydney Urban) AM Ave	RMS	0.95 per 1 dwelling	12	11	22%	78%	3	9	0%
Low Density Residential (Sydney Urban) AM Max	RMS	1.32 per 1 dwelling	12	16	22%	78%	4	13	0%
Low Density Residential (Sydney Urban) PM Ave	RMS	0.99 per 1 dwelling	12	12	65%	35%	8	5	0%
Low Density Residential (Sydney Urban) PM Max	RMS	1.39 per 1 dwelling	12	17	65%	35%	11	6	0%
Med Density Residential (Sydney Urban) AM Ave	RMS*	0.57 per 1 dwelling	12	7	21%	79%	2	6	0%
Med Density Residential (Sydney Urban) AM Max	RMS*	0.82 per 1 dwelling	12	10	21%	79%	3	8	0%
Med Density Residential (Sydney Urban) PM Ave	RMS*	0.57 per 1 dwelling	12	7	65%	35%	3	3	0%
Med Density Residential (Sydney Urban) PM Max	RMS*	0.90 per 1 dwelling	12	11	65%	35%	4	4	0%

Table 2 – Trip Generation Calculations based on RMS data (*Medium based on average of Low & High RMS rates)

As indicated in Section 1.1, the proposed development is within a 20-minute walk/ 6-minute cycle of the University of WA (UWA) and the QEII Medical Centre. The Perth CBD is 20 minutes by bicycle or public transport (Bus). All of this suggests that any resident of the development that works at UWA, QEII Medical Centre or the Perth CBD, or studies at UWA is likely to walk, cycle or use public transport for their daily commute. It is therefore highly likely that the development will generate less than the indicated 11 trips in the peak hour shown in Table 2 above.

The proposed development will replace an existing 4-bedroom 2-bathroom residential dwelling which would be expected to generate a trip during the morning and afternoon peak hours. On this basis the assessed **traffic impact** is that associated with up to an additional 10 trips in the peak hours, not the 11 trips shown in Table 2. On this basis, the development is considered to be 'Low to Moderate Impact'.

2 PROPOSED DEVELOPMENT

2.1 EXISTING LAND USES

The existing Lot contains a single 3-bedroom, 2-bathroom house with a double garage on the street frontage, as shown in Photograph 1 below.



Photograph 1 – Existing land use: 97 Smyth St, Nedlands

2.2 PROPOSED LAND USE

The existing dwelling will be demolished, and the site cleared for the development of 12 apartments with 18 on-site parking bays, as shown in the development drawings included in Appendix A, and described in Table 3 below.

	Apartments		Stores	Parking Bays		
	1-bed	2-bed		Resident	Visitor	Bicycle
2 nd Floor	2	3	5			
1 st Floor	2	3	5			
Ground Floor	1	1	2	15	3	9
Totals	5	7		18		9
	12			27		



Table 3 – Summary of proposed land use

2.3 CONTEXT WITH SURROUNDS

Smyth Rd is a Local Distributor Rd in the Main Roads WA Functional Road Hierarchy and provides access between the development site and Stirling Hwy (a Primary Distributor road). There is a No Right Turn prohibition on the southbound Smyth St approach to Stirling Hwy. Southbound Smyth St drivers that wish to turn right on Stirling Hwy can do so via Carrington St (a Local Distributor road) and Loch St (a Distributor B road). Traffic Signals at Loch St/ Stirling Hwy assist with right turns at this intersection.

The University of WA (UWA) and the QEII Medical Centre is within a 20-minute walk/ 6-minute cycle of the development site. The Perth CBD is 20 minutes by bicycle or public transport (Bus). All of this suggests that any resident of the development that works at UWA, QEII Medical Centre or the Perth CBD, or studies at UWA is likely to walk, cycle or use public transport for their daily commute.



Figure 2 – Road Hierarchy, traffic control of access/ egress routes and context of surrounds

Lot 256 is zoned R60 in the City's Local Planning Scheme No. 3 (LPS 3 (3)) which was gazetted on 16 April 2019 and is now the legal document used to guide land use and development in the City of Nedlands.

A diagram showing the context of the development site to its surroundings, including the access arrangements, is provided as Figure 3 on the following page.



Figure 3 – Development site in context of its surroundings

3 VEHICLE ACCESS AND PARKING

3.1 ACCESS ARRANGEMENTS

All vehicular access to the development site is off Smyth St, a Local Distributor Rd. There will be a single 6 m wide access driveway located near the southwestern boundary that leads to the Ground Floor parking areas that is located 110 m from the intersection with Stirling Hwy, a Primary Distributor road, as shown in Figure 4 below.



Figure 4 – Vehicular Access Location

There are three (3) visitor parking bays and fifteen (15) resident parking bays on the Ground Floor, as shown on the development drawings in Appendix A.

All parking areas are accessed via a single 5.4 m wide Access Driveway with a 5.4 m wide Standard City of Nedlands crossover ⁽⁴⁾ as shown in Figure 5 on the following page.



Figure 5 – Dimensioned extract from development drawings (Appendix A) overlaid with aerial photo

Vehicle access points are essential connections between the street and parking or delivery areas within the development.

Well-designed access and circulation areas improve safety and functionality for users, whereas poorly considered vehicle access may compromise the safety of pedestrians, residents, and traffic, as well as having a detrimental effect on the appearance and amenity of the streetscape. Design needs to balance the need for safe and efficient vehicle access and egress with the needs of pedestrians, other road users and impacts on the public realm.

The Vehicle Access design requirements are set out in Section 3.8 (Vehicle Access) of *State Planning Policy 7.3 Residential Design Codes Volume 2 – Apartments (SPP7.3)* (5).

An assessment against the Acceptable Outcomes and Design Guidance criteria of Section 3.8 of SPP7.3 is provided in Table 4 and Table 5 on the following pages.




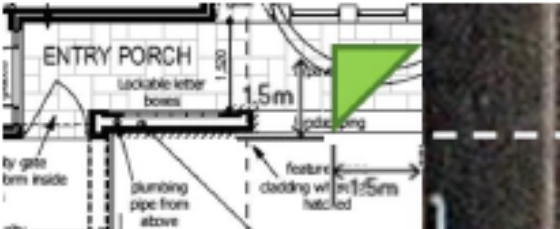
ACCEPTABLE VEHICLE ACCESS OUTCOMES		Assessment comment
A 3.8.1	Vehicle access is limited to one opening per 20 m street frontage that is visible from the street.	Complies (one opening for 25.5 m street frontage)
A 3.8.2	Vehicle entries are identifiable from the street, while being integrated with the overall façade design and/ or located behind the primary building line.	Complies.
A 3.8.3	Vehicle entries have adequate separation from street intersections.	Complies. 110 m from Stirling Hwy.
A 3.8.4	Vehicle circulation areas avoid headlights shining into habitable rooms within the development and adjoining properties.	Complies. Residences opposite have wall and driveway. 
A 3.8.5	Driveway width is kept to a functional minimum, relative to the traffic volumes and entry/ egress requirements.	Complies. Clause 2.5.2 of AS/ NZS 2890.1 (6) states two-way straight roadways or ramps to be 5.5 m minimum between kerbs and one-way roadway or ramps to be 3.0 m. 5.4 m and 6.0 m provided respectively including 300 mm clearances to walls, i.e. min clear width 5.7 m.
A 3.8.6	Driveways designed for two-way access to allow for vehicles to enter the street in forward gear where:	Complies. Two-way operation throughout.
	<ul style="list-style-type: none"> the driveway serves more than 10 dwellings 	Complies. 12 dwellings.
	<ul style="list-style-type: none"> the distance from an on-site car parking to the street is 15 m or more OR the public street to which it connects is designated as a primary distributor, district distributor or integrated arterial road. 	Not applicable. 12.0 m. Not applicable. Local Distributor.
A 3.8.7	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 6 on the following page).	Complies. No walls, fences or other structures within 1.5 m truncation on right side when looking from the street. 

Table 4 – Assessment of Acceptable Vehicle Access Outcomes in SPP7.3

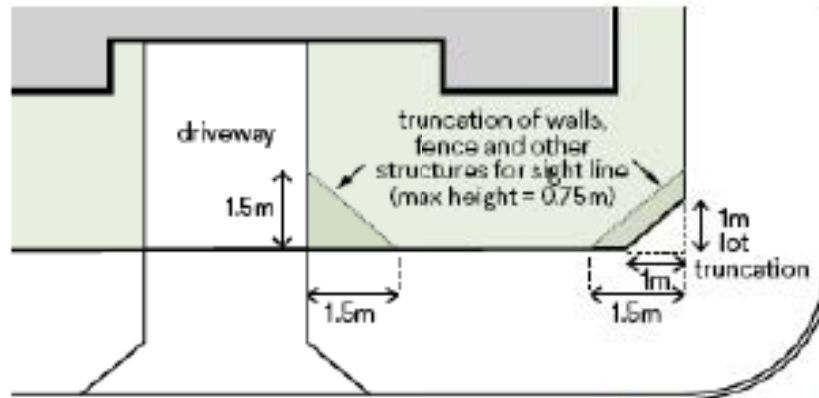


Figure 6 - Truncation at street corner to provide sightlines (Figure 3.8a of SSP7.3)

VEHICLE ACCESS DESIGN GUIDANCE		Assessment comment
DG 3.8.1	Good design can reduce the visual impact of vehicle access at the street frontage. Consider:	
	Providing access from a secondary street where possible.	Not applicable.
	Keeping the width to a minimum and avoiding vehicle standing areas within the street setback.	Complies.
	In built passing points but not the full driveway length.	Not applicable. (Two-way throughout).
	Positioning ramps, gates, and roller doors behind the main building frontage.	Complies.
	Selecting materials and colours that identify the access point while integrating with the built form and streetscape.	Unable to assess. Refer black and white images in Appendix A.
	Minimising voids in the building façade through the use of doors or gates at entries or returning the façade detailing along exposed sides/ interior of driveways.	Complies. Refer images in Appendix A.
	Concealing building services, pipes, and ducts within visible parking areas.	Unable to assess. Required detailed design drawings.
DG 3.8.2	Locate and design vehicle access to minimise impacts on pedestrians, in particular ensuring that vehicles exiting the site have adequate visibility of oncoming pedestrians, cyclists, and vehicles.	Complies. Refer A 3.8.7 assessment in Table 4.
DG 3.8.3	Visitor bays are readily accessed from the primary vehicle entry. Where located inside security gates, provide intercom controls to facilitate visitor access. (continued...)	Complies. Three visitor bays provided on Ground Floor just after security gate. Intercom provided.
DG 3.8.4	Consider design solutions to reduce the impact of vehicle entries and circulation areas within the site accommodating appropriate sightlines and safety considerations, such as:	



VEHICLE ACCESS DESIGN GUIDANCE		Assessment comment
	Using changes in materials, colour, levels, or landscaping to delineate pedestrian and vehicle circulation areas and define pedestrian paths in shared areas	Complies.
	Locating vehicle entries to minimise ramp lengths and excavation	Complies.
	Where required, incorporating aesthetically pleasing traffic calming devices that are integrated into the design such as changes in paving material or textures	Not applicable. Lengths not sufficient to achieve 30 km/h to warrant traffic calming (Clause 4.9 of AS/NZS 2890.1).
	Reducing parts of the driveway to single lane (3m width) to allow for the incorporation of deep soil areas	Not applicable. Two-way operation provided.
	Minimising the visual impact of unavoidable long driveways through changing alignments and screen planting.	Not applicable. Short driveway (36 m)
DG 3.8.5	Minimise the need for large vehicles to enter and manoeuvre within the site. Where it is required, ensure a well-planned path of travel with sufficient clearance distances and site lines. This requires consideration of building servicing requirements, including waste collection, during the preliminary design.	Complies. Waste collection to be kerbside.

Table 5 – Assessment of Acceptable Vehicle Access Design in SPP7.3



3.2 PUBLIC, PRIVATE, 'DISABLED' PARKING, SET-DOWN/ PICK-UP

Car parking within apartment buildings can have a significant impact on site planning, landscape and building design. It requires careful consideration in the design phase to ensure that car parking provided does not detract from the overall design intent or the intended character of the streetscape.

Car parking can account for significant land-take at the expense of landscaping and open space. Car parking areas can also have negative environmental impacts such as heat gain from solar absorption, glare, and stormwater contamination. Reducing onsite parking requirements can mitigate these impacts and may also encourage greater use of alternative transport modes to the private vehicle. On the other hand, residents expect adequate, safe, and accessible car parking and the local community should not be adversely impacted by on-street parking associated with development.

The design process must balance these requirements to provide sufficient parking that is well integrated into the overall design of the development and does not detract from the streetscape.

The car and bicycle design requirements are set out in Section 3.9 (Car and bicycle parking) of *State Planning Policy 7.3 Residential Design Codes Volume 2 – Apartments (SPP7.3)* (2).

An assessment against the Acceptable Outcomes criteria of Section 3.9 of SPP7.3 is provided as Table 6 below, continuing on the following page.

ACCEPTABLE CAR AND BICYCLE PARKING OUTCOMES		Assessment comment
A 3.9.1	Secure, undercover bicycle parking is provided in accordance with Table 3.9 (Table 8 in this TIS) and accessed via a continuous path of travel from the vehicle or cycle entry point.	Complies – refer Bike Rack Area on Ground Floor in Appendix A: Development Drawings.
A 3.9.2	Parking is provided for cars and motorcycles in accordance with Table 3.9 (Table 8 in this TIS).	Complies – refer Table 9 on page 20.
A 3.9.3	Maximum parking provision does not exceed double the minimum number of bays specified in Table 3.9 (Table 8 in this TIS).	Complies. Table 9 on page 20 indicates that a total of 13 bays is specified and a total of 24 bays is proposed.
A 3.9.4	Car parking and vehicle circulation areas are designed in accordance with AS2890.1 (as amended) or the requirements of applicable local planning instruments (Refer	Complies. Refer assessment in Table 7 and Section 3.3 of this TIS.
A 3.9.5	Car parking areas are not located within the street setback and are not visually prominent from the street. (continued...)	Complies.
A 3.9.6	Car parking is designed, landscaped, or screened to mitigate visual impacts when	Complies.



ACCEPTABLE CAR AND BICYCLE PARKING OUTCOMES		Assessment comment
	viewed from dwellings and private outdoor spaces.	
A 3.9.7	Visitor parking is clearly visible from the driveway, is signed 'Visitor Parking' and is accessible from the primary entry or entries.	Complies when signed.
A 3.9.8	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.	Not applicable.
A 3.9.9	Uncovered at-grade parking is planted with trees at a minimum rate of one tree per four bays.	Not applicable.
A 3.9.10	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.	Not applicable.

Table 6 – Assessment of Acceptable Car and Bicycle Parking Outcomes in SPP7.3

An assessment of the car parking and vehicle circulation areas against the requirements of AS/ NZS 2890.1 in accordance with Outcome A 3.9.4 in Table 6 is provided in Table 7 below, continuing on the following pages.

Criteria	Section	Adopted and AS/ NZS 2890.1 (6) comments	Complies?
Classification	1.4	User Class 1A adopted <u>Residential, domestic and employee parking.</u>	✓
Design coordination	2.3.1	The layout design of an off-street car park shall consider the entire facility, including parking modules, circulation roadways, access driveways and, if necessary, frontage road access, as an integrated and coordinated design. Provision for traffic within a parking facility shall take into account the following: (a) The need for traffic to move to and from the frontage road with minimum disruption to through traffic and maximum pedestrian safety. (b) Provision of adequate capacity in circulation roadways and parking aisles to handle peak period movements. (c) Arrangement of internal roadways to avoid, as far as practicable, conflicts between intersecting streams of circulating traffic. (d) Provision of minimum length travel paths between entry/exit points and parking spaces. (e) Safe treatment of points of conflict with pedestrians and other road users. (f) Provision of parking spaces and accessible pedestrian paths for people with disabilities (<i>Building Code of Australia (7) does not require provision of parking spaces for people with a disability within a Class 1A Building</i>).	✓

Criteria	Section	Adopted and AS/ NZS 2890.1 (6) comments	Complies?
Parking angle	2.3.2	90-degree parking adopted. <i>Parking aisles for 90-degree parking shall be designed for two-way movement even though one-way movement may need to be imposed in some instances.</i>	✓
Parking aisle length	2.3.3	Maximum parking aisle length = 36 m <i>If a parking aisle exceeds 100 m in length, (i.e. more than about 40 × 90-degree parking spaces on either side) traffic control devices such as speed humps shall be placed along the parking aisle to control vehicle speeds.</i>	✓
Angle parking spaces	2.4.1	Required width for Class 1A bay is 2.4 m with 0.3 m clearance to walls. Required length for Class 1A bay to a wall is 5.4 m. Minimum bays sizes proposed are 2.4 m wide and 5.4 m long with 500 mm overhang or 5.5 m long to walls.	✓
Angle parking aisle	2.4.2	A minimum aisle width of 6.1 m has been adopted throughout the car park. <i>The minimum aisle width for User Class 1A is 5.8 m. Dimensions for 90-degree parking aisles are for two-way aisles. These dimensions are required to be observed even though one-way movement along aisles is imposed for other purposes.</i> The aisle has been extended 1.331 m beyond the last parking space. <i>Blind aisles</i> <i>At blind aisles, the aisle shall be extended a minimum of 1 m beyond the last parking space (as shown in Figure 2.3 of AS/ NZS 2890.1), and the last parking space widened by at least 300 mm if it is bounded by a wall or fence.</i>	✓
Gradients within parking modules	2.4.6	The gradient of all parking modules is not indicated. <i>So that parking floors will drain adequately, the minimum gradient shall be 1 in 200 (0.5%) for covered areas.</i>	Insufficient detail to assess at this stage
Layout design of circulation roadways and ramps	2.5.2	A 6.1 m wide circulation roadway has been provided. <i>Minimum width (single lane) 3.0 m between kerbs plus 300 mm where high walls/ columns exist on the sides.</i> <i>Areas in which it is necessary for two vehicles to pass one another shall be designed for a B85 vehicle to pass a B99 vehicle. Areas shall be checked using single turn swept path templates for the B99 vehicle and the B85 vehicle. The swept path clearances shall clear any kerbs at the boundary of the intersection area.</i> <i>If a boundary of the intersection area is an obstruction such as a wall, barrier or kerb higher than 150 mm a further clearance of 300 mm shall be provided where the swept path template approaches the obstruction.</i>	✓
Circulation roadway and ramp grades	2.5.3	<i>Straight ramps:</i> <i>(i) Longer than 20 m—1 in 5 (20%) maximum.</i> <i>(ii) Up to 20 m long—1 in 4 (25%) maximum. The allowable 20 m maximum length shall include any parts of grade change transitions at each end that exceed 1 in 5 (20%).</i> <i>Grade change transitions will be required in both cases where grades are at or near the maximum</i>	Insufficient detail to assess at this stage



Criteria	Section	Adopted and AS/ NZS 2890.1 (6) comments	Complies?
Access driveway width location	3.2	The access driveway is shown as 5.4 m wide. <i>Tables 3.1 and 3.2 from AS/ NZS 2890.1 indicate that the minimum width for the access driveway is 3 m.</i>	✓
Pavement markings	4.4	No pavement marking details have been provided. <i>Parking spaces other than those for people with disabilities shall be delineated by means of white or yellow lines 80 to 100 mm wide, or white or yellow pavement markers in one or other of the forms and patterns illustrated in Figure 4.1 of AS2890.1. Pavement markers, if used, shall be substantially flush i.e. not higher than 3 mm.</i>	Insufficient detail to assess at this stage
Parcel pickup	4.5	<i>Parcel pick-up areas shall be designed so that queues do not interrupt the flow of vehicles in the circulation roadways. Pedestrians shall be able to move freely around vehicles in the pick-up zone without being endangered by traffic entering or leaving the parcel pick-up area.</i>	✓ Visitor bays
Headroom	5.3	<i>To permit access for both cars and light vans, the height between the floor and overhead obstruction shall be a minimum of 2200 mm. The minimum available clearance shall be signposted at all entrances. Appropriate warning devices such as flexible striker bars shall be provided in conjunction with the signs wherever the clearance shown on the signs is less than 2.3 m. Low clearance signs are specified in Clause 4.3.4(a) of AS/ NZS 2890.1.</i> <i>NOTE: A considerable amount of inconvenience can be caused by collisions with overhead appurtenances such as fire sprinklers. Care should be exercised in the location of these devices where headroom is limited. Headroom at a 'sag' type grade change shall be measured as illustrated in Figure 5.3 of AS/ NZS 2890.1. It shall be measured perpendicular to a chord of length equal to the wheelbase of the B99 vehicle located longitudinally such that the dimension H is a minimum.</i>	Insufficient detail to assess at this stage

Table 7 – Assessment of car parking and vehicle circulation areas against AS/ NZS 2890.1

It is noted that it is proposed to provide two trees in the landscaped area on either side of the blind aisle at the west end of the car park. It is important that these trees do not interfere with the movement of cars into and out of the last two bays or restrict car door opening movements. This is best checked through an overlay of the Design Envelope from AS/ NZS 2890.1, provided as Figure 7 on the following page.

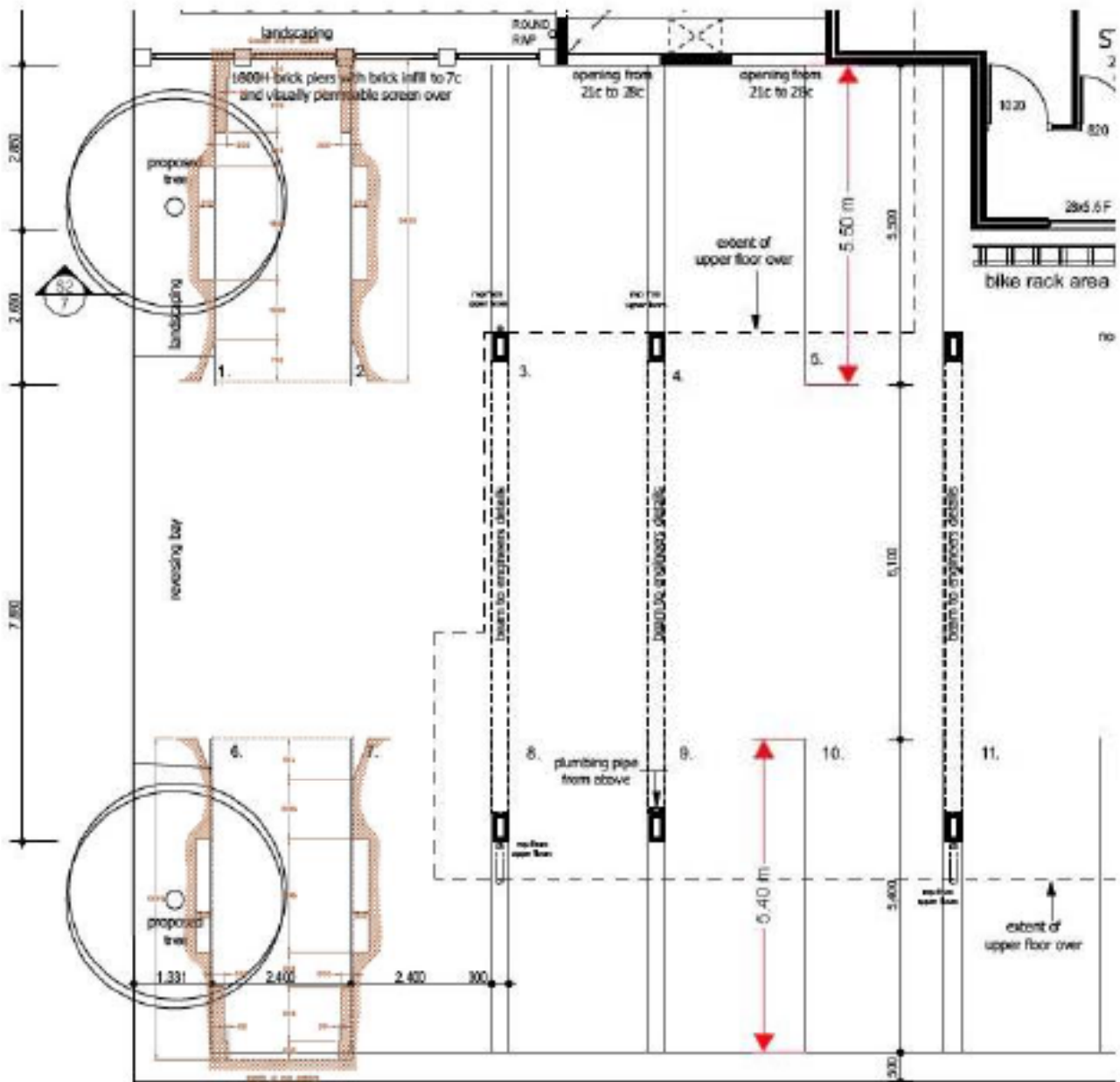


Figure 7 – Overlay of Design Envelope (Figure 5.2 AS/ NZS 2890.1)

Figure 7 above shows that the proposed trees are outside the Design Envelope. The Design Envelope in AS/ NZS 2890.1 indicates the "area around a parked vehicle which is to be kept clear of columns, walls or other obstructions."



The car and bicycle parking requirements in SPP7.3 are shown in Table 8 below.

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.			

Table 8 – Car and bicycle parking requirements (Source Table 3.9 – Parking ratio SPP7.3)

The calculation of the car and bicycle parking requirements for the proposed development, which is within 'Location A', (refer Section 7) is shown in Table 9 below. This shows that the development meets or exceeds the required parking provision rates.

Vehicle	Use	Rate	Units	Required*		Provided
Car	1 bedroom dwellings residents	0.75 bays per dwelling	5	4	11	15
	2+ bedroom dwelling residents	1.00 bays per dwelling	7	7		
	Visitors	1.00 bays per 4 dwellings	3.0	3	3	3
Bicycle	2+ bedroom dwelling residents	0.50 space per dwelling	12	6	8	9
	Visitors	1.00 space per 10 dwellings	1.2	2		
Motorcycle/ scooter	Not applicable (< 20 dwellings)	1.00 space per 10 bays	0.0	0	0	0

Table 9 – Assessment of car and bicycle parking requirements and provision (*rounded up)

3.3 SWEEP PATH ASSESSMENTS

Assessment of the swept paths of the B99 and B85 Design Vehicles using AutoTURN computer generated turning movement software and the settings shown in Figure 8 below are shown for various movements in Figure 9 below.

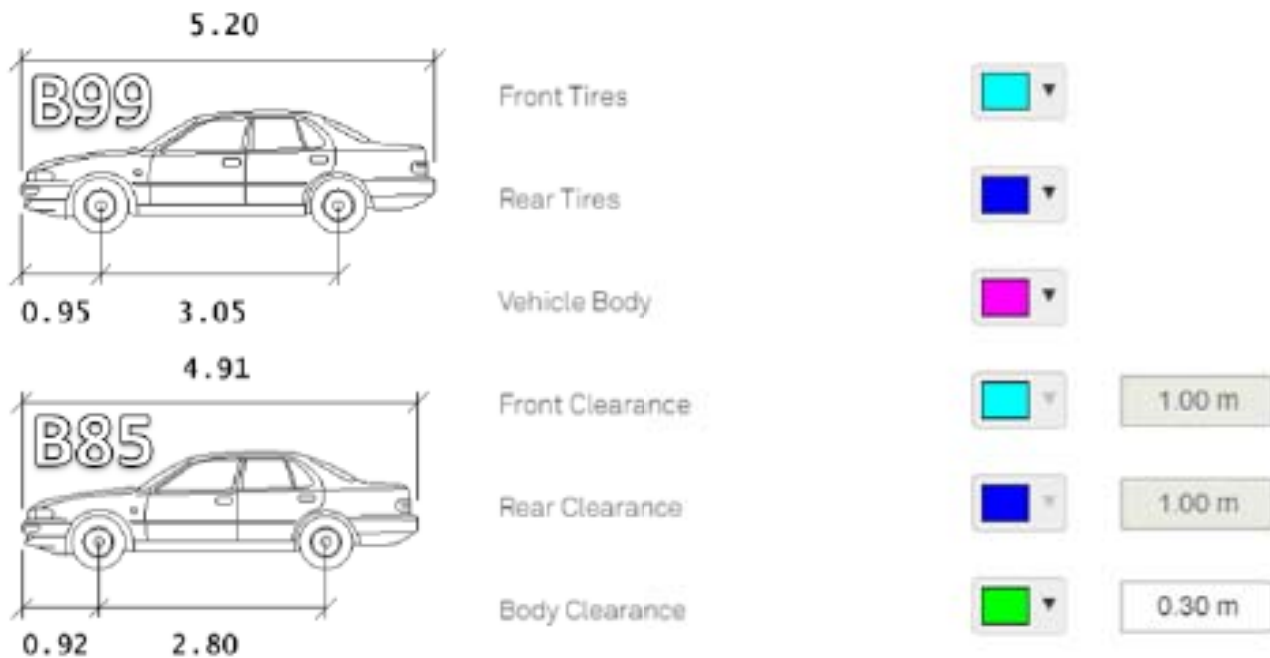


Figure 8 – AutoTURN B99 & B85 Design Vehicle Dimensions and settings used

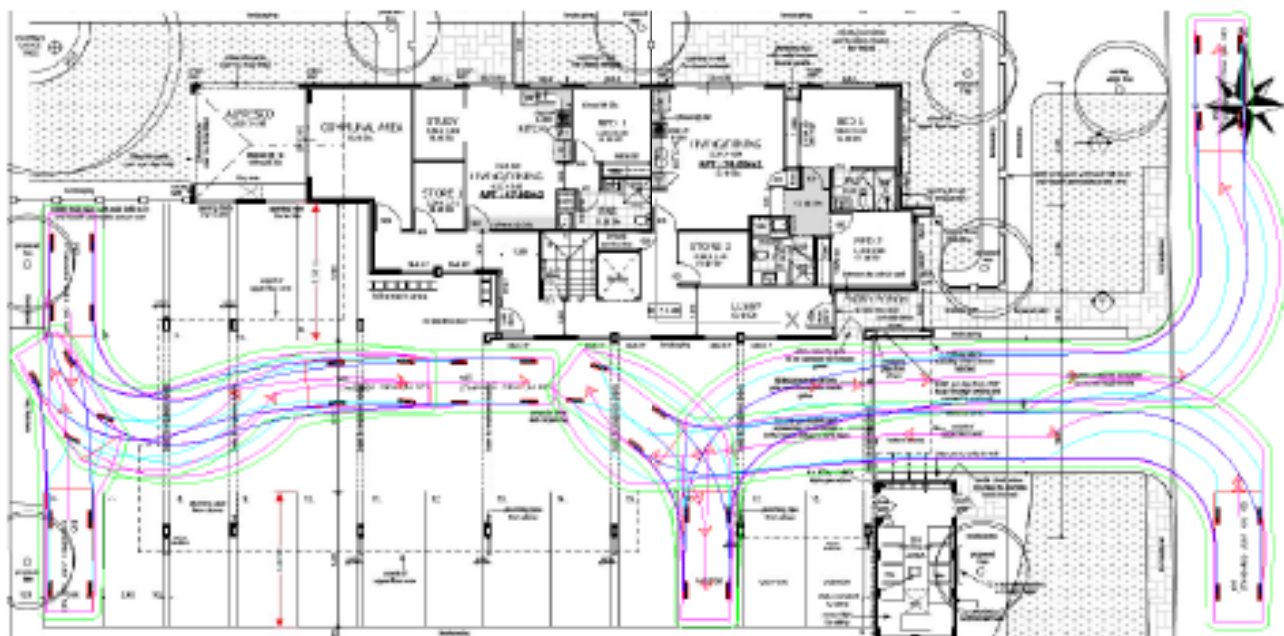


Figure 9 – Assessed swept paths of B99 (Visitor) and B85 (Tenant) Design Vehicles

The swept path assessment has indicated that the B99 and B85 Design Vehicles can manoeuvre throughout the car park and access and egress each bay easily, as would be expected with an AS 2890.1 compliant layout.



4 SERVICE VEHICLES

4.1 WASTE & RECYCLABLES COLLECTION

The proponent has indicated that waste and recyclable collection will be via regular weekly and fortnightly kerbside collection. Refer separated Waste Management Plan for servicing details.

4.2 EMERGENCY VEHICLE ACCESS

There are no identified concerns with access by emergency vehicles.



5 TRAFFIC VOLUMES AND VEHICLE TYPES

5.1 EXISTING DAILY AND PEAK TRAFFIC VOLUMES

Extensive video surveys of various intersections along Stirling Hwy, including Smyth Rd, were undertaken in December 2019.

The weekday AM and PM Peak Hour video survey data for the Stirling Hwy/ Smyth Rd intersection are shown in Figure 10 below and Figure 11 on the following page.

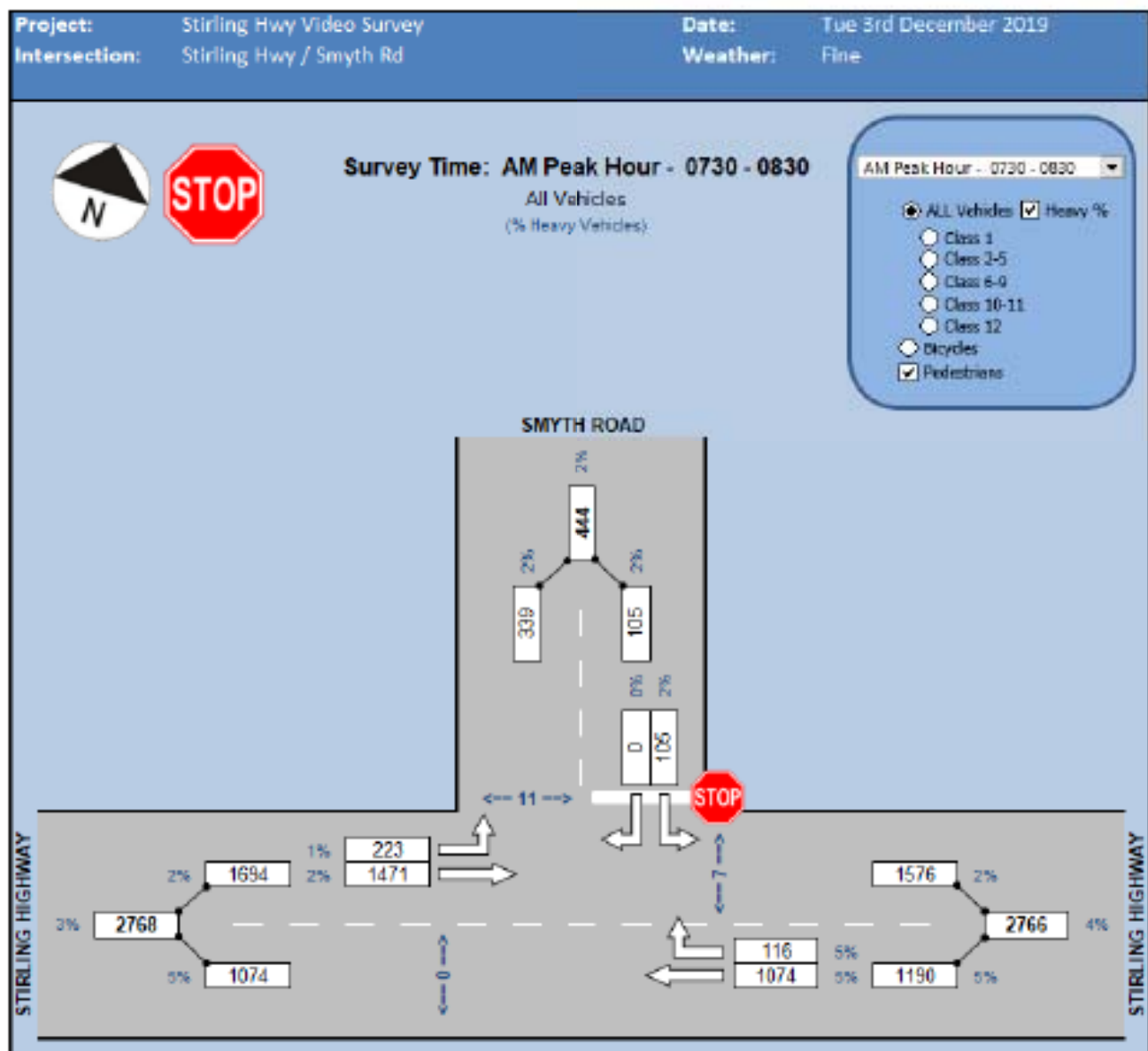


Figure 10 – Existing AM Peak Hour Turning Volumes at Stirling Hwy/ Smyth Rd (Dec 2019)

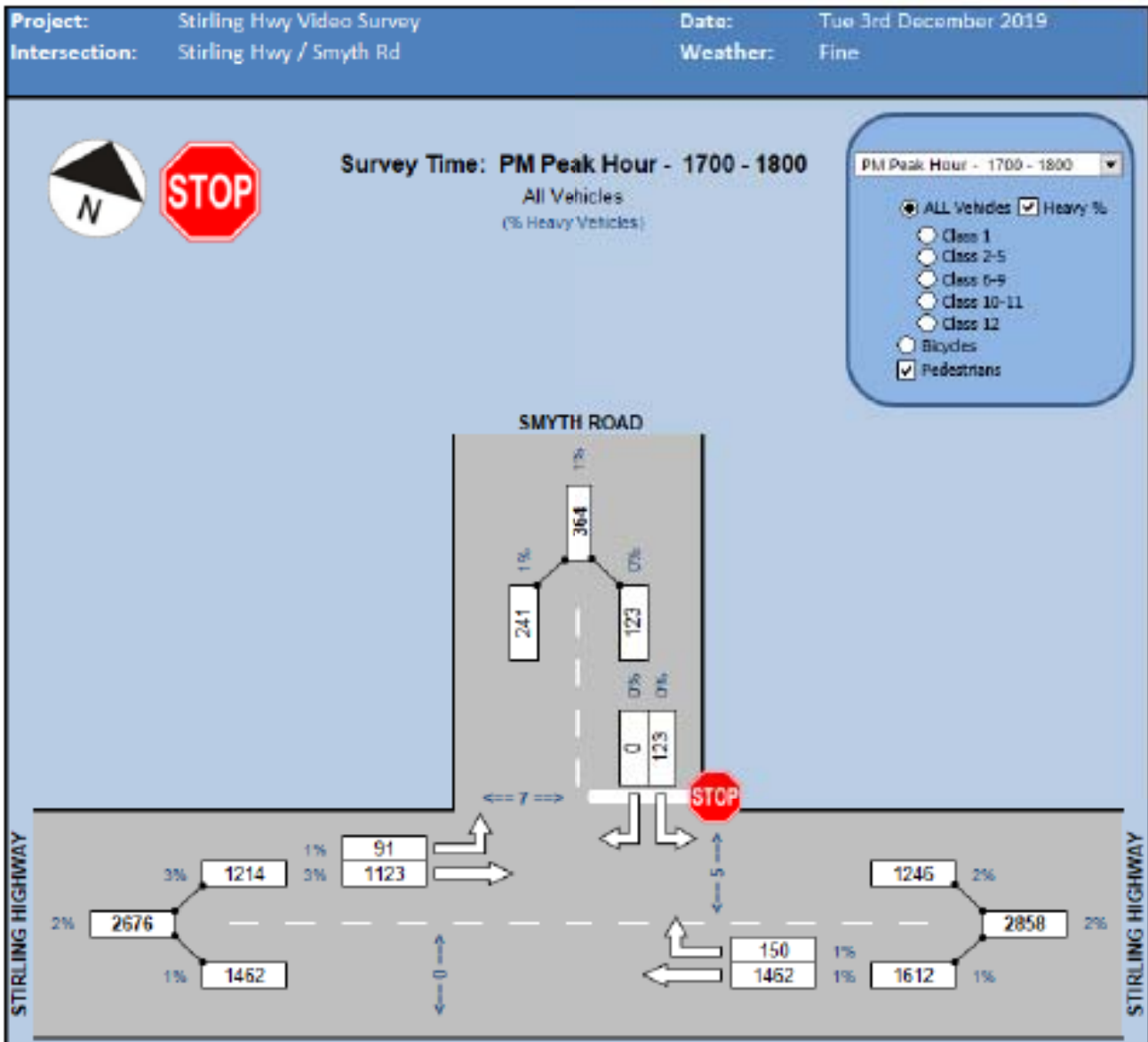


Figure 11 – Existing PM Peak Hour Turning Volumes at Stirling Hwy/ Smyth Rd (Dec 2019)

Data obtained on a single day should be treated with caution until it has been compared with data collected over a longer period of time to ensure that it is 'typical'.

The nearest Average Annual Weekday Traffic data for Stirling Hwy was collected east of Smyth Rd and dated 2018/19. The nearest Average Annual Weekday Traffic data for Smyth Rd was collected north of Stirling Hwy and dated 2019/20. Peak hour data from these two annualised data sources are shown in Table 10 below.

	Dec 2019 Video		2019/20 AAWD		Difference	
	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound
Smyth Rd, north of Stirling Hwy						
AM Peak Hour	339	105	320	141	6%	26%
PM Peak Hour	241	123	128	404	47%	70%
Stirling Hwy, west of Smyth Rd	Eastbound	Westbound	Eastbound	Westbound	Difference	
AM Peak Hour	1,576	1,190	1,792	1,277	12%	7%
PM Peak Hour	1,246	1,612	1,356	1,697	8%	5%

Table 10 – Comparison of video survey data with longer term Average Annual Weekday Data (AAWD)



Table 10 on the previous page shows significant differences between the Smyth Rd Video Survey data and the AAWD. This can be attributed to the fact that the AAWD data was collected north of the City of Nedlands offices and the commercial land use on the opposite side, both of which would generate significant volumes of traffic that would not travel on the section of Smyth Rd between Stirling Hwy and these locations.

5.2 EXISTING TYPES OF VEHICLES

With the exception of service and waste collection vehicles, all vehicles associated with the proposed development are expected to be light vehicles.

Heavy vehicles on Stirling Hwy comprise 6% of daily volumes and heavy vehicles on Smyth Rd comprise 3.5% of daily volumes.

5.3 PROPOSED DAILY AND PEAK TRAFFIC VOLUMES

As indicated in Section 1.2, the proposed development is expected to generate up to 10 trips during its peak hours which are the same as the road network peak hours, i.e. 7.30-8.30 AM and 5.00-6.00 PM.

Daily volumes are expected to be around 50 trips, i.e., 10 trips during each peak hour and 30 trips in total for the remaining hours.

An assessment of the likely trip distribution (IN/ OUT split) and trip assignment based on existing turning movements and likely destination and origin points for residents driving vehicles is shown in Figure 12 and Figure 13 on the following page for the peak hour and weekday daily volumes respectively. Note that volumes are calculated and rounded to the nearest whole number and therefore may be 1 more or less than that shown in totals.

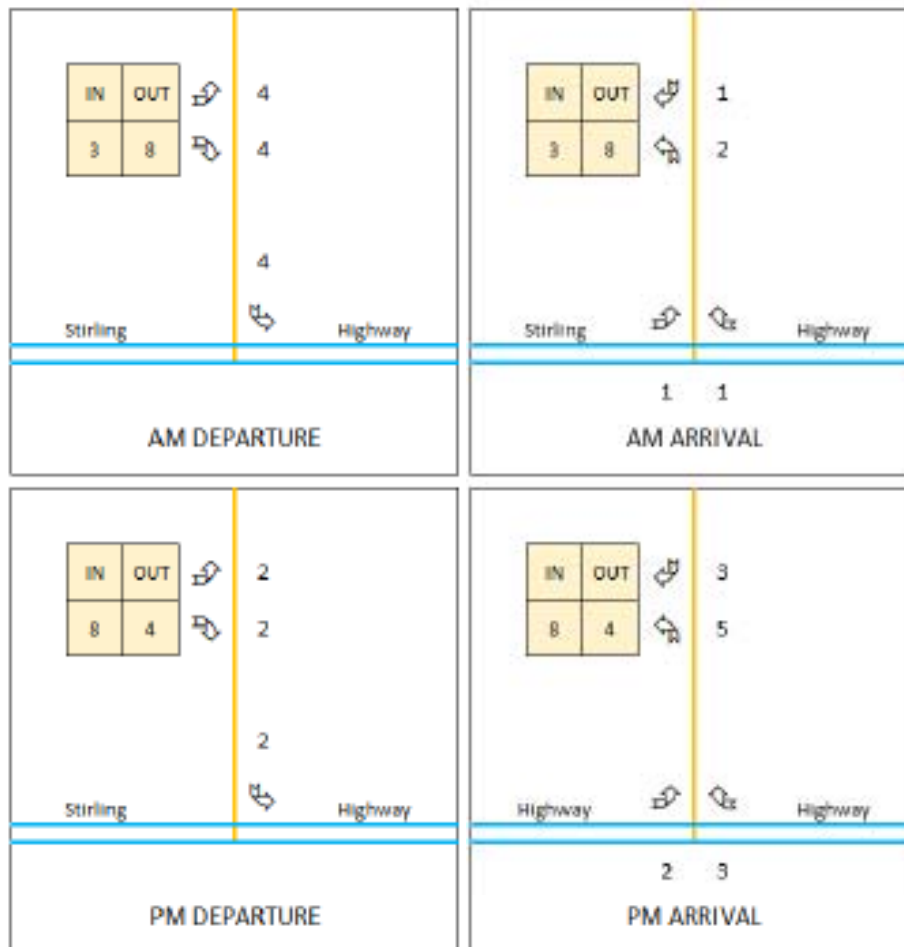


Figure 12 – Forecast development generated AM and PM peak hour trips on the road network

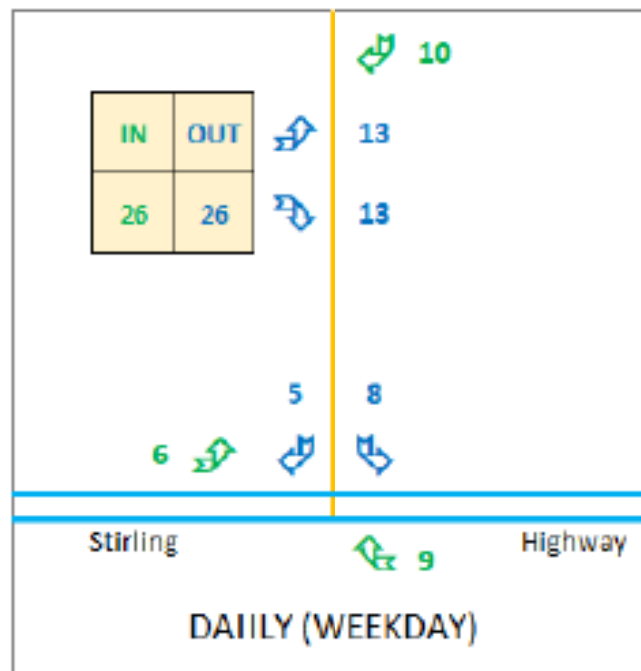


Figure 13 – Forecast development generated weekday daily trips on the road network



The WAPC Guidelines identify threshold warrants for the assessment of the capacity of roads and intersections based on the forecast increase in volumes on lanes and approaches to intersections. In order to determine the warrant for this assessment, it is necessary to determine if the various thresholds have been reached. An assessment of this for the Smyth Rd/ Stirling Hwy intersection is shown in Table 11 below.

Smyth Rd/ Stirling Hwy			Smyth SB		Stirling EB		Stirling WB	
			Left	Right	Left	Straight	Right	Straight
AM	Existing	Movement	105	0	223	1,471	116	1,074
		Approach Leg	105		1,694		1,190	
	Forecast Trips	Movement	4	0	1	0	1	0
		Approach Leg	4		1		1	
	Increase	Movement	3.8%	0.0%	0.4%	0.0%	0.9%	0.0%
		Approach Leg	3.8%		0.1%		0.1%	
PM	Existing	Movement	123	0	91	1,123	150	1,462
		Approach Leg	123		1,214		1,612	
	Forecast Trips	Movement	2	0	2	0	3	0
		Approach Leg	2		2		3	
	Increase	Movement	1.6%	0.0%	2.2%	0.0%	2.0%	0.0%
		Approach Leg	1.6%		0.2%		0.2%	

Table 11 – Assessment of increased volumes on the Smyth Rd/ Stirling Hwy intersection

A summary and assessment of the WAPC threshold criteria for assessment of intersection capacity and performance is provided as Table 12 below.

Assessment Criteria Thresholds (WAPC Guidelines)	Yes/ No	Maximum
Smyth Rd Midblock		
Greater than 100 vehicles per hour per lane?	No	7
Smyth Rd/ Stirling Hwy Intersection		
Greater than 10% on any leg of the intersection?	No	3.80%
Greater than 20% on any movement within the intersection?	No	3.80%

Table 12 – Assessment of intersection and midblock assessment threshold criteria

Table 12 above confirms that the forecast impact of development generated traffic on the road network is minimal and can be accommodated without a noticeable impact on the current performance of the network.

6 TRAFFIC MANAGEMENT ON FRONTAGE STREET

The layout of Smyth Rd in the vicinity of the subject site is best described through Photograph 2 below.

Hillway is subject to the default urban speed limit of 50 km/h.

It has No Parking/ No Stopping restrictions along the south side (right in Photograph 2) and a 2P parking restriction on the north side (development side) between 8 AM and 5 PM Monday to Friday.



Photograph 2 – Looking north on Smyth Rd towards the development site (on the left)

Smyth St consists of a 6.6 m wide sealed and kerbed single carriageway with a single lane in each direction with a broken dividing white line within a 20.12 m wide road reserve.

There is an existing 'No Parking' prohibition on both sides of Smyth Rd between the hours of 8 AM and 5 PM Mon-Fri. There are seven (7) on-street parking bays on Smyth Rd just north of Stirling Hwy, i.e. adjacent to the City of Nedlands's Offices and the commercial development on the opposite side. These bays are subject to a 3-hour parking limit between 8 AM and 5 PM Mon-Fri.



7 PUBLIC TRANSPORT ACCESS

Nearest bus routes	102, 103, 107 and 998 (High Frequency Circle Route)
Nearest train route	Fremantle Line
Nearest bus stops	Stirling Hy west of Smyth St (both sides) 180 m: 2-minute walk
Nearest train station	Loch St – 2.1 km: 27-minute walk/ 8-minute cycle Karrakatta – 2.7 km: 34-minute walk/ 11-minute cycle
Pedestrian/ cycle link to bus stops	Path on west side of Smyth Rd – median island in Stirling Hwy with pedestrian ramps, TGSIs (south side only) and grab rails to cross to other side. Paths on both sides of Stirling Hwy.
Pedestrian/ cycle link to train station	Low volume residential roads (using local roads)

8 PEDESTRIAN ACCESS/ FACILITIES

Existing pedestrian facilities within the development	Not applicable (1 house to be demolished)
Proposed pedestrian facilities within the development	Separate entrance from vehicular entrance.
Existing pedestrian facilities on surrounding roads	Path on west side of Smyth Rd – median island in Stirling Hwy with pedestrian ramps, TGSIs (south side only) and grab rails to cross to other side. Paths on both sides of Stirling Hwy.
Proposals to improve pedestrian access	The City of Nedlands should provide TGSIs for the full crossing of Stirling Hwy, not just on one side.

9 CYCLE ACCESS/ FACILITIES

Existing cycle facilities within the development	Not applicable (1 house to be demolished)
Proposed cycle facilities within the development	Secure and covered Bike Rack Area for 8 bicycles.
Existing cycle facilities on surrounding roads	Carrington St (190 m north of development site) is a designated cycle route (NW15) and extends between Kings Park (Winthrop Ave/ Park Rd) and Claremont.
Proposals to improve cycling access	None identified or warranted.

10 SITE SPECIFIC ISSUES

There are no identified site-specific issues.

11 SAFETY ISSUES

An analysis of the five-year crash record for the Smyth Rd/ Stirling Hwy intersection ending 31 December 2019 has been undertaken by the auditor (an accredited Crash Investigation Team Leader) within the Main Roads WA Crash Analysis Reporting System (CARS). This has revealed that there have been twenty-eight reported crashes at this intersection, twenty of which were property damage only crashes, i.e. no injuries. Four of the eight injury crashes involved a vehicle turning right into Smyth St from Stirling Hwy. Three of the injury crashes occurred between 9 AM and 12 noon with the remaining one between 3 and 6 PM.

The injury crash plot diagram for the intersection, as well as Smyth Rd from Stirling Hwy to just north of the development site, is provided as Figure 14 below. This shows that there have not been any reported injury crashes in the vicinity of the development site other than at the Stirling Hwy/ Smyth Rd intersection.



Figure 14 – Injury Crash Plot Diagram for area shown in blue (1 Jan 2015 – 31 Dec 2019)

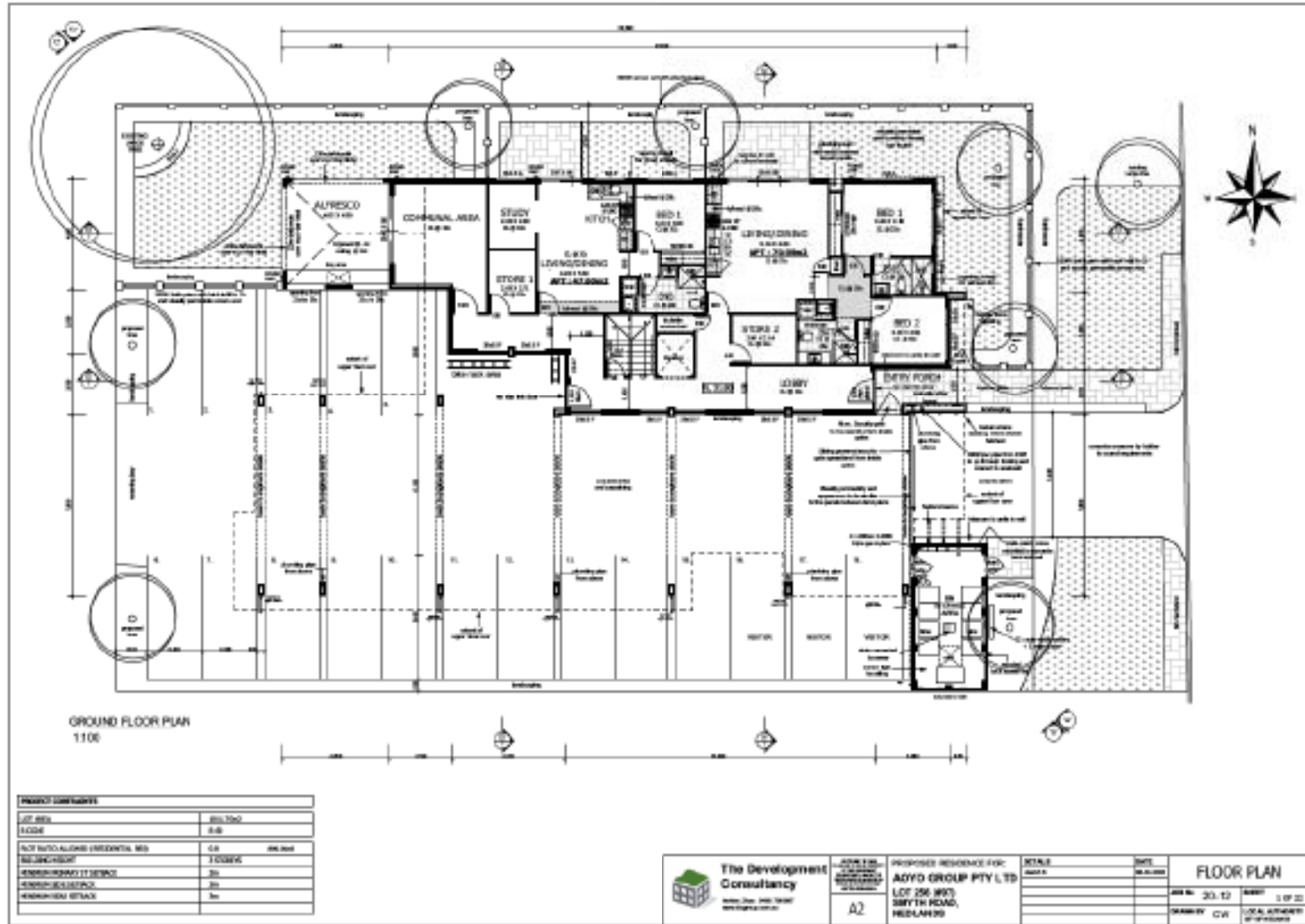
The crash record and observations on site indicate that there are safety concerns with turning right into any side road off Stirling Hwy. The relatively small increase in traffic associated with the development site, i.e. up to 3 additional right turns in the busiest hour, or an increase of up to 2% in right turning traffic, is not considered sufficient to warrant changes to the intersection on its own.



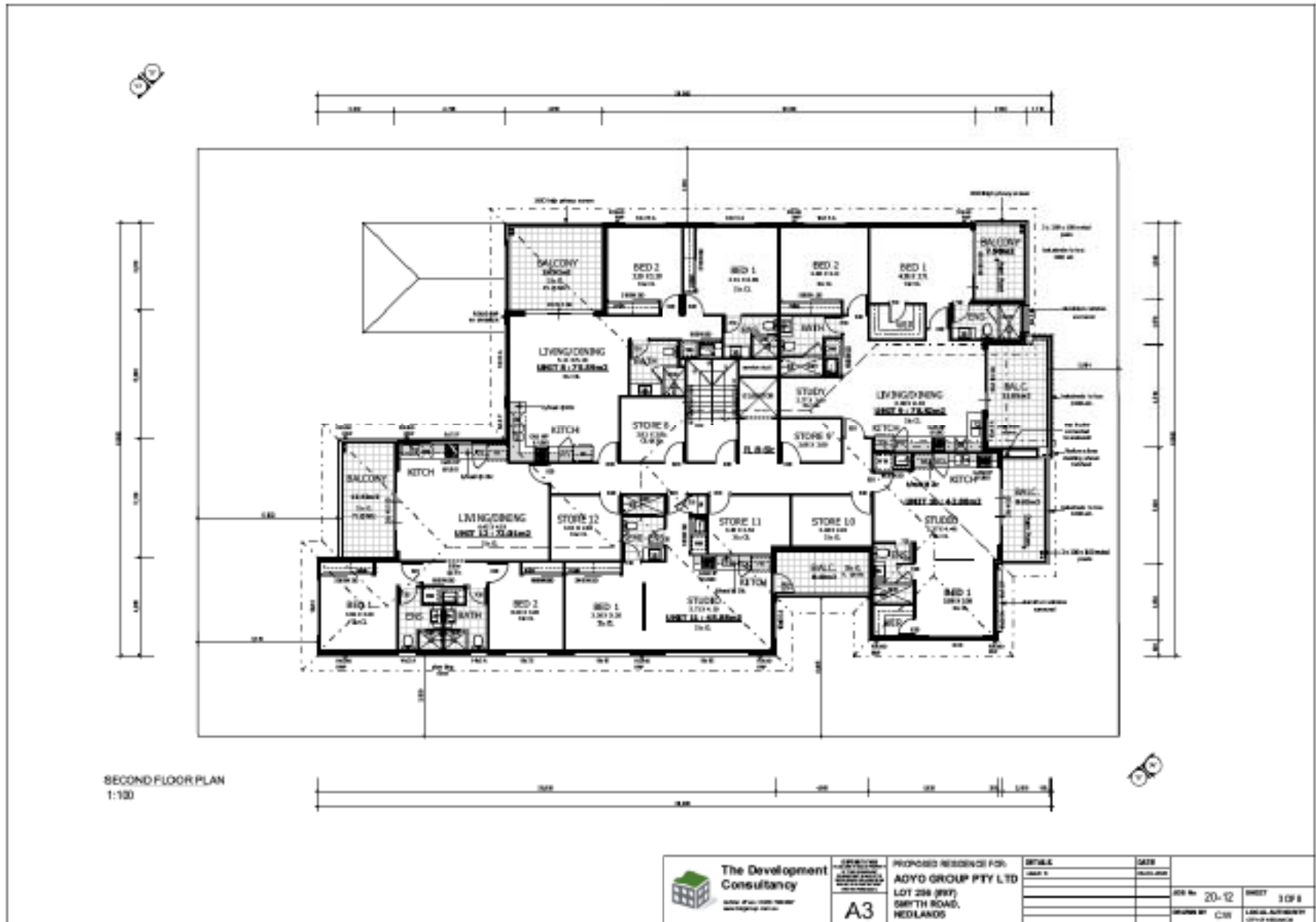
References

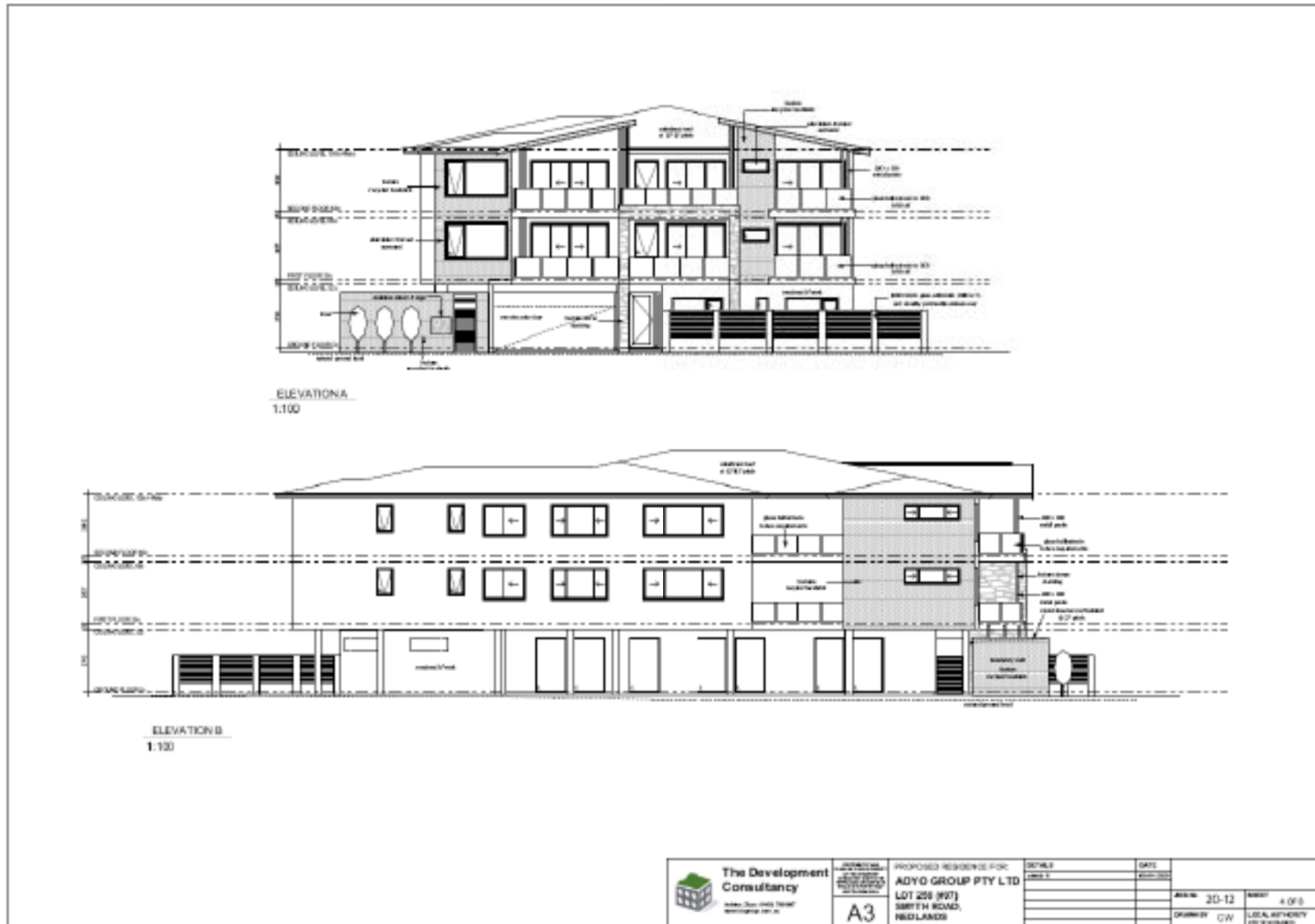
1. **Western Australian Planning Commission.** *Transport Impact Assessment Guidelines.* Department of Planning, Government of Western Australia. Perth, Western Australia : Western Australian Planning Commission, August 2016. p. 182, Revised August 2016. The current version of the TIA guidelines (August 2016) has been endorsed by the WAPC..
2. **NSW Government.** *Guide to Traffic Generating Developments Updated traffic surveys.* Transport, Roads & Maritime Services. Sydney : NSW Government, August 2013. p. 22, Technical Direction. RMS.13.298.
3. **Government of Western Australia.** *City of Nedlands Local Planning Scheme No. 3.* Department of Planning, Lands and Heritage. Perth : Department of Planning, Lands and Heritage, Gazetted 16/04/2019. p. 42, Gazetted 16/04/2019.
4. **City of Nedlands.** *Specification for the Construction of Crossovers.* City of Nedlands. Nedlands : City of Nedlands, 2018. p. 14, Specification.
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6. **Standards Australia.** *AS/NZS 2890.1 - 2004 Parking facilities Part 1: Off-street car parking.* Sydney : Standards Australia/ Standards New Zealand, 2004. p. 77. (Incorporating Amendment No 1). ISBN 0 7337 5742 1.
7. **Australian Building Codes Board (ABCB).** *The Building Code of Australia.* Canberra : Australian Building Codes Board (ABCB), 2010. The Building Code of Australia (BCA) is Volumes One and Two of the National Construction Code (NCC). The BCA is produced and maintained by the Australian Building Codes Board (ABCB) on behalf of the Australian Government and State & Territory Governments..
8. **Roads and Traffic Authority NSW.** *Guide to Traffic Generating Developments.* Transport Planning Section. Sydney, New South Wales, Australia : Roads and Traffic Authority NSW, October 2002. p. 174. Version 2.2. ISBN 0 7305 9080 1.
9. **Austroads.** *Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments.* Austroads. Sydney, NSW : Austroads Ltd, April 2020. p. 113, Guide to Traffic Management. ISBN 978-1-925854-86-2.

APPENDIX A DEVELOPMENT DRAWINGS

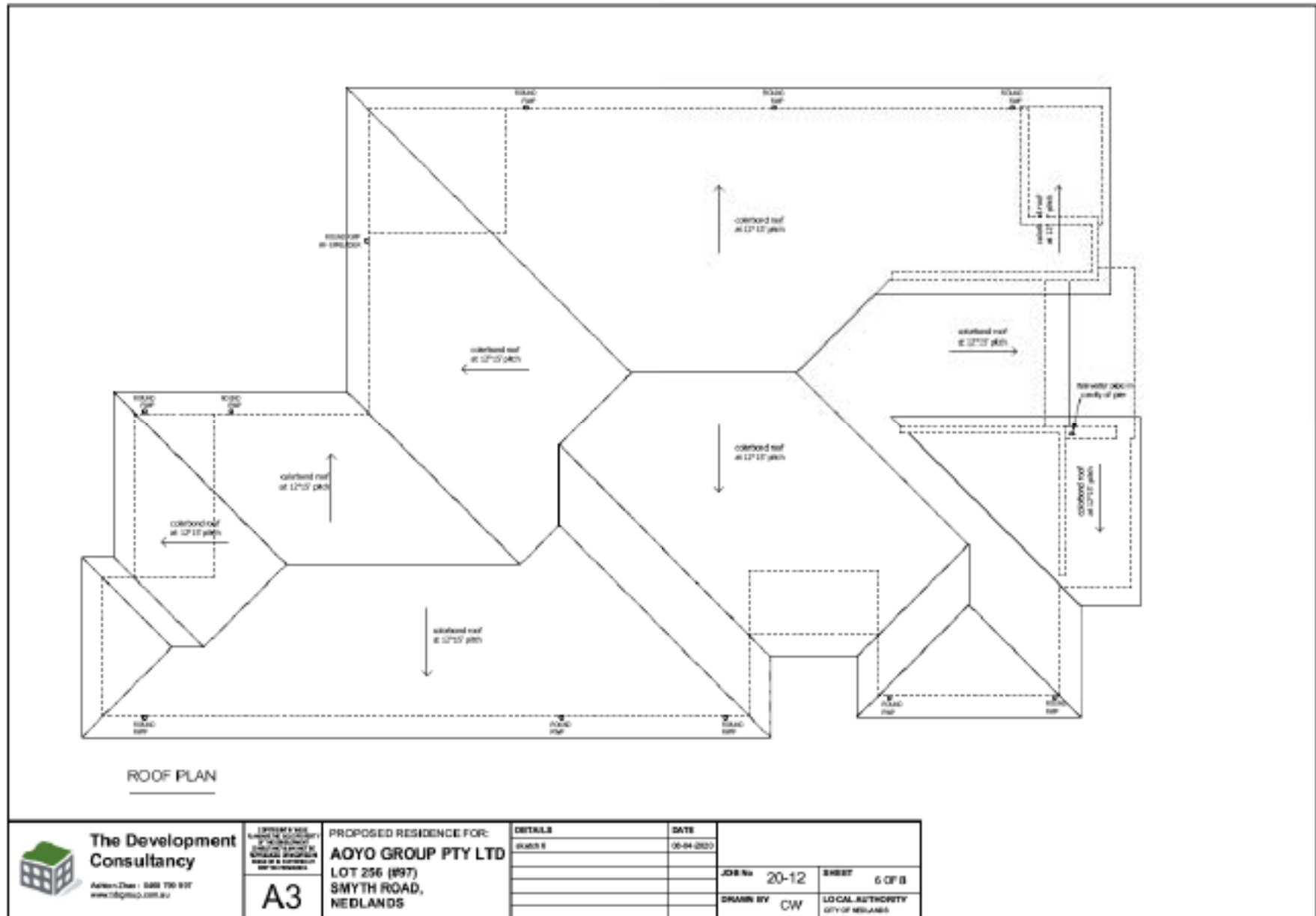


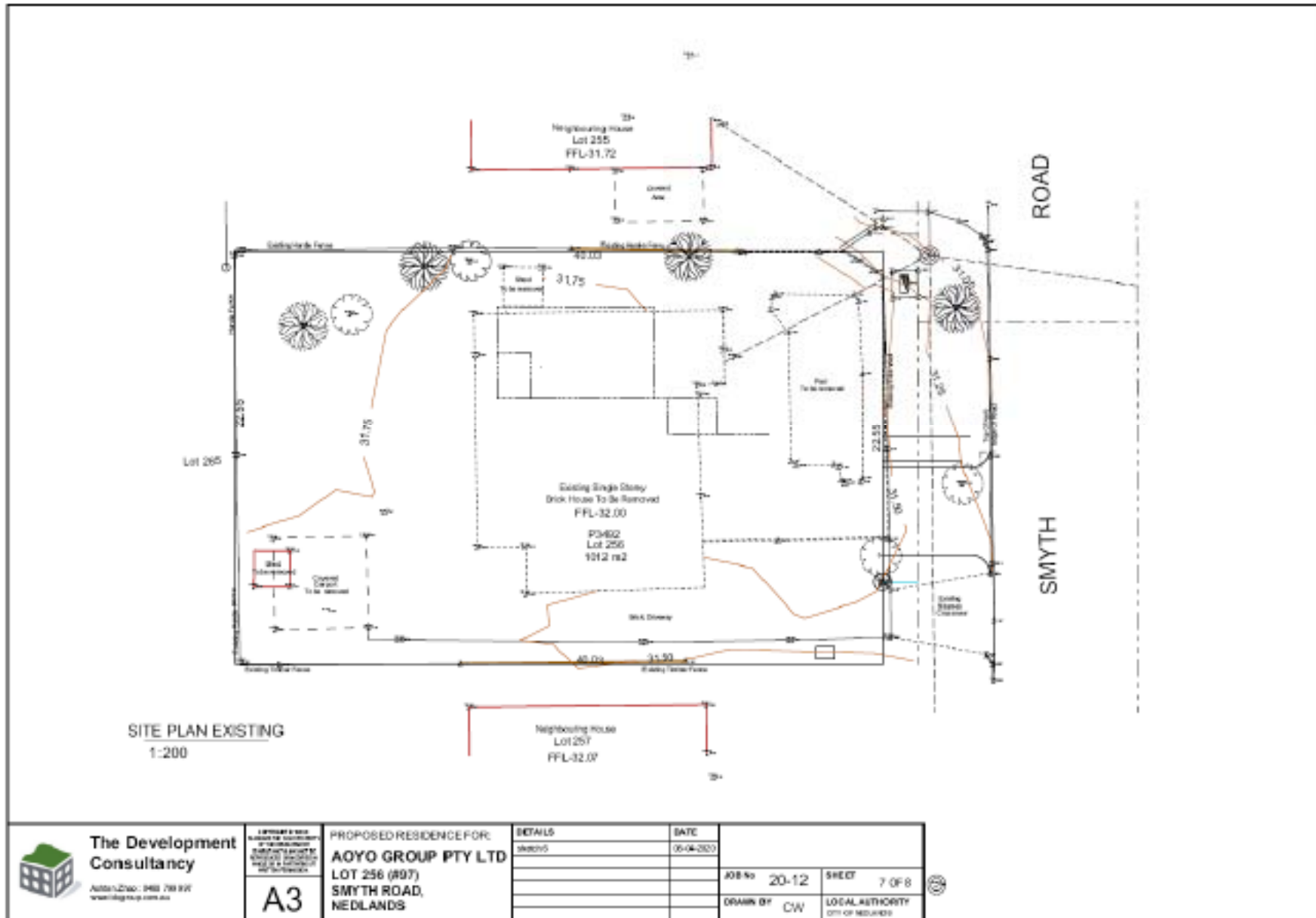













 <p>The Development Consultancy Address: 2400/ 2400 7th St www.thedevelopmentconsultancy.com.au</p>	<p>PROPOSED RESIDENCE FOR: AOYO GROUP PTY LTD LOT 256 (897) SMYTH ROAD, NEDLANDS</p>	<p>DATE</p> <p>05-04-2020</p>	<p>JOB No 20-12</p> <p>SHEET 7 OF 8</p>
		<p>DETAILS</p> <p>05/04/2020</p>	



APPENDIX B WAPC TRANSPORT IMPACT STATEMENT CHECKLIST

Checklist for a transport impact statement for individual development

- Tick the provided column for items for which information is provided.
- Enter N/A in the provided column if the item is not appropriate and enter reason in comment column.
- Provide brief comments on any relevant issues.
- Provide brief description of any proposed transport improvements, for example, new bus routes or signalisation of an existing intersection.

ITEM	PROVIDED	COMMENT
Proposed development		
existing land uses	✓	Section 2.1
proposed land use	✓	Section 2.2
context with surrounds	✓	Section 2.3
Vehicular access and parking		
access arrangements	✓	Sections 3.1 & 3.3
public, private, disabled parking set down/ pick up	✓	Sections 3.2 & 3.3
Service vehicles (non-residential)	NA	
access arrangements		
on/off-site loading facilities		
Service vehicles (residential)		
rubbish collection and emergency vehicle access	✓	Sections 4.1 & 4.2
Hours of operation (non-residential only)	NA	
Traffic volumes		
daily or peak traffic volumes	✓	Sections 5.1 & 5.3
Type of vehicles (for example, cars, trucks)	✓	Sections 5.2 & 5.3
Traffic management on frontage streets	✓	Section 6
Public transport access		
nearest bus/train routes	✓	Section 7
nearest bus stops/train stations	✓	Section 7
pedestrian/cycle link to bus stops/ train station	✓	Section 7
Pedestrian access/ facilities		
existing pedestrian facilities within the development (if any)	NA	
proposed pedestrian facilities within development	✓	Section 8



ITEM	PROVIDED	COMMENT
existing pedestrian facilities on surrounding roads	✓	Section 8
proposals to improve pedestrian access	NA	
Cycle access/facilities		
Existing cycle facilities within the development (if any)	NA	
proposed cycle facilities within development	✓	Section 9
existing cycle facilities on surrounding roads	✓	Section 9
proposals to improve cycle access	✓	Section 9
Site specific issues	NA	
Safety issues		
identify issues	✓	Section 11
remedial measures	NA	

Proponent's name

Company

The Development Consultancy

Date

Transport assessor's name

David Wilkins

Company

i3 consultants WA

Date 5 Nov 2020

Architectural Peer Review Assessment
(State Planning Policy 7.0 Design of the Built Environment; Schedule 1 - Design Principles)

Design quality evaluation

Apply the applicable rating to each Design Principle	3	<i>Supported</i>
	2	<i>Supported with conditions</i>
	1	<i>Further information required</i>
	0	<i>Not supported</i>
Principle 1 - Context and character	0	<p><i>Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.2, 3.3, 3.4, 3.6, 3.9, 4.10, 4.11, 4.12 as relevant.</i></p>
		<p>1a. The proposal fails to adequately address this design principle and this has ramifications for the design outcome and its appropriateness for the site.</p> <p>1b. The applicant would be advised to take into consideration the current context and the way that this might inform the future character of the area. A detailed analysis of the existing building stock will provide many clues that can be used to generate a design response appropriate to the context.</p>
Principle 2 - Landscape quality	0	<p><i>Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.2, 3.3, 3.4, 3.6, 4.12 and 4.16 as relevant.</i></p>
		<p>2a. The landscape design as presented appears under-developed with an overreliance on turf. This is particularly the case in the communal outdoor area and the interface with the public domain. These will impact on the amenity of the space for residents and the connection to community.</p> <p>2b. It is recommended that further work is done to develop the communal open space to improve amenity. Additionally, it is recommended that the landscape to the street is developed, with the entire landscape taking into consideration the opportunity of sustainable planting and watering selections.</p>
Principle 3 - Built form and scale	2	<p><i>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.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.2, 3.3, 4.10 and 4.11 as relevant.</i></p>
		<p>3a. Little can be seen to have been influenced by the context and character of the area in relation to built form. The scale is considered appropriate to the future context of the area.</p> <p>3b. It is recommended that the applicant reconsider the built form in order to better reflect the context and character of the area, in particular the development and composition of the façade.</p>
Principle 4 - Functionality and build quality	1	<p><i>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.</i></p>

		<i>As informed by SPP7.3 Element Objectives 4.3, 4.4, 4.6, 4.7, 4.12, 4.15, 4.17, 4.18 as relevant.</i>
		<p>4a. Furniture layouts were not indicated on floor plans (although can be seen on the ventilation diagrams – although NTS). Functionality of the storerooms could be improved if access to these was from the apartment itself. These are generously sized and in some instances are larger than study spaces in the same apartment. The selection of some materials, such as glass balustrading (and the need to know where air conditioning condensers are located) as well as stone cladding, and the way that these come together is a concern based on the current renders.</p> <p>4b. It is recommended that the applicant supply future drawings with furniture layouts on floor plans. Additionally, further consideration should be given to the selection of materials and their detailing.</p>
Principle 5 - Sustainability	0	<p><i>Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.2, 3.3, 3.9, 4.1, 4.2, 4.3, 4.11, 4.12, 4.15, 4.16, 4.17 as relevant.</i></p>
		<p>5a. Sustainability has not been adequately addressed in this proposal. No provision has been made for the incorporation of solar PV cells or water conservation. In addition, apartment layouts could be improved to get better solar access and natural ventilation. No solar shading elements have been included on the northern and western elevations.</p> <p>5b. It is recommended that the applicant consider ways in which sustainability principles can be incorporated into the design of the building in order that it can improve functionality and amenity for all residents. In particular the applicant should address issues of solar access and shading.</p>
Principle 6 - Amenity	0	<p><i>Good design optimises internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.2, 3.3, 3.4, 3.5, 4.1, 4.2, 4.3,4.4, 4.5, ,4.7, 4.9, 4.11, 4.12, 4.15, 4.16, 4.17,4.18 as relevant.</i></p>
		<p>6a. The current proposal fails to take advantage of the site's northern aspect with several bedrooms located along the building's northern edge. All apartments need to be considered through the lens of solar access, natural light and ventilation, passive surveillance and connection to outdoor spaces, visually or physically. While commendable that apartments have reached the silver liveable standard none of the carparks have the adequate dimension to achieve this rating.</p> <p>6b. It is recommended that the applicant revisit the layout of the apartments on the northern edge of the building to maximise the amount of natural light to the shared living spaces. Additionally, more work is required to ensure that the communal open space provides real amenity to residents. Two carparks need to be dimensioned to achieve the silver liveable standard.</p>
Principle 7 - Legibility	2	<p><i>Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.1, 3.4,3.6, 3.7, 3.8, 3.9, 4.5 as relevant.</i></p>

		<p>7a. The development is broadly considered to have adequate legibility with only minor recommendations against this principle.</p> <p>7b. It is considered advisable to revisit the front façade of the building and consider the integration of colour to assist in creating a legible entry for the apartment building. This could be subtly darker than the rest of the building and would simply draw attention to this point. The current stone clad feature element is not supported for reasons of aesthetics. Signage may be advisable for the communal space, with consideration required in terms of how this space might function and how multiple residents could use this simultaneously.</p>
Principle 8 - Safety	2	<p><i>Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.1,3.4, 3.6, 3.7, 3.8,3.9, 4.5 as relevant.</i></p>
		<p>8a. Due to the planning of Apartment 2 there is no passive surveillance and activation at street level, this is not supported. Access to the apartment complex, with the separation of vehicles and pedestrians, along with the automatic gate are considered to give adequate safety.</p> <p>8b. It is recommended that the applicant replan apartment 2 to bring the active spaces to the street front.</p>
Principle 9 - Community	0	<p><i>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.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.5, 4.9,4.18 as relevant.</i></p>
		<p>9a. The current proposal misses the opportunity to connect with the broader community through the activation of the street front via planning and landscape. By placing the parking along the southern edge of the block rather than at the rear the interface with the community is diminished.</p> <p>9b. It is recommended that the applicant consider the reconfiguration of the parking and the communal open space to enhance the interface at the street. By making a provision for parking at the rear the communal open space could be brought to the street. In addition, the activation of the street can be achieved by replanning Apartment 2. The applicant is encouraged to look closely at the existing streetscape and to observe the existing fencing, much of which has vertical elements, rather than horizontal. It is considered that this would be more in keeping with the neighbourhood.</p>
Principle 10 Aesthetics	0	<p><i>Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.1, 3.4, 4.8 as relevant.</i></p>
		<p>10a. More work is required in regard to the aesthetics of the proposal in terms of the character and context in which it is being proposed as well as the future character of the area. Whilst face brick is considered appropriate to the context, it could be used more liberally, forming the base of the building and grounding it (as can be seen on houses locally). Glass balustrading is questioned as is the use of the stone cladding. Side elevations require further development and it is necessary to consider the</p>

appropriateness of glass balustrading here also (for reasons of privacy for apartment residents), as well as the need for shading elements to be integrated into the design where applicable. It is considered that the front façade needs considerable work in relation to the proportioning and hierarchy of elements. In particular the stone clad feature element is not supported and is severely compromised by the number of building elements that it interfaces with.

10b. It is recommended that the applicant first undertake a full context and character analysis in order to develop a design language that truly responds to its location. With this in mind the selection of materials and the way they are deployed across the building facades will become evident. Additionally, the applicant is advised that the incorporation of shading elements to the necessary facades will assist in the articulation of elevations. The location of the parking along the southern edge of the block is not supported and consideration should be given to the opportunities for this to be remedied.

Architectural Peer Review Assessment
(State Planning Policy 7.0 Design of the Built Environment; Schedule 1 - Design Principles)

Design quality evaluation

Apply the applicable rating to each Design Principle	3	<i>Supported</i>
	2	<i>Supported with conditions</i>
	1	<i>Further information required</i>
	0	<i>Not supported</i>
Principle 1 - Context and character	0	<p><i>Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.2, 3.3, 3.4, 3.6, 3.9, 4.10, 4.11, 4.12 as relevant.</i></p>
		<p>1a. The proposal fails to adequately address this design principle and this has ramifications for the design outcome and its appropriateness for the site.</p> <p>1b. The applicant would be advised to take into consideration the current context and the way that this might inform the future character of the area. A detailed analysis of the existing building stock will provide many clues that can be used to generate a design response appropriate to the context.</p>
Applicant Response		<p>The façade provides articulation and visual interest to improve its appearance and interface with the streetscape and neighbouring properties.</p> <p>The built form includes a mixture of colours and materials from striking metallic and aluminium elements, and feature stone cladding, to exposed feature recycled face brick, and contrasting painted rendered walls in charcoal grey and white, as well as large window glazes.</p> <p>The built form references materials evident in the local area and responds to an emerging character of the area (following recent changes to the planning framework and adoption of LPS No. 3)</p> <p>The local area is in transition. Greater density of development is now allowable and encouraged following changes made after the introduction of SPP 7.3 Vol. 2 and the City's new LPS No. 3. In the future there will be further higher-density development in the local area both as part of the adjoining and adjacent R160 sites, and the Nedlands Town Centre R-AC1 sites a few metres further to the south.</p> <p>The design has responded to and references the built form of the immediate local area by its use of building materials and colours scheme. The proposed façade materials consist of a feature recycled face-brick façade, aluminium window frames, a stone feature clad wall which frames the pedestrian entry, as well as glass, and contrasting painted finish rendered walls. The street façade is softened by the landscaping treatment proposed to Smyth Road.</p> <p>This immediate built form character north of Stirling Highway at this location is currently predominantly single houses, with highway commercial businesses along Stirling Highway. The emerging and future built form includes a greater number of multiple dwelling apartment developments.</p> <p>The design and material selection for the proposed building seeks to complement and reference the local character of the area, including the "red-brick character houses", and "limestone" geology of the area.</p> <p>By drawing on and sympathetically interpreting these character elements — which have been previously identified as desirable by the City — the design has formed a unique and distinct development which will positively contribute to the streetscape.</p> <p>The design also respects the existing (and emerging) character of the area by proposing generous setbacks and separations well in excess of the acceptable outcomes, and a very high amenity communal space, which understands the limited availability of public open space in the immediate area.</p> <p>Overall, it is considered that the design addresses, responds to, and enhances the character of the area, and will be a suitable and welcome addition. This is achieved</p>

		through the façade and building design treatment referencing local building materials and the accompanying landscaping which will enhance and contribute to this green aesthetic.
Principle 2 - Landscape quality	0	<p><i>Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.2, 3.3, 3.4, 3.6, 4.12 and 4.16 as relevant.</i></p>
		<p>2a. The landscape design as presented appears under-developed with an overreliance on turf. This is particularly the case in the communal outdoor area and the interface with the public domain. These will impact on the amenity of the space for residents and the connection to community.</p> <p>2b. It is recommended that further work is done to develop the communal open space to improve amenity. Additionally, it is recommended that the landscape to the street is developed, with the entire landscape taking into consideration the opportunity of sustainable planting and watering selections.</p>
Applicant Response		<p>The proposed landscaping selection includes a generous amount of DSA throughout (consisting of 18% deep soil areas where only 7% is the prescribed acceptable outcome).</p> <p>The proposed landscaping softens the façade and improves the aesthetic of the development overall. The street frontage includes numerous tree plantings to further contribute to an attractive development. More than 9 on-site trees are proposed, and all apartments have outlook toward landscaping and landscaped areas.</p> <p>The landscaping design addresses the street, and communal open space areas by providing shade trees and plants. This improves the aesthetic and functional performance of the development, in relation to heat loads, heat retention, noise and acoustic propagation, privacy, and the health & wellbeing of residents and visitors.</p> <p>The design includes a verge landscaping treatment in excess of the requirements of acceptable outcome 4.12.2 and 4.12.3, illustrated in the image below. Further detail on landscaping is provided within the landscape plan prepared by Kelsie Davies Landscape Architecture.</p> <p>An outdoor timber seating area provide to the outdoor communal area as well as covered BBQ area.</p>
Principle 3 - Built form and scale	2	<p><i>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.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.2, 3.3, 4.10 and 4.11 as relevant.</i></p>
		<p>3a. Little can be seen to have been influenced by the context and character of the area in relation to built form. The scale is considered appropriate to the future context of the area.</p> <p>3b. It is recommended that the applicant reconsider the built form in order to better reflect the context and character of the area, in particular the development and composition of the façade.</p>
Applicant Response		The proposed design provides a variety of responsive materials, colours, and other design elements to the building façade. As discussed previously, this includes brick, rendered walls, metal slats and surrounds, and stone cladding.

	<p>The built form is also broken up by the articulation and recessing provided throughout the development.</p> <p>Together this provides visual interest for the development when viewed from the street. The building communicates and interfaces with the street providing a clear hierarchy and expression of the building's function and purpose. This is supported by the proposed communal open space, which will be accompanied by landscaping, seating, and a barbeque for residents.</p> <p>The proposed built form and scale is consistent with the zoning and desired future character of the area as established by the City's planning framework for R60 sites. The proposed height is consistent with the planning framework, and the proposed development falls entirely within the "building envelope" established by setback, separation, visual privacy and other design elements in SPP 7.3 Vol. 2.</p> <p>The built form is broken up by the articulated form throughout and the use of recessing, stepping, voids, and materiality.</p> <p>The exterior is clean and refined in its expression through its choice and variation of materials, textures, and colours across the façades.</p> <p>The local area is undergoing transition. The proposed design recognises the future development character of the area and has responded accordingly by seeking to reduce the effects of massing to the streetscape. The proposed apartments have respected the existing residential aspect of the area and provided setbacks and a built form considerate of the locality and neighbours</p>
Principle 4 - Functionality and build quality	<p>1 <i>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.</i></p> <p><i>As informed by SPP7.3 Element Objectives 4.3, 4.4, 4.6, 4.7, 4.12, 4.15, 4.17, 4.18 as relevant.</i></p>
	<p>4a. Furniture layouts were not indicated on floor plans (although can be seen on the ventilation diagrams – although NTS). Functionality of the storerooms could be improved if access to these was from the apartment itself. These are generously sized and in some instances are larger than study spaces in the same apartment. The selection of some materials, such as glass balustrading (and the need to know where air conditioning condensers are located) as well as stone cladding, and the way that these come together is a concern based on the current renders.</p> <p>4b. It is recommended that the applicant supply future drawings with furniture layouts on floor plans. Additionally, further consideration should be given to the selection of materials and their detailing.</p>
Applicant Response	<p>The furniture layout has been provided in the planning pack page 4 – Furniture Layout.</p>
Principle 5 - Sustainability	<p>0 <i>Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.2, 3.3, 3.9, 4.1, 4.2, 4.3, 4.11, 4.12, 4.15, 4.16, 4.17 as relevant.</i></p>
	<p>5a. Sustainability has not been adequately addressed in this proposal. No provision has been made for the incorporation of solar PV cells or water conservation. In addition, apartment layouts could be improved to get better solar access and natural ventilation. No solar shading elements have been included on the northern and</p>

	<p>western elevations.</p> <p>5b. It is recommended that the applicant consider ways in which sustainability principles can be incorporated into the design of the building in order that it can improve functionality and amenity for all residents. In particular the applicant should address issues of solar access and shading.</p>
Applicant Response	<p>As elaborated further in the energy efficiency section of the SPP 7.3 Vol. 2 assessment, the design prides itself on being sustainable. The proposal considers key environmental aspects of its materials with several key overarching priorities:</p> <ul style="list-style-type: none"> • Maximising solar access and natural ventilation opportunity for each apartment. • Providing a well-resolved landscaping solution that contributes to increasing tree canopy and reducing heat-loads. • Using low-maintenance materials with low whole-of-life costs to reduce the need for replacement, repairs, and maintenance. • Use of a two-bin system with room for recyclables, as well as scope for future FOGO bins. • Glazing types and sizing assist winter heat gain into the building, whilst minimising heat gain in the summer. • Dwelling and room orientation and positioning to improve solar access outcomes. • The installation of an integrated network system utilising onsite renewable energy via photo-voltaic cells. • Use of water efficient fittings and fixtures throughout, in bathrooms, kitchens, and toilets. • Reducing water use in the garden from using a thick 70mm mulch and using bubblers instead of sprinklers, to implementing a rain / weather sensing retic system and directing water falling on rooves into garden beds. • Use of LED lighting throughout and light sensors to public areas to reduce power consumption. • Use of high-quality insulation throughout. <p>The developer is also considering the Solare PV cells to install.</p>
Principle 6 - Amenity	<p>0 <i>Good design optimises internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.2, 3.3, 3.4, 3.5, 4.1, 4.2, 4.3,4.4, 4.5, ,4.7, 4.9, 4.11, 4.12, 4.15, 4.16, 4.17,4.18 as relevant.</i></p>
	<p>6a. The current proposal fails to take advantage of the site's northern aspect with several bedrooms located along the building's northern edge. All apartments need to be considered through the lens of solar access, natural light and ventilation, passive surveillance and connection to outdoor spaces, visually or physically. While commendable that apartments have reached the silver liveable standard none of the carparks have the adequate dimension to achieve this rating.</p> <p>6b. It is recommended that the applicant revisit the layout of the apartments on the northern edge of the building to maximise the amount of natural light to the shared living spaces. Additionally, more work is required to ensure that the communal open space provides real amenity to residents. Two carparks need to be dimensioned to achieve the silver liveable standard.</p>
Applicant Response	<p>The proposed development prides itself on providing a high level of amenity to its future residents. Each apartment is provided with large bedrooms and living areas complemented by balconies or terraces suitable for outdoor living pursuits. Each apartment has also is provided with ample access to daylight and natural ventilation. The proposed landscaping and greening solution further enhances the amenity of the</p>

	<p>apartments and streetscape. Notably, the communal open space is very high amenity, and has a rooved alfresco, an indoor area, and a shaded outdoor landscaped area — the communal open space will form a fantastic place for residents to gather, socialise, and relax, without need to leave their homes. It is noted that all floors of the development are also accessible by lift and amenable for a wide range of users, including those with movement difficulties.</p> <p>With respect to the situation of the development the site is only about 1km from the University of Western Australian campus, the QEII Medical Precinct, and the Taylor Road IGA (a 24/7 grocery store). The site is also only a short stroll away from Stirling Highway, which is undergoing redevelopment at the moment as part of the Nedlands Town Centre.</p> <p>Stirling Highway itself includes a range of high frequency public-transport options which make it possible to access Perth CBD in less than 15 minutes. Notable bus services include the CircleRoute bus 998 and 999.</p> <p>Nearby businesses from cafés to restaurants, take-away, service businesses and a range of small businesses and shops along Stirling Highway and throughout the local area. This is supported by the redevelopment occurring as part of Nedlands Town Centre. U.W.A, QEII, and Perth are all large employment centres and located within a stone's throw of the site, while Claremont (3km west) includes a range of commercial and retail offerings.</p> <p>The nearby local amenity is excellent and the siting of such a proposal for twelve multiple dwellings at this location is highly desirable and suitable.</p> <p>Due to the current design, there are spaces behind carpark column where can be used for the adjacent carbays.</p>
Principle 7 - Legibility	<p>2 <i>Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.1, 3.4,3.6, 3.7, 3.8, 3.9, 4.5 as relevant.</i></p>
	<p>7a. The development is broadly considered to have adequate legibility with only minor recommendations against this principle.</p> <p>7b. It is considered advisable to revisit the front façade of the building and consider the integration of colour to assist in creating a legible entry for the apartment building. This could be subtly darker than the rest of the building and would simply draw attention to this point. The current stone clad feature element is not supported for reasons of aesthetics. Signage may be advisable for the communal space, with consideration required in terms of how this space might function and how multiple residents could use this simultaneously.</p>
Applicant Response	<p>The apartment design is clearly legible and intuitive for residents and visitors to use. There is a clear differentiation between the public and private realm and clear and separate access routes for pedestrians and vehicles into the development. The amount of unnecessary circulation space has been minimised, and the access lobby, lift, and stairwell have been conveniently and clearly located at the centre of the site. Visitor access (for pedestrians and vehicles) is managed by an intercom system. The entry to the development from the street and from the car parking area are clearly defined, and easy and safe to use. There is a clear hierarchy of space proposed within the development.</p> <p>With regard to waste management, the use of the bin store will be aided by</p>

		<p>signage and ongoing monitoring by a caretaker, while its location, and the ease of moving the bins for presentation is considered to be minimal and amenable given the proposal for twelve multiple dwellings. Waste management will operate in accordance with the submitted approved waste management plan. The operation of the building will be reviewed by the strata company and caretaker on an ongoing basis, and as issues arise these will be addressed.</p>
Principle 8 - Safety	2	<p><i>Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.1,3.4, 3.6, 3.7, 3.8,3.9, 4.5 as relevant.</i></p>
		<p>8a. Due to the planning of Apartment 2 there is no passive surveillance and activation at street level, this is not supported. Access to the apartment complex, with the separation of vehicles and pedestrians, along with the automatic gate are considered to give adequate safety.</p> <p>8b. It is recommended that the applicant replan apartment 2 to bring the active spaces to the street front.</p>
Applicant Response		<p>The design is considered to achieve the safety design principle. All street fronting apartments overlook and provide passive surveillance to the street, without compromising their ability to provide visual privacy for their residents. A clear hierarchy of defensible space has been created.</p> <p>In relation to vehicle manoeuvring, adequate sightlines are maintained through the development and driveway through to the crossover and street. A separate pedestrian entry is proposed. Pedestrian areas are clearly delineated from vehicle areas.</p> <p>The design attempts to limit areas for concealment, and the amount of exposed blank façade (in relation to graffiti). A secure access system to the apartments is proposed, which otherwise prevents any unauthorised person from accessing the site beyond the public street frontage interface area.</p> <p>The design achieves the underlying principles of Crime Prevention Through Environmental Design.</p> <p>The development has also ensured passive visual surveillance of the street throughout and provided clear sightlines to public spaces to maximise opportunities for natural light penetration. All public areas are to be provided with lighting to improve visibility — operated by sensor where appropriate to reduce energy consumption and lightspill.</p> <p>The developer will install intercom as well as security camera as part of safety concerns. The living area of Apartment 2 has been designed to access to the backyard, not the front yard as privacy consideration.</p>
Principle 9 - Community	0	<p><i>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.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.5, 4.9,4.18 as relevant.</i></p>
		<p>9a. The current proposal misses the opportunity to connect with the broader community through the activation of the street front via planning and landscape. By placing the parking along the southern edge of the block rather than at the rear the interface with the community is diminished.</p> <p>9b. It is recommended that the applicant consider the reconfiguration of the parking and the communal open space to enhance the interface at the street. By making a provision for parking at the rear the communal open space could be brought to the street. In addition, the activation of the street can be achieved by replanning</p>

		Apartment 2. The applicant is encouraged to look closely at the existing streetscape and to observe the existing fencing, much of which has vertical elements, rather than horizontal. It is considered that this would be more in keeping with the neighbourhood.
Applicant Response		<p>The proposed design recognises and responds to the needs of providing opportunities for community interaction, while acknowledging the smaller scale of the proposal and its situation as part of a residential only development. A very high amenity communal space with an indoor room, rooved alfresco area, and shaded landscaped outdoor area is proposed which will be a significant benefit and point of difference of this development. The communal area includes a barbeque, seating, and other amenities. This communal area will help promote incidental interaction and sense of community between residents, and improve the health and wellbeing outcomes for those who call the Smyth Road apartments their home.</p> <p>Given the design does not include a mixed-use component, public interface is unnecessary and inappropriate for this site. The design provides a friendly and appealing streetscape interface and appearance through its use of direct street access, private open space, landscaping, and façade treatment. This improves the sense of connection for residents to their community and street, and vice-versa of "inviting" the community to feel a sense of connection to this development (without compromising CPTED).</p> <p>A range of dwelling types and sizes have also been proposed to improve the housing diversity both in the local area, and within the development. The design allows for occupation by a range of persons of different ages and backgrounds.</p>
Principle 10 Aesthetics	0	<p><i>Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.</i></p> <p><i>As informed by SPP7.3 Element Objectives 3.1, 3.4, 4.8 as relevant.</i></p>
		<p>10a. More work is required in regard to the aesthetics of the proposal in terms of the character and context in which it is being proposed as well as the future character of the area. Whilst face brick is considered appropriate to the context, it could be used more liberally, forming the base of the building and grounding it (as can be seen on houses locally). Glass balustrading is questioned as is the use of the stone cladding. Side elevations require further development and it is necessary to consider the appropriateness of glass balustrading here also (for reasons of privacy for apartment residents), as well as the need for shading elements to be integrated into the design where applicable. It is considered that the front façade needs considerable work in relation to the proportioning and hierarchy of elements. In particular the stone clad feature element is not supported and is severely compromised by the number of building elements that it interfaces with.</p> <p>10b. It is recommended that the applicant first undertake a full context and character analysis in order to develop a design language that truly responds to its location. With this in mind the selection of materials and the way they are deployed across the building facades will become evident. Additionally, the applicant is advised that the incorporation of shading elements to the necessary facades will assist in the articulation of elevations. The location of the parking along the southern edge of the block is not supported and consideration should be given to the opportunities for this to be remedied.</p>
Applicant Response		The design provides a well resolved façade, colours, and materials solution. The contemporary design uses a mixture materials and colours from recycled face brick to stone cladding, glass and metallic elements, to painted render, in combination with

	<p>articulation, recessing, and variation in height to provide a cohesive design solution respectful and responsive to the streetscape and neighbouring properties.</p> <p>The design is respectful of the evolving character of the area and understands and has created a coherent, well-resolved built form, responsive to the future character. The streetscape appearance and façade treatment creates an attractive interface with the wider local area. The built form is also not overbearing, and proposes generous setbacks, separations and articulation of the built form. The proposed development considers the existing vernacular in the surrounding area. Through investigation of the geometric articulation, the building presents a refined contemporary design and sets a benchmark performance for all future builds in the locality.</p> <p>The landscaping treatment is no exception, with deep soil areas and landscaping proposed throughout. The proposed deep soil areas (for example) being well over the acceptable outcome measure.</p>
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SPP7.3 R-CODES

VOLUME 2 - APARTMENTS

ASSESSMENT TEMPLATE

ELEMENT 2.2		BUILDING HEIGHT	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
<p>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.</p>	<p>The acceptable outcomes for height are for buildings with up to three storeys. The proposed built form is three storeys in height. The local area is expected to see change and increases in density following the introduction of SPP 7.3 Vol. 2 and the City's new LPS No. 3. The proposed apartments are consistent with the desired future character as set out by the planning framework.</p> <p>The street setback and façade treatment also help to ensure that the height of the building does not dominate the existing streetscape character (which is currently predominant single storey development).</p> <p>Notwithstanding, the street and local area are expected to transform as more development occurs in accordance with the zonings adopted under LPS No. 42, to 3m in height and setbacks similar to the proposed.</p> <p>Given this context, the proposed height of the building is entirely appropriate and consistent with the desired future character as set out by the planning framework.</p>	<p><u>Objective achieved</u></p> <p>The height of the building will be generally consistent with buildings located between the site and Stirling Highway.</p> <p>Acceptable outcome A2.2.1 has been met (see below).</p>	
<p>O2.2.2 – The height of buildings within a development responds to changes in topography.</p>	<p>The site has a sloping topography of approximately 1.0m from west (32.5m AHD) to east (31.5m AHD). The proposed apartments balance the extent of fill and excavation, and proposes a ground FFL of 31.8m AHD. The land in the immediate area is coded with the same or greater density.</p>	<p><u>Objective achieved</u></p> <p>The finished floor level of the ground floor will seek to minimise the height of fill at the front of the site, whilst utilising cut at the rear. This ensures the overall height of the building is within the maximum acceptable outcome allowance.</p>	
<p>O2.2.3 – Development incorporates articulated roof design and/or roof top communal open space where appropriate.</p>	<p>The design does not include roof-top communal areas, which are impractical given the scale of development proposed. Notwithstanding, a high-amenity communal space is proposed on the ground floor at the rear north which will help to contribute to resident amenity.</p> <p>The form of the roof includes varying roof heights and parapet walls / articulation to the front and side elevation which improve the visual interest and reduce the appearance of bulk and scale of the proposal.</p>	<p><u>Objective achieved</u></p> <p>Articulation of roof design is achieved by utilising a series of roof ridges to break up the front façade.</p> <p>No roof top communal open space is proposed.</p>	

<p>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.</p>	<p>The Smyth Road apartments do not compromise the ability of any neighbouring site to achieve sufficient daylight (and natural ventilation) access.</p> <p>The building has a lowered height and sufficient side setbacks to ensure that overshadowing to adjoining properties at midday 21 June is less than 50%.</p> <p>The Smyth Road apartments have also been carefully designed to respect the need for daylight and solar access to the neighbouring properties — which are also zoned Residential R60 but are yet to be developed. The proposed building height has respected neighbouring sites and understood the context of the planning framework for future development and responded accordingly through the modest built form, bulk, and scale demonstrated in the proposed design.</p> <p>The development is designed to achieve ample solar access to apartments and communal spaces, with all apartments provided with a multiple-aspect outlook.</p>	<p><u>Objective achieved</u></p> <p>The neighbouring property to the south (99 Smyth Rd) will be overshadowed by the development for 31% of its total area at 12pm on 21 June 2020 (worst case). As the neighbouring site is coded R160, there is no acceptable outcome limit on overshadowing. The development has achieved an optimal outcome for overshadowing given the R60 acceptable outcome is 50% of the neighbouring lot and R160 is unlimited.</p>
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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 A.2	Low-rise		Medium-rise		High-density residential		Neighbourhood centre	Mid-rise urban centres	High density urban centres		Planned areas
	R40	R50	R60	R80	R100	R160			R-AC4	R-AC3	
Site R-Coding											
Building height (storeys) refer 2.2	2	3	3	4	4	5	3	6	7	9	

Acceptable Outcome achieved:

The building will be three storeys in height (maximum of 3 in R60 density). Maximum height to top of roof is 10.7m above natural ground level (12m acceptable outcome).

LOCAL PLANNING FRAMEWORK	REQUIREMENT
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<p><i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i></p>	<p>Draft Local Planning Policy – Hollywood Central Transition Zone is currently being advertised for public comment. The policy is not currently a 'due regard document'. Assessment of the development against the draft policy has been conducted to test the policy provisions. Application of the policy to the development is premature given the document is currently being advertised for comment.</p> <p>The draft Local Planning Policy allows for 3 storeys as an acceptable outcome. The draft policy as advertised also proposes an additional storey where the site abuts land with a higher density code, which is the case with this development. However, the proposal does not seek to utilise this outcome.</p> <p>The proposal is consistent with the acceptable outcomes of the draft policy.</p>
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ELEMENT 2.3		STREET SETBACKS	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
O2.3.1 – The setback of the development from the street reinforces and/or complements the existing or proposed landscape character of the street.	<p>The acceptable outcome is for a 2.0m street setback. The façade of the building is separated by more than 2.0m from the street.</p> <p>The built form includes balconies and direct access for Unit 2 via a pedestrian pathway (a street facing apartment) to improve the interface with the street. The street setback is consistent with the desired future built form as set-out by the planning framework and associated prescribed density coding of R60.</p> <p>The increased setback allows the development to utilise the space between the building and the street for landscaping. This helps to reinforce the existing landscaped character of the street.</p>	<p><u>Objective achieved</u></p> <p>Acceptable Outcome A2.3.1 achieved (see below).</p> <p>The main building will be setback a minimum of 3.0m from the street boundary. The front setback is articulated along the façade, with setbacks varying from 2.0m to the bin store to 4.2m to the ground floor apartment Bed 1.</p>	
O2.3.2 – The street setback provides a clear transition between the public and private realm.	<p>The site provides a clear transition between the public and private realm through the street setback area which has been provided.</p> <p>The proposed apartments do not have a mixed-use or commercial component, and the general public is not expected to interface with the apartments beyond the street façade. A semi-permeable street facing fence is proposed to improve the streetscape interface.</p> <p>The separation between the public and private realm is clearly communicated by the design and reinforced by measures including secure access door and gate systems. The site provides a clear transition between the public and private realm.</p>	<p><u>Objective achieved</u></p> <p>The street setback area will be fenced and landscaped in a manner that delineates the transition between public and private realms.</p>	
O2.3.3 – The street setback assists in achieving visual privacy to apartments from the street.	<p>The proposed street setbacks (~2.0m) do not impact nor affect visual privacy. A good level of visual privacy is maintained for all street facing apartments, between apartments within the site, and to neighbouring sites.</p> <p>The design includes living areas and private open space (including balconies) that overlook the street. Notwithstanding the proposed street setback (namely the street facing balconies) improves the interface with the</p>	<p><u>Objective achieved</u></p> <p>There is one ground floor apartment facing the street. There are a total of four upper floor apartments that face the street. The privacy for the ground floor apartment is achieved through fencing and landscaping. The upper floor apartments utilise balconies to increase the setbacks to indoor living areas and bedrooms.</p>	

	street and provides for passive surveillance, while maintaining suitable visual privacy for private open space to the street.	
O2.3.4 – The setback of the development enables passive surveillance and outlook to the street.	<p>The proposed street setback allows for passive surveillance of the street, pedestrian entries, and the driveway.</p> <p>The balcony elements improve the interface of the apartments with the street and provide opportunity for improved “ownership” of the street space for residents to engage, interact, and provide passive surveillance to the street. Behind these balconies are living spaces which seamlessly connect with the private outdoor space and street beyond.</p> <p>The development is designed to optimise passive surveillance and outlook to the street to create a safer environment for the local community.</p>	<p><u>Objective achieved</u></p> <p>Each apartment that faces the street includes balconies and indoor living areas with passive surveillance to the street. There are windows and balconies that directly overlook the pedestrian and vehicle entries into the development.</p>

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
	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

Acceptable Outcome Achieved

R60 provides a minimum 2m setback. This is achieved to the bin store. 3m is achieved to the upper floors. 3.6m is achieved to the ground floor apartment.

LOCAL PLANNING FRAMEWORK

REQUIREMENT

<p><i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i></p>	<p>Draft Local Planning Policy – Hollywood Central Transition Zone is currently being advertised for public comment. The policy is not currently a 'due regard document'. Assessment of the development against the draft policy has been conducted to test the policy provisions. Application of the policy to the development is premature given the document is currently being advertised for comment.</p> <p>The draft Local Planning Policy – Hollywood Central Transition Zone allows for an average 6m acceptable outcome primary street setback where the width of the building is more than 16m. The development has a building width of 18.8m and average primary street setback of 3.1m.</p> <p>The proposal is not consistent with the acceptable outcomes of the draft policy.</p>
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ELEMENT 2.4 SIDE AND REAR SETBACKS		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<i>Development is to achieve the following Element Objectives</i>	<i>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.</i>	
O2.4.1 – Building boundary setbacks provide for adequate separation between neighbouring properties.	<p>The acceptable outcome recommendations for R60 density coded land is as follows:</p> <ul style="list-style-type: none"> • Side Setback — 3.0m • Rear Setback — 3.0m • Avg. Setback — 3.5m (for buildings over 16m long) • Boundary wall height — 1 storey* • Meets Element Objs. of Design Element 3.5 • Meets Element Objs. of Design Elements 2.7, 3.5, 3.3, & 4.1. <p>Consideration should be given to the performance-based nature of SPP 7.3 Vol. 2 and the element objectives, with respect to the scope, purpose, and application of acceptable outcomes. The term “recommendation” is used to emphasise that element objectives are not a quantitative (pass / fail) based assessment, but rather a qualitative based assessment.</p> <p>The proposed design meets acceptable outcome recommendations related to side / rear setback and is fully consistent with average setback and boundary wall height. The design also achieves (and exceeds) all element objectives listed, including the element objectives for visual privacy (design element 3.5).</p>	<p><u>Objective achieved</u></p> <p>Acceptable outcomes A2.4.1 and A2.4.2 achieved (see below).</p> <p>There is adequate separation between neighbouring properties due to compliance with the acceptable outcomes for side/rear setbacks and building separation.</p>
O2.4.2 – Building boundary setbacks are consistent with the existing streetscape pattern or the desired streetscape character.	<p>The proposed built form is consistent with the desired future character established by the zoning and density coding of LPS No. 3.</p> <p>The proposed design is consistent with the desired and permitted streetscape character encouraged by the City's local planning framework. The proposal is considered to respect and respond to the future streetscape character intent set-out by this framework. The proposed setbacks are well in excess of the side and rear setbacks acceptable outcomes.</p>	<p><u>Objective achieved</u></p> <p>Side and rear setbacks for single houses are varied within the street block. More modern homes provide side and rear setbacks less than 3.0m in some cases. The development has achieved an average rear setback of 8.0m, which is consistent with the provision of a 'back yard' as seen on surrounding properties.</p>
O2.4.3 – The setback of development from side and rear boundaries enables retention of existing	The proposed setbacks allow for the planting of trees throughout the site and which reinforce the green	<u>Objective achieved</u>

<p>trees and provision of deep soil areas that reinforce the landscape character of the area, support tree canopy and assist with stormwater management.</p>	<p>aesthetic that is proposed. The development proposes deep soil areas which are greater than the acceptable outcome recommendations of design element 3.3, which relates to tree canopy and deep soil area. In-fact the proposed deep soil area equates to 18% of the site, where the acceptable outcome is 7% — this is 11% more!</p> <p>The proposal allows for the retention of one large tree on the site, as well as for the retention of a large mature street tree on the road verge.</p> <p>Stormwater will also be directed into garden beds where possible, before infiltration into soakwells, in accordance with principles of Water Sensitive Urban Design. Items related to stormwater are expected to be conditioned as standard items of development application approval.</p> <p>The proposed landscaping solution represents a dramatic increase in mature tree canopy compared to the pre-development condition.</p>	<p>A large eucalyptus in the north western corner of the property is to be retained. A total of 17.9% of the site is to incorporate deep soil area.</p>
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<p>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.</p>	<p>The site is surrounded by land zoned R160 (a greater density) and R60. Stirling Highway is a short distance away to the south, and includes R-AC1 land fronting it. Although most of the properties immediately surrounding the site have yet to be developed, it is expected that they will be in the near future and to a form and scale which is similar to the proposed development.</p> <p>Notwithstanding, the development does well to integrate itself amongst the single residential properties in the interim by providing substantial side and rear setbacks, especially to the upper floors. The Smyth Road apartments provide side and rear setbacks which are consistent with development for a R60 site and also respectful of the existing lower density single houses which are currently present in the immediate local area.</p>	<p><u>Objective achieved</u></p> <p>The property to the south is coded R160, although is currently developed for a single house. The height, bulk and setback of this development will allow for appropriate amenity to any future higher density development of the site to the south.</p>
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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 <i>refer A2</i>	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
Boundary wall height (storeys) ^{1,2} <i>refer 2.4</i>		1 ³		1 ³	2 ³		2 ³		2	3	4	
Minimum side setbacks ⁴ <i>refer 2.4</i>		2m	3m		3m		3m		Nil			
Minimum rear setback <i>refer 2.4</i>		3m			3m		6m		6m	Nil	Nil	
Average side setback where building length exceeds 15m <i>refer 2.4</i>		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 NOC.

Acceptable Outcome achieved

3m for side and rear setbacks is required to meet acceptable outcomes. This development meets this requirement as follows:

- North side – 3.2m
- South side – 3.5m
- West rear – 5.2m

A boundary wall of 3.3m length and 2.7m height is proposed for the southern boundary (bin store). This equates to 8% of the lot boundary in lieu of 66.6% acceptable outcome.

The development is generally consistent with the visual privacy separation acceptable outcomes, with the exception of the windows to the living areas of Apartments 6 and 11. This matter will be addressed in Element 3.5.

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*.

Acceptable Outcome achieved

Elements 2.7, 3.3, 3.5 and 4.1 have been achieved by this development.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
<p><i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i></p>	<p>Draft Local Planning Policy – Hollywood Central Transition Zone is currently being advertised for public comment. The policy is not currently a 'due regard document'. Assessment of the development against the draft policy has been conducted to test the policy provisions. Application of the policy to the development is premature given the document is currently being advertised for comment.</p> <p>The draft Local Planning Policy – Hollywood Central Transition Zone allows for 3.5m side setbacks where the building length exceeds 16m. A 6m rear setback is provided. This development provides 3.2m and 3.5m side setbacks. The minimum rear setback is 5.2m, with an average setback of 8.0m.</p> <p>The proposal is not consistent with the acceptable outcomes of the draft policy.</p>

ELEMENT 2.5		PLOT RATIO	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
<p>O2.5.1 – The overall bulk and scale of development is appropriate for the existing or planned character of the area.</p>		<p>The acceptable outcome recommendation is for a plot ratio of up to 0.8:1 or a plot ratio area of 809.36sqm. The proposed plot ratio area is 809.26sqm or ~0.8:1, easily meeting the acceptable outcome recommendation.</p> <p>The built form is largely contained within the “envelope” established by setback, separation, and height design criteria, and provides good and highly functional dwelling sizes without impacting on other design elements and the intent of DesignWA and SPP 7.3 Vol. 2.</p> <p>It should be noted that plot ratio is not directly correlated to the number of apartments provided in a development. Two sites with the same plot ratio could be delivered — with one having a less efficient, bulkier built form envelope, lacking important landscaping and deep soil features, with dull boxy blank façades, and with significant issues with access to daylight and natural ventilation. This is the importance of not relying on the acceptable outcomes in assessing the merit of a development.</p> <p>For the reasons outlined above, the overall bulk and scale of the apartments are considered entirely appropriate, having regard for the existing and planned character of the area.</p>	<p><u>Objective achieved</u></p> <p>Acceptable Outcome A2.5.1 achieved (see below).</p> <p>The overall bulk and scale of the development responds to the relatively wide lot, where a large building is provided with setbacks that meet or exceed acceptable outcomes. The setbacks and ‘squat’ building height is consistent with the existing streetscape, particularly to the south of the site.</p>
<p>ACCEPTABLE OUTCOMES <i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i></p>			
<p>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. <i>(Excerpt from table 2.1)</i></p>			

Streetscape contexts and character <i>refer A2</i>	Low-rise		Medium-rise		Higher density residential		Neighbourhood centre	Mid-rise urban centres	High density urban centres		Planned areas
	R40	R50	R60	R80	R100	R160	R-AC4	R-AC3	R-AC2	R-AC1	R-AC0
Plot ratio ⁷ <i>refer 2.5</i>	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

Acceptable Outcome achieved

Plot ratio area for the development has been calculated at 812m². The acceptable outcome of 0.8 for R60 is 810m². The additional 2m² is considered within the margin of error for calculating areas using PDF versions of the plans in lieu of more accurate CAD software.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	NIL

ELEMENT 2.6		BUILDING DEPTH	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
O2.6.1 – Building depth supports apartment layouts that optimise daylight and solar access and natural ventilation.	<p>The proposed apartments are well planned and propose a building depth which provides sufficient access to daylight and natural ventilation. Each apartment includes an outdoor living area and several major openings which allows for optimal daylight, solar access and natural ventilation to penetrate the building. No single-aspect apartments are proposed.</p>	<p><u>Objective achieved</u></p> <p>The east-west orientation of the building requires some apartments to be located on the south side. However, this has been offset by providing dual and triple aspects to all but one apartment. The only single aspect apartment is located on the ground floor and is north facing.</p>	
O2.6.2 – Articulation of building form to allow adequate access to daylight and natural ventilation where greater building depths are proposed.	<p>The built form has been broken up through the use of stepping and articulation to improve solar access and natural ventilation.</p> <p>The generous articulation of the façades and built form throughout will further improve the visual aesthetic of the development, and improve and protect the ability for residents and neighbours access to daylight and natural ventilation.</p> <p>The proposed balconies on the upper floors also help to articulate the building and its appearance. This has the effect of reducing the impact of building bulk and scale to neighbouring properties and the street, while also improving natural daylight and ventilation across the site. Design features and variation in materials, textures, and colours across the façade will further improve the interface of the development with neighbouring properties and the Smyth Road streetscape.</p>	<p><u>Objective achieved</u></p> <p>The south, west and east elevations of the building have been articulated to maximise access to daylight and natural ventilation to individual apartments. Articulation has been used to create additional aspects for apartments that would otherwise be single aspect only.</p>	
O2.6.3 – Room depths and / or ceiling heights optimise daylight and solar access and natural ventilation.	<p>The well-proportioned room depths and heights in the proposed development achieve and allow for good access to daylight and natural ventilation throughout and across each apartment. This has been demonstrated in the plans submitted with this application.</p>	<p><u>Objective achieved</u></p> <p>Room depths are consistent with the minimum dimensions of Element 4.3. Ceiling heights of 2.7m are proposed for each apartment.</p>	
ACCEPTABLE OUTCOMES <i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i>			
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.			

Acceptable Outcome not applicable

There is one single aspect apartment in the complex, located on the ground floor where no central corridor is provided. Notwithstanding this, maximum building depth is 18.8m.

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the lcal planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

NIL.

ELEMENT 2.7		BUILDING SEPARATION	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
O2.7.1 – New development supports the desired future streetscape character with spaces between buildings.	<p>The proposed building height is less than 5 storeys, as a result there are no explicit acceptable outcome recommendations. The desired future character would be for development consistent with a R60 density coded area. The adjoining sites are yet to be developed. The proposed setbacks, and visual privacy cone-of-vision setbacks are consistent with the planning framework. Both within the site and to neighbouring sites, a good degree of separation is maintained.</p> <p>There are no areas of the Smyth Road apartments which appear constrained, and the design represent a well-thought-out and resolved design which naturally flows between one apartment and the next, and across the façade.</p>	<p><u>Objective achieved</u></p> <p>The building height and setbacks will allow for appropriate separation should adjoining properties be developed in the future. The property to the south is coded R160 and is able to be developed up to 5 storeys in height. Should this occur, it will be located on the southern boundary where the impact will be less than if the higher development was on the north.</p>	
O2.7.2 – Building separation is in proportion to building height.	<p>A stepped and articulated built form has been utilised which has been setback from lot boundaries in response to visual privacy considerations of design element 3.5, and setback considerations of design elements 2.3 and 2.4. The proposed separation is considered to be in proportion to the proposed modest two-storey built form.</p>	<p><u>Objective achieved</u></p> <p>Acceptable Outcome A2.6.1 achieved (see below).</p> <p>The building is three storeys high and will achieve acceptable outcome setbacks. The setback to the southern boundary is greater than the acceptable outcome in order to reduce the impact on the property to the south.</p>	
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.	<p>The separation of the built form into two separate building blocks provides opportunities for increased landscaping areas, solar access, and natural ventilation.</p> <p>Residential amenity is improved by the multiple-aspect form of the individual apartments — which in combination with the window and façade treatment, and location of living and bedroom areas to the exterior of the built form — have allowed for and improved sunlight and daylight access throughout. For further detail, refer to each respective design element.</p>	<p><u>Objective achieved</u></p> <p>Acceptable Outcome A2.6.1 achieved (see below).</p> <p>Visual privacy meets the R60 acceptable outcomes of Element 3.5 with the exception of the living rooms to Apartments 6 and 11. These windows will be addressed to ensure compliance with Element 3.5.</p> <p>Separation to the property boundaries is sufficient to allow daylight access and natural ventilation. Windows</p>	

	The proposed building separation allows for the provision of deep soil landscaping around the site that assists with acoustic privacy and visual amenity.	and balconies have been placed to allow outlook without impacting on visual privacy.
O2.7.4 – Suitable areas are provided for communal and private open space, deep soil areas and landscaping between buildings	The proposed separation supports landscaped areas, private open space, and deep soil areas throughout and surrounding the apartments, whilst maintaining the opportunity for solar access and natural ventilation within the site.	<p><u>Objective achieved</u></p> <p>The relatively large rear setback allows for provision of a 85m² deep soil area in the north western corner of the lot. This area will allow for retention of the large eucalypt tree and provision of communal open space.</p> <p>The northern setback area will provide for private open space for the two ground floor apartments.</p>

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.

Acceptable Outcome achieved

Element 2.4 and Element 3.5 have been achieved by this development.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:	NIL

ELEMENT 3.2		ORIENTATION	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
<p>O3.2.1 – Building layouts respond to the streetscape, topography and site attributes while optimising solar and daylight access within the development.</p>	<p>The layout of the building is considered to respond to the streetscape and topography attributes and has located the ground floor FFL at a similar height as the adjacent NGL. Unit 2 incorporates direct access from the street via a pedestrian pathway.</p> <p>All units and the building overall have access to direct sunlight, and windows positioned on multiple aspects. The stepping and articulation of the built form further improves the solar orientation outcomes for the site.</p> <p>The design provides ample solar access across the site. This is further demonstrated in the plans which have been prepared for the proposed development.</p> <p>The extent of “overshadow” to neighbouring sites meets acceptable outcome recommendations. The design has thoughtfully considered its solar orientation and ensured that all units have generous availability of solar access without compromising the ability of neighbouring sites to do the same.</p> <p>Further discussion is provided in the under the “solar and daylight access” element objective.</p>	<p><u>Objective achieved</u></p> <p>The building maximises daylight access by reducing the number of apartments that rely solely on south-facing openings. Five apartments are oriented to the street to activate the frontage.</p> <p>Acceptable Outcome A3.2.1 achieved (see below).</p>	
<p>O3.2.2 – Building form and orientation minimises overshadowing of the habitable rooms, open space and solar collectors of neighbouring properties during mid-winter.</p>	<p>Overshadowing to neighbouring properties meets the acceptable outcome recommendations of SPP 7.3 Vol. 2, and is expected to be negligible.</p> <p>There are also no solar collectors present on neighbouring properties affected by proposed development.</p>	<p><u>Objective achieved</u></p> <p>The reduced height and increased setback of the building when compared to acceptable outcomes has minimised the proportion of the neighbouring site that will be overshadowed at 12 pm on 21 June 2020. Acceptable Outcome A3.2.3 has been achieved.</p> <p>There are at least two windows to habitable rooms located in the northern elevation of the single house at 99 Smyth Road. There is also a paved area at the rear of the house that will be affected by overshadowing during winter. There are no solar collectors on the neighbouring property at this time. Whilst there will be overshadowing</p>	

on 21 June, the extent of this has been minimised by the design of the building. The location of the adjoining house approximately 2m from the common boundary is likely to create a challenge for overshadowing for any development of 2 or 3 storeys on the subject site.

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.

Acceptable Outcome achieved

A total of five apartments directly face the street. Direct access is provided between the street and the lobby entrance.

A3.2.2 – Buildings that do not have frontages to streets or public realm are oriented to maximise northern solar access to living areas.

Acceptable Outcome not applicable

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 area¹
- adjoining properties coded R30 – R40 - 35% of the site area¹
- adjoining properties coded R50 – R60 – 50% of the site area¹
- 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)

Acceptable Outcome achieved

The adjoining property to the south is coded R160. Acceptable Outcome is nil requirements. The overshadowing at 12pm on 21 June is 313m² of the 1012m² lot (31%). This is less than that acceptable for a R30-40 site.

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.

Acceptable Outcome not applicable

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

Nil.

ELEMENT 3.3 TREE CANOPY AND DEEP SOIL AREAS		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<p><i>Development is to achieve the following Element Objectives</i></p>	<p><i>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.</i></p>	
<p>O3.3.1 – Site planning maximises retention of existing healthy and appropriate trees and protects the viability of adjoining trees.</p>	<p>An existing street trees (Queensland Box tree) will be retained, with sufficient clearance to ensure minimal disturbance to root systems. Another existing street tree — more recently planted in 2013 — is proposed to be removed. The proponent welcomes the planting of a replacement to help contribute to and complement the green aesthetic of the Smyth Road apartments.</p> <p>An additional large tree will be retained on site, with eight more to be planted (totalling nine trees), as well as a generous amount of further landscaping throughout.</p> <p>The post-development tree canopy and landscaping will significantly improve on the pre-development condition.</p>	<p><u>Objective achieved</u></p> <p>The existing large eucalypt in the north western corner of the site is to be retained within a large deep soil area. The setbacks proposed will allow for existing small and medium trees located on adjoining properties to be unaffected.</p>
<p>O3.3.2 – Adequate measures are taken to improve tree canopy (long term) or to offset reduction of tree canopy from pre-development condition.</p>	<p>The proposed development provides a significant improvement in the pre-development tree canopy. The current site contains a mixture smaller bushes and trees, with some medium and larger trees—of which three are to be retained. The retention of the remainder would be unviable and not feasible in the context of multiple dwelling development and the wider proposal.</p> <p>The proposed landscaping solution at maturity will significantly increase the amount of landscaping through and across the site when compared with the pre-development condition.</p>	<p><u>Objective achieved</u></p> <p>Approximately 4 small trees are to be removed from the site to facilitate the development. However, the primary canopy on the site will be retained (large eucalypt) and enhanced through planting of Crepe Myrtle, Chinese Tallow and Exmouth Magnolia trees. Canopy cover is proposed to occupy 25% of the site at maturity.</p>
<p>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.</p>	<p>The development proposes 183.4sqm of on-ground Deep Soil Areas across the site, as well as further space for on-structure DSA on balconies (credited at half the ratio of on-ground DSA). The 12.5% Deep Soil Area proposed is well in excess of the 7% (63.7sqm) acceptable outcome (with retained trees).</p> <p>Sufficient rootable soil zone is provided around each tree to enable growth to full canopy at maturity, and stormwater will be directed / and stored where possible for use in garden beds.</p>	<p><u>Objective achieved</u></p> <p>The acceptable outcome for deep soil area (A3.3.4) has been exceeded by the development. The new medium-sized trees will be located in relatively narrow deep soil areas. However, these are located adjacent to deep rootable areas, including the car parking area, abutting road verge and neighbouring property.</p>

The landscape plan prepared by Kelsie Davies Landscape Architecture proposes a total of more than nine trees across the site. Proposed tree varieties will include Chinese Tallow and Natchex Crêpe Myrtle trees.

The plant selection has been development with consideration of the City of Nedlands' approved tree species list, their functional benefit to residents, ongoing maintenance, and their water use.

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.

Acceptable Outcome achieved

A large eucalypt located in the north western corner of the lot is to be retained. This tree is approximately 15-20m high with a trunk diameter exceeding 160mm and canopy of approximately 20m.

A3.3.2 – The removal of existing trees that meet any of the criteria at A3.3.1 is supported by an arboriculture report.

Acceptable Outcome not applicable

A3.3.3 – The development is sited and planned to have no detrimental impacts on, and to minimise canopy loss of adjoining trees.

Acceptable Outcome achieved

The surrounding properties incorporate small and medium trees into the landscaping in the rear and along the side boundaries. The setbacks of the proposed development will ensure against impact on trees located on neighbouring properties.

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 700m ²		1 medium tree and small trees to suit area
700 – 1,000m ²	10% OR	2 medium trees OR 1 large tree and small trees to suit area
> 1,000m ²	7% if existing tree(s) retained on site (% site area)	1 large tree and 1 medium tree for each additional 400m ² in excess of 1000m ² OR 1 large tree for each additional 800m ² in excess of 1000m ² and small trees to suit area

¹ Minimum requirement for trees includes retained or new trees. Refer Table 3.3b for tree sizes.

Acceptable Outcome achieved

As a tree is to be retained, 7% of the site area (71m²) is to be deep soil area, with this area co-located with existing trees. A total of 183m² of deep soil area is proposed. A total of 3 medium and 4 small trees are proposed in addition to the existing large tree. This exceeds the acceptable outcome requirement of 2 medium trees for a 1,000m² site (development site is 1,012m²).

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	9m ²	2m	1m (DSA) + 1m (RSZ)	100L
Medium	6-9m	8-12m	36m ²	3m	3m (DSA) + 1m (RSZ)	200L
Large	>9m	>12m	64m ²	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.

Acceptable Outcome not achieved

A total of 4 x 100lt and 3 x 200lt trees are proposed in addition to retaining the existing large eucalypt. Small trees are located in DSA with a minimum width of 2.4m and minimum area of 17m². (complies).

The medium tree located in front of the bin storage area is located within a DSA of 9sqm and width of 1.8m. However, it abuts the road verge, which extends the DSA available by 40m². (Partially compliant)

The medium trees located on the rear boundary are to be located in DSA of 9m² with a width of 1.5m. As this area butts a car parking area, there is additional rootable soil zone available, which reduces the recommended DSA width to 2m. The trees will be located on a boundary where DSA/rootable zone area is present on the neighbouring property. (Partially compliant).

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.

Acceptable Outcome not applicable

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.

Acceptable Outcome not applicable

LOCAL PLANNING FRAMEWORK	REQUIREMENT
<i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i>	Nil.

ELEMENT 3.4 COMMUNAL OPEN SPACE		
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>	APPLICANT COMMENT	ASSESSOR COMMENT
	<i>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.</i>	
O3.4.1 – Provision of quality communal open space that enhances resident amenity and provides opportunities for landscaping, tree retention and deep soil areas.	<p>A landscaped communal open space including a large multi-functional common room and rooved communal space is proposed. The communal space (which will allow for all weather use) will provide a great place for residents to gather.</p> <p>This communal space will also allow for incidental interaction between residents, and help to improve the “friendliness” and amenity of the development.</p> <p>The communal space will include a barbeque and seating, as well as an external landscaped area situated beneath the shade of a large retained tree. The high-quality, high-amenity communal space, which will dramatically improve the amenity of the apartments for all future residents is considered to be a welcome addition to the Smyth Road apartments, and a further demonstration of the design going above and beyond to improve amenity for the sake of good design.</p>	<p><u>Objective achieved</u></p> <p>Acceptable Outcomes A3.4.1 and A3.4.4 achieved (see below).</p> <p>The proposed communal open space incorporates both indoor and outdoor areas with a high level of amenity. The space is located at the rear of the development and incorporates a relatively large deep soil area and retained large tree. An indoor communal room with connected alfresco and BBQ is also provided to allow for a range of recreational uses in all weather.</p>
O3.4.2 – Communal open space is safe, universally accessible and provides a high level of amenity for residents.	<p>The proposed communal open space is located at-grade on the ground floor on step-free ground. It is safe and universally acceptable, while also providing a high level of amenity for residents due to its position in a landscaped setting.</p>	<p><u>Objective achieved</u></p> <p>Acceptable Outcomes A3.4.2, A3.4.3, A3.4.5 and A3.4.6 achieved (see below).</p> <p>The communal open space is located on the ground floor and is accessible from the entry lobby. It is located behind the security gate / door for the complex and is accessible from all floors via the lift.</p>
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.	<p>The proposed communal open space is positioned so that it does not impact on the habitable rooms and private open spaces of apartments within the development and on neighbouring properties.</p> <p>The communal open space is located within proximity to communal facilities such as the lifts, storerooms and bin store. As visible in the image below, this not only</p>	<p><u>Objective achieved</u></p> <p>Acceptable Outcome A3.4.7 achieved (see below).</p> <p>The communal open space is located at the rear of the complex and is separated from the adjoining ground floor apartment. Fencing is used to demarcate the communal</p>

positions it away from dwellings and habitable rooms but will increase incidental social interaction between residents.

open space from private and parking areas. The space is located adjacent to the back yards of the adjoining properties to the north and west and will be used in a similar manner to these spaces. The space is located away from noise-sensitive areas of adjoining properties.

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: 6m ² per dwelling up to maximum 300m ²	At least 2m ² per dwelling up to 100m ²	4m

Acceptable Outcome achieved

12 dwellings are proposed. 72m² of communal open space is required. This development proposes 127m² comprising a 19m² indoor communal area, 22m² alfresco and 86m² garden/landscaping.

The minimum accessible /hard landscape area requirement has been exceeded (41m² in lieu of 24m² required).

The minimum open space dimension of 4m has not been achieved fully. A minimum dimension of 3.2m is proposed for the northern elevation between the alfresco / communal area and northern boundary. However, this is considered to be appropriate as the open space area is directly connected to the alfresco, increasing the usable outdoor communal open space.

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.

Acceptable Outcome achieved

The communal open space is accessible from the ground floor entry lobby.

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.

Acceptable Outcome achieved

The communal open space area is located on the northern elevation of the site and is not overshadowed. Daylight access to the space will be available 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.

Acceptable Outcome achieved

The outdoor portion of the communal open space is also deep soil area.

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.

Acceptable Outcome achieved

No plant and equipment are shown within the communal open space area.

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.

Acceptable Outcome achieved

Whilst no lighting plan is provided, indoor communal areas will be lit. The communal area is located at the rear of the complex behind security doors. The area is open with limited areas for concealment.

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.

Acceptable Outcome achieved

The communal open space is located at ground level which will prevent overlooking. The space is located separate from the adjoining apartments to reduce noise, odour, light spill and overlooking into apartments. The location abuts the back yards of surrounding properties, reducing amenity impacts when compared to being located adjacent to dwellings or outdoor living areas.

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

Nil.

ELEMENT 3.5		VISUAL PRIVACY	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
<p>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.</p>		<p>The acceptable outcome recommendations for R60 density coded land is as follows:</p> <ul style="list-style-type: none"> • 3.0m to major opening of bedroom, study, or open access walkway [sic]; • 4.5m to other major openings; and • 6.0m to unenclosed [sic] private open spaces. <p>As before consideration should be given to the performance-based nature of SPP 7.3 Vol. 2 and the element objectives, with respect to the scope, purpose, and application of acceptable outcomes.</p> <p>Regardless, the design has achieved (wholly) <u>all</u> acceptable outcomes related to visual privacy, both within the site and to neighbouring site.</p> <p>Screening is proposed on selected balconies to improve visual privacy — a particular consideration within the City of Nedlands.</p> <p>Visual privacy has been achieved without adversely compromising daylight or natural ventilation access, and has not relied excessively or unduly on windows with high sill levels, or fixed and obscure.</p> <p>By making these windows major openings — and not high-sill level or obscure — provides a significant functional benefit in terms of amenity and usability outcomes (associated with the reasons detailed above) for the future resident of the apartments, as well as improving the interface and façade appearance of the development to neighbouring properties.</p>	<p><u>Objective achieved with conditions.</u></p> <p>It is recommended that a condition be placed on any approval that requires the south elevation windows to the living area for Apartments 6 and 11 are screened or modified to provide a bottom sill height of at least 1.6m above finished floor level.</p> <p>It is recommended that a condition be placed on any approval that requires planting and maintenance at all times of the landscaping proposed to assist in ameliorating visual privacy concerns.</p> <p>It is recommended that a condition be placed on any approval that requires the provision of horizontal screening to the bottom of north-facing windows to Apartments 3, 4, 8 and 9 and south-facing windows to Apartments 6, 7, 11 and 12 to prevent downwards views into the adjoining properties.</p> <p>It is recommended that a condition be placed on any approval that requires the balustrading to the balconies of Apartments 3, 7, 8 and 12 to be obscure glaze or solid to prevent downwards views into adjoining properties.</p> <p>The development is generally consistent with the acceptable outcomes for visual privacy. Departures relate to the living room windows in the south elevation for Apartments 6 and 11 and the proportion of non-screening of the balconies to Apartments 3 and 8. The provision of 'highlight' windows to Apartments 6 and 11 would not affect daylight access given the windows are located on the southern elevation. There is also an east-facing window into these rooms to provide external outlook.</p>

		<p>Visual privacy was raised in a number of submissions on the development. The proponent has attempted to address some of the suggestions made in submissions. Changes made include the provision of vertical fins on windows in Apartments 6, 7, 11 and 12 to reduce the visual sight lines into properties to the south west. Changes have also been made to tree selection on the landscape plan to provide additional screening along the western (rear) boundary of the property.</p> <p>With the exception of the south windows to the living rooms for Apartments 6 and 11, all windows meet the acceptable outcome setback distances. However, it is acknowledged that neighbouring properties have raised concerns with visual privacy, particularly since all adjoining properties are currently low density single houses (irrespective of the density coding of R60 or R160).</p> <p>Solar and daylight access, ventilation and external outlook has been provided for all apartments. Whilst compliant with acceptable outcomes, the windows on the south and north side elevations will have the potential to overlook the adjoining properties. One option would be to install horizontal fins than prevent downwards views into private areas.</p> <p>It is also recommended that the balustrading of unscreened balcony elevations be obscure glaze or solid for Apartments 3, 7, 8 and 12. These balconies are orientated into neighbouring properties. Obscure glaze or solid balustrading will reduce passive overlooking when seated in the living rooms of these apartments. The balustrade to the balconies for Apartments 6 and 11 can remain visually permeable given there is no living room that would look over the balcony and into surrounding properties.</p>
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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.

Table 3.5 Required privacy setback to adjoining sites

Cone of vision from unscreened:	First 4 storeys		5th storey and above
	Adjoining sites coded R50 or lower	Adjoining sites coded higher than R50	
Major opening to bedroom, study and open access walkways	4.5m	3m	Refer Table 2.7
Major openings to habitable rooms other than bedrooms and studies	6m	4.5m	
Unenclosed private outdoor spaces	7.5m	6m	

Acceptable Outcome not achieved

Adjoining properties are coded R60 to the north and west and R160 to the south.

All bedroom windows are setback a minimum of 3.2m from boundaries (3m required - complies).

Non-bedrooms on upper floors are setback greater than 4.5m (complies) with the exception of the living area for Apartments 6 and 11. The windows for these rooms are setback 3.5m in lieu of 4.5m (non-compliant). These windows are not screened in a manner that would meet visual privacy objectives.

Unscreened elevations of balconies on upper floors have been setback a minimum of 6m from side and rear boundaries (complies). Where balcony elevations are less than 6m from side boundaries, these elevations have been provided with screening to 1.65m above balcony floor level (Apartments 3, 4, 8 and 9). This allows for compliance with the acceptable outcomes.

Windows and openings on the ground floor are considered to be compliant with the acceptable outcome given the finished floor level is less than 0.5m above natural ground level and standard boundary fencing is installed.

A3.5.2 – Balconies are unscreened for at least 25 per cent of their perimeter (including edges abutting a building).

Acceptable Outcome not achieved

Balconies to Apartments 3 and 8 will be unscreened for 18% of their perimeter in order to meet visual privacy requirements. (Non-compliant)

The balconies to Apartments 6 and 11 are unscreened for 32% of their perimeter. (Complies)

The Bed 1 balconies to Apartments 4 and 9 are unscreened for 31% of their perimeter. (Complies)

The Living/Dining balconies to Apartments 4 and 9 are unscreened for 32% of their perimeter. (Complies)

The balconies to Apartments 5 and 10 are unscreened for 50% of their perimeter. (Complies)

The balconies for Apartments 7 and 12 are unscreened for 54% of their perimeter. (Complies)

A3.5.3 - Living rooms have an external outlook from at least one major opening that is not obscured by a screen.

Acceptable Outcome achieved

All living rooms meet this requirement.

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.

Acceptable Outcome achieved

Each habitable room is provided with at least one unscreened low-sill window. Vertical fins have been provided to windows on the south and west elevations to partially screen neighbouring properties without affecting outlook.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
<i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i>	Nil.

ELEMENT 3.6		PUBLIC DOMAIN INTERFACE	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
<p>O3.6.1 – The transition between the private and public domain enhances the privacy and safety of residents.</p>		<p>The development proposes a clear transition between the private and public realm.</p> <p>The transition between the public and private realm is clearly delineated. Defensible space responding to CPTED principles is provided, and the design limits opportunities for concealment. Passive surveillance to the driveway, street, and other public areas is provided from the dwellings.</p> <p>Street-facing balconies, bedrooms, and other living areas provide an interface with the street appropriate for a residential only development (not containing mixed-use).</p>	<p><u>Objective achieved</u></p> <p>The public-private interface for the development incorporates open fencing and passive surveillance from all five apartments that front the street. It is noted that the ground floor apartment does not have direct access into the street setback area. However, this is offset by two windows from bedrooms looking into the setback area. The area is incorporated into the private open space for the ground floor apartment, albeit with indirect access.</p> <p>A visually permeable security gate is proposed for the driveway to provide demarcation of the interface. The entry into the building is directly visible from the street.</p>
<p>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.</p>		<p>The design retains and enhances the amenity of the public domain. The design is considered to achieve this through the provision of a complimentary landscaping and façade design which addresses the street.</p> <p>This includes the planting of three new trees to the front of the development within the site (and the retention of an existing street tree as well as the landscaping of the road verge). These proposed tree plantings will complement the green aesthetic and landscaping treatment provided throughout.</p> <p>A visually permeable fence, as well as direct street access via a side-gate for Unit 2 located on the ground floor is also proposed. The low-height semi-permeable street fence also helps contribute to providing an active interface between the apartments and the street appropriate for a residential only development.</p> <p>No building services or utilities are located or visible from the street, and there is no substantial difference in height between the road verge and the parking and landscaping area within the site.</p>	<p><u>Objective achieved</u></p> <p>Three trees are proposed along the street boundary with will provide shade. The landscaping and fencing is open in nature to prevent concealment and to demarcate the public-private interface.</p>

The design retains and enhances the amenity of the public domain through the provision of a complimentary landscaping and façade design which addresses the street.

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.

Acceptable Outcome not achieved

Apartment 2 fronts the street. However, its access to the street setback area is indirect as the main outdoor living area is located in the side (north) setback area.

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).

Acceptable Outcome achieved

The ground level car parking area is located behind the street setback line and is screened by the building and the integrated bin storage room. The vehicle entry is integrated into the building design.

A3.6.3 – Upper level balconies and/or windows overlook the street and public domain areas.

Acceptable Outcome achieved

Apartments 4, 5, 9 and 10 include balconies and windows that overlook the street.

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.

Acceptable Outcome achieved

Glass balustrading is proposed to the street-facing balconies. Privacy screening is proposed for the side elevations of the balconies to Bed 1 in Apartments 4 and 9.

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.

Acceptable Outcome achieved

There is no significant level change between the street and the building or surrounding gardens.

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.

Acceptable Outcome achieved

The front fence proposed a solid portion of 0.8m above natural ground level. The blank wall facing the street (bin store) is setback 2m and will be ameliorated with landscaping between the front boundary and the wall (DG3.6.7).

A3.6.7 – Fencing, landscaping and other elements on the frontage are designed to eliminate opportunities for concealment.

Acceptable Outcome achieved

The front fencing is visually permeable. The bin store will be gated to prevent unauthorised access into the store or the complex beyond.

A3.6.8 – Bins are not located within the primary street setback or in locations visible from the primary street.

Acceptable Outcome achieved

Bins will be located within an integrated bin storage room that is located behind the 2m street setback line. The store will screen bins from view.

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 facade. Consult early with relevant authorities to resolve functional requirements in an integrated design solution.

Acceptable Outcome achieved

Meter boxes are located within the bin storage room and will not be viewable from the street.

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

NIL

ELEMENT 3.7		PEDESTRIAN ACCESS AND ENTRIES	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
<p>O3.7.1 – Entries and pathways are universally accessible, easy to identify and safe for residents and visitors.</p>	<p>The primary pedestrian entry is from Smyth Road, near the driveway.</p> <p>The pedestrian entry provides access to the dwellings over level step-free ground to the lift lobby as well as to the communal open space. Alternative pedestrian entry from the car parking area is also provided. The pedestrian entry is clearly legible and easy to identify for residents and visitors.</p> <p>The entry is framed by street fencing and the built form of the apartments and balconies above.</p> <p>All pedestrian entries are protected from the weather by awnings and require minimal upkeep and ongoing maintenance given their outdoor location and construction of durable hardy low-maintenance materials. The pedestrian entries are surrounded by deep soil areas and landscaping.</p> <p>The pedestrian circulation areas will be provided with a lighting treatment to ensure safe access day and night, without excessive light-spill through the use of sensor lights, and ankle height floor illumination lights.</p> <p>Passive surveillance is provided over the pedestrian entry from windows and openings on the street facing apartments above, and on the ground floor.</p> <p>The pedestrian entries are provided with opportunity for passive surveillance through the siting of windows and living areas oriented toward the street.</p> <p>It is noted that a footpath is not currently constructed along this side of Smyth Road, however there is one on the opposite side of the road.</p>	<p><u>Objective achieved</u></p> <p>The entry into the building is at grade and perpendicular to the street. This allows it to be easily accessed and identified. An entry porch will be lit for safe entry at night. There are no areas for concealment.</p>	
<p>O3.7.2 – Entries to the development connect to and address the public domain with an attractive street presence.</p>	<p>The design provides a clear and connected interface between the public domain and the street. The design utilises a variety of materials and colours, in combination with landscaping to provide an attractive street presence. These materials and colours include brick, feature stone,</p>	<p><u>Objective achieved</u></p>	

metallic framing and slats, as well as contrasting render.
The entry is clearly legible without dominating the streetscape, consistent with the character of the area.

The entry is directly accessible from the street in a straight line between street, entry and lifts/stairs. The entry porch is integrated into the façade design.

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.

Acceptable Outcome achieved

The pedestrian entry is located perpendicular to the street and will be readily identifiable as the entry point into the development. There is a straight line of travel from the street into the building and to the lift and stairs.

A3.7.2 – Pedestrian entries are protected from the weather.

Acceptable Outcome achieved

The entry porch is covered.

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.

Acceptable Outcome achieved

The pedestrian entry is located perpendicular to the street and will be readily identifiable as the entry point into the development. There is a straight line of travel from the street.

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.

Acceptable outcome not applicable

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.

Acceptable Outcome achieved

Services and utilities are located away from the entry in the bin storage room.

A3.7.6 – Bins are not located at the primary pedestrian entry.

Acceptable Outcome achieved

Bins are located away from the entry in the bin storage room.	
LOCAL PLANNING FRAMEWORK	REQUIREMENT
<i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i>	NIL.

ELEMENT 3.8		VEHICLE ACCESS	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
<p>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.</p>	<p>Only a one single width crossover is proposed. A separate pedestrian entry is provided. There are no blind corners in the proposed car parking solution. Traffic volumes are not expected to be significant, and the chance for vehicle conflict is expected to be minimal. The manoeuvring does not allow for high-speed traffic, which reduces the chance for vehicle conflict.</p> <p>The applicant looks forward to working with the City to ensure that matters related to pedestrian safety are resolved to a mutually agreeable solution.</p>	<p><u>Objective achieved</u></p> <p>The vehicle access point is located perpendicular to the street and provided with appropriate sight lines to Smyth Road, which is a relatively busy local distributor.</p>	
<p>O3.8.2 – Vehicle access points are designed and located to reduce visual impact on the streetscape.</p>	<p>As above only one single width crossover is proposed. Car parking is located at-grade in an undercroft, and as a result there are no car parking entry structures dominating the streetscape. All on-site car parking is located behind the street setback area, and is not readily visible from the street.</p> <p>Landscaping will further reduce and screen the crossover's and driveway's presence to the street.</p>	<p><u>Objective achieved</u></p> <p>The vehicle access point is limited to a single crossover and driveway located towards the centre of the property. The driveway will be integrated into the building and landscaping.</p>	
<p>ACCEPTABLE OUTCOMES <i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i></p>			
<p>A3.8.1 – Vehicle access is limited to one opening per 20m street frontage that is visible from the street</p> <p><u>Acceptable Outcome achieved</u> There is one vehicle access point into the property. The frontage of the property is 25.5m.</p>			
<p>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.</p> <p><u>Acceptable Outcome achieved</u> The vehicle access is visible from the street and is integrated into the building. The driveway leads under the building to the car parking area at the rear.</p>			
<p>A3.8.3 – Vehicle entries have adequate separation from street intersections.</p>			

Acceptable Outcome achieved

The crossover will be located approximately 110m from the nearest street intersection (Stirling Hwy).

A3.8.4 – Vehicle circulation areas avoid headlights shining into habitable rooms within the development and adjoining properties.

Acceptable Outcome achieved

The driveway is separated from the ground floor apartments by the lobby area and fencing. This will avoid headlights shining into apartments. The driveway is located approximately between two houses on the opposite side of Smyth Road, which will reduce the impact of headlights from exiting vehicles.

A3.8.5 – Driveway width is kept to a functional minimum, relative to the traffic volumes and entry/egress requirements.

Acceptable Outcome achieved

The driveway is proposed at 5.4m, which will allow for vehicles to pass, consistent with A3.8.6.

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.

Acceptable Outcome achieved

As there are 12 dwellings, two way access has been provided. All vehicles will be able to exit in forward gear.

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).

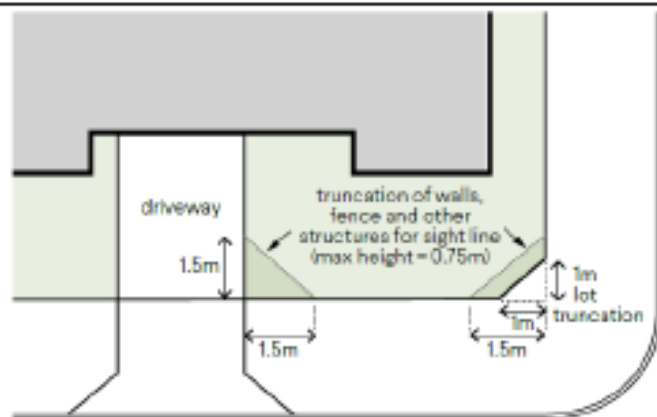


Figure 3.8a Truncation at street corner to provide sightlines (refer A3.8.7).

Acceptable Outcome achieved

The front fence and return is setback 2m from the edge of the driveway, which exceeds the 1.5m x 1.5m truncation. The bin storage wall is setback 2m from the street boundary so that the 1.5m x 1.5m truncation requirement is also met.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
<p>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</p>	<p>Draft Local Planning Policy – Hollywood Central Transition Zone is currently being advertised for public comment. The policy is not currently a 'due regard document'. Assessment of the development against the draft policy has been conducted to test the policy provisions. Application of the policy to the development is premature given the document is currently being advertised for comment.</p> <p>The draft Local Planning Policy – Hollywood Central Transition Zone allows for a maximum driveway width of 6.0m as an acceptable outcome. This proposal is consistent with this provision (5.4m proposed).</p>

ELEMENT 3.9 CAR AND BICYCLE PARKING		
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>	APPLICANT COMMENT	ASSESSOR COMMENT
	<i>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.</i>	
O3.9.1 – Parking and facilities are provided for cyclists and other modes of transport.	<p>The site is in a location A area within 250m of the nearby high frequency bus routes 998 and 999 (among others).</p> <p>It is considered that the facilities provided for bicycles and other modes of transport are suitable for the proposed development. The individual apartments each provide suitable end-of-trip facilities for cyclists and pedestrians. Dedicated or separate facilities are not appropriate given no mixed-use / commercial is proposed.</p> <p>The acceptable outcome recommendation for bicycle parking is:</p> <ul style="list-style-type: none"> • 0.5 resident bicycle parking spaces per dwelling (6.0 spaces); • 1 bicycle parking space per 10 dwellings for visitors (1.2 spaces). • 7 spaces in total. <p>The proposed bicycle parking consists of ~9 dedicated spaces provided by well-located bicycle rack parking (near to a pedestrian entry), with additional space within each resident's dwelling store to accommodate the parking of an additional bicycle.</p>	<p><u>Objective achieved</u></p> <p>The development proposes 15 resident car parking bays, 3 visitor parking bays and 9 bicycle spaces. This provisions exceeds the acceptable outcome requirements. No motorcycle parking is required in order to meet acceptable outcomes.</p> <p>The development is located 170m from a high frequency bus route stop in Stirling Hwy. This provides alternative travel options to private car travel for the development.</p>
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.	<p>The development is located in a Location A area (as detailed previously) and the following car parking bays are required to be provided:</p> <ul style="list-style-type: none"> • 0.75 bays per single bedroom dwellings (3.75 spaces) and 1 bay per multi-bedroom dwelling (7 spaces) (total 10.75); with • 1 bay per four dwellings up to 12 dwellings for visitor car parking (3 spaces) <p>The development proposes a total of 18 car bays, comprising of 15 on- site car parking spaces for</p>	<p><u>Objective achieved</u></p> <p>Car parking provision exceeds the acceptable outcome requirements for Location A for residential parking (15 provided, 11 required). Visitor parking provision meets the acceptable outcome of 3 spaces.</p> <p>The location is within 250m of a high frequency bus route (Stirling Highway). The location is also highly walkable with access to shops and services located on Stirling Highway. The site is located approximately 400m from future retail centres.</p>

	<p>residents, and 3 visitor bays, which exceeds the 14 bays acceptable outcome recommendation.</p>	
<p>Q3.9.3 – Car parking is designed to be safe and accessible.</p>	<p>The proposed car parking design is considered to be safe and accessible and will be designed to meet Australian Standards AS2890.1, as demonstrated in the Transport Impact Statement prepared by i3 Consultants WA for this proposal.</p> <p>i3 consultants WA, traffic and engineering consultants, prepared a Transport Impact Statement for the proposed development and found that the peak motor vehicle trip generation rate of the development would be 10 vehicles per hour (vph). A summary of the report is as follows:</p> <ul style="list-style-type: none"> • The peak vph trip generation rate is low, and wholly capable of being accommodated in the site and surrounding road network, without any burden. • The forecasted vpd is 50, based on N.S.W. RTA standards, which is a low number trip generation rate. • Single car width crossover is supported by KCTT given traffic volumes and site context, increasing amenity and safety. • No issues with vehicle manoeuvring or sight lines. • Great pedestrian and public transport amenity and infrastructure in the local area. <p>Car parking areas will be secured behind a gate with a secure access intercom system. Visitor parking will be accessible via an intercom (or similar) system.</p> <p>Given the low volumes of traffic a basic linear layout of the driveway a single width driveway and crossover has been proposed which reduces the presence and dominance of the car parking to the streetscape. There are not expected to be any issues with regard to vehicle conflict, given these traffic volumes and that clear sight lines are maintained from the street into the car parking area and vice-versa.</p> <p>Access to the apartments from the car parking area will be possible via the lift or stairs from the car parking area.</p>	<p><u>Objective achieved</u></p> <p>Car parking has been designed to AS2890.1 as required by acceptable outcomes.</p>

	A separate and safe means of pedestrian entry into the apartments has also been proposed.	
O3.9.4 – The design and location of car parking minimises negative visual and environmental impacts on amenity and the streetscape.	<p>The proposed development achieves this element objective and the related acceptable outcomes for design and location of car parking. All on-site car parking is located behind the street setback area, and is not readily visible from the street.</p> <p>The proposed development does not exceed 21.5 residential car parking bays as set out by acceptable outcome A3.9.3.</p>	<p><u>Objective achieved</u></p> <p>The car parking area is located behind the street setback and is screened from the view of the street.</p>

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	1bedroom 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 ²	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.

Acceptable Outcome achieved

Acceptable outcome bicycle parking requirement: 6 spaces plus 1 visitor space (7) required. 9 spaces provided (complies). The bicycle parking area is located in an accessible area within the car parking area and accessed by the driveway or through the lobby.

A3.9.2 – Parking is provided for cars and motorcycles in accordance with Table 3.9.

Acceptable Outcome achieved

Development site is Location A, as it is located 170m from the Perth-bound bus stop in Stirling Highway east of Smyth Road. This stop serves a number of routes, including the high frequency 998/999 Circle Route.

<p>Acceptable outcome resident parking requirement: 5 x 1 bed apartments and 7 x 2 bed apartments. 10.75 (11) car parking spaces required. 15 provided (complies).</p> <p>Acceptable outcome visitor parking requirement: 3 spaces required. 3 spaces provided (complies).</p> <p>Acceptable outcome motorcycle parking requirement: Nil. Nil provided (complies).</p>
<p>A3.9.3 – Maximum parking provision does not exceed double the minimum number of bays specified in Table 3.9</p> <p><u>Acceptable Outcome achieved</u> A total of 18 spaces are provided, whereas the amount that is double the requirement is 28.</p>
<p>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.</p> <p><u>Acceptable Outcome achieved</u> The design has been assessed as meeting the Australian standard.</p>
<p>A3.9.5 – Car parking areas are not located within the street setback and are not visually prominent from the street.</p> <p><u>Acceptable Outcome achieved</u> The car parking is screened from the street due to being located underneath and behind the building and bin store.</p>
<p>A3.9.6 – Car parking is designed, landscaped or screened to mitigate visual impacts when viewed from dwellings and private outdoor spaces.</p> <p><u>Acceptable Outcome achieved</u> The car park is located predominantly under the building. However, landscaping is proposed surrounding the perimeter of the car park. As the car park is located at ground level, it will not be visually prominent from neighbouring properties. The car park will also be screened from view from apartments within the complex.</p>
<p>A3.9.7 – Visitor parking is clearly visible from the driveway, is signed 'Visitor Parking' and is accessible from the primary entry or entries.</p> <p><u>Acceptable Outcome achieved – condition recommended</u> A condition is recommended in the event of approval that requires the visitor car parking to be signed appropriately. Another condition is recommended to ensure the visitor parking is available given that it will be located behind the security gate.</p>
<p>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.</p> <p><u>Acceptable Outcome not applicable</u></p>

A3.9.9 – Uncovered at-grade parking is planted with trees at a minimum rate of one tree per four bays.

Acceptable Outcome not applicable

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.

Acceptable Outcome not applicable

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

Draft Local Planning Policy – Hollywood Central Transition Zone is currently being advertised for public comment. The policy is not currently a 'due regard document'. Assessment of the development against the draft policy has been conducted to test the policy provisions. Application of the policy to the development is premature given the document is currently being advertised for comment.

The draft Local Planning Policy – Hollywood Central Transition Zone requires parking not to be located in the street setback area and not be visually prominent from the street. This development is consistent with the policy.

The policy also requires visitor parking to be clearly visible from the vehicle entry point. The visitor parking will be visible from the entry gate as they will be the first spaces as vehicles enter the parking.

At grade car parking areas are to be sleeved, integrated into the overall design and not visually obtrusive from the street. This development is consistent with the policy.

Car parking provisions should not limit the provision of tree canopy and landscaping. This development meets the requirements of Elements 3.3 and 4.12. Tree canopy is proposed to be enhanced by the development. The development is consistent with the policy.

ELEMENT 4.1 SOLAR AND DAYLIGHT ACCESS		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<i>Development is to achieve the following Element Objectives</i>	<i>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.</i>	
<p>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.</p>	<p>The site is located in climate zone 5. All individual dwellings are capable of receiving direct solar access to each habitable room. Each habitable room has a light-permeable window for access to natural daylight.</p> <p>Bedrooms and living areas are located on the exterior of the apartment block to improve their solar access outcomes.</p> <p>The built form of the apartment has sizable setbacks and building articulation to help improve access to daylight throughout each floor of the development. This maximises the exposure of the northern aspect to sunlight.</p>	<p><u>Objective achieved</u></p> <p>The building is located on an east-west axis, which requires some apartments to be south-facing. However, the building has been articulated to increase daylight access into south-facing apartments except Apartments 6 and 11.</p> <p>Acceptable Outcome A4.1.1 has been achieved (see below). It is noted that the proportion of dwellings with no daylight access on 21 June is 17% in lieu of the acceptable outcome of 15%. However, given the small number of dwellings proposed, the slight increase does not affect the total number of dwellings permitted as an acceptable outcome.</p>
<p>O4.1.2 – Windows are designed and positioned to optimise daylight access for habitable rooms.</p>	<p>All apartments have access to multiple aspects to enable improved year-round use. Floor to ceiling glazed windows have been provided to the balcony and living room aspects in order to maximise solar access. All habitable rooms are provided with windows to allow for improved daylight access, while acknowledging visual privacy considerations which are a particular consideration point within the City of Nedlands.</p>	<p><u>Objective achieved</u></p> <p>Each habitable room is provided with a relatively large clear glazed window. The minimum proportion of glazing to floor area is 15%, which exceeds the acceptable outcome of 10%.</p> <p>Articulation has been employed on the southern elevation to incorporate east and west facing windows where possible to increase daylight access.</p>
<p>O4.1.3 – The development incorporates shading and glare control to minimise heat gain and glare:</p> <ul style="list-style-type: none"> - from mid-spring to autumn in climate zones 4, 5 and 6 AND - year-round in climate zones 1 and 3. 	<p>Balconies are covered to provide shade during the summer months, to assist in the control of heat gain. Living rooms and other rooms are recessed away from balconies to further help control heat gain and heat loss.</p> <p>Other measures include the proposed landscaping treatment, and extensive tree planting and retention which will provide a shade-canopy and help to dramatically reduce heat loads.</p> <p>Materials selection also plays an important part in reducing the need for mechanical heating and cooling.</p>	<p><u>Objective achieved</u></p> <p>Eaves and covered balconies are provided to shade openings into living areas.</p>

The lighter coloured materials used in these apartments will help reduce heat loading.

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.

Acceptable Outcome achieved

**A total of 10 of the 12 apartments will have direct sunlight into living rooms and private open space for at least 2 hours on June 21 (83%). Complies
A total of 2 of the 12 apartments will have no direct sunlight on 21 June (17%). Minor non-compliance.**

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.

Acceptable Outcome achieved

Each habitable room is provided with a minimum glazed area of 15% of the floor area, all of which is clear glaze.

A4.1.3 – Lightwells and/or skylights do not form the primary source of daylight to any habitable room.

Acceptable Outcome achieved

Each room has an external window as the primary source of daylight.

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).

Acceptable Outcome achieved

Eaves and covered balconies are provided.

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

Nil.

ELEMENT 4.2 NATURAL VENTILATION		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<i>Development is to achieve the following Element Objectives</i>	<i>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.</i>	
O4.2.1 – Development maximises the number of apartments with natural ventilation.	<p>Every apartment is provided with a means of natural ventilation through openable windows and doors and across and the articulated built form.</p> <p>The well resolved and modest design prioritises access to natural ventilation for each apartment by providing a multiple-aspect apartment form, which orients living areas and bedrooms to the exterior of the apartment block.</p> <p>The window design and orientation will help reduce latent heat gain. This will improve the effectiveness of air circulation and outcomes.</p> <p>Every living room has openable windows and doors to improve air circulation, and all apartments have a means of “cross-ventilation” exceeding the 60% of apartments acceptable outcomes criteria.</p>	<p><u>Objective achieved</u></p> <p>11 of the 12 apartments achieves natural ventilation (92%). This is considered to be maximised given the only apartment not to achieve natural ventilation is the only single aspect apartment in the development.</p>
O4.2.2 – Individual dwellings are designed to optimise natural ventilation of habitable rooms.	<p>As before the built form is broken up using a stepped articulated built form with generous setbacks to improves the access to natural ventilation.</p> <p>Most dwellings have been designed to position an internal door opposite an openable window in habitable rooms, which lengthens and improves the ability for ventilation across each dwelling.</p> <p>All apartments include large sliding doors and other openings associated with open plan living rooms to further improve natural ventilation and reduce the reliance on mechanical heating or cooling.</p>	<p><u>Objective achieved</u></p> <p>Each habitable room in the development is provided with a relatively large window with openings. The acceptable outcome for distance between openings in a room has been achieved.</p>
O4.2.3 – Single aspect apartments are designed to maximise and benefit from natural ventilation.	<p><i>No single aspect apartments are proposed.</i></p> <p>Each individual apartment receives ample opportunity to access to sunlight and natural ventilation.</p>	<p><u>Objective achieved</u></p> <p>Apartment 1 is single aspect. This apartment will be difficult to naturally ventilate as all external openings are in the same elevation. However, the placement of a screen door on the entry would allow this apartment to obtain crossflow. Given the development meets the</p>

acceptable outcomes for natural ventilation, it is not considered necessary to require this change to Apartment 1 in the event of approval.

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.

Acceptable Outcome achieved

All rooms achieve this requirement.

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.

Acceptable Outcome achieved

- (a) 11 of the 12 apartments are capable of cross ventilation (92%).
- (b) The only single aspect apartment is Apartment 1, which has not been included in the 60% minimum of part (a).
- (c) Not applicable.

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.

Acceptable Outcome not applicable

A4.2.4 – No habitable room relies on lightwells as the primary source of fresh-air.

Acceptable Outcome achieved

All rooms are provided with external windows.

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

NIL

ELEMENT 4.3		SIZE AND LAYOUT OF DWELLINGS	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
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.	<p>All dwellings exceed the size recommendations of the acceptable outcomes (being 47sqm for 1-bed, 1-bath; 72sqm for 2-bed, 2-bath; 95sqm for 3-bed, 2 bath; and 100qm for 3-bed, 3-bath). All individual rooms are consistent with the acceptable outcome sizing recommendations.</p> <p>The internal size and layouts of the dwellings are functional and provides the ability for reuse in the future to suit and be customised to different residents. The size and layout of each apartment is considered appropriate for the expected household size. The apartment composition is for a mix of single-bedroom, two-bedroom and three-bedroom apartments.</p>	<p><u>Objective achieved</u></p> <p>The acceptable outcomes for apartment size have been met with the exception of Apartment 2. This apartment is 70sqm in lieu of 72sqm. This variation is considered minor with the Apartment remaining functional with the ability to flexibly accommodate furniture.</p>	
O4.3.2 – Ceiling heights and room dimensions provide for well-proportioned spaces that facilitate good natural ventilation and daylight access.	<p>The proposed room dimensions and proportions facilitate good access to natural ventilation and daylight in combination with the location of windows and other openings to each apartment.</p> <p>Each individual floor is ~2.7m high, meeting acceptable outcome A4.3.3. Further detail is provided in the architectural plans.</p>	<p><u>Objective achieved</u></p> <p>The acceptable outcomes for room size and ceiling height have been achieved except for Bed 1 in Apartment 1 and Bed 2 in Apartment 2. In relation to Apartment 1, the bedroom is 9sqm in area in lieu of 10sqm with a minimum dimension of 2.9m in lieu of 3.0m. In relation to Apartment 2, the Bed 2 minimum dimension is 2.9m in lieu of 3.0m.</p> <p>The minor departures from acceptable outcomes are not considered significant enough to warrant change to the plans. All rooms remain well-proportioned with access to external windows that meet the daylight and ventilation elements.</p>	
ACCEPTABLE OUTCOMES <i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i>			
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	37m ²
1 bed	47m ²
2 bed+1 bath ¹	67m ²
3 bed+1 bath	90m ²

¹An additional 3m² shall be provided for designs that include a second or separate toilet, and 5m² for designs that include a second bathroom.

Acceptable Outcome not achieved

Studio – 37sqm required. Min. 43sqm provided. (Complies)

1 Bed – 47sqm required. 48sqm provided. (Complies)

2 Bed – 72sqm required. Min. 70sqm provided. (Does not comply). This relates to Apartment 2.

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	10m ²	3m
Other bedrooms	9m ²	3m
Living room – studio and 1 bed apartments	N/A	3.0m
Living room – other dwelling types	N/A	4m

¹Excluding robes

Acceptable Outcome not achieved

Master bedroom for Apartment 1 is 9sqm (10sqm required). Minimum dimension of this bedroom is 2.9m (3.0m required).

Bed 2 in Apartment 2 has a minimum dimension of 2.9m (3.0m required).

All other rooms meet acceptable outcome requirements.

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.

Acceptable Outcome achieved
Ceiling height of 2.7m achieved.

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.

Acceptable Outcome achieved
No living areas are deeper than 8m (three times 2.7m ceiling height).

LOCAL PLANNING FRAMEWORK	REQUIREMENT
<i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i>	Nil

ELEMENT 4.4 PRIVATE OPEN SPACE AND BALCONIES		
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>	APPLICANT COMMENT	ASSESSOR COMMENT
	<i>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.</i>	
O4.4.1 – Dwellings have good access to appropriately sized private open space that enhances residential amenity.	<p>All apartments have good access to an appropriately sized private open space. All private open space meets the minimum dimension and area requirements of the acceptable outcome A4.4.1.</p> <p>Some screening has been incorporated to improve visual privacy — a particular concern in the City of Nedlands — without compromising the ability of each apartment to receive adequate natural ventilation or solar access, as per and with respect to visual privacy considerations of acceptable outcome A4.4.2.</p>	<p><u>Objective achieved</u></p> <p>Each apartment has a private open space area that is directly accessible from the living room and meets acceptable outcome dimensions. Apartments 4 and 9 are provided a second balcony to provide additional space.</p> <p>The ground floor apartments are provided with private garden areas that are landscaped and screened to provide privacy.</p>
O4.4.2 – Private open space is sited, oriented and designed to enhance liveability for residents.	<p>All apartments include a suitably sized balcony area or yard for future residents to use.</p> <p>The areas and dimensions of each private open space meets the applicable acceptable outcomes. The design and orientation of these balconies and terraces, which have been located on the northern aspect where possible, help improve the solar access and the functionality of each apartment and individual rooms.</p> <p>The private open space is sited and provided to enhance the liveability for residents. All private open space receives direct sun. All private open space is also directly accessible from a room of the apartment and secure.</p> <p>Unit 2 is provided with a yard that includes direct street access, while a visually permeable street fencing design is also proposed to improve the interface of the Smyth Road apartments with the street.</p>	<p><u>Objective achieved</u></p> <p>Private open space areas meet or exceed minimum acceptable outcome areas and dimensions. Use of the northern aspect of the site has been limited to the ground floor private open space areas due to visual privacy considerations. Upper floor balconies generally have an eastern or western aspect with the exception of the south-facing balconies for Apartments 6 and 11.</p> <p>The limited size of private open space is offset by the provision of a relatively large communal open space area, including alfresco BBQ and indoor communal area. This will provide enhanced liveability for residents.</p>
O4.4.3 – Private open space and balconies are integrated into the overall architectural form and detail of the building.	<p>The proposed development design thoughtfully integrates the balconies and ground floor private open space into the building design and architectural form. The private open space is framed by the façade treatment which complements the overall design and aesthetic.</p> <p>Overall, the private open space is thoroughly integrated into the design of the building, providing a thoughtful and</p>	<p><u>Objective achieved</u></p> <p>The balconies have been fully integrated into the building form.</p>

functional design. No private open space is proposed to include external fixtures such as air conditioner condensers or other servicing infrastructure — the details of which are to be confirmed.

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	8m ²	2.0m
2 bedroom	10m ²	2.4m
3 bedroom	12m ²	2.4m
Ground floor / apartment with a terrace	15m ²	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.

Acceptable Outcome achieved

All Apartments are provided with private open space that meets the size and dimension requirements of Table 4.4. It is noted that the Bed 1 balconies of Apartments 4 and 9 are undersize. However, these are the second balconies for these apartments, with the main balconies meeting the acceptable outcomes.

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.

Acceptable Outcome achieved

Screening is proposed on balconies for Apartments 3, 4, 8 and 9. The entire open space is not screened and outlook is not obscured.

A4.4.3 – Design detailing, materiality and landscaping of the private open space is integrated with or complements the overall building design.

Acceptable Outcome achieved

The balconies are fully integrated into the design of the building. The ground floor private open space areas are integrated into the landscaping of the development.

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.

Acceptable Outcome achieved

No services are shown on the private open space areas.

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

Nil.

ELEMENT 4.5 CIRCULATION AND COMMON SPACES		
ELEMENT OBJECTIVES <i>Development/s to achieve the following Element Objectives</i>	APPLICANT COMMENT	ASSESSOR COMMENT
	<i>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.</i>	
O4.5.1 – Circulation spaces have adequate size and capacity to provide safe and convenient access for all residents and visitors.	<p>All circulation corridors and walkways are all at least 1.5m in width, this includes lobbies and external circulation spaces, designed with universal access considerations in mind.</p> <p>All circulation areas are designed with dimensions to allow people with mobility impairments/equipment to use them. All floors of the apartments are accessible via lift.</p> <p>Direct, convenient, and safe pedestrian access is provided for all residents and visitors from the street and from vehicle parking areas to each apartment. The lift is positioned in a central location reinforced by the building façade treatment/articulation to enhance legibility between the street and the common areas of the proposal.</p> <p>The design achieves CPTED principles, and provides defensible space.</p> <p>A security system (consisting of a keycode, swipe card, or similar system) is proposed to be installed to manage the means of access from the street and will be complemented by a lighting in circulation spaces that are communally accessed or used by the public. Each apartment is also proposed to be secured in accordance with the requirements of the National Construction Code. The impact of noise from circulation areas is minimal.</p>	<p><u>Objective achieved</u></p> <p>It is noted that the circulation corridors for the upper floors will be 1.3m wide. The acceptable outcome is 1.5m. However, the reduced width is offset by the 'straight line' design of the corridors on the upper floors. There are no changes of direction that would warrant additional width to accommodate moving of furniture. The entry landing to the lift on upper floors is wider (1.7m), which will allow for manoeuvring.</p> <p>In addition to the lift, there is a stairway that links all floors. This provides additional capacity.</p> <p>There are limited opportunities for concealment. The changes in corridor direction on the ground floor are offset by a 1.5m wide corridor at those points. The main area of concealment would be the stairway and associated doors. This can be managed by lighting and integration of glazed panels to the doors (if these are not required to be fire rated). This matter is not considered sufficient to warrant a condition on any planning approval granted.</p>
O4.5.2 – Circulation and common spaces are attractive, have good amenity and support opportunities for social interaction between residents.	<p>Circulation spaces, including the pedestrian entry from Smyth Road, and car parking areas will be illuminated at night without light spill into the habitable rooms of dwellings of this site or any neighbouring site.</p> <p>The circulation spaces, including external walkways, have generous spatial dimensions and will be constructed of hardy materials requiring minimal ongoing maintenance.</p> <p>The proposed communal open space will encourage social interaction between residents.</p>	<p><u>Objective achieved</u></p> <p>The circulation corridors and common spaces will be lit and allow for social interaction to occur, particularly in the communal area on the ground floor.</p>

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.

Acceptable Outcome not achieved

The minimum width of circulation corridors is 1.3m.

A4.5.2 – Circulation and common spaces are designed for universal access.

Acceptable Outcome achieved

Circulation corridors are a minimum of 1.3m, which is sufficient to allow for universal access. All doorways and thresholds into the lift are at grade. All apartments meet silver level criteria of the Liveable Housing Design Guidelines, which ensures access into each dwelling is universally accessible.

A4.5.3 – Circulation and common spaces are capable of passive surveillance, include good sightlines and avoid opportunities for concealment.

Acceptable Outcome achieved

The circulation corridors are straight on upper floors. On the ground floor, there are a number of right angle bends in the corridor. However, these are offset by relatively wide corridor widths of 1.5m at the corners.

A4.5.4 – Circulation and common spaces can be illuminated at night without creating light spill into the habitable rooms of adjacent dwellings.

Acceptable Outcome achieved

The circulation corridors are capable of being lit. There are no windows directly into apartments that would create a nuisance.

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.

Acceptable Outcome achieved

There are no windows and major openings that open directly onto the circulation corridors.

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

NIL

ELEMENT 4.6	STORAGE
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ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
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<i>Development is to achieve the following Element Objectives</i>	<i>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.</i>	
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<p>O4.6.1 – Well-designed, functional and conveniently located storage is provided for each dwelling.</p>	<p>A total of 12 storerooms are proposed and have been co-located with each respective dwelling for ease of access and use.</p> <p>The stores range in size between 5.4sqm and 8.8sqm and exceed the size recommendations of acceptable outcome 4.6.1 in both area and height (being 3sqm for 1-beds, 4sqm for 2-beds)</p> <p>All secure lockable stores will be provided with a means of lighting and can accommodate bicycles.</p>	<p><u>Objective achieved</u></p> <p>Acceptable outcomes A4.6.1 – A4.6.3 have been achieved (see below).</p>
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ACCEPTABLE OUTCOMES
<i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i>

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	3m ²	1.5m	2.1m
1 bedroom dwelling	3m ²		
2 bedroom dwellings	4m ²		
3 bedroom dwellings	5m ²		

¹ Dimensions exclusive of services and plant.

Acceptable Outcome achieved

A minimum store room area of 5.4sqm is provided. The minimum dimension provided is 2.0m. Minimum height is 2.7m. Each of the 12 store rooms exceeds the minimum area, dimension and height of the acceptable outcomes.

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.

Acceptable Outcome achieved

All store rooms are located directly off the circulation corridors which increases manoeuvrability.

A4.6.3 – Storage provided separately from dwellings or within or adjacent to private open space¹, 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.

Acceptable Outcome achieved

Store rooms are all located within the building and not viewable from the public domain.

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

NIL

ELEMENT 4.7 MANAGING THE IMPACT OF NOISE		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<i>Development is to achieve the following Element Objectives</i>	<i>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.</i>	
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.	All dwellings will exceed the requirements of the National Construction Code. The location of mechanical building services and vehicle car parking and manoeuvring areas are screened and located away from sensitive residential apartment uses, and adjoining sites.	<u>Objective achieved – conditions required</u> The development appears to locate noise sources appropriately to maintain residential amenity. However, insufficient information on the type of equipment, including lift machinery, gate motors and air conditioning units has limited the ability to assess this objective. Conditions on any approval are recommended to ensure compliance with this objective (see acceptable outcomes below).
O4.7.2 – Acoustic treatments are used to reduce sound transfer within and between dwellings and to reduce noise transmission from external noise sources.	In addition to the above, noise mitigation treatments will include the use of fire-proof dividing walls and window / door orientation and glazing which will further contribute to reducing the impact of noise between apartments and neighbouring sites.	<u>Objective achieved – condition required</u> This objective is addressed at the working drawings stage (building plans). A condition is recommended in the event of approval requiring compliance with this objective.
ACCEPTABLE OUTCOMES <i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i>		
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).		
<u>Acceptable Outcome achieved – condition recommended.</u> An acoustic report has been provided which has been assessed. The report is currently incomplete given there is a lack of information available on machinery, such as lift and gate motors and air conditioning units. It is recommended that a condition be placed on any approval that requires compliance with the Acceptable Outcome.		
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.		
<u>Acceptable Outcome achieved – condition recommended.</u> Major noise emitters shown on the development plans include the car parking gate and bin store. Both of these facilities are located away from the apartments. No details have been provided for air conditioning. It is recommended that a condition be placed on any approval that requires noise sources to not be located on the external wall of a habitable room or within 3m of a bedroom window.		

A4.7.3 – Major openings to habitable rooms are oriented away or shielded from external noise sources.

Acceptable Outcome achieved

The development is located in a residential area with limited external noise sources. The main noise source is Smyth Road, which is a local distributor. The majority of the development is located away from the street.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
<i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i>	Nil.

ELEMENT 4.8		DWELLING MIX	
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>		APPLICANT COMMENT	ASSESSOR COMMENT
		<i>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.</i>	
<p>O4.8.1 – A range of dwelling types, sizes and configurations is provided that caters for diverse household types and changing community demographics.</p>		<p>A mix of single-bedroom and two-bedroom apartments has been proposed, in various configurations. The apartment composition is as follows:</p> <ul style="list-style-type: none"> • 4 x studio apartments • 1 x single-bedroom • 7 x two-bedroom <p>The housing typology and layout is considered appropriate for the location with a mix of studio, one-bedroom, and two-bedroom apartments. More than 20% of the 12 apartments are a different dwelling mix. These are spread evenly through each floor. All apartments are suitable for use by those with a mobility impairment and are step-free throughout.</p>	<p><u>Objective achieved</u></p> <p>Acceptable Outcomes A4.8.1 and 4.8.2 achieved (see below).</p> <p>The development provides a mix of four 1 bed 1 bath studios, a 1 bed 1 bath apartment and seven 2 bed 2 bath apartments. There is a distribution of each type throughout the development. It is considered that the development will cater generally for singles or couples, but not for older families. Whilst this demographic is not catered for in this development, it is noted that other recent proposals have provided 3 bedroom apartments. Therefore, there is likely to be a more diverse dwelling mix in the locality overall.</p>
<p>ACCEPTABLE OUTCOMES <i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i></p>			
<p>A4.8.1 –</p> <p>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</p> <p>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.</p> <p><u>Acceptable Outcome achieved</u></p> <p>There is currently no local housing strategy or local planning instrument that provides guidance on dwelling mix. Part b) of the acceptable outcome applies. A minimum of 3 dwellings are required to have differing bedroom numbers. The development proposes 58% 2 bedroom and 42% 1 bedroom apartments. (Complies)</p>			
<p>A4.8.2 – Different dwelling types are well distributed throughout the development, including a mix of dwelling types on each floor.</p> <p><u>Acceptable Outcome achieved</u></p> <p>Differing dwelling types are located on each floor as follows:</p> <ul style="list-style-type: none"> - Ground: 1 x 1 bed and 1 x 2 bed - Level 1: 2 x 1 bed studio and 3 x 2 bed - Level 2: 2 x 1 bed studio and 3 x 2 bed 			

LOCAL PLANNING FRAMEWORK	REQUIREMENT
<i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i>	Nil.

ELEMENT 4.9		UNIVERSAL DESIGN	
ELEMENT OBJECTIVES		APPLICANT COMMENT	ASSESSOR COMMENT
<i>Development is to achieve the following Element Objectives</i>		<i>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.</i>	
<p>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.</p>		<p>All apartments, and public entries are step-free and generously proportioned (reference to plot ratio) to allow for ease of manoeuvring by the aged, and those with a mobility impairment.</p> <p>While not more than 20% of the apartments exceed the “Silver Level” requirements of the <i>Liveable Housing Design Guidelines</i>, the scope of the difference between the “Silver” standard and what has been achieved is insignificant.</p> <p>All floors are accessible via lift. Each apartment provides a suitable amount of amenity to support its users to age in place. The location of the site itself near medical facilities (such as those near the QEII medical precinct) and transport options will further support and allow for a wide range of people to call the Smyth Road apartments their home.</p>	<p><u>Objective achieved</u></p> <p>Acceptable Outcome A4.9.1 achieved with condition (see below).</p>
ACCEPTABLE OUTCOMES			
<i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i>			
<p>A4.9.1 –</p> <p>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</p> <p>b) 5 per cent of dwellings are designed to Platinum Level as defined in the Liveable Housing Design Guidelines (Liveable Housing Australia).</p> <p><u>Acceptable Outcome achieved – condition required</u></p> <p>The development is proposing all 12 apartments meet silver level requirements. (100%). It is recommended that in the event of approval that a condition be placed requiring at least three apartments (25%) be designed to meet silver level requirements.</p>			
LOCAL PLANNING FRAMEWORK		REQUIREMENT	
<i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i>		NIL	

ELEMENT 4.10 FAÇADE DESIGN		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<p><i>Development is to achieve the following Element Objectives</i></p>	<p><i>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.</i></p>	
<p>O4.10.1 – Building façades incorporate proportions, materials and design elements that respect and reference the character of the local area.</p>	<p>The façade provides articulation and visual interest to improve its appearance and interface with the streetscape and neighbouring properties.</p> <p>The built form includes a mixture of colours and materials from striking metallic and aluminium elements, and feature stone cladding, to exposed feature recycled face brick, and contrasting painted rendered walls in charcoal grey and white, as well as large window glazes.</p> <p>The built form references materials evident in the local area and responds to an emerging character of the area (following recent changes to the planning framework and adoption of LPS No. 3)</p> <p>The façade includes articulation and scaling elements to improve its appearance to the street. The design also includes landscaping to the street frontage which will complement and soften the design and its appearance to the street.</p> <p>The proposed design achieves the acceptable outcomes as it provides façade treatment that includes:</p> <ul style="list-style-type: none"> • Site responsive mix of materials and colour palette; • Building articulation and scaling; • Clearly defined and legible building entries; • Vertical and horizontal defining design elements; • A complementary landscaping treatment; and <p>Concealed building services.</p>	<p><u>Objective achieved</u></p> <p>The façade incorporates a number of materials and textures to provide visual relief. The employment of roof pitch helps to break up the façade vertically. The balconies and stone feature provide horizontal interest.</p> <p>The use of materials and finishes found on surrounding housing provides a connection back to the existing character. The façade presents in a similar manner to the modern dwelling located at 103 Smyth Road, albeit in a three storey and wider form.</p>
<p>O4.10.2 – Building façades express internal functions and provide visual interest when viewed from the public realm.</p>	<p>The proposed design provides a variety of responsive materials, colours, and other design elements to the building façade. As discussed previously, this includes brick, rendered walls, metal slats and surrounds, and stone cladding.</p> <p>The built form is also broken up by the articulation and recessing provided throughout the development.</p>	<p><u>Objective achieved</u></p> <p>The entry into the building is well-defined by the presence of the stone feature. Upper floor balconies provide visual interest and identify the location of apartments.</p>

Together this provides visual interest for the development when viewed from the street. The building communicates and interfaces with the street providing a clear hierarchy and expression of the building's function and purpose. This is supported by the proposed communal open space, which will be accompanied by landscaping, seating, and a barbeque for residents.

The bin store, albeit located in the front of the property, provides an effective screen to the car parking below and is finished to complement to main façade.

The use of a number of materials, angles and textures reduces the impression of the building being box-like.

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.

Acceptable Outcome achieved

A mix of materials including stone, face brick, render, glass and timber are used in the façade to provide visual interest and to draw attention towards the entry. The façade is articulated by being broken into four vertical segments.

A4.10.2 – In buildings with height greater than four storeys, façades include a defined base, middle and top for the building.

Acceptable Outcome not applicable

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.

Acceptable Outcome achieved

Both adjacent buildings on Smyth Road are single storey with relatively high roof pitches. The roof pitch of these dwellings approximately corresponds with the floor level of the upper storey of the development. The façade has incorporated materials commonly seen on housing in the street, such as face brick and render.

A4.10.4 – Building services fixtures are integrated in the design of the façade and are not visually intrusive from the public realm.

Acceptable Outcome achieved

Services will be located within the bin store and not visible from the street.

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.

Acceptable Outcome not applicable

A4.10.6 – Where provided, signage is integrated into the façade design and is consistent with the desired streetscape character.

Acceptable Outcome achieved

Signage is integrated into the bin storage wall and will complement the streetscape.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
<p><i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i></p>	<p>Draft Local Planning Policy – Hollywood Central Transition Zone is currently being advertised for public comment. The policy is not currently a 'due regard document'. Assessment of the development against the draft policy has been conducted to test the policy provisions. Application of the policy to the development is premature given the document is currently being advertised for comment.</p> <p>The draft Local Planning Policy – Hollywood Central Transition Zone provides augmented / supplementary acceptable outcomes in addition to the R-Codes. A4.10.1 is augmented to include the incorporation of high quality materials and finishes that are sympathetic to the desired future neighbourhood character. The development achieves this requirement in providing a modern building façade that incorporates elements of the existing character.</p> <p>The policy includes supplementary acceptable outcomes as follows:</p> <ul style="list-style-type: none"> - Façade design to be coherent, with a balanced composition of building elements to achieve scale texture and rhythm. (Development achieves this). - Façade to include well-defined entries. (Development achieves this). - Development is to achieve pedestrian scale by incorporating podium/street walls with upper floor set back. (Development does not achieve this).

ELEMENT 4.11 ROOF DESIGN		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<i>Development is to achieve the following Element Objectives</i>	<i>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.</i>	
O4.11.1 – Roof forms are well integrated into the building design and respond positively to the street.	A concealed roof design is proposed. The concealed roof design will reduce the impact and appearance of bulk to the street. The proposed design is consistent and responsive to the current established character of the area.	<u>Objective achieved</u> The roof incorporates a 12 degree roof pitch and modern interpretation of the classic hip and gable design found in the locality. The roof design is fully integrated into the façade to break up the height and bulk of the building when viewed from the street.
O4.11.2 – Where possible, roof spaces are utilised to add open space, amenity, solar energy generation or other benefits to the development.	The roof form is pitched to reference the pitched rooves of the area, and separated into separate portions to help provide visual interest and break-up the built form. A standard lift overrun above the roof height is proposed, concealed within the roof space. The roof form respects the amenity of the immediate neighbourhood, the site's context, and allows these building utilities to be provided without impacting on the amenity of the apartments. Given the small scale of the design and minimal benefit potential offered, an additional roof function has not been incorporated in these apartments.	<u>Objective achieved</u> Open space is not provided on the roof. However, the roof design will allow for solar collectors and air conditioning units to be located without visual impact when viewed from the street.
ACCEPTABLE OUTCOMES <i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i>		
A4.11.1 – The roof form or top of building complements the façade design and desired streetscape character. <u>Acceptable Outcome achieved</u> The roof design incorporates a series of hips and angles to complement the façade design. The employment of a hip roof design is consistent with the traditional roof types in the street. However, the overall pitch angle and height have been adjusted to accommodate the taller structure.		
A4.11.2 – Building services located on the roof are not visually obtrusive when viewed from the street. <u>Acceptable Outcome achieved – condition recommended</u> No services are shown on the roof. However, a standard condition requiring screening of roof-mounted equipment is recommended in the event of approval.		

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.

Acceptable Outcome not applicable

LOCAL PLANNING FRAMEWORK	REQUIREMENT
<p><i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i></p>	<p>Draft Local Planning Policy – Hollywood Central Transition Zone is currently being advertised for public comment. The policy is not currently a 'due regard document'. Assessment of the development against the draft policy has been conducted to test the policy provisions. Application of the policy to the development is premature given the document is currently being advertised for comment.</p> <p>The draft Local Planning Policy – Hollywood Central Transition Zone provides an augmented acceptable outcome in addition to the R-Codes. A4.11.1 is augmented to include reference to the future character of the transition zone. This proposal reflects a modern interpretation of the traditional hip and gable roof design found in the locality. The roof design reflects the height and bulk of the apartment building in a manner that is consistent with the desired future character, namely:</p> <p><i>Developments shall be constructed using materials that are respectful of the local context, reinterpreting the traditional built form of the area through the use of historic materials in modern forms. Building height will remain relatively low where the development fronts the street, with greater heights to be located centrally within the lots.</i></p>

ELEMENT 4.12 LANDSCAPE DESIGN		
ELEMENT OBJECTIVES <i>Development is to achieve the following Element Objectives</i>	APPLICANT COMMENT	ASSESSOR COMMENT
	<i>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.</i>	
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.	<p>The proposed landscaping selection includes a generous amount of DSA throughout (consisting of 18% deep soil areas where only 7% is the prescribed acceptable outcome).</p> <p>The proposed landscaping softens the façade and improves the aesthetic of the development overall. The street frontage includes numerous tree plantings to further contribute to an attractive development. More than 9 on-site trees are proposed, and all apartments have outlook toward landscaping and landscaped areas.</p> <p>The landscaping design addresses the street, and communal open space areas by providing shade trees and plants. This improves the aesthetic and functional performance of the development, in relation to heat loads, heat retention, noise and acoustic propagation, privacy, and the health & wellbeing of residents and visitors.</p> <p>The design includes a verge landscaping treatment in excess of the requirements of acceptable outcome 4.12.2 and 4.12.3, illustrated in the image below. Further detail on landscaping is provided within the landscape plan prepared by Kelsie Davies Landscape Architecture.</p>	<p><u>Objective achieved</u></p> <p>The landscape plan includes planting two small trees and 1 medium tree in the front setback area. This will provide visual relief to the building, as well as provide shade in the front setback open space area.</p> <p>The overall landscape design will provide an attractive outlook for apartments looking down into the site. The plan includes retaining the large eucalypt in the north western corner of the site, which will provide shade and reduce the bulk and scale of the building.</p>
O4.12.2 – Plant selection is appropriate to the orientation, exposure and site conditions and is suitable for the adjoining uses.	<p>The species of the proposed tree plantings will be selected with consideration to the City of Nedlands' approved tree species list, their functional benefit to residents, ongoing maintenance, their water use & WaterWise status, and preference for native & endemic varieties.</p> <p>As per the submitted Landscape Plan, the proposed landscaping treatment will include the following plant varieties:</p> <ul style="list-style-type: none"> • Chinese Tallow • Natchex Crêpe Myrtle • Dianella Blaze, Tas Red, and Wyeena 	<p><u>Objective achieved</u></p> <p>The landscape plan has been prepared by a landscape architect and modified to take into account neighbour comments. The ability for tree canopies to provide visual screening of adjoining properties has been taken into account.</p>

	<ul style="list-style-type: none"> • Eremophila Blue Horizon • Grevillea Gin Gin Gem • Rhapiolepis Cosmic White • Dwarf Bamboo • Lily Pilly <p>Mother-in-law's tongue</p>	
<p>O4.12.3 – Landscape design includes water efficient irrigation systems and where appropriate incorporates water harvesting or water re-use technologies.</p>	<p>All landscaped areas will be reticulated using a variety of systems. These systems will include drip-feed and bubbler systems. A smart monitoring sensor network will help manage plant health and watering. All landscaping beds will be mulched to a minimum depth of 70mm, which is double the nominal rate. This will minimise the extent of water loss through evaporation.</p> <p>Stormwater will also be directed and stored in water tanks or similar where appropriate for use on gardens, reducing the need for the use of reticulated watering.</p> <p>The proposed design is considered to achieve and be consistent with the intent of this element objective.</p>	<p><u>Objective achieved</u></p> <p>A reticulation plan has been provided. Due to the size of the development, water harvesting has not been achieved.</p>
<p>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.</p>	<p>The proposed landscaping is integrated into the design and complements the built form of the development overall.</p>	<p><u>Objective achieved</u></p> <p>The landscaping has been integrated into the built form outcomes, particularly in relation to the communal open space area and ground floor private open space areas.</p>
<p>ACCEPTABLE OUTCOMES <i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i></p>		
<p>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.</p> <p><u>Acceptable Outcome achieved</u> Landscape plan and reticulation plan submitted.</p>		
<p>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.</p> <p><u>Acceptable Outcome achieved</u> A large eucalypt will be retained and 3 medium and 4 small trees planted. Landscaping has been collocated with communal open space to provide a relatively large landscaped rear area.</p>		

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	76.8m ³	1,200mm	64m ² with minimum dimension 7m
Medium tree	8-12m high, crown spread at maturity	36m ³	1,000mm	36m ² with minimum dimension 5m
Small tree	4-8m high, crown spread at maturity	7.2m ³	800mm	3m x 3m
Small ornamentals	3-4m high, crown spread at maturity	3.2m ³	800mm	2m x 2m
Shrubs	--	--	500-600mm	--
Ground cover	--	--	300-450mm	--
Turf	--	--	200mm	--

Acceptable outcome not applicable

A4.12.4 – Building services fixtures are integrated in the design of the landscaping and are not visually intrusive.

Acceptable Outcome achieved

Building services have been located inside of the bin store and will not impact on landscaped areas.

LOCAL PLANNING FRAMEWORK	REQUIREMENT
<p><i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i></p>	<p>Draft Local Planning Policy – Hollywood Central Transition Zone is currently being advertised for public comment. The policy is not currently a 'due regard document'. Assessment of the development against the draft policy has been conducted to test the policy provisions. Application of the policy to the development is premature given the document is currently being advertised for comment.</p> <p>The draft Local Planning Policy – Hollywood Central Transition Zone provides an augmented acceptable outcome in addition to the R-Codes. A4.12.1 is augmented to include reference to endemic species of medium and large trees. In this case, non-endemic species are proposed to provide screening.</p>

ELEMENT 4.13 ADAPTIVE REUSE		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<i>Development is to achieve the following Element Objectives</i>	<i>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.</i>	
O4.13.1 – New additions to existing buildings are contemporary and complementary and do not detract from the character and scale of the existing building.		Not applicable
O4.13.2 – Residential dwellings within an adapted building provide good amenity for residents, generally in accordance with the requirements of this policy.		Not applicable
ACCEPTABLE OUTCOMES		
<i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i>		
A4.13.1 – New additions to buildings that have heritage value do not mimic the existing form and are clearly identifiable from the original building.		
A4.13.2 – New additions complement the existing building by referencing and interpreting the scale, rhythm and materiality of the building.		
LOCAL PLANNING FRAMEWORK	REQUIREMENT	
<i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i>		

ELEMENT 4.14 MIXED USE		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<i>Development is to achieve the following Element Objectives</i>	<i>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.</i>	
O4.14.1 – Mixed use development enhances the streetscape and activates the street.		Not applicable
O4.14.2 – A safe and secure living environment for residents is maintained through the design and management of the impacts of non-residential uses such as noise, light, odour, traffic and waste.		Not applicable
ACCEPTABLE OUTCOMES		
<i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i>		
A4.14.1 – Where development is located within a mixed use area designated within the local planning framework, ground floor units are designed for future adaption to non-residential uses.		
A4.14.2 – Ground floor uses including non-commercial uses, such as communal open space, habitable rooms, verandahs and courtyards associated with ground floor dwellings, address, enhance and activate the street.		
A4.14.3 – Non-residential space in mixed use development is accessed via the street frontage and/or primary entry as applicable.		
A4.14.4 – Non-residential floor areas provided in mixed use development has sufficient provision for parking, waste management, and amenities to accommodate a range of retail and commercial uses in accordance with the requirements		
A4.14.5 – Mixed use development is designed to mitigate the impacts of non-residential uses on residential dwellings, and to maintain a secure environment for residents.		
LOCAL PLANNING FRAMEWORK	REQUIREMENT	
<i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i>		

ELEMENT 4.15 ENERGY EFFICIENCY		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<i>Development is to achieve the following Element Objectives</i>	<i>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.</i>	
O4.15.1 – Reduce energy consumption and greenhouse gas emissions from the development.	<p>The following energy efficiency measures are incorporated in the design:</p> <ul style="list-style-type: none"> • The use of light sensors and LED lights in all public areas to reduce electricity consumption across the site when areas are not in use. • All apartments will be fitted with high quality insulation. • Each apartment will be provided with a means of natural ventilation, and all apartments have been provided with openings to improve daylight and natural ventilation access. • Bedrooms and living areas are positioned near the façade of the apartments to allow for improved access to daylight, natural ventilation, and opportunity for outlook to the street — improving their liveability, usability, and reducing the need for mechanical heating and cooling. • Materials with low ongoing maintenance requirements, and low embodied energy will be used throughout. <p>All individual apartments will be sub-metered.</p>	<p><u>Objective met – condition recommended</u></p> <p>A number of measures have been listed by the proponent. However, it is recommended a condition be placed to ensure compliance with the acceptable outcome as a minimum.</p>
ACCEPTABLE OUTCOMES		
<i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i>		
<p>A4.15.1 –</p> <p>a) Incorporate at least one significant energy efficiency initiative within the development that exceeds minimum practice (refer Design Guidance) OR</p> <p>b) All dwellings exceed the minimum NATHERS requirement for apartments by 0.5 stars.¹</p> <p>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.</p> <p><u>Acceptable Outcome achieved – condition recommended</u></p> <p>It is recommended that a condition be placed that requires the incorporation of at least one significant energy efficiency initiative, or all dwellings to exceed the minimum NATHERS requirements by 0.5 stars.</p>		

LOCAL PLANNING FRAMEWORK	REQUIREMENT
<i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i>	Nil

ELEMENT 4.16 WATER MANAGEMENT AND CONSERVATION		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<i>Development is to achieve the following Element Objectives</i>	<i>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.</i>	
O4.16.1 – Minimise potable water consumption throughout the development.	<p>Each apartment will utilise water efficient fixtures and fittings for the toilets, kitchen, and bathroom taps and shower heads to reduce water consumption. Stormwater will be directed into garden-beds with overflow into soak-wells.</p> <p>Each apartment will be individually metered for water and power use, which will reduce the amount of potable water consumption (as each resident will be individually liable for their own use).</p>	<p><u>Objective achieved – condition recommended</u></p> <p>The use of water efficient fixtures is noted. It is recommended that a condition be placed on any approval that requires individual metering of water usage.</p>
O4.16.2 – Stormwater runoff from small rainfall events is managed on-site, wherever practical.	<p>Specific details relating to water management and conservation are expected to be conditioned as a standard condition of approval / addressed at building permit stage. The site is capable of accommodating 1 in 1-year average recurrence interval (ARI) rainfall events.</p> <p>The design proposes to retain all stormwater on-site through soak wells and stormwater infrastructure and may direct stormwater into garden beds to improve water usage across the development. It is expected that this will be conditioned as a standard condition of development approval. Specific details relating to water management and conservation are expected to be conditioned / addressed at building permit stage.</p>	<p><u>Objective achieved – condition recommended</u></p> <p>A standard stormwater management condition placed on any approval will ensure this objective is achieved.</p>
O4.16.3 – Reduce the risk of flooding so that the likely impacts of major rainfall events will be minimal.	<p>The Smyth Road apartments will be capable of wholly accommodating 1 in 1 year ARI rainfall events on site. No basement is proposed and all floors are located above the surrounding natural ground level.</p> <p>The development is on an elevated site, there is minimal expected risk associated with flooding. The development will also meet the requirements of the National Construction Code.</p>	<p><u>Objective achieved</u></p> <p>The site slopes by approximately 1, from the rear to the street. The finished level of the ground floor will be at ground level or above.</p>
ACCEPTABLE OUTCOMES		
<i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i>		
A4.16.1 – Dwellings are individually metered for water usage.		

Acceptable Outcome achieved – condition recommended

It is recommended that a condition be placed on any approval requiring individual metering.

A4.16.2 – Stormwater runoff generated from small rainfall events is managed on-site.

Acceptable Outcome achieved – condition recommended

Stormwater run-off is to be accommodated by on-site soak wells. It is recommended that a condition be placed on any approval granted requiring this outcome.

A4.16.3 – Provision of an overland flow path for safe conveyance of runoff from major rainfall events to the local stormwater drainage system.

Acceptable Outcome achieved

The overland flow path is from the rear of the site to the street. Stormwater management will be controlled through standard conditions in the event of approval.

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

NIL

ELEMENT 4.17 WASTE MANAGEMENT		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<p><i>Development is to achieve the following Element Objectives</i></p>	<p><i>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.</i></p>	
<p>O4.17.1 – Waste storage facilities minimise negative impacts on the streetscape, building entries and the amenity of residents.</p>	<p>A Waste Management Plan has been prepared by Dallywater Consulting for the proposed development.</p> <p>The proposed bin store is located near the front of the property, away from sensitive uses, and a very short distance from the bin presentation point on the road verge. A hardstand area on the verge is also proposed, to minimise the impact on verge landscaping, and maintain the well-kempt appearance of the street.</p> <p>The bin store is full enclosed and concealed from view from the street.</p> <p>The bin store is also setback 2.0m from the street, meeting the applicable street setback acceptable outcome. The bin store is located behind the street setback area and not readily visible from the street, the apartments, or communal areas. The negative amenity impact of the proposed bin storage is minimal.</p> <p>The bin store contributes to the streetscape appearance by providing an architectural “recycled brick” wall which further contributes to the street appearance by screening the car parking areas from Smyth Road.</p> <p>The bin store will also include a washdown area, tap, and suitable drain with gross pollutant trap. A rubbish compactor has also been proposed.</p> <p>The bin store will also include a means of natural and mechanical ventilation.</p> <p>A suitable waste presentation area will also be proposed subject to conditioning in consultation with the City of Nedlands.</p> <p>The bin store will be managed by the strata company and strata company caretaker in accordance with the waste management plan and reviewed on a regular ongoing basis.</p>	<p><u>Objective achieved</u></p> <p>A bin store is to be located at the front of the site. However, it will be screened from view from the street and neighbouring property. The store will also be roofed and provided with ventilation to manage odour. The store is located to one side of the development away from the entry into the building.</p>

O4.17.2 – Waste to landfill is minimised by providing safe and convenient bins and information for the separation and recycling of waste.

The Waste Management Plan proposes the use of a two-bin system to separate recyclable waste and general waste.

The proposed bin composition consists of 240L MGB (Mobile General Waste Bins) and 240L MRB (Mobile Recyclable Waste Bins) bins. The bin composition is as follows:

- 3x 240L MGB (720L capacity, collected weekly); and
- 5x 240L MRB (1,200L capacity, collected fortnightly).

Additional storage space is included to accommodate future bin systems.

This includes scope for the future FOGO (MOB) bin system to be adopted by the City by 2025, as well as garden organics. Waste collection will be through the City's waste contractor via standard kerbside collection.

The waste generation forecast is:

- 1,240L per week General Waste; and
- 1,140L per week Recyclable Waste.

Using a waste compactor, at a rough 50% compaction rate, the resultant waste generation and bin capacity would be as follows:

- 620L per week General Waste; and
- 570L per week Recyclable Waste (1,140L storage requirement).

The use of this two-bin system is considered to minimise the amount of waste which will go through to landfill. Information signage will be provided within the bin store to assist with informing residents of how to use this bin system and to reduce contamination, subject to the waste management plan.

The developer is required to satisfy the Waste Management Plan which has been prepared. Ongoing up-keep and compliance with the Waste Management Plan will be the responsibility of the future strata company. The day-to-day upkeep of the bin stores and

Objective achieved

The Waste Management Plan has been assessed by the City and is considered to be generally in compliance with the City's Waste Management Guidelines. There is a small number of matters to be clarified in the event the development is approved. These matters include:

- Bin placement for collection on the verge;
- Bin compactor operation;
- Confirmation of arrangements if 'FOGO' is introduced; and
- Confirmation of bin store layout.

waste store areas will be the responsibility of the strata company caretaker.

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).

Acceptable Outcome achieved

A Waste Management Plan has been prepared in accordance with the City's Waste Management Local Planning Policy and Guidelines.

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).

Acceptable Outcome achieved – condition recommended

The submitted Waste Management Plan has been prepared and has been assessed as appropriate, subject to a number of minor changes / clarifications relating to:

- Bin placement for collection on the verge;
- Bin compactor operation;
- Confirmation of arrangements if 'FOGO' is introduced.

A condition is recommended in the event of approval requiring the waste management plan to be updated to address outstanding matters.

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).

Acceptable Outcome achieved

The proposed bin storage layout will be subject to confirmation in the final Waste Management Plan that would be required as a condition of approval.

A4.17.4 – Communal waste storage is sited and designed to be screened from view from the street, open space and private dwellings.

Acceptable Outcome achieved

A screened bin storage area has been incorporated into the development.

LOCAL PLANNING FRAMEWORK

REQUIREMENT

Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:

The Waste Management Plan and waste arrangements have been assessed against the City's Waste Management Local Planning Policy. The Plan has been assessed as compliant with the policy with a number of matters to be clarified in the event approval is granted.

ELEMENT 4.18 UTILITIES		
ELEMENT OBJECTIVES	APPLICANT COMMENT	ASSESSOR COMMENT
<i>Development is to achieve the following Element Objectives</i>	<i>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.</i>	
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.	<p>The proposed building services will include power, potable water, natural gas, reticulated sewerage, and NBN. These services will be fit for purpose and meet the performance and access requirements of the respective service providers.</p> <p>The location of the utilities and plant services are shown on the plans and are not directly visible from the street. NBN and underground power are proposed to service the site.</p> <p>While no utility upgrades are required to service the apartments, should any costs arise these will be borne by the developer in proportionate share.</p>	<p><u>Objective achieved</u></p> <p>All services are available to the site. The restively small size of the development is expected to not create any capacity issues. However, in the event of capacity issues, there are established processes to determine upgrades between the developer and service providers.</p>
O4.18.2 – All utilities are located such that they are accessible for maintenance and do not restrict safe movement of vehicles or pedestrians.	<p>The design and location of building utilities including laundries, stores, site servicing infrastructure, waste collection rooms, and other utilities are located to be conveniently accessible without obstructing visual or acoustic amenity. These utilities will be located outside of pedestrian and vehicle movement areas.</p>	<p><u>Objective achieved</u></p> <p>Utility meters will be located in the bin store at the front of the site and can be readily accessed. These will be located away from entries.</p>
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.	<p>The proposed utilities will be primarily located within plant rooms or utility cabinets. Services including air-conditioning condenser units, how water systems, and antennae, will be concealed from view and integrated into the design of the development.</p> <p>The proposed water meters are to be located in an enclosed receptacle, integrated into the design of the apartments and the recycled brick façade where they are located. This is expected to be conditioned as a standard condition of approval.</p> <p>All utilities like that described will not be readily visible from the street.</p> <p>The location of the proposed meter boxes is in a suitable location which is visible from the street, or other public</p>	<p><u>Objective achieved</u></p> <p>Utility meters will be located in the bin store at the front of the site and are screened from view.</p>

	<p>areas and open space of the development. The proposed meter boxes are located near to the bin store.</p> <p>The specifics of utilities are expected to be conditioned as a standard condition of planning approval, subject to an approved design and specific advice at the building permit stage.</p>	
<p>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.</p>	<p>There is not considered to be any adverse negative impact which will arise from the proposed development in relation to noise or air quality impacts from utilities within individual apartments. This includes from laundry rooms, store rooms, or bin stores. The specifics of utilities are expected to be conditioned as a standard condition of planning approval.</p>	<p><u>Objective achieved</u></p> <p>Utilities within dwellings is limited to laundry areas. These are located within an enclosed cupboard and access from a hallway or bathroom.</p>
<p>ACCEPTABLE OUTCOMES <i>Acceptable Outcome pathway may not be applicable where a performance solution is provided</i></p>		
<p>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.</p> <p><u>Acceptable Outcome achieved</u> Utility meters will be located within the bin store, which is screened from view and not visually intrusive.</p>		
<p>A4.18.2 – Developments are fibre-to-premises ready, including provision for installation of fibre throughout the site and to every dwelling.</p> <p><u>Acceptable Outcome achieved</u> This is a standard requirement of NBN Co for new developments. An advice note will be included on any approval granted.</p>		
<p>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.</p> <p><u>Acceptable Outcome achieved – condition recommended</u> The location of air conditioner units is not known at this stage. Clothes drying areas have not been shown. However, provision has been made for clothes dryers within each apartment. Standard condition relating to screening of plant and equipment and the provision of clothes drying facilities is recommended in the event of approval.</p>		
<p>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.</p> <p><u>Acceptable Outcome achieved</u></p>		

Laundry facilities are located within each apartment. These take the form of a laundry cupboard 1.6m-1.8m wide and 0.75m deep and contain sufficient space for a trough, washing machine and dryer. These are located in hallways or bathrooms. Ventilation and function will be subject to Health requirements in the event of approval.	
LOCAL PLANNING FRAMEWORK	REQUIREMENT
<i>Does the local planning framework amend or replace the above stated controls? If yes, state the applicable requirement:</i>	Nil.

10. Urgent Business Approved By the Presiding Member or By Decision

10.1 Community Engagement RFQ

Council instructs the CEO to immediately release to the public the 9 page document titled 'RFQ Evaluation and Recommendation Report (RFQ) 2019-20.WM' dated 4 May 2020 with all identifying personal information relating to non-Executive employees redacted.

The Mayor accepted this item as urgent business.

Dissent Motion

Moved – Councillor Wetherall

Seconded – Councillor McManus

That this motion is out of order.

**CARRIED 5/4
(Against: Mayor de Lacy Crs. Bennett Mangano & Coghlan)**

11. Confidential Items

Nil.

Declaration of Closure

There being no further business, the Presiding Member declared the meeting closed at 9.16 pm.