



## LOW-RISE MEDIUM DENSITY REVIEW **RECOMMENDATIONS REPORT**

Prepared for the City of Canada Bay  
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# EXECUTIVE SUMMARY



### Project Scope

A new Low Rise Medium Density Housing Code (the MD Code), developed by the NSW Government, commenced in July 2018. A deferment of the implementation of this Code in City of Canada Bay (CCB) has been granted until 31 October 2019. The new Code identifies medium density housing typologies that can be approved through complying development.

The NSW Government has also released the Low Rise Medium Density Design Guide for Development Applications (DA Guide) which must be considered if the Development Control Plan does not control certain medium density development types, such as terraces and manor houses. These changes in policy generated a review of the planning framework for low rise medium density development across the City of Canada Bay (CCB).

The purpose of the review was to determine the planning and urban design implications arising from the introduction of the MD Code and to ensure that high quality urban design and planning outcomes are delivered when sites are redeveloped for the purpose of low rise medium density housing. This has also involved a review of the Canada Bay Local Environmental Plan 2013 (LEP) and the Canada Bay Development Control Plan (DCP).

### Implications of the MD Code

*Larger dual occupancies* – The MD Code permits dual occupancies that are substantially larger than current controls. For example, under the MD Code a 600m<sup>2</sup> site can be developed with an FSR of 0.75:1, i.e. 450m<sup>2</sup>. Under the LEP a 600m<sup>2</sup> site has a maximum FSR of 0.5:1 i.e. 300m<sup>2</sup> so the FSR permissible under the MD Code is 150m<sup>2</sup> greater than under the LEP.

After a site is subdivided the LEP only allows a maximum FSR of 0.60:1 on a 300m<sup>2</sup> site (i.e. 180m<sup>2</sup>). The MD Code allows 0.75:1 (i.e. 225m<sup>2</sup>) which results in a house that is 45m<sup>2</sup> larger.

*Development on smaller and narrower sites* – Under the MD Code, manor houses are permissible on sites larger than 600m<sup>2</sup>. Multi dwelling housing in CCB within R1 & R3 zones currently requires sites to be larger than 800m<sup>2</sup>.

*Creation of smaller lots* - The MD Code permits lots to be subdivided under Torrens Title if they are 60% of the minimum lot size specified in the LEP (i.e. 270m<sup>2</sup>). Under the LEP the minimum lot size for Torrens Title subdivision is generally 450m<sup>2</sup>.

*Larger terraces in R1/R3* - Larger terraces in R1/R3 - The density controls in the MD Code overrule the Council controls. Terraces can have an FSR of 0.6:1 in an R1 zone and 0.8:1 in an R3 zone.

The CCB has limited areas zoned R1 General Residential. For example, areas in Mortlake have a similar FSR (0.75:1) to the MD Code as do some areas zoned R3, such as Liberty Grove (FSR's of 0.7 or 0.75:1). Many areas zoned R3 do not currently have a maximum FSR and development is currently controlled by site coverage and dwelling density. For example, within Precincts 2 and 3 this is generating a FSR of approximately 0.55:1 which is significantly lesser as compared to the MD Code.

*Inconsistent development controls* - Under the MD Code, terraces and dual occupancies have larger permissible floor areas (FSR) than manor houses which will discourage development of this typology.

### Implications of the DA Guide

*Density controls* – The state wide DA Guide assumes that Council also specifies FSR's in the LEP. Compared to other LGA's CCB relies more on detailed DCP controls than FSR to control medium density development.

*Typology specific controls* – The DA Guide must be considered if the DCP does not have controls for certain medium density development types such as Terraces and Manor Houses. CCB does not currently have controls for Terraces or Manor Houses in the LEP or DCP.

### Other issues

*Precincts* – DCP controls in CCB are further refined by precincts, which encourage smaller developments in some areas that are zoned R3 than in others. While this is a way of refining the scale of development in different areas, possibly to better fit with local character, it creates confusion and adds to the complexity of the DCP.

*Corner sites and sites with rear lanes* - The controls for both complying development and DA approved development encourages development on corner sites.



### Strategic Policy response

In May 2019 Council released a draft Local Housing Strategy (LHS). The document assessed the demand for dwelling growth within the LGA and recommends changes to the planning controls in order to support the three housing typologies mentioned in the Low Rise Medium Density Housing Code.

It is recommended that Council support the draft Local Housing Strategy (LHS) recommendation for rezoning of R2 Low Density areas around Concord West, North Strathfield and Five Dock to facilitate terraces but consider whether an alternative zone should be applied to land within the immediate vicinity of metro stations as part of the preparation of the proposed local planning study.

It is also recommended that Council support:

- Adding Manor House into the permitted with consent land use table in the R3 Medium Density zone but also include it in the R1 General Residential zone.
- The draft LHS recommendation to reduce subdivision lot size and reduce the minimum site width to facilitate the development of Torrens titled terrace development.

- The draft LHS recommendation to amend the DCP to require an increased number of three bedroom apartments and create guidelines to encourage family friendly apartments in centre core areas and major precincts. Review if this control for more three bedroom dwellings has to be extended to all dwellings types (i.e. terraces) as there are currently few new small houses (i.e. two bedroom) being built.

It is recommended that Council support the draft Local Strategic Planning Statement (LSPS) action of precluding Complying Development under the Housing Code and Low Rise Medium Density Housing Code within Local Character Areas. If this is not possible, it is recommended that dual occupancies are removed as a permitted use within Local Character Areas.

### Overall Recommendations

It is recommended that Council's LEP and DCP controls be revised to be closely aligned with the draft Local Strategic Planning Statement, the Draft Housing Strategy and the MD Code and MD Guide.

It is recommended that rather than adopt the State-wide MD Guide, Council revise its DCP to control development that occurs through a DA pathway. This will help Council to retain long term control of built form outcomes. It is recommended that the DCP reflects controls in the MD Guide wherever possible.



**Changes to the LEP**

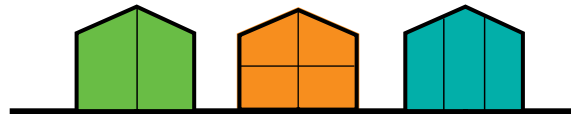
Include a definition of 'Manor House' and 'Terraces' within the LEP.

Restrict development of oversized uncharacteristic dual occupancies within the Local Character Areas.

Identify Character Areas in the LEP and create Local Character Statements for these areas.

Improve alignment between the MD Code, DA Guide and LEP/DCP by including maximum FSRs in the LEP. These could be consistent across a zone or be refined to reflect local character (possibly using the precincts in the DCP).

To encourage a variety of building types and to ensure that specific dwelling type are not substantially bigger than others in the street, it is recommended that the controls for maximum height and FSR are the same for all medium density dwelling types depending on the zone and location. This would mean that a 600m<sup>2</sup> site with a maximum FSR of 0.7:1 could be developed as two 210m<sup>2</sup> dual occupancies or three 140m<sup>2</sup> terraces or four 105m<sup>2</sup> apartments in a manor house.



Same maximum FSR for dual occupancies, manor houses and terraces would encourage diversity of housing types

**Changes to the DCP**

Restructure the text and layout in the current DCP by topic/ theme similar to Chapter 4 (setbacks, landscape, bulk and scale, public domain interface etc.) and integrate controls specific to medium density typologies under each topic.

Identify the controls that are the most important and/or complex and prepare a suite of diagrams that convey what is permissible, encouraged or prohibited in a way that is easy to understand and defend.

Align best practice provisions and terminology with State Government policies (MD Code, DA Guide, ADG) where possible.

Simplify metrics where possible, i.e. avoid complicated formulas and express areas and distances in metres rather than percentages.

Add photographs of best practice built examples with a preference for development in the Canada Bay LGA and briefly explain what the photo shows.



# CHAPTER 1 INTRODUCTION





## 1-1 About this study

A Low Rise Medium Density Housing Code (the MD Code), developed by the NSW Government, commenced in July 2018. The new Code, which forms part of the State Environmental Planning Policy (Exempt and Complying Development Code) 2008, permits a range of medium density housing typologies including Dual Occupancies, Manor Houses and Terraces, to be achieved through a complying development certificate process.

On 5 July 2018 the Department of Planning and Environment advised that the MD Code would be deferred in the Local Government Area (LGA) of the City of Canada Bay (CCB) until 1 July 2019. On 28 June 2019, a second deferment was provided that delayed commencement of the code in the City of Canada Bay until 31 October 2019.

The Low Rise Medium Density Design Guide for Development Applications (DA Guide) was prepared to provide councils with standard development controls where their DCP did not cover the specified range of development types. It was also intended that the document could be adopted by councils to control these particular development types. Clause 92(e) of the Environment Planning and Assessment Act 1979 requires CCB council to consider the DA Guide for all development applications where a DCP does not specifically apply. Manor houses and terrace houses are not controlled by the current DCP.

The introduction of the MD Code and the DA Guide created a need for Council to review the current planning framework for low rise medium density development across the LGA.

The key objectives of this project were to

- Determine the planning and urban design implications arising from the introduction of the Low Rise Medium Density Housing Code to Canada Bay;
- Ensure that high quality urban design and planning outcomes are delivered when sites are redeveloped for the purpose of low rise medium density housing;
- Convey technical information in a way that is visually appealing and accessible to a range of audiences.

### Application of the Code in Canada Bay

The objectives of the recommendations included in this report are to:

- Guide the assessment of building types facilitated by the introduction of the MD Code.
- Bring development controls in closer alignment with the MD Code.
- Ensure local development controls for medium density housing promote a diversity of housing typologies and sizes within the LGA.
- Develop controls where required to be more responsive to local character and context.



## 1-2 Process followed

The recommendations in this report are the result of a study trip and workshop with council staff as well as a review and comparison of the different standards and controls with respect to:

- Council's Local Environmental Plan and Development Control Plan
- Low Rise Medium Density Housing Code, NSW Government (MD Code)
- The Low Rise Medium Density Design Guide for DAs (DA Guide)

This led to the creation of a Background Report for Council review. After receiving Council feedback on this report, the document was restructured to make it easier to understand the recommendations.

A review of the Draft Local Housing Strategy (LHS) (2019) and Draft Local Strategic Planning Statement (LSPS) (2019) was undertaken to increase the alignment of the recommendations with Council's emerging strategic policy to then create this final Recommendations Report.

## 1-3 Structure

*Chapter 1* - provides a background to this study, outlines the process that was followed to develop the recommendations and summarises the relevant documents that were reviewed.

*Chapter 2* - discusses the key findings specific to the medium density housing typologies in the City of Canada Bay, analyses the spatial data to identify opportunities for medium density development and discusses some of the key issues with recently approved development within the LGA.

*Chapter 3* - identifies recommended changes to the City of Canada Bay Local Environment Plan 2013 (LEP) in order to deliver improved planning outcomes for low rise medium density housing.

*Chapter 4* - identifies recommended changes to the City of Canada Bay Development Control Plan (DCP) in order to deliver improved architectural design outcomes for low rise medium density housing.

*Chapter 5* - reviews draft Character Statements available for various localities throughout Canada Bay and prepares an example Local Character Statement (LCS) for one of the identified Character Areas.

## 1-4 Policy overview

The following planning policies and guidelines influence medium density housing typologies within the City of Canada Bay:

- City of Canada Bay Local Environmental Plan 2013 (LEP)
- City of Canada Bay Development Control Plan 2013 (DCP)
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (Codes SEPP): Part 3B Low Rise Medium Density Housing Code, NSW Government (MD Code)
- The Low Rise Medium Density Design Guide for DAs (DA Guide), NSW Government
- Draft Local Housing Strategy, SGS Economics & Planning 2019
- Draft Local Strategic Planning Statement, City of Canada Bay Council, 2019

### City of Canada Bay LEP 2013

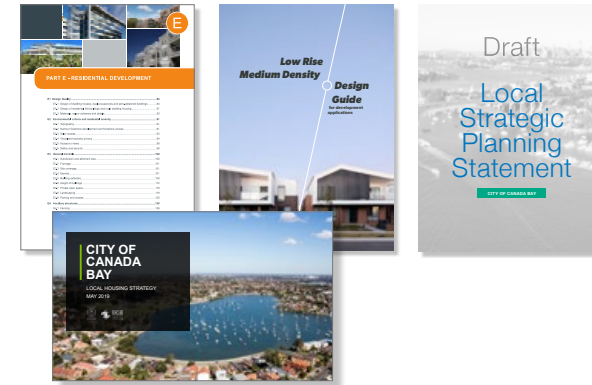
The Canada Bay LEP permits the following medium density housing typologies:

- Dual occupancies in R1 General Residential, R2 Low Density Residential and R3 Medium Density Residential zones
- Multi dwelling housing (including manor houses, terraces and villas/ townhouses) in R1 General Residential, R3 Medium Density Residential and R4 High Density Residential zones

### Low Rise Medium Density Housing Code

The MD Code and the DA Guide introduce two new forms of development, being Manor Houses and Terraces.

Manor houses are permissible where multi dwelling housing or residential flat buildings are permitted. Terraces are defined as a form of multi dwelling housing where each new dwelling directly faces a public road and are permitted where multi dwelling housing is currently permitted. Along with dual occupancies, these typologies can be built as 'complying development' if they are permissible with consent in the land use zone under the LEP.



Complying development establishes an 'as of right' development potential – but only if all standards are met. However, aspects of a development application can be assessed on their merits and may not comply with all controls as set out in a DCP.

Complying development is not permitted on environmentally sensitive land, in heritage conservation areas or on the same land as a heritage item. On this basis complying development is restricted in application compared to the development potential under the DA path – mainly in relation to heritage conservation areas.



### The DA Guide

The DA Guide must be considered by Council when assessing DAs if the DCP does not have controls for specific development types of medium density housing (ie Manor Houses). The DA Guide can be adopted in full or in part as part of Council's DCP (See Planning Circular PS 18-007).

The DA Guide contains detailed objectives and design criteria for all aspects of the development. The DA Guide specifically refers in many instances to Council DCPs. The intention of the DA Guide is that the key metrics and controls that shape the character of the built form are contained specifically in Council's DCP.

In many areas, particularly with regard to amenity, it provides the same or a greater standard than the current DCP. These aspects of the development are universal and generally independent of the location and character of the area.

The DA Guide has a similar format to the Apartment Design Guide (ADG). It also has a number of components designed to ensure a high quality outcome and increased amenity such as minimum room size, storage provision and access to private open space.

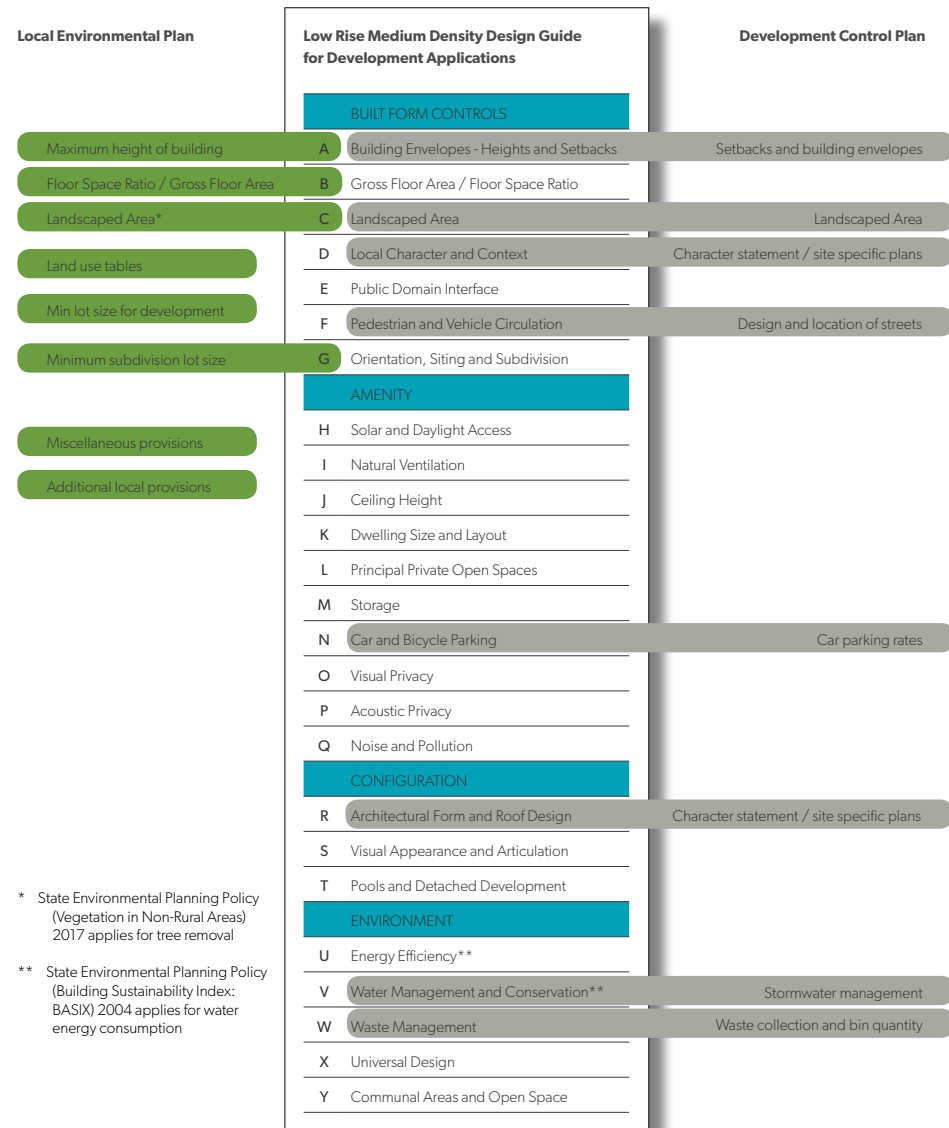


Figure 1 Relationship between LEP, DCP and Design Criteria (Low Rise Medium Density Design Guide, 2018)



## Draft Local Housing Strategy

This document assesses the demand for dwelling growth within the LGA, prepares a structure plan locating the potential distribution of housing within the LGA, and recommends changes to the planning controls in order to support the three housing typologies mentioned in the Low Rise Medium Density Housing Code.

The report identifies a significant demand for medium and high density housing in the LGA over the next 20 years, with a higher demand around local public transport, social infrastructure and open space. The forecast increase in apartments creates challenges for preserving local character, providing amenity and housing diversity, and maintaining affordability.

The draft strategy presents two options for the delivery of future housing in the LGA:

- Option 1 (Current approach): that keeps to current planning framework in the LEP, with the addition of the major planned precincts on Parramatta Road and Rhodes East.
- Option 2 (Local Centre Renewal): investigative changes to the planning framework to encourage a greater diversity of dwellings.

The structure plan identifies the following if Option 1 is the preferred option for delivery of future housing:

- High density apartment development of the Parramatta Road Urban Transformation Precincts and the Rhodes East Planned Precinct with provisions for housing affordability and diversity (senior living, student accommodation etc).
- Low rise medium density and infill development in and around well-serviced and connected local centres such as Concord West, North Strathfield and Five Dock (by developing Local Area Plans).
- Preservation of DCP Character Precincts with sensitive infill development.

Option 2 identifies additional areas around Concord West, North Strathfield and Five Dock as 'mixed housing precincts' to encourage semi detached dwellings through low rise medium density development of no greater than 2 storeys in height.

To achieve the additional medium density infill development, the following planning framework modifications are recommended:

- Undertake further analysis to determine whether land surrounding proposed metro stations should be rezoned to allow for a higher density
- Add Manor Houses into the permitted with consent land use table in the R3 Medium Density zone.
- Reduce subdivision lot size to facilitate the development of Torrens titled terrace development. Anecdotal evidence suggests that there is an increase in the demand for Torrens title development.
- Revise the minimum site width to encourage the development of terrace housing.
- Investigate policy guidelines to encourage family friendly apartments in centre core areas and major precincts.



Figure 2 Structure plan for the delivery of future housing in the LGA (CCB LHS, 2019)

**Draft Local Strategic Planning Statement**

This document outlines the 20-year vision for the LGA in accordance with the Eastern City District Plan (2018), the Greater Sydney Region Plan (2018) and other relevant state-wide and regional policies, and identifies planning priorities and land use actions to deliver the vision.

The 2016 population figure of the LGA is projected to increase by 32,000 people by 2036, requiring 14,450 additional dwellings, with the highest projected growth in North Strathfield, Rhodes and Mortlake- Breakfast Point. As of 2016, over 50% of the dwellings in the LGA are apartments which is estimated to increase to 63.8% by 2036. Rental stress is identified as a key concern within the LGA.

The structure plan for the LGA identifies key spatial projects planned for the future including:

- Rhodes Planned Precinct & Collaboration Area
- Parramatta Road Urban Renewal corridor
- Potential sites for terraces and dual occupancies around local centres
- Local Character Areas and Conservation Area
- Public open space and biodiversity areas
- Future Metro West corridor with potential metro station locations

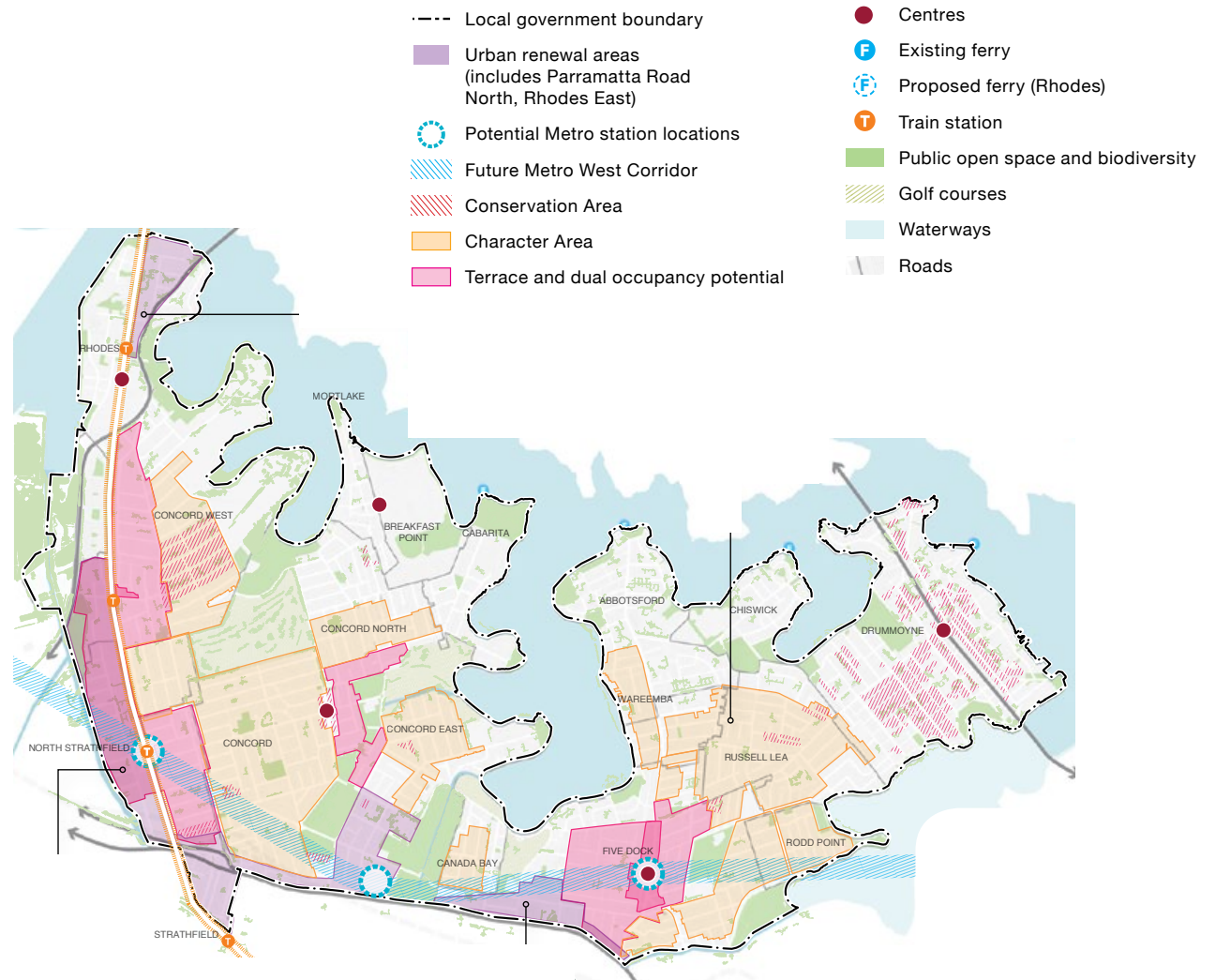


Figure 3 Structure plan for the LGA (LSPS 2019)

The draft strategy uses four key themes to frame the land use actions for the LGA, which include infrastructure and collaboration; liveability; productivity; and sustainability. The issues of housing choice and affordability are addressed within the following priorities and actions:

*Priority 2: Work towards best-practice planning and infrastructure provision for Rhodes Planned Precinct, creating a model for sustainable, high quality development*

Actions	
2.1	Work with stakeholders on the Rhodes Planned Precinct to ensure that sustainability, affordable housing and other infrastructure is delivered.

*Priority 4: Foster safe, healthy, creative, culturally rich and socially connected communities*

Actions	
4.1	Review the DCP to ensure new apartment development is adaptable and accessible; adequate communal / shared is provided; and impacts of air and noise pollution from road and rail corridors are minimised.
4.2	Implement the Disability Inclusion Action Plan; Community Safety and Crime Prevention Plan; Public Art Plan and Cultural Plan.

*Priority 5: Provide housing supply, choice and affordability in key locations*

Actions	
5.1	Implement the Parramatta Road Corridor Strategy generally in accordance with the 2016-2023 Implementation Plan, following finalisation of a precinct wide traffic and transport study, and an urban design study.
5.2	Planning Proposals that seek to rezone land outside of identified renewal areas are compatible with character and prevailing density of established neighbourhoods.
5.3	Investigate changes to the planning framework to encourage greater diversity of dwellings within the immediate vicinity of Concord West station, North Strathfield station and Five Dock Town Centre.
5.4	Amend DCP to require all new development to provide an increased number of three bedroom apartments.
5.5	Require a minimum of 5% of the Gross Floor Area of new development to be dedicated as affordable housing for Planned Precincts; Parramatta Road Corridor precincts; and where there is an increase in density arising from a Planning Proposal
5.5	Ensure that Planned Precincts, Parramatta Road Corridor and redevelopment of large sites deliver a diversity of housing types ranging from terraces to apartments.

*Priority 7: Create vibrant places that respect local heritage and character*

Actions	
7.2	Amend the LEP to implement interim local character statements for identified localities.
7.3	Review the interim local character statements and prepare new local character statements for areas identified for change, and areas with an existing distinctive urban form and character.
7.4	Preclude Complying Development under the Housing Code and Low Rise Medium Density Housing Code from Local Character Areas.
7.8	Include a minimum lot size of 800m <sup>2</sup> for Boarding Houses in the R2 Low Density Residential zone.

The structure plan within the draft strategy reflects Option 2 as outlined in the Draft Local Housing Strategy.





## CHAPTER 2

# KEY FINDINGS

## 2-1 Typologies

### Dual occupancies

Dual occupancies locate two dwellings on one lot which can be arranged side by side facing the same street frontage, behind each other with the rear dwelling accessed by a driveway, or located on corner lots where (ideally) one dwelling addresses the primary road and the other the secondary road.

Site testing and policy comparison of the DCP and the MD Code has identified the following key findings specific to this medium density housing typology in the City of Canada Bay:

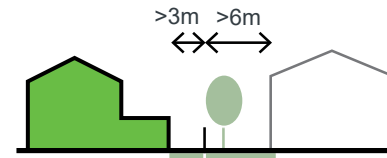
- *Larger permissible houses under the MD Code* - the MD Code allows higher FSR for attached dual occupancies on sites less than 1200m<sup>2</sup> compared to the DCP. This is likely to result in bulkier complying dual occupancy development. For example, on a small site of 450m<sup>2</sup> a dual occupancy development of 2 dwellings each with a GFA of 160m<sup>2</sup> would be permissible.
- *Semi-detached appearance* - complying dual occupancy development under the MD Code must address the street. On mid-block lots this will likely create a more semi-detached appearance. Development that proposes a 'rear' dwelling without a street address must follow the DA pathway and comply with the DCP.
- *Reduced rear setbacks* - under the MD Code dwellings can be built up to 3m from the rear boundary compared to a 6m requirement in the DCP. This may reduce the opportunity for consolidated deep soil zones and mature trees.

However, the reduced rear setback allows the private open space to be located on the side of the dwelling, increasing the opportunity for a more climate responsive design.

- *Local character* - both the MD Code and the DCP require consideration of existing character, streetscape and the dominant pattern of existing development.
- *Smaller Torrens title lots* - the MD Code permits subdivision to create smaller lots (60% of LEP minimum i.e. 270m<sup>2</sup>) compared to the Canada Bay LEP minimum (generally 450m<sup>2</sup> for attached dual occupancies and 800m<sup>2</sup> for detached).
- *Narrow dual frontage lots* - the MD Code permits dual occupancies on very narrow lots (minimum 12m before subdivision) if these have two street frontages. This includes lots with a rear lane and lots located on corners. The current minimum lot width in the DCP is 14m.
- *Front loaded dual occupancies* - site testing has shown that 18m wide mid-block lots (before subdivision) allow for successful integration of garages and driveways. If lot widths are less than 18m this can be a challenge.
- *'Eyes on the street'* - the MD Code requires a habitable room facing the street on each level of development. The DCP is less strict and only requires one habitable room which can be on the ground or upper level.
- *The maximum GFA not always achievable* - site testing has shown that due to setback and landscape area controls in the MD Code, the maximum permissible GFA for small dual occupancy sites less than 500m<sup>2</sup> and without basement parking is difficult to achieve.



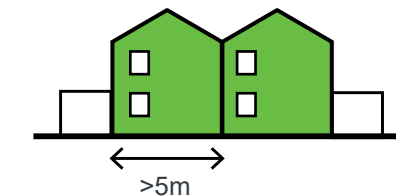
Complying dual occupancies are likely to be larger and bulkier than traditional detached houses



A smaller 3m minimum rear setback is permissible under the MD Code



The MD Code allows dual occupancies on lots as narrow as 12m



The MD Code requires that each level must have a habitable room addressing the street



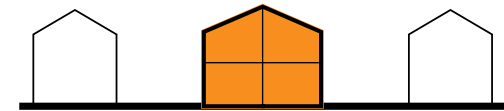
**Manor houses**

Manor house developments contain three to four dwellings integrated into a two storey built form with the appearance of a large detached house. It is also known as a small Residential Flat Building (RFB). Manor houses provide an opportunity for small scale affordable housing that can assist in providing a diverse range of housing in an infill environment. Historically manor houses were a popular housing form in the City of Canada Bay, however, more recent examples are rare.

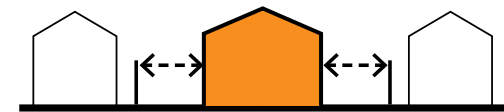
Site testing and policy comparison of the DCP and the MD Code has identified the following key findings specific to this medium density housing typology in the City of Canada Bay:

- *Less permissible floor space* - the MD Code permits less maximum floor space for manor houses compared to other medium density typologies.
- *Setbacks* - the MD Code requires larger rear and side setbacks for manor houses compared to other medium density typologies. However, ground floor side setbacks in the MD Code are three times smaller than those in the DCP.

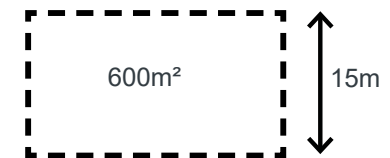
- *Smaller landscaped areas* - minimum landscaped areas under the MD Code are less than the requirements in the current DCP. The MD Code also identifies a minimum area dimension that can be counted towards landscaped area of 1.5m and this is believed to generate a similar overall landscaped area.
- *Minimum lot size* - the minimum lot size for manor houses under the MD Code overrides Council's local planning controls. Manor houses under the MD Code are permissible on sites that are 600m<sup>2</sup> while the DCP requires a minimum of 800m<sup>2</sup>.
- *Narrower sites* - the minimum lot width for manor houses under the MD Code is 5m less than the current minimum under the DCP.
- *Driveways and parking* - manor house development on mid block sites without basement parking requires a larger area for vehicle circulation and more parking spaces than traditional detached houses or dual occupancies.
- *Circulation* - the low permissible GFA may encourage external communal circulation areas (stairs, external corridors) to maximise unit sizes.
- *Corner sites* - lots located on corners are ideal for manor house development as they offer greater design flexibility for orientation and vehicle access.



Manor houses are a small strata titled Residential Flat Building with multiple dwellings within a 'traditional' building envelope



Side setbacks under the current DCP are more than three times greater than under the MD Code



The MD Code allows manor houses on lots as small as 600m<sup>2</sup> and as narrow as 15m



Manor houses require a greater area for vehicular circulation and parking than other housing types

**Terraces**

Terraces are a long-established traditional attached housing typology, typically 2-3 storeys in height and side by side. Vehicular parking can be from the front (primary street), the rear (laneway) or within a shared basement. Traditionally terraces are orientated to the street, with private open space and parking located to the rear of the property.

A terrace style development has the bulk of the development located along the front of the lot rather than deep into the lot. This can reduce the impact of development on the rear garden compared to a typical townhouse development where the dwellings are located in the middle of the site.

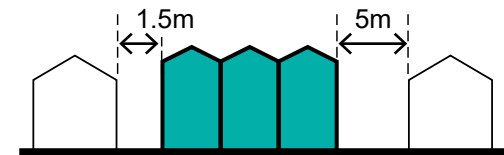
Site testing and policy comparison of the DCP and the MD Code has identified the following key findings specific to this medium density housing typology in the City of Canada Bay:

- *Development intensity* - the MD Code permits a higher density (FSR) for terrace development in R3 zones than the current LEP.
- *Dual-frontage lots* - sites with more than one street address, e.g. corner lots or lots with rear access, are attractive for terrace development as they can accommodate a greater number of dwellings compared to a similar sized mid-block lot. This is due to the requirement for all dwellings to have a frontage to a public road and to be a minimum of 6m wide.

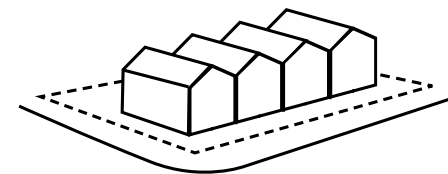
- *Smaller setbacks* - the MD Code allows significantly smaller side setbacks for terraces than the current DCP.
- *Overshadowing of adjoining sites* - sunlight access to neighbouring dwellings could be a critical issue, as terrace development results in deeper two storey massing near the boundary compared to other housing typologies, especially on mid-block sites.
- *Lot width* - mid block sites less than 18m wide are not likely to develop as terraces. To be viable, at least three terraces with a minimum width of 5m (DA Guide) or 6m (MD Code) would be required.
- *Lot size* - under the MD Code 800m<sup>2</sup> lots can be Torrens title subdivided for three terrace houses, under the current LEP 1,350m<sup>2</sup> is required.
- *Reduced front setbacks in R3 zones* - the MD Code allows complying terraces to set back as little as 3.5m in R3 zones while the current DCP has a requirement of a 'prevailing street setback' of the nearest five dwellings. In Canada Bay front setbacks are typically 5 to 7.5m.
- *Consolidated basement carparking* - terrace development with a rear lane or consolidated basement carpark are the preferred design outcome over front-loaded terraces as the number of driveway crossings is significantly reduced and buildings have the ability to positively address the public domain with front doors, windows and landscaped spaces.



Terrace developments typically require greater lot widths to be viable



Side setbacks under the current DCP are more than three times greater than under the MD Code



Corner lots are the most attractive location for terrace developments



The greatest limitation for complying terraces is the potential overshadowing impacts on neighbours

## 2-2 Spatial analysis

The residential areas within the Canada Bay area are generally located within the R2 – Low Density Housing and R3 Medium Density Housing zoned land.

The split between the R2 and R3 zoned with respect to the number of lots is:

- R2 12,965 Lots
- R3 3,465 Lots
- Total (R2+R3) 16,430

The R2 zoned land permits single dwelling houses, semi-detached houses and dual occupancies.

The R3 zoned land permits the same residential land uses as R2 and also includes multi-dwelling housing and residential flat buildings.

Of the R3 zoned land, Council have approved development applications on 53.4 % of the medium density zoned land.

The low availability of medium density zoned land reduces the capacity for new medium density housing to be part of the housing mix for Canada Bay unless additional land is made available or significant development incentives are provided to enable amalgamation.

### Delivery of medium density housing as Complying Development

The Codes SEPP provides an alternate path for the delivery of medium density housing through the complying development approval pathway. In order to achieve consent through this path, each development must comply with every development standard in the Codes SEPP and also the Design Criteria within the Design Guide.

The requirement for 100% compliance with the Codes SEPP is a high bar, and certain site based factors will limit the attractiveness of this pathway for development consent these include:

- Lot orientation – favours a north – south orientation
- Lot width – favours sites with a width greater than 15m
- Topography – generally flat topography preferred.
- Not land containing a heritage item or within a heritage conservation area
- Lot area greater than 450m<sup>2</sup> for dual occupancy, 600m<sup>2</sup> for manor house and 800m<sup>2</sup> for terrace form development.
- Lots of irregular shape and frontage.

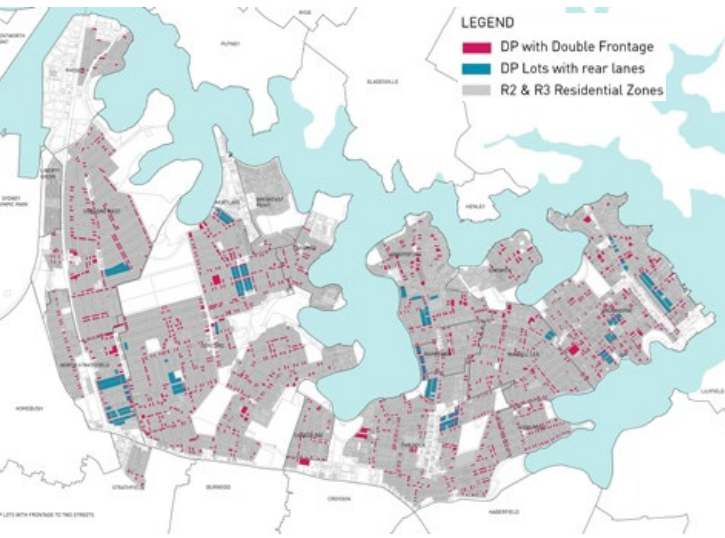
The following numbers are for DP lots that are greater than 450m<sup>2</sup> with a site width of over 15m for dual occupancy; greater than 600m<sup>2</sup> with a site width over 15m for manor houses; and greater than 800m<sup>2</sup> with a site width of over 18m for terrace house development.

	Lots	% of all lots
<b>Dual Occupancy</b>	2879	22.2% (of all lots in R2 zone)
<b>Manor houses</b>	334	9.6% (of all lots in R3 zone)
<b>Terraces</b>	31	0.9% (of all lots in R3 zone)

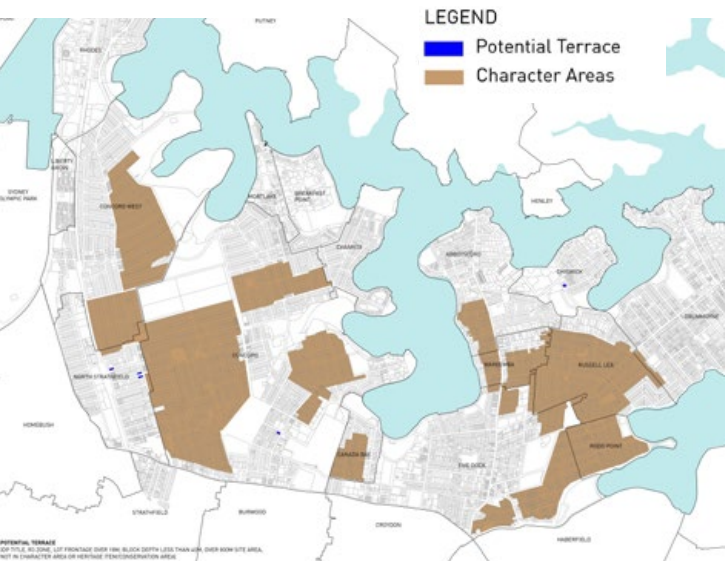
After land within a heritage or conservation area is excluded from the above, the following number of DP lots would be available for medium density housing using the complying development pathway:

	Lots	% of all lots
<b>Dual Occupancy</b>	1371	10.6% (of all lots in R2 zone)
<b>Manor houses</b>	322	9.3% (of all lots in R3 zone)
<b>Terraces</b>	29	0.8% (of all lots in R3 zone)

Note: if east-west oriented lots were excluded from this data the number of lots available for dual occupancy development would be reduced by approximately 35 percent.



DP lots with frontage to two streets



R3 zoned land with 18m+ and 21m+ wide frontages with less than 40m depth not in Character Area

### Opportunities for Terrace house development

Both the Codes SEPP and the Design Guide for development applications release the potential for terrace house development as an alternative to the traditional villa and town house development on the R3 zoned land

The terrace house form is most attractive when:

- Access is available to established rear lanes
- Corner and end of block locations

Based on currently available R3 zoned land – there are 29 lots available for this kind of development without needing amalgamation.

Terrace house forms could also be carried out on land with a frontage greater than 18m (21m would be required to approve on land as a complying development certificate)

The terrace house form of development is most attractive where the lot depth is between 30 and 40m. Where the block depth exceeds 50m, a town house or villa development could result in a greater yield.

### Opportunities for Manor house development

Manor house development is limited in height to two storeys and is permitted where multi dwelling house or residential flat buildings are permitted – in Canada Bay that is limited to R3 zoned land.

Under the Codes SEPP, a minimum site requirement of 15m width at the street boundary and area of 600m<sup>2</sup> is required.

322 lots are available for this on existing R3 zoned land.

The most significant barrier to this form of development is accommodating 4 car spaces on such small land. Corner sites provide the best opportunities for car parking without requiring a basement.

27 lots meet the criteria and are located on corners on R3 zoned land.



2-3 Issues as built vs. intent



**Built Character**

A review of recently approved dual occupancy development has indicated some inconsistencies between approvals and relevant controls in the CCB DCP.

The most common non-compliance has been approval of driveways and accessways that take up over a third of the building frontage (E1.1, C21). This is often due to a dual driveway design which typically results in having more than one vehicle crossing per site (E1.1, C19). Other common features of approved dual occupancies are:

- The landscape area provided is less than the amount required in the DCP (E3.8, C2)
- Non-compliances with the building height plane envelope (E3.6, C1)
- Encroachments into the side setbacks (E3.5, C5)
- Garages in the primary façade and/or forward of entry doors (E3.9, C10)
- Dwellings with double garages or garage with carport embedded in the primary façade (E3.9,C10)
- FSR over 0.5 in R2 zone (CCB LEP)

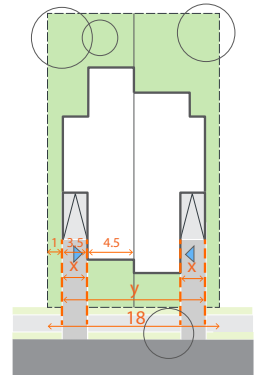
Dual occupancies on narrow lots (less than 15m) result in the driveway or garage dominating the street frontage. Even where the parking is located in a basement - although the garage door can have reduced visibility, the hole in the front setback limits the opportunity for landscape and significantly alters the character of the streetscape compared with a single dwelling on the same lot.

Development on lots over 18m is preferable because then the width of habitable rooms facing the street is greater than the width of the garaging (as seen in the adjacent diagram).

Many recent townhouse developments have resulted in private courtyards facing the street that provides a poor street presentation.

Basement car parking on narrow sites also results in reduced deep soil area in both the side and rear setbacks.

The lack of any detailed character statements in the DCP has resulted in approved development in many cases being unsympathetic to the existing context - in particular in how the development presents to the street.





## CHAPTER 3

# LEP RECOMMENDATIONS

### 3-1 Land use zoning

Within the City of Canada Bay Local Environmental Plan (CCB LEP), the majority of residential land is zoned as R2 Low Density Residential (77.5%) followed by R3 Medium Density Residential (20.7%), R4 High Density Residential (0.6%) and R1 General Residential (1.2%).

As per the CCB LEP, Dual occupancies are currently permitted in R1, R2 and R3 zones on lots greater than 450m<sup>2</sup> (attached) and 800m<sup>2</sup> (detached). There are currently 1371 lots available for development as dual occupancy in the R2 zone (10.6% of all R2 zoned land). These lots are not heritage listed or in a conservation area and have lot widths of 15m or greater.

Under the MD code the minimum lot size for side by side dual occupancies is 400m<sup>2</sup>, with a minimum lot width of 12m. In Canada Bay, dual occupancies will generally be developed with one dwelling at the front and one at the rear of the lot. This will require an extra 3m of lot width (total 15m minimum lot width) to accommodate a driveway to the rear dwelling and a minimum lot size of 450m<sup>2</sup>.

Manor houses are not currently defined as a typology in the CCB LEP. However, manor houses can be approved as 'multi dwelling housing' (if each unit has access at ground level) or as 'residential flat buildings' (if each unit does not have access at ground level). Both these housing typologies are permissible in the R1, R3 and R4 zones within

CCB. Under the MD Code, manor houses are permitted where an LEP allows multi dwelling housing or residential flat building, but not in areas zoned R4 High Density Residential.

Terrace houses are permissible as 'attached dwellings' or 'multi dwelling housing' within areas zoned R1 R3 and R4. Terrace houses are different to villa or townhouse developments as each dwelling must have a frontage to the street. The traditional form of villa and town house development, where the site has a narrow frontage to the street and dwellings are located perpendicular to the street, is often characterized by minimal landscaped areas, dominance of the driveway and poor definition of public/ private spaces and impacts on rear gardens of adjoining properties. Villas and townhouses are currently permissible wherever terraces are permissible as multi dwelling housing.

As per the draft Local Strategic Planning Statement (LSPS), dated March 2019 and exhibited for comment in July 2019, one of the key actions of Council is to provide housing choice and affordability within the LGA and to "investigate changes to the planning framework to encourage greater diversity of dwellings within the immediate vicinity of Concord West station, North Strathfield station and Five Dock Town Centre".

	R1	R2	R3	R4
Detached	✓	✓	✓	
Secondary dwelling	✓	✓	✓	
Dual Occupancy	✓	✓	✓	
Manor House (multi dwelling/ residential flat building)	✓		✓	✓
Terrace (attached/(multi dwelling)	✓		✓	✓
Townhouse (attached/multi dwelling)	✓		✓	✓
Apartments (residential flat building)	✓		✓	✓

Table 1 Permissible housing typologies in residential zones within the Canada Bay LGA (CCB LEP 2013)

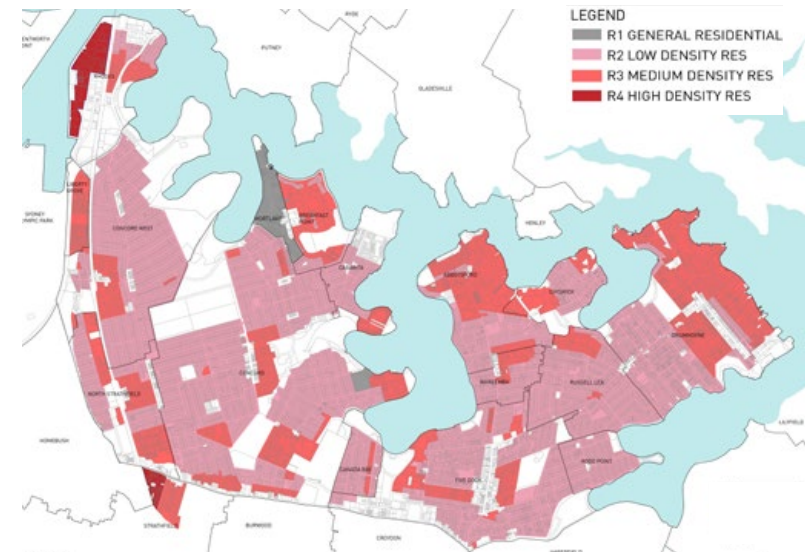


Figure 4 Zoning map with residential zones (CCB LEP 2013)



The draft Local Housing Strategy (LHS), released in May 2019, recommends rezoning the R2 Low Density areas around Concord West, North Strathfield, Five Dock and Concord east to an R3 Medium Density zone in order to encourage low rise medium density development (manor houses, townhouses and terraces).

Of the areas identified for rezoning from R2 Low Density to R3 Medium Density in the draft LHS, Concord West is an existing train station, Five Dock is a potential future Metro Station, North Strathfield is an existing train station and potential future Metro station, while Concord (as identified on the Structure Plan) is not an existing or potential future train station.

**Recommendation:** *Include 'manor house' within the LEP definitions.*

A separate typology of 'manor house' enables controls to be developed that are independent from 'multi dwelling housing' and 'residential flat buildings'. If Council wishes to promote the development of manor houses through a development application route, these controls will need to ensure manor houses are an attractive option compared to other typologies (i.e. FSR/ site coverage) and also "fit" with the local character of an area. It is recommended that 'manor house' be added to the R1 and R3 Land Use Tables. This recommendation is in line with the draft LHS which also recommends adding manor houses into the permitted with consent land use table in the R3 Medium Density zone.

**Recommendation:** *Include 'multi dwelling housing (terraces)' within LEP definitions.*

The current LEP definition of 'multi dwelling housing' allows the development of manor houses, terraces and townhouses or villas. To provide specific controls for terraces that do not apply to manor houses, townhouses or villas, it is recommended that the LEP includes a definition for 'multi dwelling housing (terraces)' similar to that mentioned in the MD Code as follows: *multi dwelling housing (terraces) means multi dwelling housing where all dwellings are attached and face, and are generally aligned along, 1 or more public roads.* It is recommended that 'multi dwelling housing (terraces)' be added to the R1 and R3 Land Use Tables.

**Recommendation:** *Introduce multi-dwelling housing (terraces) as an additional permitted use in R2 Low Density zone in identified locations.*

To increase diversity of housing types within the LGA, and especially the development of terrace houses, it is recommended that an 'Additional Permitted Uses' map be prepared and incorporated within the LEP identifying suitable locations within R2 Low Density Residential zone where multi-dwelling housing (terraces) can be developed

**Recommendation:** *Consider the use of an R3 Medium Density zone for land within the immediate vicinity of proposed Metro stations – where supported by a local planning study.*

Currently, the R3 Medium Density zone permits attached dwellings, dwelling houses, dual occupancies, multi dwellings and residential flat buildings. The best suited housing typology for any specific site would depend on the location of the site, the lot size, the desirability, the feasibility and the construction cost.

Rezoning areas identified in the draft LHS from R2 to R3 Medium Density in Five Dock and North Strathfield is recommended as they are potential Metro stations, with a high dwelling demand forecast. In addition, the area around the North Strathfield station may be suitable for large scale urban renewal since the location will be close to a key interchange station between Sydney Metro and the heavy rail system and provide access to a higher number of jobs. Once this occurs, this area could potentially accommodate a higher density of development.

Areas within the R3 zone land, closer to the metro station, could contain medium density housing of a greater height and intensity than the low rise dwelling typologies proposed in this report. These could have location specific controls and could be considered as part of a detailed precinct plan as metro station locations are confirmed.

**Recommendation: Restrict dual occupancies in Local Character Areas.**

The density controls for dual occupancies under the MD Code are significantly higher than the maximum permissible FSR specified in the LEP. This could impact on the built form outcomes and amenity of the LGA, especially in the Local Character Areas.

It is recommended that dual occupancies are restricted within the Local Character Areas by either precluding their development as complying development or restricting dual occupancies within Local Character Areas. This is discussed further in Section 3-6.

	Current LEP	MD Code	DA Guide	Recommendations	
	Dual occupancies	Permissible in R1, R2 and R3 zones	As per Council's LEP possible in R1, R2, R3	As specified in the LEP	Keep as is but restrict dual occupancies in Local Character Areas (See Section 3-6).
Multi dwelling housing	Manor houses	Permissible as multi dwelling/ residential flat building in R1, R3 and R4 zones	Possible in R1 and R3. Not possible in R4.	As specified in the LEP	Include 'manor house' within the LEP definitions and allow within R1 and R3 zones
	Villas/ townhouses	Permissible as attached/ multi dwelling in R1, R3 and R4 zones	n/a	As specified in the LEP	Keep as is
	Terraces	Permissible as attached/ multi dwelling in R1, R3 and R4 zones	Possible in R1 and R3. Not possible in R4.	As specified in the LEP	Include 'multi dwelling housing (terraces)' within LEP definitions and allow within R1 and R3 zones. Promote as an 'Additional Permitted Use' within the R2 zone.

Table 2 LEP Recommendations - Land use zoning

### 3-2 Building heights

#### Commentary

Within the City of Canada Bay LEP, areas zoned R1, R2 and R3 where the medium density typologies are permissible generally have a height limit of 8.5m. Under the MD Code, the maximum height limit for the three typologies is also 8.5m, although terrace houses can be 9m high in the DA Guide. The number of storeys under the MD Code is limited to 2 storeys for all three typologies.

**Recommendation:** Add new subclause to permit 9m maximum building height for terraces in R3 Medium Density zones

Currently, the maximum building height of 8.5m makes it difficult to accommodate a third storey in terraces. To make terraces in the R3 zones more attractive, a new subclause to Clause 4.3 Height of Buildings within the LEP is recommended as follows:

(2) The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.

(2A) Despite subclause (2), the maximum height of multi dwelling housing (terrace) on land in Zone R3 Medium Density Residential is 9 metres if:

- (a) the development follows a 45 degree height plane to the front and the rear, springing from 7m above the natural ground level (as shown in Figure 5); and
- (b) only bedrooms and non-habitable spaces are located on the third level.

The visual impact of the additional storey on the streetscape and local character would be mitigated through a 45 degree height plane across the third storey to the front and the rear. This recommendation is in line with the draft Local Housing Strategy, which identifies the opportunity to accommodate a third storey subject to satisfactory urban design outcomes.

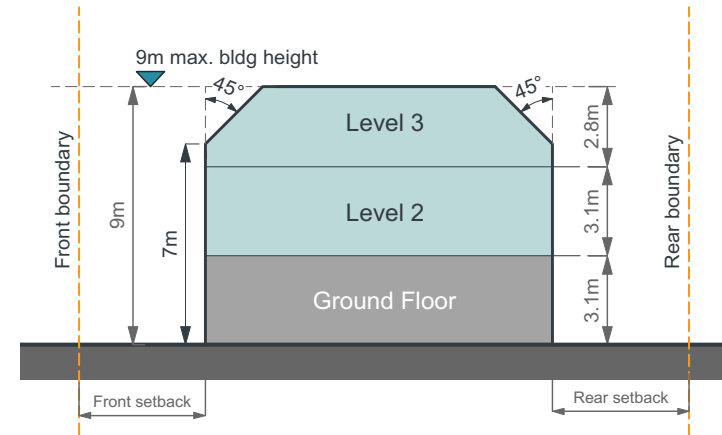


Figure 5 Recommended height plane control for medium density development within an R3 zone

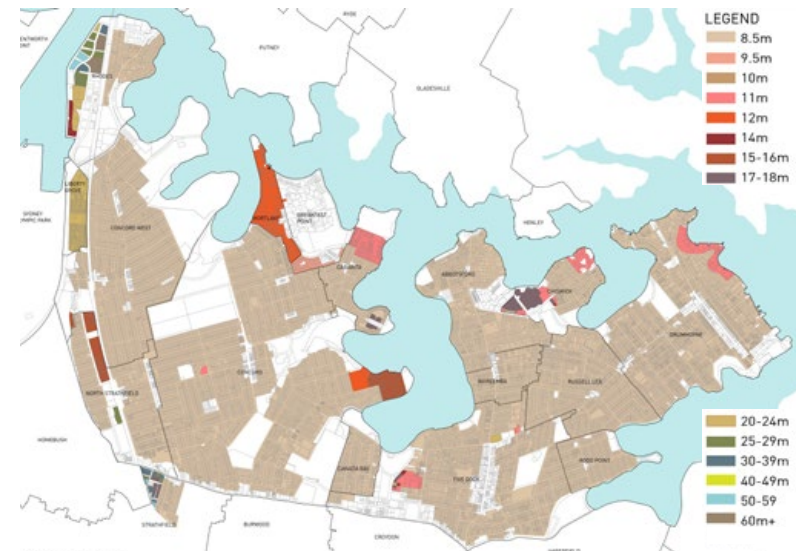


Figure 6 Maximum height of buildings in residential zones (CCB LEP 2013)

	Current LEP	MD Code	DA Guide	Recommendations
Multi dwelling housing	Dual occupancies	Maximum 8.5m, 2 storeys	As specified in the LEP or DCP. Maximum 8.5m and 2 storeys. Maximum 5.4m for detached dual occupancies in battle axe arrangement single storey (1 storey) for rear dwelling	Add new subclause to LEP to permit 9m maximum building height for multi dwelling housing (terraces) in R3 Medium Density zones.
	Manor houses	Maximum 8.5m 2 storeys	As specified in the LEP or DCP. Maximum 2 storeys (excluding basements)	
	Villas/ townhouses	n/a	n/a	
	Terraces	Maximum 9m, max 2 storeys	Maximum 9m (if not specified in LEP) and 2 storeys (excluding basement) in R1, R2 zones; Maximum 11m (if not specified in LEP) and 3 storeys (excluding basement) in R3 zone	

Table 3 LEP Recommendations - Building heights

### 3-3 Minimum lot size for development

#### Commentary

The purpose of a minimum lot size for development clause is to ensure that the development site has a dimension that ensures appropriate amenity.

Within the Canada Bay LEP 2013, the current minimum lot size is 450m<sup>2</sup> for an attached dual occupancy and 800m<sup>2</sup> for a detached dual occupancy. For multi dwelling housing (including manor houses, terraces and townhouses), the minimum lot size is 800m<sup>2</sup> in the R1 and R3 zones. Attached dwellings (including terraces and townhouses) currently do not have any minimum lot size as per the CCB LEP.

Under the MD Code, the minimum lot size for attached and detached dual occupancies must be the greater of either 400m<sup>2</sup> or the minimum lot size as per the LEP. The minimum lot size for manor houses and terraces in the MD Code is 600m<sup>2</sup>, which is 200m<sup>2</sup> smaller than that specified in the LEP.

For a subdivision, the minimum resultant lot size for all residential development within the Canada Bay LEP is generally 450m<sup>2</sup> for sites identified within the Lot Size Map, with the exception of 25 Beaconsfield Lane in Concord which has a minimum lot size of 200m<sup>2</sup>. The CCB LEP does not currently specify a minimum lot width for subdivision of lots.

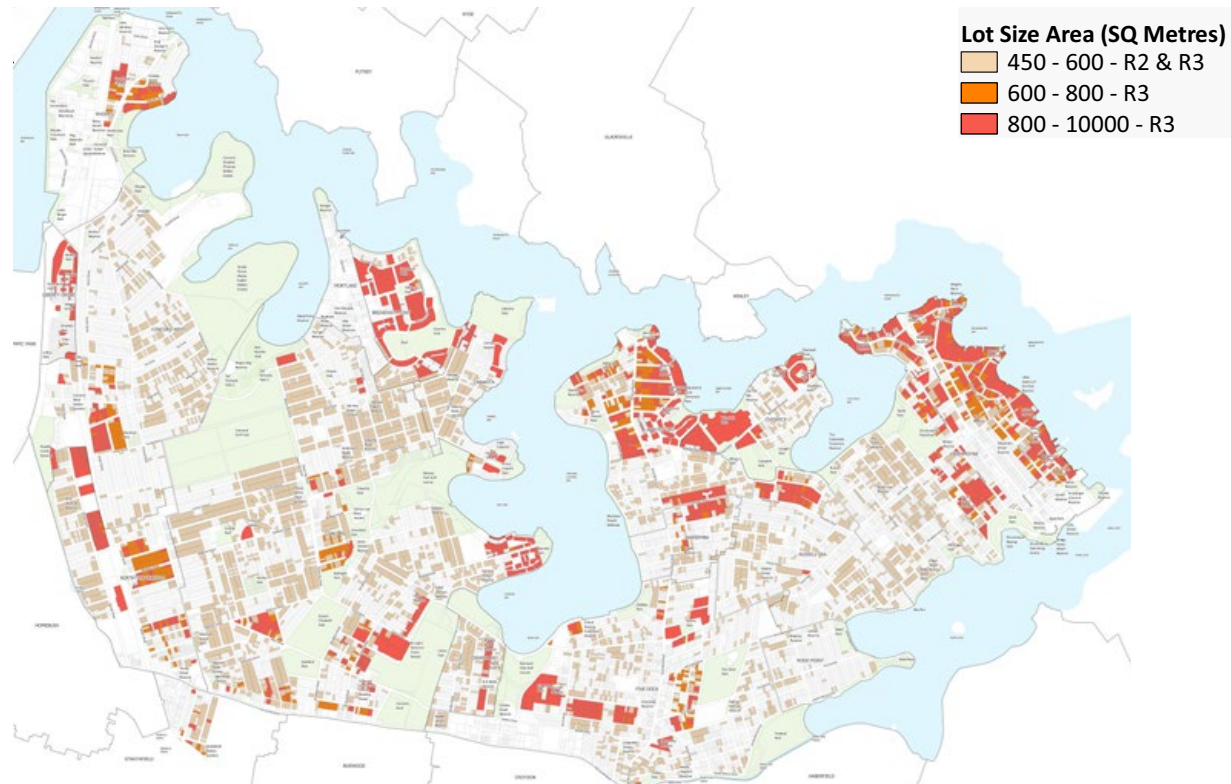


Figure 7 Lot size area within the Canada Bay LGA (Smith and Tzannes 2019)

**Recommendation:** *Reduce minimum lot size for development of manor houses and terraces*

Manor houses and terraces are compact typologies that could be suitable on smaller lots. To promote these typologies through a development application route, it is recommended that the minimum lot size

for a 'manor house' and 'multi dwelling housing (terraces)' be reduced from 800m<sup>2</sup> to 600m<sup>2</sup>. For townhouses and villas, it is recommended that the minimum lot size of 800m<sup>2</sup> is retained since these typologies need to accommodate an access handle.

	Current LEP	MD Code	DA Guide	Recommendations
	<p><b>Dual occupancies</b></p> <p>Attached: Minimum 450m<sup>2</sup></p> <p>Detached: Minimum 800m<sup>2</sup></p>	<p>If not specified in LEP/DCP: Minimum 400m<sup>2</sup> (for attached and detached dual occupancies)</p> <p>Note: The MD Code does not permit battle-axe dual occupancies</p>		<p><i>Retain minimum lot size of attached and detached dual occupancies.</i></p>
Multi dwelling housing	<p><b>Manor houses</b></p> <p>R1 and R3 zones: Minimum 800m<sup>2</sup></p> <p>R4 zone: Minimum 1,500m<sup>2</sup></p>	Minimum 600m <sup>2</sup>	As per Council's LEP/ DCP	<p><i>Reduce minimum lot size to 600m<sup>2</sup></i></p>
	<p><b>Villas/ townhouses</b></p> <p>R1 and R3 zones: Minimum 800m<sup>2</sup></p> <p>R4 zone: Minimum 1,500m<sup>2</sup></p>	n/a	As per Council's LEP/ DCP	<p><i>Retain minimum lot size of 800m<sup>2</sup></i></p>
	<p><b>Terraces</b></p> <p>R1 and R3 zones: Minimum 800m<sup>2</sup></p> <p>R4 zone: Minimum 1,500m<sup>2</sup></p>	As per Council's LEP/ DCP if not specified: Minimum 600m <sup>2</sup>	As per Council's LEP/ DCP	<p><i>Reduce minimum lot size to 600m<sup>2</sup></i></p>

Table 4 LEP Recommendations - Minimum lot size for development



### 3-4 Minimum lot size for Torrens titled subdivision

#### Commentary

Unless the development site of a dual occupancy is greater than 900m<sup>2</sup> they can only be strata subdivided under the Canada Bay LEP, as the resultant minimum lot size for Torrens title subdivision is 450m<sup>2</sup>. The minimum resultant lot size for Torrens title subdivision of dual occupancies under the MD Code is 60% of the minimum lot size specified in the LEP. This makes the minimum resultant lot size for dual occupancies 270m<sup>2</sup> (60% of 450m<sup>2</sup> ) for Canada Bay.

After construction, the strata subdivision of dual occupancies where both dwellings are side by side and face the street, does not lead to significant physical difference compared to a Torrens title. However Torrens title subdivision could make dual occupancy development a more attractive title system given the independence offered to the owners.

Subdividing for terraces is not practical under the LEP, due to the large minimum lot size of 450m<sup>2</sup> Torrens title subdivision. Under the MD Code, the minimum resultant lot size for Torrens title subdivision for terraces is 200m<sup>2</sup>, less than half of the minimum lot size currently permissible under the LEP (450m<sup>2</sup>). This can potentially make the terrace form of housing viable in the Canada Bay area.

The 200m<sup>2</sup> lot size for terraces provides sufficient area for on grade parking, landscape and the dwelling at the scale of development expected in the Canada Bay area.

Although smaller terraces could be provided, these are probably more likely to be strata titled development as they may necessitate basement car parking.

**Recommendation:** Add a clause for resultant subdivision lot sizes and lot widths of dual occupancies and terraces

Since the current LEP does not specify minimum lot sizes or widths for the medium density housing typologies, it is recommended that a new clause be added to 'Clause 4.1 Minimum subdivision lot size' as follows:

*4.1B Exceptions to minimum subdivision lot sizes for certain residential development*

*(1) The objective of this clause is to encourage housing diversity without adversely impacting on residential amenity.*

*(2) This clause applies to development on land in R1 General Residential, R2 Low Density Residential and R3 Medium Density Residential zones*

*(3) Development consent may be granted to a single development application for development to which this clause applies that is:*

- *(a) the subdivision of land into 2 or more lots, and*
- *(b) the erection of a dual occupancy, semi-detached dwellings or multi dwelling housing (terrace) on each lot resulting from the subdivision, if the size of each lot is equal to or greater than:*
  - *(i) for the erection of a dual occupancy or semi-detached dwelling—270 square metres, or*
  - *(ii) for the erection of a multi dwelling housing (terrace) —200 square metres.*
- *(c) the erection of a dual occupancy, semi-detached dwelling or multi dwelling housing (terrace) on each lot resulting from the subdivision, if the width of each lot is equal to or greater than:*
  - *(i) for the erection of a dual occupancy or semi-detached dwelling—6 metres*
  - *(ii) for the erection of a multi dwelling housing (terrace)—6 metres*

This is in line with the draft Local Housing Strategy which also recommends reducing subdivision lot size and revising the minimum lot widths to facilitate the development of Torrens titled terrace development.



	Current LEP	MD Code	DA Guide	Recommendations	
Multi dwelling housing	<b>Dual occupancies</b>	Minimum resultant subdivision lot size 450m <sup>2</sup>	Torrens title subdivision: Minimum 60% of the minimum lot area for subdivision of land as specified in the LEP/ DCP (60% of 450m <sup>2</sup> = 270m <sup>2</sup> ) if not specified, minimum lot area for subdivision: 200m <sup>2</sup>	<i>Add a clause for the resultant subdivision lot sizes of dual occupancies to be 270m<sup>2</sup></i>	
	<b>Manor houses</b>	n/a	n/a	n/a	
	<b>Villas/ townhouses</b>	Minimum resultant subdivision lot size 450m <sup>2</sup>	n/a	n/a	n/a
	<b>Terraces</b>	Minimum resultant subdivision lot size 450m <sup>2</sup>	Minimum resultant subdivision lot size 200m <sup>2</sup> .	As per Council's LEP/ DCP	<i>Add a clause for the resultant subdivision lot sizes of terraces to be 200m<sup>2</sup></i>

Table 5 LEP Recommendations - Minimum lot size for subdivision

### 3-5 Density

The CCB LEP generally has a maximum floor space ratio (FSR) of 0.5:1 within the R2 Low Density and R3 Medium Density zones, although some areas zoned R3, such as Liberty Grove, have an FSR of 0.7 or 0.75:1. There is a limited area zoned R1 General Residential in Mortlake which has an FSR of 0.75:1. Areas with higher permissible FSRs generally consist of larger apartment developments, and are unlikely to develop for medium density housing under the MD Code.

A majority of the land within Canada Bay is identified as 'Area 1' on the Floor Space Ratio Map. For multi dwelling housing or residential flat buildings within 'Area 1', no maximum FSR applies. Thus, terraces, manor houses and townhouses within these areas currently have no maximum FSR under the CCB LEP.

For semi-detached dwellings and dwelling houses within 'Area 1', the maximum FSR increases with a decrease in site area, also known as 'sliding scale FSR'. Sites with lot areas lesser than 150m<sup>2</sup> have the highest FSR of 0.7:1 while sites greater than 450m<sup>2</sup> have the lowest FSR of 0.5:1. For the minimum lot size of 450m<sup>2</sup> for dual occupancies as per the CCB LEP, the maximum permissible FSR would be 0.55:1. Development following the MD Code would have a minimum lot size (after subdivision) of 270m<sup>2</sup> and the FSR would be 0.6:1.

On a 270m<sup>2</sup> site, this allows an additional area of 13.5m<sup>2</sup> which could potentially fit an extra bedroom. However, if other controls with respect to landscape, setbacks and overshadowing are met, this additional FSR should not have a significant impact on the built form and amenity of dual occupancies within the LGA. It is noted that once the lot is subdivided, the house could do alterations and additions under the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 which allows a much higher FSR than what is permissible under the current CCB LEP.

The MD Code specifies the maximum gross floor area (GFA) for each of the medium density housing typologies, in place of FSR. For dual occupancies, the maximum GFA also increases with a decrease in site area similar to the CCB LEP. Figure 9 compares the maximum permissible GFA for Dual Occupancy development by site area under the current LEP and under the MD Code. It shows that the maximum permitted GFA under the MD Code is greater for smaller sites than that permissible under the CCB LEP.

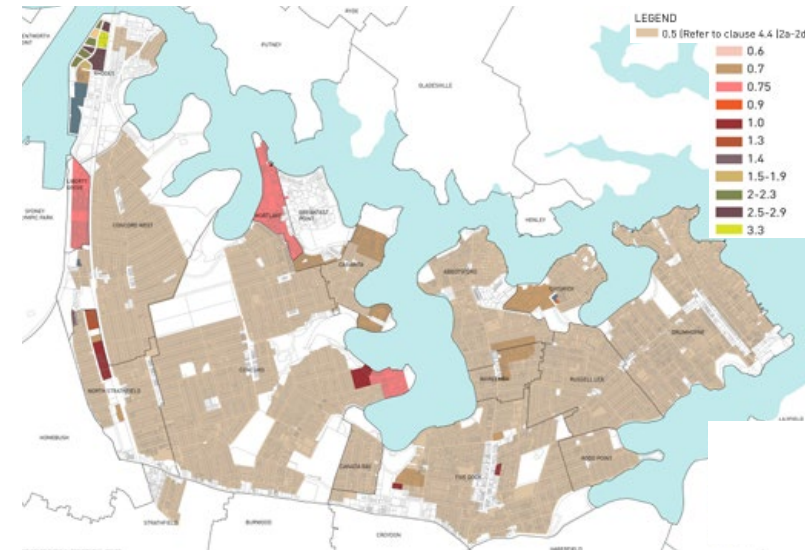


Figure 8 Canada Bay FSR LEP map

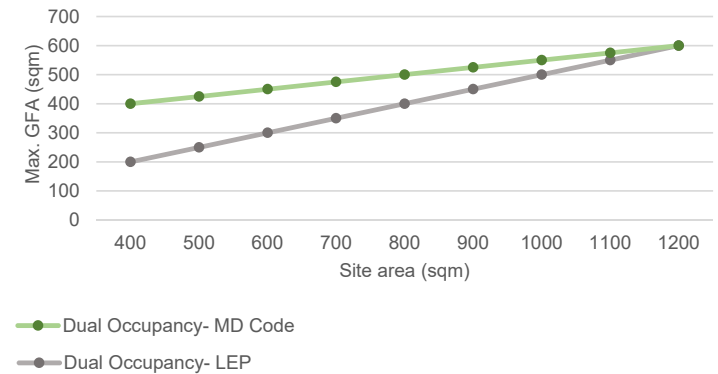


Figure 9 Comparison of density controls for Dual Occupancy within the LEP and MD Code

For the minimum lot size of 450m<sup>2</sup> as per the CCB LEP, the maximum permissible FSR for dual occupancies (as calculated using the maximum GFA as specified in the MD Code) would be 0.92:1, compared to 0.55:1 per the CCB LEP. In both instances, the maximum permissible GFA may not be achievable due to other development controls, such as overshadowing and landscape area. Therefore dual occupancies on smaller sites under the MD code are likely to be larger than current dual occupancy development.

For the minimum recommended lot size of 600m<sup>2</sup> for manor houses and terraces, the maximum permissible FSR (as calculated using the maximum GFA as specified in the MD Code) would be 0.5:1 for manor houses, 0.6:1 for terraces in the R1 zone and 0.8:1 for terraces in the R3 zone.

**Recommendation:** *Remove exceptions to Floor Space Ratio map and revise FSR map*

Currently, as per Clause 4.4 (2A) of the Canada Bay LEP 2013, there is no maximum FSR for multi dwelling housing or residential flat buildings within the 'Area 1' of the Floor Space Map and as per Clause 4.4 (2B), there is a sliding scale FSR for dwelling houses and semi-detached houses.

To encourage a variety of building types and to ensure that specific dwelling types are not substantially bigger than others in the street, it is recommended that the controls for maximum height and FSR are the same for all medium density dwelling types depending on the zone and location. This would mean that a 600m<sup>2</sup> site with a maximum FSR of 0.7:1 could be developed as two 210m<sup>2</sup> dual occupancies or three 140m<sup>2</sup> terraces or four 105m<sup>2</sup> apartments in a manor house.

It is recommended that Clause 4.4 (2A) and (2B) be removed and the Floor Space Ratio map be updated to reflect the maximum FSRs as follows:

- 0.5:1 for land in Zone R2 Low Density Residential
- 0.6:1 to 0.75:1 for land in Zone R1 General Residential depending on location
- 0.7:1 to 0.8:1 for land in Zone R3 Medium Density Residential depending on location



Same maximum FSR for dual occupancies, manor houses and terraces would encourage diversity of housing types

This would ensure that medium density development under the MD Code is similar to the development under the DA approval but does not encourage very large development.

It is noted that some areas currently zoned R3 Medium Density, including Drummoyne and Abbotsford, are not as well located as other R3 zoned areas which are around centres and close to new and proposed transport nodes. Council may wish to consider whether these areas should have the same increase in height and FSR.

	Current LEP	MD Code	DA Guide	Recommendations																												
Multi dwelling housing	<b>Dual Occupancies</b>	<p>Maximum FSR of 0.5:1 generally permitted within R2, R3 zones.</p> <p>Maximum FSR of 0.7 to 0.75 for some areas in R1 zone.</p> <p>Sliding scale FSR within 'Area 1' on the Floor Space Ration map:</p> <table border="1"> <thead> <tr> <th>Lot Size</th> <th>Max. FSR</th> </tr> </thead> <tbody> <tr> <td>&lt;150m<sup>2</sup></td> <td>0.70:1</td> </tr> <tr> <td>150- 250m<sup>2</sup></td> <td>0.65:1</td> </tr> <tr> <td>&gt;250- 350m<sup>2</sup></td> <td>0.60:1</td> </tr> <tr> <td>&gt;350- 450m<sup>2</sup></td> <td>0.55:1</td> </tr> <tr> <td>&gt;450m<sup>2</sup></td> <td>0.50:1</td> </tr> </tbody> </table>	Lot Size	Max. FSR	<150m <sup>2</sup>	0.70:1	150- 250m <sup>2</sup>	0.65:1	>250- 350m <sup>2</sup>	0.60:1	>350- 450m <sup>2</sup>	0.55:1	>450m <sup>2</sup>	0.50:1	<p>Density controls over rule EPI Controls.</p> <p>Maximum GFA for lot area 400 - 2,000m<sup>2</sup>: 25% of lot area + 300m<sup>2</sup></p> <p>Maximum GFA for lot area &gt; 2,000m<sup>2</sup>: 800m<sup>2</sup></p> <p><i>Maximum FSR using maximum GFA (calculated estimate by Studio GL):</i></p> <table border="1"> <thead> <tr> <th>Lot Size</th> <th>Max. FSR</th> </tr> </thead> <tbody> <tr> <td>450m<sup>2</sup></td> <td>0.92:1</td> </tr> <tr> <td>500m<sup>2</sup></td> <td>0.85:1</td> </tr> <tr> <td>600m<sup>2</sup></td> <td>0.75:1</td> </tr> <tr> <td>700m<sup>2</sup></td> <td>0.68:1</td> </tr> <tr> <td>800m<sup>2</sup></td> <td>0.63:1</td> </tr> <tr> <td>900m<sup>2</sup></td> <td>0.58:1</td> </tr> <tr> <td>1,000m<sup>2</sup></td> <td>0.55:1</td> </tr> </tbody> </table>	Lot Size	Max. FSR	450m <sup>2</sup>	0.92:1	500m <sup>2</sup>	0.85:1	600m <sup>2</sup>	0.75:1	700m <sup>2</sup>	0.68:1	800m <sup>2</sup>	0.63:1	900m <sup>2</sup>	0.58:1	1,000m <sup>2</sup>	0.55:1	<p><i>Remove exceptions to Floor Space Ratio map and revise FSR map as follows:</i></p> <ul style="list-style-type: none"> <li>• 0.5:1 for land in Zone R2 Low Density Residential</li> <li>• 0.6:1 to 0.75:1 for land in Zone R1 General Residential depending on location</li> <li>• 0.7:1 to 0.8:1 for land in Zone R3 Medium Density Residential depending on location</li> </ul>
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<b>Manor Houses</b>	<p>Maximum FSR of 0.5:1 generally permitted within R2, R3 zones.</p> <p>Maximum FSR of 0.7 to 0.75 for some areas in R1 zone.</p> <p>No maximum FSR for sites within 'Area 1' on the Floor Space Ration map</p>	<p>Density controls over rule EPI Controls.</p> <p>Maximum GFA 25% of lot area + 150m<sup>2</sup> to a maximum of 400m<sup>2</sup></p> <p><i>Maximum FSR using maximum GFA (calculated estimate by Studio GL):</i></p> <table border="1"> <thead> <tr> <th>Lot Size</th> <th>Max. FSR</th> </tr> </thead> <tbody> <tr> <td>600m<sup>2</sup></td> <td>0.50:1</td> </tr> <tr> <td>700m<sup>2</sup></td> <td>0.46:1</td> </tr> <tr> <td>800m<sup>2</sup></td> <td>0.44:1</td> </tr> <tr> <td>900m<sup>2</sup></td> <td>0.42:1</td> </tr> <tr> <td>1,000m<sup>2</sup></td> <td>0.40:1</td> </tr> <tr> <td>1,100m<sup>2</sup></td> <td>0.39:1</td> </tr> </tbody> </table>	Lot Size	Max. FSR	600m <sup>2</sup>	0.50:1	700m <sup>2</sup>	0.46:1	800m <sup>2</sup>	0.44:1	900m <sup>2</sup>	0.42:1	1,000m <sup>2</sup>	0.40:1	1,100m <sup>2</sup>	0.39:1																
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<b>Villas/Townhouses</b>	n/a																															
<b>Terraces</b>	<p>Density controls over rule EPI Controls.</p> <p>Maximum GFA for R1, R2 and RU5 zones: 60% of lot area (0.6:1 FSR)</p> <p>Maximum GFA for R3 zones: 80% of lot area (0.8:1 FSR)</p>																															

Table 6 LEP Recommendations - Density

### 3-6 Heritage and Conservation Areas

The Canada Bay LEP identifies a number of sites as 'Heritage Items' and 'Conservation Areas' as shown in Figure 10. While the larger Heritage items include parks and open spaces within the RE1 Public Recreation zone, many of the heritage listed houses are located within the R2 and R3 zones. Large parts of Drummoyne and Concord West are identified as Conservation Areas.

Apart from the heritage listed items and conservation areas, the draft LHS and draft LSPS identify 'Character Areas' which have a distinctive local character as shown in Figure 11. To protect and manage development of these localities, the Council has prepared interim local character statements that inform development controls and the desired future character of these neighbourhoods.

The draft LSPS includes actions to amend the Canada Bay LEP to implement the interim local character statements for the identified Character Areas. The protection of certain low density areas for future development has strategic merit and thus the introduction of Local Character Areas is supported.

It is noted that some of the Character Areas overlap with the existing Conservation Areas such as that in Concord West and Russell Lea. Apart from a few areas that are zoned R3 Medium Density, most of the Character Areas are located within the R2 Low Density Residential zone. It is also noted that certain sites within the proposed Character Areas are identified as 'Area 3' within the Floor Space Ratio map in the Canada Bay LEP which allows higher FSRs than other residential zones, ranging from 2:1 for sites up to 1,000m<sup>2</sup> to 3:1 for sites larger than 2,000m<sup>2</sup>.

The draft LSPS also includes an action to preclude Complying Development under the Housing Code and Low Rise Medium Density Housing Code from Character Areas.

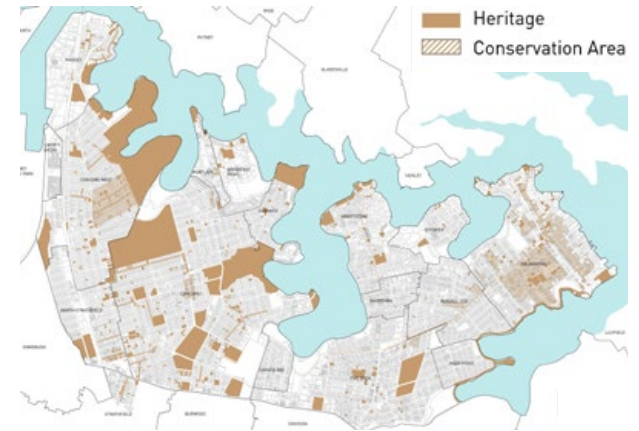


Figure 10 Canada Bay Heritage LEP

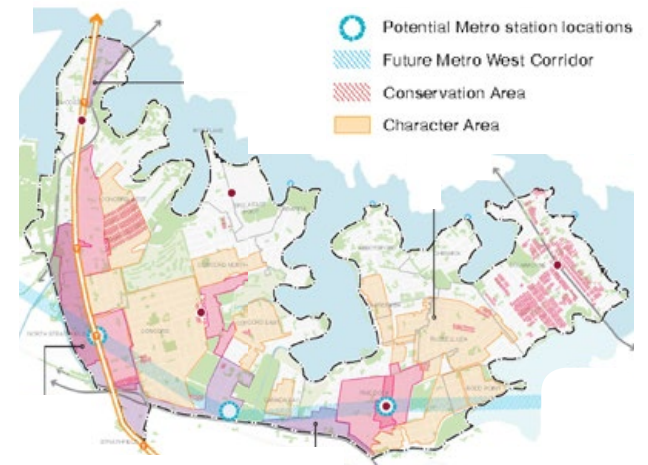


Figure 11 Character and Conservation Areas as identified in the draft LSPS (Canada Bay, 2019)



### **Recommendation: Restrict dual occupancies within Local Character Areas**

The current maximum permissible FSRs for dual occupancies under the MD Code are very high and risk disrupting the character of Local Character Areas. To protect the identified low density areas, it is recommended that dual occupancies within Local Character Areas are precluded as Complying Development under the Housing Code and Low Rise Medium Density Housing Code. This will ensure that any dual occupancy development within these areas will have to follow a development application route and will be thoroughly assessed before being permitted.

If Council is unable to preclude dual occupancies within Local Character Areas as complying development, the CCB LEP could be updated to restrict the development of dual occupancies in the following ways:

- List some of the Local Character Areas as Conservation Areas if they meet the requirements of the Heritage Act;
- Remove dual occupancies as a permitted use within Local Character Areas, should Council's LSPS action for precluding Complying Development under the Housing Code and MD Code not be supported. (Note: If Council considers this as a significant reduction in medium density development, dual occupancies could be allowed on corner sites within Local Character Areas).

### **Recommendation: Modify boundaries of Character Areas**

It is recommended that the R3 Medium Density zoned areas be removed from the identified Low Density Character Areas. Additionally, the Canada Bay Character Area could be within walking distance from a future Metro Station at Burwood North, which makes it a highly accessible area. It is recommended that Council considers if this block should be removed from the group of Low Density Character Areas as it is suitable for urban renewal.

### **Recommendation: Local Character Statements for areas undergoing significant change**

Apart from preparing Local Character Statements for Local Character Areas, it is recommended that Council also prepares Local Character Statements for areas undergoing significant change and high density areas in order to achieve the desired future character in these areas.

### **Recommendation: Heritage Review**

It is recommended that Council undertakes a Heritage Review to outline planning controls needed for the interface with Heritage Conservation Areas and Heritage Items, and to identify any Heritage Items embedded in the LGA that have greater development potential than is currently allowed. The Review may also identify some of the Character Areas that warrant additional protection through heritage listing or as Conservation Areas.

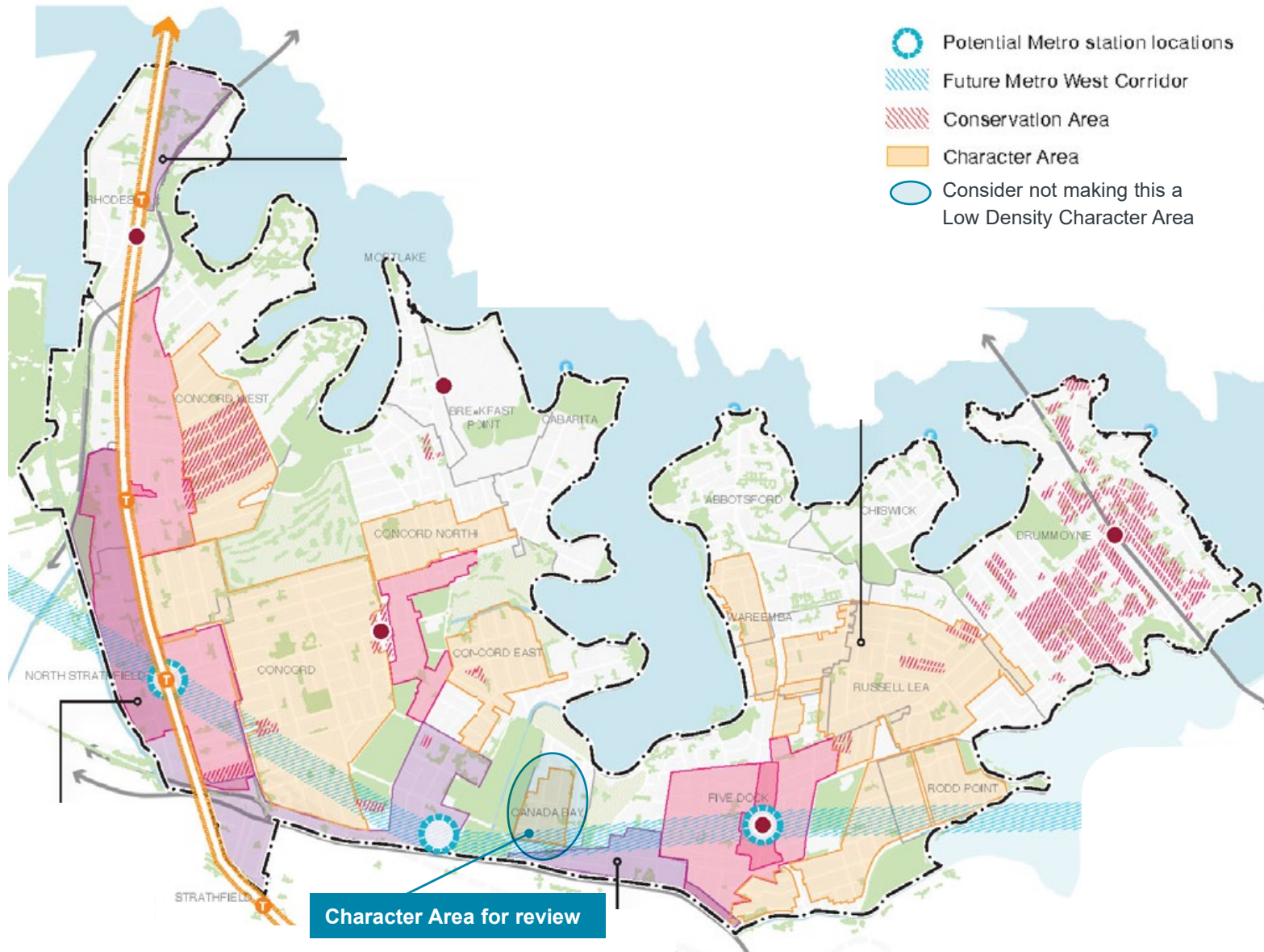


Figure 12 Recommended areas to not be a Low Density Character Area



## CHAPTER 4

# DCP RECOMMENDATIONS

### 4-1 Primary street setback

**Recommendation:** Retain the current DCP control of the 'prevailing street setback for all residential development in R1 and R2 zones.

Front setback controls for medium density typologies in both policies are generally comparable. The current DCP requires new development to set back a minimum of 4.5m or no less than 'prevailing street setback' (average of 5 adjoining residential properties on both sides of the development) whichever is the greater.

The MD Code also applies an average setback but only of the two closest residential buildings which can be less representative of the overall street character compared to the requirement in the DCP. Where no existing residential buildings are within 40m, setbacks in the MD Code range from 4.5m to 10m depending on the lot size.

**Recommendation:** Require all terrace development in R3 zones to set back 3.5m from the street boundary. All other medium density typologies in R3 zones are to set back a minimum of 4.5m.

A notable difference between the MD Code and the DCP applies to terrace development in R3 zones. The MD Code applies a generic minimum 3.5m setback. This setback may not be 'in-keeping' with the existing street setback in Canada Bay.

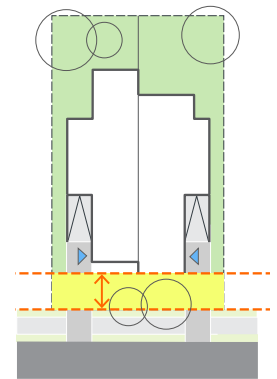
Initially the recommendation was to retain Council's current controls so that new development 'fit' within the predominant street setback character. After more consideration it was felt that the challenge with this approach is that in an area where change is anticipated, retaining the current setbacks could force new development to provide large front setbacks, concentrating development towards the side and rear of the lot where it will have more of an impact on neighbouring sites.

The recommendation is that the R3 Medium Density will focus on creating a desired future character rather than maintaining the existing character so in this zone it is recommended

that the DCP allows a 3.5m front setback for terraces and a 4.5m front setback for all other types of development. This should encourage terrace development over other types and ensure terraces approved through complying development are similar to those approved under the DA pathway.

**Recommendation:** Where a third storey is permissible, it must sit within a 45 degree plane projected from 7m (two storeys) height above existing ground level at the minimum primary street setback (see Section 3.2 LEP recommendations)

Both the MD Code and the DCP do not identify an upper level street setback for the third floor.



Primary street setback				
	Current DCP	MD Code	DA Guide	Recommendations
Multi dwelling housing	Dual occupancies	Average of two closest dwellings; where no dwellings within 40m, setbacks are dependant on lot size i.e. 4.5m for lots 400-900m <sup>2</sup>	As per MD Code	Retain the current DCP control of the 'prevailing street setback' for all residential development in R1 and R2 zones.  Adopt a minimum 3.5m setback for all terrace development in R3 zones. Adopt a minimum 4.5m setback for all other medium density typologies in R3 zones.
	Manor houses		As per MD Code	
	Villas/ townhouses	n/a	As per MD Code	Introduce an upper level street setback for three-storey development in R3 zones (see LEP recommendations in Section 3-2)
	Terraces	R1 and R2 zones: average of the two closest dwellings; where no dwellings within 40m the minimum setback is 3.5m  R3 zones: Minimum 3.5m		

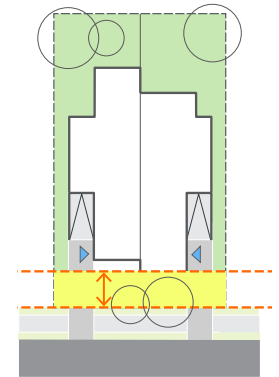


Table 7 DCP Recommendations - Primary street setback

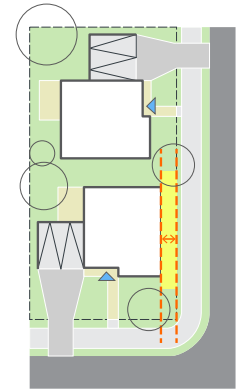


4-2 Secondary street setback

**Recommendation:** Retain the 'prevailing street setback' control for the rear part of corner lots and apply to all medium density typologies. Introduce a metric secondary street setback control of 2-3m for the first 25m measured from the corner. Require medium density typologies to address both primary and secondary streets, i.e. a requirement for windows and/ or doors to face secondary streets.

The MD Code requires a setback of minimum 2m for lots less than 900m<sup>2</sup>. It also requires buildings to address the secondary road on corner sites. The current DCP does not set secondary street setback controls except for dual occupancies on corner lots that are required to 'acknowledge the prevailing setback on both streets'.

A review of recent approvals indicates that Council has taken a flexible approach to this control on a case by case basis, allowing secondary street setbacks to be less than the prevailing distance to allow for sufficient space for the 'rear' dual occupancy dwelling.



	Current DCP	MD Code	DA Guide	Recommendations	
Multi dwelling housing	<b>Dual occupancies</b>	Where detached dual occupancy development is on a corner lot, the design should acknowledge the prevailing setback on both streets.	as per MD Code however smaller lot size ranges from 0-900m <sup>2</sup>	<p><i>Retain the prevailing street setback control for the rear part of corner lots.</i></p> <p><i>Introduce a minimum 2-3m secondary street setback for the area of the site within 25m measured from the corner.</i></p> <p><i>Require medium density typologies to address both primary and secondary streets, i.e. a requirement for windows and/ or doors to face secondary streets.</i></p>	
	<b>Manor houses</b>	n/a			
	<b>Villas/ townhouses</b>	n/a			n/a
	<b>Terraces</b>	n/a			Minimum 2m for lots 400-900m <sup>2</sup> Minimum 3m for lots 900-1,500m <sup>2</sup> Minimum 5m for lots > 1,500m <sup>2</sup>

Table 8 DCP Recommendations - Secondary street setback

## 4-3 Side setback

**Recommendation:** Increase the current DCP ground floor side setback for dual occupancies from 0.9m to 1.5m. Reduce ground floor side setbacks for manor house, villa/ townhouse and terrace development to 1.5m as per MD Code to promote habitable rooms facing the street and/or rear of sites.

The side setback controls for dual occupancy for lots less than 24m wide (the majority of lots in Canada Bay) are comparable in both policies. Side setbacks for manor house, villa/ townhouse and terrace development differ significantly between the MD Code and the DCP. The MD Code requires a minimum side setback of 1.5m while the DCP sets the minimum at 5m.

The large setback required under the DCP creates two key issues. The first one is that manor house, villa/ townhouse and terrace development are more likely to choose the CDC (complying) path. The other is that large side setbacks encourage habitable rooms to be located and oriented towards side boundaries, which can create privacy and amenity issues. The 5m setback also effectively excludes terrace development on sites less than 25m wide.

**Recommendation:** Introduce upper level setbacks for all medium density typologies in the DCP. Differentiate between the front of the lot <20m from the front boundary and the rear >20m as illustrated in Figure 13 and Figure 14 adjacent.

Increase setbacks for living rooms that face the side boundary. Suggested controls are: Primary living room windows on the ground floor can face the side boundary only if set back by a minimum of 5m. Primary living room windows on upper floors can face the side boundary only if set back by a minimum of 9m.

Medium density typologies are typically two storeys in height, although development in R3 zones is recommended to be able to add a third storey (see Section 3-2). It is important to regulate upper level setbacks along side boundaries, particularly towards the rear of properties where privacy and overshadowing impacts are the greatest.

The MD Code applies upper level setbacks to dual occupancy and manor house development. The current DCP applies an upper level side setback to dual occupancies.

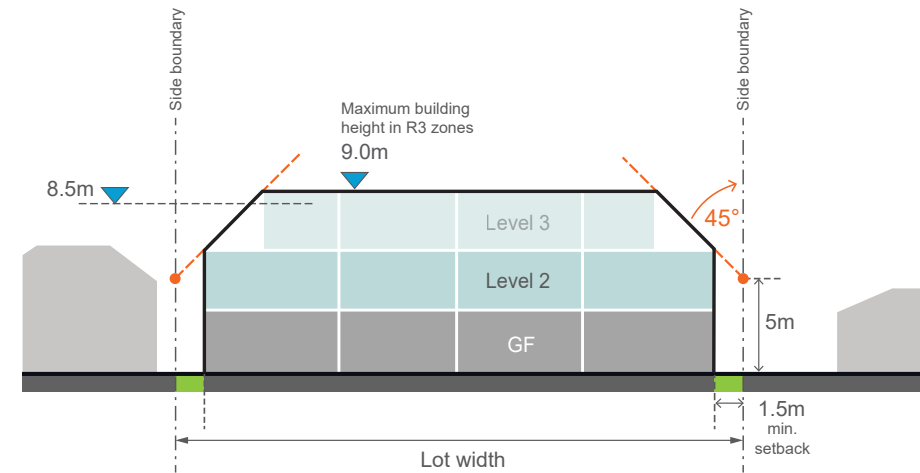


Figure 13 Side setbacks for front portion of the lot <20m from front boundary

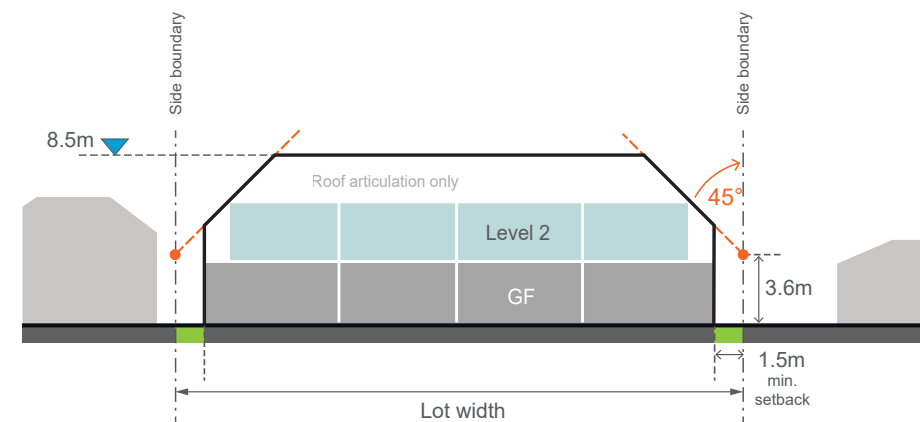


Figure 14 Side setbacks for rear portion of the lot >20m from front boundary

Side setback																					
	Current DCP	MD Code	DA Guide	Recommendations																	
Multi dwelling housing	<b>Dual occupancies</b>	<p>Single storey: Minimum 0.9m</p> <p>Second storey: Minimum 1.5m</p> <p>Rear detached dual occupancies (all storeys): Minimum 1.5m</p>	<p>For lots 12 - 24m wide:</p> <table border="1"> <thead> <tr> <th>Height</th> <th>Min. Setback</th> </tr> </thead> <tbody> <tr> <td>0-4.5m</td> <td>0.9m</td> </tr> <tr> <td>4.5-8.5m</td> <td>= (building height - 4.5m) ÷ 4 + 0.9m</td> </tr> </tbody> </table> <p>For lots 24 - 36m wide:</p> <table border="1"> <thead> <tr> <th>Height</th> <th>Min. Setback</th> </tr> </thead> <tbody> <tr> <td>0-4.5m</td> <td>1.5m</td> </tr> <tr> <td>4.5-8.5m</td> <td>= (building height - 4.5m) ÷ 4 + 1.5m</td> </tr> </tbody> </table> <p>For lots &gt;36m wide:</p> <table border="1"> <thead> <tr> <th>Height</th> <th>Min. Setback</th> </tr> </thead> <tbody> <tr> <td>0-8.5m</td> <td>2.5m</td> </tr> </tbody> </table>	Height	Min. Setback	0-4.5m	0.9m	4.5-8.5m	= (building height - 4.5m) ÷ 4 + 0.9m	Height	Min. Setback	0-4.5m	1.5m	4.5-8.5m	= (building height - 4.5m) ÷ 4 + 1.5m	Height	Min. Setback	0-8.5m	2.5m	as per MD Code however smaller lot size ranges from 0-24m wide	<p><i>Increase the current DCP ground floor side setback for dual occupancies from 0.9m to 1.5m. Reduce ground floor side setbacks for manor house, villa/ townhouse and terrace development to 1.5m.</i></p> <p><i>Introduce upper level setbacks for all medium density typologies. Differentiate between the front of the lot (&lt;20m from the front boundary) and the rear (&gt;20m) as illustrated in on the next page.</i></p> <p><i>Increase setbacks for living rooms that face the side boundary. Primary living room windows on the ground floor can face the side boundary only if set back by a minimum of 5m. Primary living room windows on upper floors can face the side boundary only if set back by a minimum of 9m.</i></p>
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Height	Min. Setback																				
0-8.5m	2.5m																				
<b>Manor houses</b>	Minimum 5m	<p>Minimum 1.5m</p> <p>Development that is &gt;10m behind the front building line and greater than 4.5 metres above ground level (existing): Minimum setback = building height - 3m</p>	as per MD Code																		
<b>Villas/ townhouses</b>	Minimum 5m	n/a																			
<b>Terraces</b>	Minimum 5m	Minimum 1.5m	as per MD Code																		

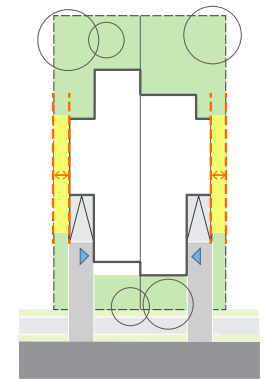


Table 9 DCP Recommendations - Side setback

## 4-4 Rear setback

**Recommendation:** Maintain the current DCP rear setback control of 6m for all residential development with the exception for living rooms on upper floors which should be set back 9m from the rear boundary.

The minimum rear setbacks in the MD Code are different to the current DCP. The DCP requires a 6m rear setback to all storeys of residential development as illustrated in Figure 15 adjacent.

Rear setback requirements in the MD Code vary with typologies and lot sizes, and in addition differentiate between the ground floor (building height up to 4.5m) and upper floors (>4.5m height). A dual occupancy or terrace development on sites less than 900m<sup>2</sup>, for example, requires a 3m rear setback to the ground floor and a 8m setback to upper floors as illustrated in Figure 16.

The reduced setback in the MD Code impacts on the opportunity for consolidated deep soil areas along the rear of lots. At the same time setbacks can increase opportunities for more climate responsive designs. Site testing has shown that the impact on overall achievable floor area is similar under both policies.

For manor house development, the MD Code's setback to the ground floor is 6m (the same as the DCP), however, the upper level is required to set back a minimum of 10m. This means that a manor house development is more likely to choose the development application route rather than the CDC (complying) path through the MD Code.

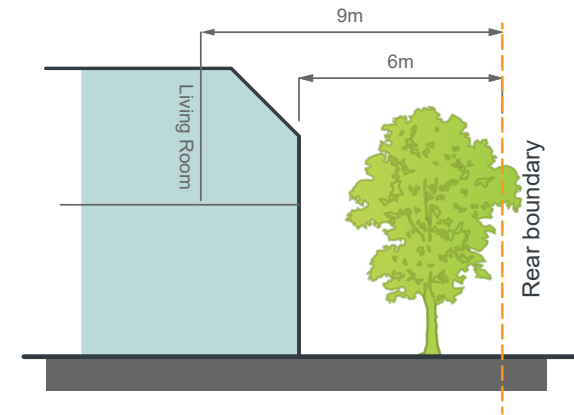


Figure 15 Current DCP rear setback control of 6m and the proposed addition of a 9m setback for living rooms

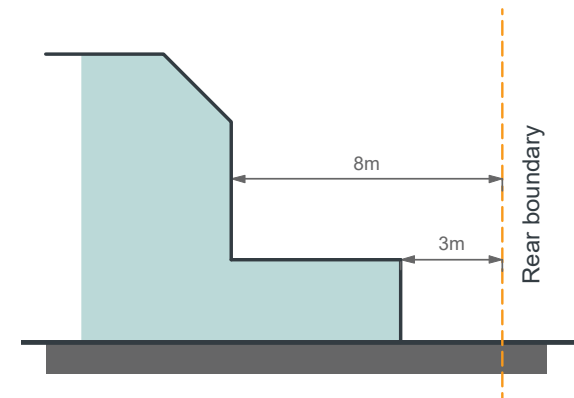


Figure 16 MD Code rear setback controls for dual occupancies and terraces on sites <900m<sup>2</sup>

Rear setback						
	Current DCP	MD Code		DA Guide	Recommendation	
Multi dwelling housing	Minimum 6m	Dual occupancies	Lot Size	Min. Setback	As per MD Code however smaller lot size ranges from 0-900m <sup>2</sup>	Retain the current DCP rear setback control of 6m for all types of residential development with the exception for living rooms on upper floors which should be set back 9m from the rear boundary.
		400-900m <sup>2</sup>		GF: 3m		
				2nd floor: 8m		
		900-1,500m <sup>2</sup>		GF: 5m		
				2nd floor: 12m		
				GF: 10m		
				2nd floor: 15m		
		Manor houses	Lot Size	Min. Setback	As per MD Code however smaller lot size ranges from 0-900m <sup>2</sup>	
		400-1500m <sup>2</sup>		GF: 6m		
				2nd floor: 10m		
			>1500m <sup>2</sup>	GF: 10m		
				2nd floor: 15m		
		Villas/ townhouses	n/a		6m	
		Terraces	Lot Size	Min. Setback	as per MD Code	
		600-900m <sup>2</sup>		GF: 3m		
				2nd floor: 8m		
		900-1,500m <sup>2</sup>		GF: 5m		
				2nd floor: 12m		
				GF: 10m		
				2nd floor: 15m		

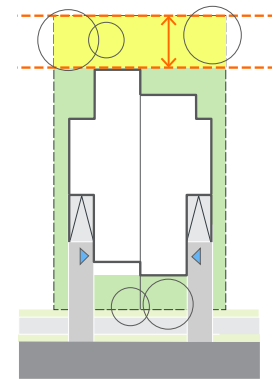


Table 10 DCP Recommendations - Rear setback



### 4-5 Lot width and dwelling frontage

**Recommendation:** Reduce the minimum lot width for dual occupancies on dual-frontage lots. Add a control that prohibits both dwellings to be accessed from the same street.

For most medium density development, the MD Code sets lower minimum lot widths compared to the current DCP. Dual occupancies under the Code can be as narrow as 12m compared to 14m in the DCP. However, the DA Guide specifies that the 12m only apply to 'dual-frontage' lots (sites that have two street frontages, i.e. corner lots).

**Recommendation:** Consider reducing the minimum lot widths for manor house development to 18m.

Manor house development is permissible on 15m wide sites under the MD Code compared to 20m under current DCP. Site testing has shown that manor houses without basement carparking are difficult to achieve on sites less than 18m.

**Recommendation:** Retain existing minimum lot widths for villas/ townhouses in the DCP.

Villa/ townhouse development requires a driveway or laneway to access rear dwellings and both the DA Guide and the current DCP set the same minimum lot width of 20m.

**Recommendation:** Consider reducing the minimum lot widths for terrace development to 18m.

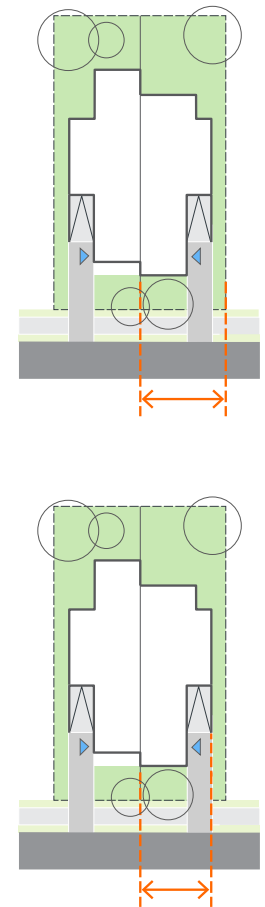
For terrace development, the MD Code permits a 18m wide lot compared to 20m in the DCP. A 18m wide mid-block lot would allow for three attached 5m wide terraces and a 1.5m setback on each side boundary to neighbouring properties.

**Recommendation:** Consider to introduce a minimum dwelling width of 5m for all medium density typologies that are not 'front loaded' (i.e. have consolidated basement parking or parking accessed from rear lanes or secondary streets).

The MD Code requires a minimum dwelling width of 5m. The recommendation is to introduce a similar provision in the DCP so that both policies are better aligned. It would apply to typologies that do not have vehicular access/ parking from the front (primarily rear loaded terraces or terraces with consolidated basement car parking).

**Recommendation:** Front loaded dwellings (garages accessed off the primary street) should have a minimum dwelling width of 7m.

It is recommended to prescribe an increased minimum dwelling width for all 'front loaded' dwellings.



Minimum lot width					
	Current DCP	MD Code	DA Guide	Recommendations	
Multi dwelling housing	<b>Dual occupancies</b>	Attached: Minimum 14m Detached: Minimum 16m	Minimum 12m  Torrens title subdivision: Minimum 6m	Dual street frontage (parking provided off secondary road, parallel road or lane): Minimum 12m Single street frontage: Minimum 15m  Torrens title subdivision: R1 and R2 zones: Garages not fronting primary road: Minimum 6m Garages fronting primary road: Minimum 7.5m R3 zones: Garages not fronting primary road: Minimum 5m Garages fronting primary road: Minimum 7.5m	<i>Consider reducing minimum lot widths for sites that have two street frontages (dual-frontage sites) to 12m.</i>  <i>Adopt the DA Guide minimum width for Torrens title subdivision.</i>
	<b>Manor houses</b>	Minimum 20m	Minimum 15m	Minimum 15m	<i>Consider reducing minimum lot widths to 18m.</i>
	<b>Villas/ townhouses</b>	Minimum 20m	n/a	Minimum 20m	<i>Retain current DCP control.</i>
	<b>Terraces</b>	Minimum 20m	Minimum 18m  Torrens title subdivision: Minimum 6m	Minimum 18m  Subdivision as per dual occupancies above.	<i>Consider reducing minimum lot widths to 18m. Adopt the DA Guide minimum width for Torrens title subdivision.</i>

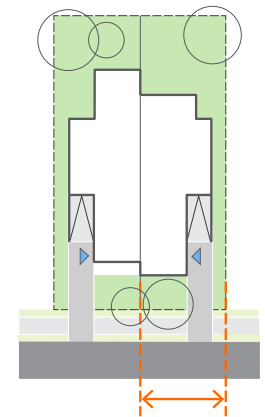


Table 11 DCP Recommendations - Minimum lot width

Minimum dwelling frontage					
	Current DCP	MD Code	DA Guide	Recommendations	
Multi dwelling housing	Dual occupancies	n/a	Minimum 5m	as per MD Code	<p><i>Introduce a minimum dwelling width of 5m for all medium density typologies that are not 'front loaded' (i.e. have consolidated basement parking or parking accessed from rear lanes or secondary streets).</i></p> <p><i>Front loaded dwellings (garages accessed off the primary street) should have a minimum dwelling width of 7m.</i></p>
	Manor houses	n/a	n/a	n/a	
	Villas/ townhouses			Minimum 5m	
	Terraces		Minimum 6m	Minimum 5m	

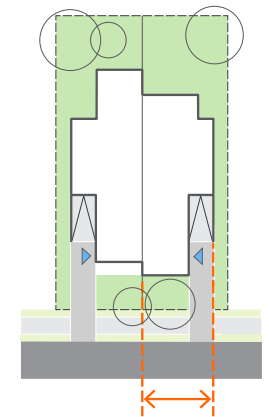


Table 12 DCP Recommendations - Minimum dwelling frontage

### 4-6 Landscaped area

**Recommendation:** Reduce the overall landscaped area requirements in the DCP for multi dwelling housing (manor house, villa/ townhouse, terrace). Consider to set at 30-35%.

Consider the introduction of a requirement for minimum 50% of the overall required landscaped area to be deep soil with deep soil planting (trees, shrubs). Preferably, this would be a control in Part E of the DCP but alternatively it could be an amendment to the definition of 'landscaped area' in Part J.

The following landscaped area controls are interrelated and need to be considered together when comparing the MD Code and the current DCP:

1. The overall amount of required landscaped area,
2. The minimum dimension that counts towards landscaped area, and
3. The amount of required landscaped area in the front setback.

The first control, the amount of required landscaped area, is generally higher in the current DCP compared to the MD Code. This is shown in Figure 17 and Figure 18 adjacent.

The most significant difference in the required provision of landscaped area applies to terraces in R3 zones. The MD Code only requires 20% of the site area to be landscaped which is less than half of the area set in the DCP.

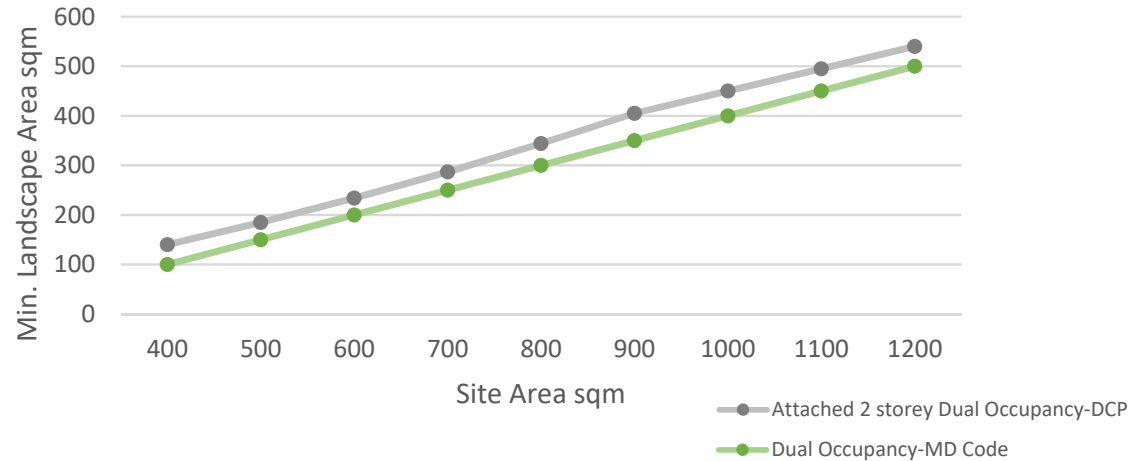


Figure 17 Minimum landscaped area for dual occupancies in R2 zones

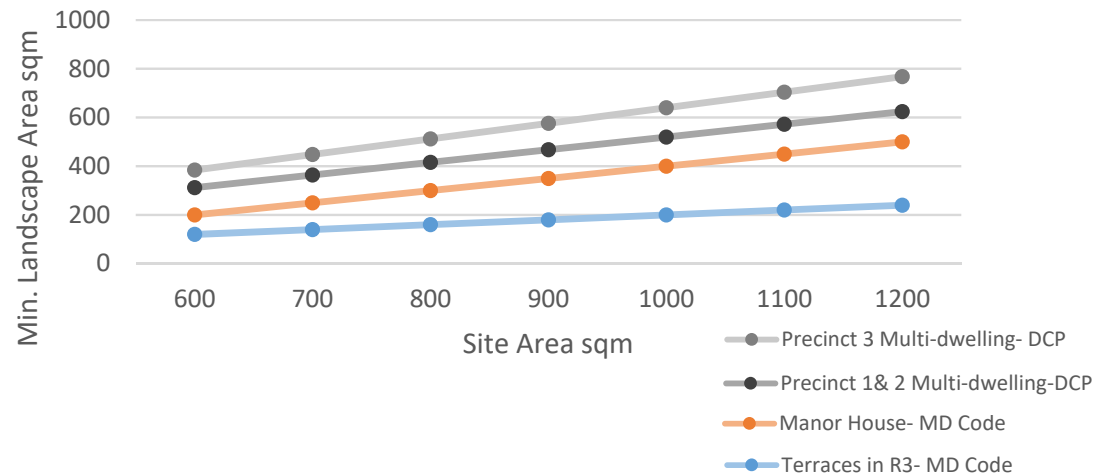


Figure 18 Minimum landscaped area for manor houses and terraces

**Recommendation:** Provide one set of minimum areas (as a % and linked to the size of the lot) that is the same for attached, detached, single and two storey dual occupancy. This would simplify the DCP controls and also lessen the current disincentive for attached two storey dual occupancies.

*Consider matching the MD Code or adopting a consistent 35% to encourage two storey development over single storey development.*

The MD Code applies a formula of 50% of site area minus 100m<sup>2</sup> to the minimum landscaped area for dual occupancies and manor houses, and sets a % of site area for terrace development depending on location (30% in R1 zone, 20% in R3 zone).

The current DCP controls are not as easy to understand. The amount of landscape area depends on a combination of location (Precinct 1,2 or 3), housing typology (attached or detached dual occupancies, multi-dwelling housing) and/or proposed dwelling size categorised as 'small', 'medium' or 'large' and identified in Part J Definitions of the DCP.

**Recommendation:** Introduce a DCP control that sets a minimum dimension of landscaped area that counts towards the overall provision (recommended 1.5m as per MD Code).

The MD Code requires a minimum dimension of landscaped area of 1.5m. The current DCP sets no minimum landscape dimension which means that small 'left-over' spaces can count towards the amount of landscape area, even if of questionable amenity or ecological value.

Because of this, the same development is likely to 'achieve' more landscaped area when assessed under the current DCP compared to the MD Code. Site testing during this review has indicated that introducing a minimum dimension typically offsets a reduction in the overall landscape area by approximately 5%.

The introduction of a minimum dimension should offset some of the recommended percentage decrease of the overall landscaped area requirement and minimum landscaped area in the front setback.

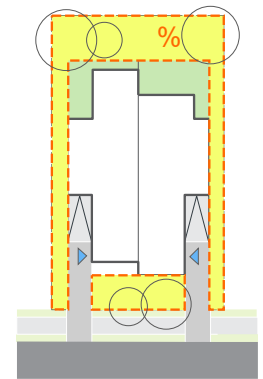
**Recommendation:** Define the landscaped area of front setbacks as a % (numeric value) of the front setback area for all residential development. A minimum of 30-35% is recommended except for front loaded terraces (garage integrated into ground floor, no basement) where this requirement could be reduced to 20-25%.

*At least 50% of the required landscaped area in the front setback should be deep soil and suitable for planting trees.*

Landscaped area requirements in the front setback are another key control. The ability for trees and quality landscaping in the front setback delivers a significant contribution to the streetscape character.

The MD Code requires 25% of front setbacks to be landscaped for dual occupancy and terrace developments, and doubles this requirement for manor houses to 50%.

The DCP states that the 'majority' of front setbacks should comprise landscaping, however, it does not set a numeric value. If this control is interpreted literally (more than 50%), developments with multiple driveways such as front loaded terraces accessed directly off the street may be more inclined to choose the CDC (complying) path.





Landscaped area																																																					
	Current DCP	MD Code	DA Guide	Recommendations																																																	
Multi dwelling housing	<p><b>Dual occupancies</b></p> <p>Detached dual occupancy, min. landscape area: 35%</p> <p>Attached dual occupancy:</p> <table border="1"> <thead> <tr> <th>Lot Size</th> <th>Two Storey</th> <th>Single Storey</th> <th>Lot Size</th> <th>Landscape area min.</th> </tr> </thead> <tbody> <tr> <td>&lt;450m<sup>2</sup></td> <td>35%</td> <td>25%</td> <td>450m<sup>2</sup></td> <td>125m<sup>2</sup> 29%</td> </tr> <tr> <td>450-550m<sup>2</sup></td> <td>37%</td> <td>27%</td> <td>500m<sup>2</sup></td> <td>150m<sup>2</sup> 30%</td> </tr> <tr> <td>550-650m<sup>2</sup></td> <td>39%</td> <td>29%</td> <td>600m<sup>2</sup></td> <td>200m<sup>2</sup> 33%</td> </tr> <tr> <td>650-750m<sup>2</sup></td> <td>41%</td> <td>31%</td> <td>700m<sup>2</sup></td> <td>250m<sup>2</sup> 36%</td> </tr> <tr> <td>750-850m<sup>2</sup></td> <td>43%</td> <td>33%</td> <td>800m<sup>2</sup></td> <td>300m<sup>2</sup> 38%</td> </tr> <tr> <td>&gt;850m<sup>2</sup></td> <td>45%</td> <td>35%</td> <td>900m<sup>2</sup></td> <td>350m<sup>2</sup> 39%</td> </tr> </tbody> </table> <p>No minimum dimension of landscaped area</p> <p>Majority of front setback should comprise landscaping</p>	Lot Size	Two Storey	Single Storey	Lot Size	Landscape area min.	<450m <sup>2</sup>	35%	25%	450m <sup>2</sup>	125m <sup>2</sup> 29%	450-550m <sup>2</sup>	37%	27%	500m <sup>2</sup>	150m <sup>2</sup> 30%	550-650m <sup>2</sup>	39%	29%	600m <sup>2</sup>	200m <sup>2</sup> 33%	650-750m <sup>2</sup>	41%	31%	700m <sup>2</sup>	250m <sup>2</sup> 36%	750-850m <sup>2</sup>	43%	33%	800m <sup>2</sup>	300m <sup>2</sup> 38%	>850m <sup>2</sup>	45%	35%	900m <sup>2</sup>	350m <sup>2</sup> 39%	<p>50% of lot area -100m<sup>2</sup></p> <p>This translates to:</p> <table border="1"> <thead> <tr> <th>Lot Size</th> <th>Landscape area min.</th> </tr> </thead> <tbody> <tr> <td>450m<sup>2</sup></td> <td>125m<sup>2</sup> 29%</td> </tr> <tr> <td>500m<sup>2</sup></td> <td>150m<sup>2</sup> 30%</td> </tr> <tr> <td>600m<sup>2</sup></td> <td>200m<sup>2</sup> 33%</td> </tr> <tr> <td>700m<sup>2</sup></td> <td>250m<sup>2</sup> 36%</td> </tr> <tr> <td>800m<sup>2</sup></td> <td>300m<sup>2</sup> 38%</td> </tr> <tr> <td>900m<sup>2</sup></td> <td>350m<sup>2</sup> 39%</td> </tr> </tbody> </table> <p>Minimum dimension of landscaped area: 1.5m</p> <p>Front setback: Minimum 25%</p>	Lot Size	Landscape area min.	450m <sup>2</sup>	125m <sup>2</sup> 29%	500m <sup>2</sup>	150m <sup>2</sup> 30%	600m <sup>2</sup>	200m <sup>2</sup> 33%	700m <sup>2</sup>	250m <sup>2</sup> 36%	800m <sup>2</sup>	300m <sup>2</sup> 38%	900m <sup>2</sup>	350m <sup>2</sup> 39%	as per MD Code	<p><i>Provide one set of minimum areas that is the same for attached, detached, single and two storey dual occupancy. Consider matching the MD Code or set at 35%.</i></p> <p><i>Introduce a minimum dimension of landscaped area of 1.5m.</i></p> <p><i>Require 30-35% of the front setback to be landscaped.</i></p> <p><i>Require 50% of landscaped area to be deep soil.</i></p>
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	<p><b>Manor houses</b></p> <p>Set by dwelling size and Precinct in which the development is located.</p> <p>This translates to approximate % for manor houses as follows:</p> <table border="1"> <thead> <tr> <th>Precinct</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Precinct 1</td> <td>51%</td> </tr> <tr> <td>Precinct 2</td> <td>54%</td> </tr> <tr> <td>Precinct 3</td> <td>67%</td> </tr> </tbody> </table>	Precinct	%	Precinct 1	51%	Precinct 2	54%	Precinct 3	67%	<p>50% of lot area -100m<sup>2</sup></p> <p>This translates to:</p> <table border="1"> <thead> <tr> <th>Lot Size</th> <th>Landscape area min.</th> </tr> </thead> <tbody> <tr> <td>600m<sup>2</sup></td> <td>200m<sup>2</sup> 33%</td> </tr> <tr> <td>700m<sup>2</sup></td> <td>250m<sup>2</sup> 36%</td> </tr> <tr> <td>800m<sup>2</sup></td> <td>300m<sup>2</sup> 38%</td> </tr> <tr> <td>900m<sup>2</sup></td> <td>350m<sup>2</sup> 39%</td> </tr> <tr> <td>1000m<sup>2</sup></td> <td>400m<sup>2</sup> 40%</td> </tr> <tr> <td>1100m<sup>2</sup></td> <td>450m<sup>2</sup> 41%</td> </tr> </tbody> </table> <p>Front setback: Minimum 50%</p>	Lot Size	Landscape area min.	600m <sup>2</sup>	200m <sup>2</sup> 33%	700m <sup>2</sup>	250m <sup>2</sup> 36%	800m <sup>2</sup>	300m <sup>2</sup> 38%	900m <sup>2</sup>	350m <sup>2</sup> 39%	1000m <sup>2</sup>	400m <sup>2</sup> 40%	1100m <sup>2</sup>	450m <sup>2</sup> 41%	as per MD Code	<p><i>Reduce overall landscaped area requirements. Consider to match the MD Code or set at 30-35%.</i></p> <p><i>Introduce a minimum dimension of landscaped area of 1.5m.</i></p> <p><i>Require 30-35% of the front setback to be landscaped.</i></p> <p><i>Require 50% of landscaped area to be deep soil.</i></p>																											
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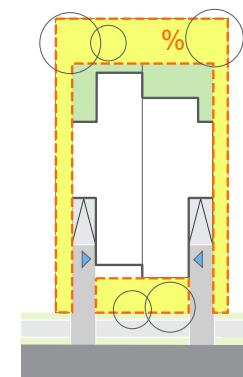


Table 13 DCP Recommendations - Landscaped area

Landscaped area															
	Current DCP	MD Code	DA Guide	Recommendations											
Multi dwelling housing	<b>Villas/ townhouses</b>	Set by dwelling size and in which Precinct the development is located (see manor house)  No minimum dimension of landscaped area  Majority of front setback should comprise landscaping	n/a	<table border="1"> <tr> <td>R1 zone</td> <td>30%</td> </tr> <tr> <td>R3 zone</td> <td>20%</td> </tr> </table>	R1 zone	30%	R3 zone	20%	<p><i>Reduce the overall landscaped area requirements. Consider to set at 30-35%.</i></p> <p><i>Introduce a minimum dimension of landscaped area of 1.5m.</i></p> <p><i>Require 30-35% of the front setback to be landscaped, except for front loaded terraces (garage integrated into ground floor, no basement) where this requirement could be reduced to 20-25%.</i></p> <p><i>Require 50% of landscaped area to be deep soil.</i></p>						
	R1 zone	30%													
R3 zone	20%														
<b>Terraces</b>	Set by dwelling size and in which Precinct the development is located.  Translates to approximate % for terraces as follows:	<table border="1"> <tr> <td>R1 zone</td> <td>30%</td> </tr> <tr> <td>R3 zone</td> <td>20%</td> </tr> </table> <p>Minimum dimension of landscaped area: 1.5m</p> <p>Front setback: Minimum 25%</p>	R1 zone	30%	R3 zone	20%	as per MD Code	<table border="1"> <tr> <td>Precinct 1</td> <td>52%</td> </tr> <tr> <td>Precinct 2</td> <td>49%</td> </tr> <tr> <td>Precinct 3</td> <td>59%</td> </tr> </table> <p>No minimum dimension of landscaped area</p> <p>Majority of front setback should comprise landscaping</p>	Precinct 1	52%	Precinct 2	49%	Precinct 3	59%	
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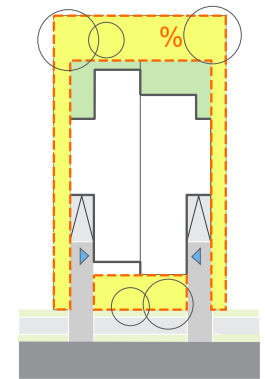


Table 13 DCP Recommendations - Landscaped area

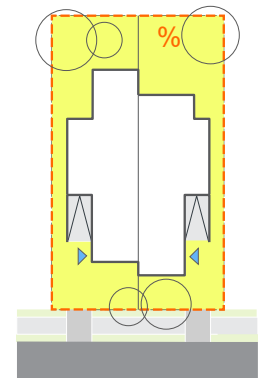
4-7 Site coverage

**Recommendation:** Site coverage can effectively be controlled through minimum landscaped areas. It is recommended that site coverage controls are removed from the DCP.

The MD Code does not contain site coverage requirements. Instead, it follows the trend in recent policy making to rely on landscaped area (and density controls) to achieve a balance between developed and non-developed land.

The DCP contains site coverage controls expressed as % of site area depending on location (precinct 1,2 or 3). One of the objectives is that "new development and alterations and additions to existing development result in site coverage which allows adequate provision to be made on site for infiltration of stormwater, deep soil tree planting, landscaping, footpaths, driveway areas and areas for outdoor recreation."

Initial site testing undertaken during this project indicates that the site coverage controls within the current DCP can result in landscaped areas being higher than the minimum required and development being lower than the maximum GFA. While this is not necessarily a negative outcome, the combination of site coverage and landscaped areas adds a layer of complexity to the DCP.



	Current DCP	MD Code	DA Guide	DCP Recommendation
<b>Dual occupancies</b>	n/a	n/a	n/a	<i>Remove site coverage controls from the DCP</i>
<b>Manor houses</b>	Precinct 1: 40% Precinct 2: 40% Precinct 3: 30%	n/a	n/a	
<b>Villas/ townhouses</b>	Precinct 1: 40% Precinct 2: 40% Precinct 3: 30%	n/a	n/a	
<b>Terraces</b>	Precinct 1: 40% Precinct 2: 40% Precinct 3: 30%	n/a	n/a	

Table 14 DCP Recommendations - Site coverage

### 4-8 Private open space (POS)

**Recommendation:** Retain the current DCP control of 40m<sup>2</sup> for dual occupancy and villa/ townhouse development.

Reduce the requirement for manor house and terrace development to encourage these typologies and the delivery of smaller dwellings.

Suggested minimum private open space areas for ground floor dwellings and dwellings with a living room at ground floor:

- 15m<sup>2</sup> for 1 bedroom dwellings
- 25m<sup>2</sup> for 2 bedroom dwellings
- 30m<sup>2</sup> for 3+ bedroom dwellings

Minimum areas for upper floor dwellings:

- 10m<sup>2</sup> for 1 bedroom dwellings
- 14m<sup>2</sup> for 2 bedroom dwellings
- 16m<sup>2</sup> for 3+ bedroom dwellings

At first glance the difference between the overall area requirements between the MD Code and the DCP appear significant, with the DCP requiring 40m<sup>2</sup> of private open space for most dwellings while the MD Code only requires 16m<sup>2</sup>.

This is due to the MD Code approaching private open space more as the 'principal/ primary private open space' meaning a

consolidated 'usable' area that should be provided. For development using the MD Code the resulting area of overall private open space is likely to be higher than 16m<sup>2</sup> because the policy relies on the landscaped area provisions to achieve open space on each lot.

However, when combined with the reduced rear ground floor setback requirements, the MD Code could lead to a reduction in rear gardens compared to the DCP with more flexibility for landscaping located at the front and sides of the lot. (Note: the DA Guide differs from the MD Code for villa/ townhouse and terrace developments and is similar to the DCP, see table above).

Area requirements for upper level dwellings are similar between both policies, with the MD Code requiring 8-12m<sup>2</sup> depending on the number of bedrooms, and the DCP requiring a generic 10m<sup>2</sup>.

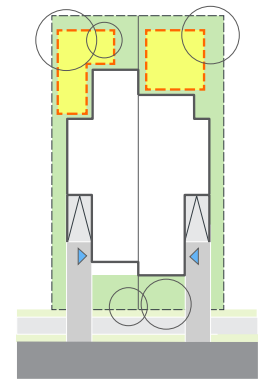
Private open space controls in the DCP are the same across all typologies. While keeping the provisions as simple and consistent as possible is one of the aims of this review, the current requirement may discourage manor houses choosing the development application route due to the larger open space area requirement for ground floor dwellings under the current DCP compared to the MD Code.

Initial site testing has indicated that achieving 40m<sup>2</sup> for manor houses can be difficult on smaller sites due to the need for increased car parking and driveway areas compared to other medium density typologies.

**Recommendation:** Consider reducing the current minimum dimension of 5x5m for dual occupancy and villa/ townhouse development to 4x4m. Reduce the minimum dimension for ground floor dwellings in manor house and terrace development from 5x5m to 3x3m to align with MD Code. Increase the minimum dimension of private open space for upper level dwellings from 1.5x1.5m to 2x2m.

Both policies identify a minimum dimension. The MD Code applies a 3x3m dimension for dwellings on the ground floor while the DCP requires a larger 5x5m minimum consolidated area. It is recommended that minimum dimensions are reduced so that the DCP aligns more closely with the MD Code and to encourage the delivery of smaller medium density development.

The minimum dimension of private open spaces for upper level dwellings is 1.5x1.5m in the DCP, 3x3m in the MD Code and, for comparison, 2x2m in the Apartment Design Guide for 1-2 bedroom apartments.



Private open space (POS)					
	Current DCP	MD Code	DA Guide	DCP Recommendation	
Multi dwelling housing	<b>Dual occupancies</b>	Ground floor dwellings: minimum 40m <sup>2</sup> per dwelling  Minimum dimension: 5x5m  Upper level dwellings: minimum 10m <sup>2</sup> per dwelling	Minimum 16m <sup>2</sup> per dwelling Minimum dimension: 3x3m  Located behind the front building line adjacent to the living room, dining room or kitchen.	as per MD Code	<i>Retain the current minimum POS area of 40m<sup>2</sup>. Reduce the minimum private open space area dimension to 4x4m.</i>
	<b>Manor houses</b>	Minimum dimension: 1.5x1.5m  Located behind the front building line.  A portion of the space (minimum 40m <sup>2</sup> ) should be adjacent to, visible and accessible from the main living and/ or dining rooms.	Minimum dimension: 3x3m 1 bedroom/ studio: min 8m <sup>2</sup> 2 bedroom: min 12m <sup>2</sup>  Dwellings with living area at ground floor: min 16m <sup>2</sup>  Located behind the front building line adjacent to the living room, dining room or kitchen.	as per MD Code	<i>Reduce the minimum POS area and express as m<sup>2</sup> linked to number of bedrooms (see next page). Reduce the minimum dimension for ground floor dwellings to 3x3m. Increase dimension for upper level dwellings to 2x2m.</i>
	<b>Villas/ townhouses</b>		n/a	Minimum 45m <sup>2</sup> per dwelling Minimum dimension: 5x5m	<i>Retain the current minimum POS area of 40m<sup>2</sup>. Reduce the minimum private open space area dimension to 4x4m.</i>
	<b>Terraces</b>		Minimum 16m <sup>2</sup> per dwelling Minimum dimension: 3x3m  Located behind the front building line adjacent to the living room, dining room or kitchen.	Minimum 45m <sup>2</sup> per dwelling Minimum dimension: 5x5m	<i>Reduce the minimum POS area and express as m<sup>2</sup> linked to number of bedrooms (see next page). Reduce the minimum dimension to 3x3m.</i>

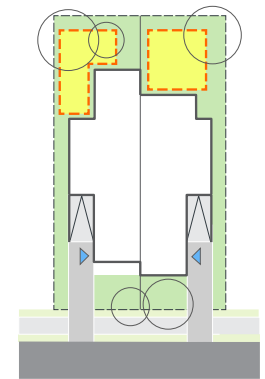


Table 15 DCP Recommendations - Private open space



### 4-9 Number of trees

**Recommendation:** Strengthen the requirement for tree planting to increase urban tree canopy in the Canada Bay LGA.

The draft Urban Tree Canopy Guide, released by the Government Architect NSW in 2018, recommends to "strengthen requirements for tree canopy on private land in (local) planning controls" in order to reach a 40% overall canopy coverage target for metropolitan Sydney (currently 16.8%).

**Recommendation:** Increase the tree planting requirements as follows:

*1 larger tree for every 300m<sup>2</sup> of land with a mature height of 8m; and*

*1 medium tree for every 200m<sup>2</sup> of land with a mature height of 5m.*

*Trees can be located anywhere on site, with the only requirement being that a portion of trees is planted in the deep soil zones of the front setback. At a minimum, one medium tree should be planted every 7.5m along the lot street frontage.*

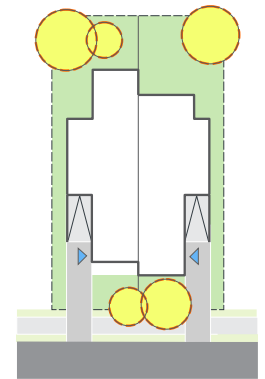
Typically, DCPs in NSW require new development to incorporate trees on site linked to the size of the lot. The Canada Bay DCP currently requires 1 tree for lots less than 400m<sup>2</sup>, 2 trees for lots 400-800m<sup>2</sup> and 3 trees for lots larger than 800m<sup>2</sup>. Trees must have a mature height of 8m and can be placed anywhere on the lot.

The MD Code requires a minimum of 2 trees linked to the housing typology. Dual occupancies, manor houses, villa/ townhouses and terraces all require one smaller tree in the front (5m mature height) and one larger tree in the rear of the lot (8m mature height).

However, it is unclear whether this provision applies before or after subdivision. If the MD Code applies before subdivision, a 2,000m<sup>2</sup> lot, for example, developed as ten strata terraces would only be required to plant two trees on the entire site, one in the front and one in the rear.

If the control applies after subdivision, a smaller 800m<sup>2</sup> lot, for example, if developed as a dual occupancy and subdivided into two 400m<sup>2</sup> properties, would be required to plant four trees, two in the front and two in the rear. If the same land is developed as four Torrens title terraces of 200m<sup>2</sup> each, the development would be required to deliver eight trees, while a manor house would only be required to provide a total of two trees.

The number of trees required is recommended to be linked to the site area, not the typology, which is similar to the current DCP. It is also recommended that a portion of the required trees are accommodated within deep soil zones in the front setback to add to the streetscape character.



Number of trees						
	Current DCP		MD Code	DA Guide	Recommendations	
Multi dwelling housing	Dual occupancies	Lot size	Trees required	Front: 1 tree with mature height of 5m if primary road setback is greater than 3m.  Rear: 1 tree with mature height of 8m.	As per MD Code	<p><i>Strengthen the requirement for tree planting to increase urban tree canopy.</i></p> <p><i>Increase the tree planting requirements as follows:</i></p> <p><i>1 larger tree for every 300m<sup>2</sup> of land with a mature height of 8m; and</i></p> <p><i>1 medium tree for every 200m<sup>2</sup> of land with a mature height of 5m.</i></p> <p><i>Trees can be located anywhere on site, with the only requirement being that a portion is planted in the deep soil zones of the front setback. At a minimum, one medium tree should be planted every 7.5m along the lot street frontage.</i></p>
		< 400m <sup>2</sup>	1			
		400 - 800m <sup>2</sup>	2			
	> 800m <sup>2</sup>	3				
Manor houses	Trees are capable of achieving a mature height of 8.0m and are to be accommodated on site.		Front: 1 tree with mature height of 5m if primary road setback is greater than 3m.  Rear: 1 tree with mature height of 8m.	As per MD Code		
Villas/ townhouses			n/a	Front: 1 tree with mature height of 5m if primary road setback is greater than 3m.  Rear: 1 tree with mature height of 8m.		
Terraces			Front: 1 tree with mature height of 5m if primary road setback is greater than 3m.  Rear: 1 tree with mature height of 8m.	As per MD Code		

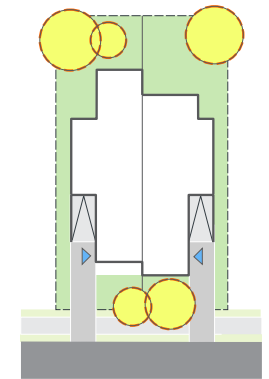


Table 16 DCP Recommendations - Number of trees

### 4-10 Number of storeys

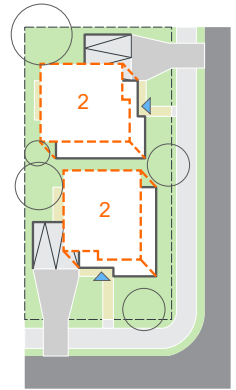
**Recommendation:** Amend the DCP to allow 2 storey detached 'rear' dual occupancies on corner lots if both dwellings address a different street (front dwelling addresses primary street, rear dwelling addresses secondary street).

The desired outcome of this recommendation is to incentivise attached dual frontage developments on corner lots that support the streetscape character of both streets. The proposed increase in height for the 'rear' dwelling is coupled with the requirement to provide vehicular and pedestrian access off the secondary street.

**Recommendation:** Amend the DCP controls for manor houses, townhouses and terraces as follows:

*R1 and R2 zones: maximum 2 storeys*  
*R3 zones: maximum 3 storeys*

This recommendation aims at encouraging the delivery of medium density typologies other than dual occupancies in R3 zones by allowing an extra storey. This incentive should not be extended to low rise residential flat buildings with more than 4 dwellings.



Number of storeys				
	Current DCP	MD Code	DA Guide	Recommendations
	<p><b>Dual occupancies</b></p> <p>Attached: maximum 2 storeys; detached front dwelling: maximum 2 storeys</p> <p>Detached rear dwelling: maximum 1 storey (on a corner site the dwelling facing the primary street frontage is considered the front dwelling)</p> <p>Attached dual occupancies are not to exceed the building height plane projected at an angle of 45 degrees over the site from a vertical distance of 5 metres above ground level at any boundary of the site.</p>	<p>2 storeys if both dwellings have a street frontage</p> <p>(Note: a 2 storey rear dwelling on a mid-block lot is <u>not</u> permissible under the Code)</p>	<p>Detached rear dwellings maximum 1 storey (5.4m)</p>	<p><i>Amend DCP to allow 2 storey detached 'rear' dual occupancies on <u>corner lots</u> if both dwellings address a street (front dwelling addresses primary street, rear dwelling addresses secondary street)</i></p>
Multi dwelling housing	<p><b>Manor houses</b></p> <p>Precinct 1: 2 storeys</p> <p>Precinct 2: 2 storeys</p>	n/a	2 storeys	<p><i>Amend the DCP controls for Manor houses, townhouses and terraces as follows:</i></p> <p><i>R1 and R2 zones: maximum 2 storeys; R3 zones: maximum 3 storeys (also see LEP recommendations Section 3-2)</i></p>
	<p><b>Villas/ townhouses</b></p> <p>Precinct 3: 3 storeys</p>	n/a	R1 and R2 zones: 2 storeys	
	<p><b>Terraces</b></p>	2 storeys	R3 zones: 3 storeys	

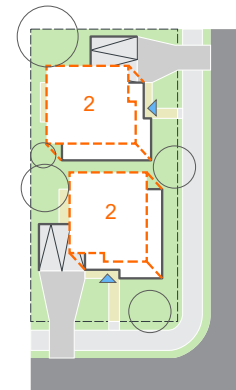


Table 17 DCP Recommendations - Number of storeys

## 4-11 Facade articulation

**Recommendation:** Retain the primary and secondary facade control for detached dwelling houses only. For medium density typologies, further investigation is required to test controls that more effectively deliver a built form massing articulation that integrates well with the existing local character.

The following options may be considered for R1 and R2 zones:

1. Retain the primary and secondary facade control as per the current DCP and add further requirements e.g. that a habitable room window must be located at the primary building facade line (preferably a living or kitchen window).
2. Retain the primary and secondary facade control as per the current DCP but require these to be built-to alignments that cannot be 'achieved' by building elements alone.
3. Replace the primary and secondary facade control with an articulation zone similar to the MD Code (1.5m forward of the front setback).
4. Replace the primary and secondary facade control with an articulation zone that allows elements to protrude into the front setback and requires built form massing to step back:

- A 0.5-1.0m articulation zone forward of the required front setback allows for lightweight elements such as awnings over entries, sun shading or bay windows for a maximum of 15-25% of the facade.
  - A 1.5m deep articulation zone behind the required front setback that requires 30-40% of the building facade to step back in massing.
5. A combination of the above.

For development in R3 zones, it is recommended Council adopt the controls in the MD Code which allow a 1.5m deep articulation zone that protrudes into the front setback. Over time this will contribute to a new, more urban, desired future character.

The DCP differentiates between a 'primary' and a 'secondary' building facade in order to encourage articulation of the built form addressing the street. The primary facade must not exceed 40% of the total lot width, while the secondary facade must not exceed 55% and be set back 1.5m behind the primary facade.

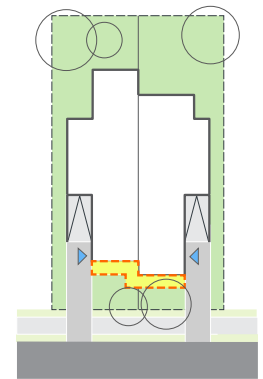
The MD Code does not contain a control for primary and secondary facades. Instead, it permits a 1.5m facade articulation zone forward of the minimum front setback and allows certain building elements within this zone, i.e. entry features, balconies, terraces,

bay windows, awnings and the like. Compared to the DCP, development under the MD Code appears to be closer to the street.

The primary and secondary facade control is a common provision for single storey detached houses. It creates a more 'traditional' appearance (if combined with a pitched roof form) that has good proportions and breaks up the building bulk.

For medium density typologies, however, the DCP control of primary and secondary facades in its current form appears to be less effective in creating the desired building articulation. Rather than articulating the massing of built form, recent development in Canada Bay (dual occupancies in particular) appear to locate the main building along the secondary facade line, with building elements added which extend to the primary facade alignment.

This can lead to undesirable outcomes, i.e. cantilevering of the upper storey to the front boundary line with the ground floor set back, and/or deep 'voids' (upper floor balconies) that create visual bulk and unbalanced proportions, particularly when coupled with a flat roof. In some cases, resulting built form is unsympathetic to the streetscape character and surrounding built form. This is not the intended outcome of the DCP controls.





Facade articulation					
	Current DCP	MD Code	DA Guide	DCP Recommendation	
Multi dwelling housing	<b>Dual occupancies</b>	The primary building facade must not exceed 40% of the total site frontage.	Primary road articulation zone that extends up to 1.5m forward of the minimum required setback for selected building elements such as entry features, balconies, pergolahs, verandahs, bay windows, awnings, sun shading and the like.	As per MD Code	<p><i>Retain the primary and secondary facade control for detached dwelling houses only.</i></p> <p><i>Undertake further investigation into effective articulation controls for medium density typologies as outlined on the next page.</i></p>
	<b>Manor houses</b>	The secondary building facade must not exceed 55% of the total site frontage and must be set back 1.5m from the primary building facade.	Private courtyards within the front setback are located within the articulation zones and / or behind the required front building line.		
	<b>Villas/ townhouses</b>	No balconies, entry porches or verandahs are permitted to encroach within the front setback. The only encroachments permitted within the front setback are restricted to eaves and awnings for weather protection but no supporting columns or posts.	n/a	as per dual occupancies, manor houses and terraces in the MD Code	
	<b>Terraces</b>		as per dual occupancies and manor houses	As per MD Code	

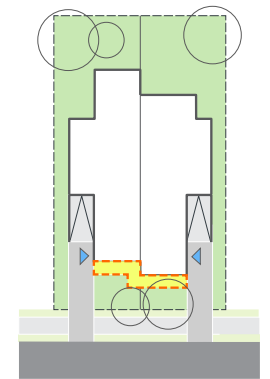


Table 18 DCP Recommendations - Facade articulation

### 4-12 Solar access to neighbours

**Recommendation:** Create two separate sections in the revised DCP, one that sets controls for solar access/ limits to overshadowing of neighbouring properties and another section that contains provisions for solar access to new dwellings.

Two key components regulate solar access. The first is the impact of new development on the solar access of adjacent properties. The second is to ensure new residents receive adequate solar access to main living areas and private open spaces (see Section 4-14).

**Recommendation:** Consider removing control E1.2-C7 or alternatively amending it so that it only applies to detached dwellings.

The DCP (E.1.2-C7) notes that "development should not reduce solar access to adjoining dwellings, private open space or public open space". This control is assumed to be written for low density detached dwellings. For medium density typologies it may be difficult to achieve this requirement as most are likely to have some impact on the solar access of neighbouring properties. It also contradicts the controls contained in section E2.3 Solar Access of the DCP.

**Recommendation:** North facing habitable windows and the principal private open spaces (PPOS) of adjacent dwellings should be protected, ideally by metric controls. The following DCP controls are recommended:

*Adjacent living and habitable room windows:*

- Direct sunlight to all north facing windows of habitable rooms of adjacent dwellings should not be reduced to less than 3 hours between 9.00am and 3.00pm on 21 June (mid-winter).
- Where windows currently receive less than 3 hours, direct sunlight cannot be reduced.

*Adjacent private open spaces:*

- Direct sunlight to 50% of the principal open space (PPOS) should not be reduced to less than 3 hours between 9.00am and 3.00pm on 21 June (mid-winter).
- Where 50% of the PPOS currently receive less than 3 hours, direct sunlight cannot be reduced.

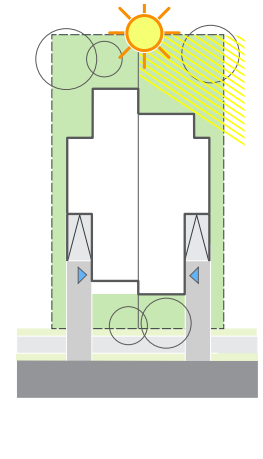
The DCP focuses on protecting all neighbouring north facing habitable room windows, whilst the MD Code protects living room windows more than 3m from the boundary. The current DCP appears more restrictive compared to the MD Code, however, it does not take into account

adjacent living room windows that may face east or west. In addition, the MD Code protects existing sunlight access of living room windows and states that if the window currently receives less than 3hrs, direct sunlight cannot be reduced any further.

In regard to open space protection, the DCP requires all private open spaces on adjacent properties to receive a minimum amount of sunlight (3 hours in mid-winter). This control could disproportionately impact development of sites adjacent to lots with existing large gardens. The MD Code does not specify any metric limits for overshadowing of neighbouring private open space and only includes an objective to provide 'reasonable solar access'.

Within the Canada Bay LGA there are many sites with neighbouring buildings closer than 3m to the boundary. New development would benefit from not having to assess overshadowing of neighbouring windows along this boundary under the MD Code.

Initial site testing has indicated that solar access controls within the MD Code will have the greatest impact on the development capacity of smaller east-west orientated lots when the neighbouring building is more than 3m from the boundary.



Solar access to neighbours				
	Current DCP	MD Code	DA Guide	DCP Recommendation
<b>Dual occupancies</b>	Direct sunlight to north facing windows of habitable rooms and all private open space areas of adjacent dwellings should not be reduced to less than 3 hours between 9.00am and 3.00pm on 21 June (mid-winter).	The window to a living room of an adjoining dwelling that is more than 3m from the boundary is to receive more than 3 hours of solar access between 9am and 3pm on the winter solstice.  If the window currently receives less than 3hrs, direct sunlight is not reduced.	A window that is more than 3m from the boundary to a living room of an adjoining dwelling is to receive more than 3 hours of direct sunlight between 9am and 3pm on the winter solstice (June 21). If the window currently receives less than 3hrs - direct sunlight is not reduced.	<i>Create two separate sections in the revised DCP, one for solar access of neighbouring properties and another for solar access to new dwellings.</i>
<b>Manor houses</b>	Control E1.2-C7:			<i>Consider removing control E1.2-C7 or amending it so that it applies to detached dwellings only.</i>
<b>Villas/ townhouses</b>	Development should not reduce solar access to adjoining dwellings, private open space or public open space.	n/a	Where the location of the living room windows of an adjoining dwelling cannot be verified, the proposed development is accommodated within a building envelope defined by a 35° plane springing from 3.6m above the boundary.	<i>Revise controls for adjacent living/ habitable room windows and principal private open space (PPOS) as outlined on the next page.</i>
<b>Terraces</b>		The window to a living room of an adjoining dwelling that is more than 3m from the boundary receives more than 3 hours of solar access between 9am and 3pm on the winter solstice.  If the window currently receives less than 3hrs, direct sunlight is not reduced.		

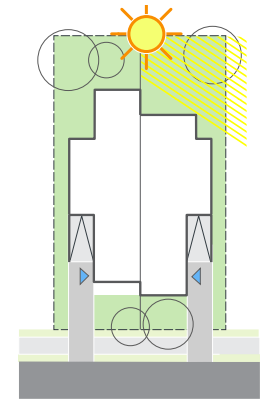


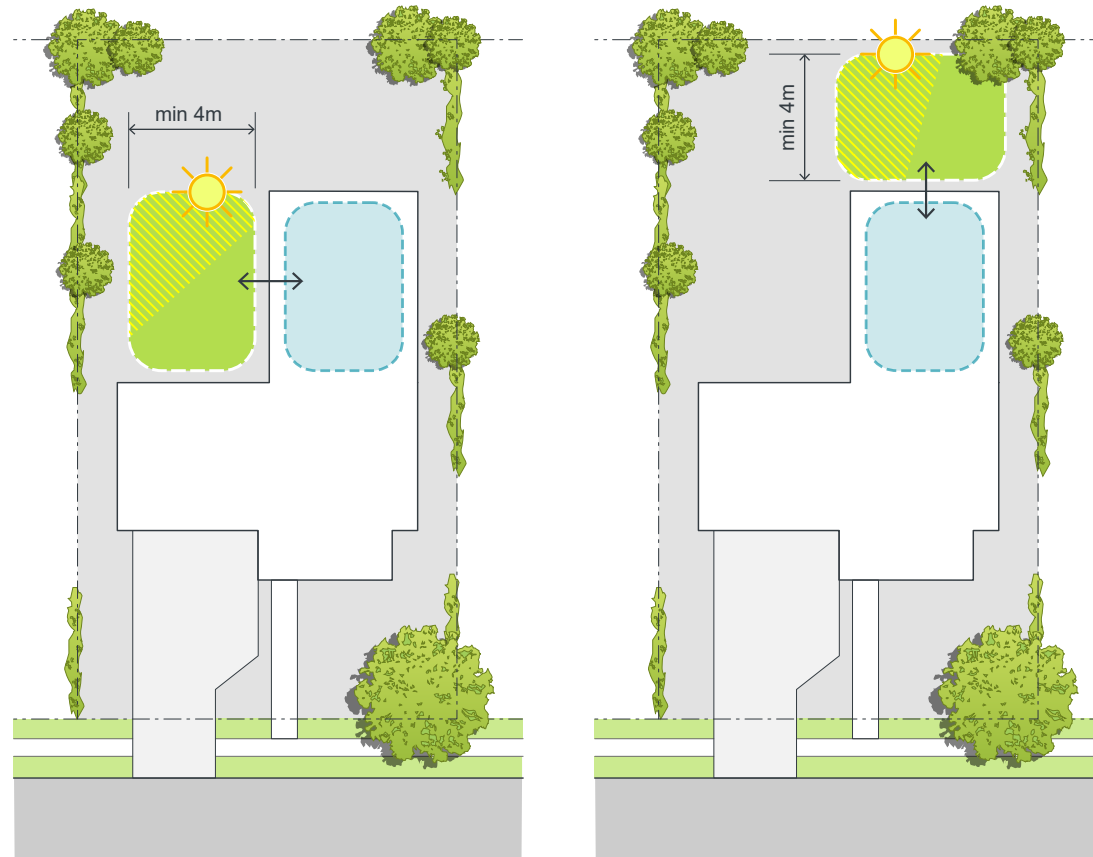
Table 19 DCP Recommendations - Solar access to neighbours

## 4-13 Solar access to dwellings

**Recommendation:** Require 2-3 hours of direct sunlight to all living room windows of new development in mid-winter. Require 2-3 hours of direct sunlight to 50% of the primary private open space (PPOS).

The second component when regulating solar access is to ensure that new residents receive adequate solar access to their main living areas and (principal) private open spaces. The current DCP states that "new buildings and additions are sited and designed to maximise direct sunlight to north-facing living areas and all private open space areas".

The MD Code provides more detailed controls. For dual occupancies, the MD Code requires 3 hours of direct sunlight to the living room and *principal* private open space. For manor houses, 75% of all dwellings are required to conform with the above. Terraces require 2 hours of direct sunlight to the living room *or* the private open space, and the DA Guide outlines the same (2 hours) for villa/ townhouse developments.



### Legend

- Primary Private Open Space (PPOS)
- Habitable Room
- Direct Access to PPOS
- At least 3h sunlight in mid winter to 50% of PPOS

Solar access to dwellings					
	Current DCP	MD Code	DA Guide	DCP Recommendation	
Multi dwelling housing	<b>Dual occupancies</b>	New buildings and additions are sited and designed to maximise direct sunlight to north-facing living areas and all private open space areas.	A living room and principal private open space in each dwelling is to receive a minimum of 3 hours direct sunlight between 9 am and 3 pm on the winter solstice (June 21).	As per MD Code	<p><i>Require 2-3 hours of direct sunlight to all living room windows of new development (no matter the orientation) in mid-winter.</i></p> <p><i>Require 2-3 hours of direct sunlight to 50% of the primary private open space (see diagram below)</i></p>
	<b>Manor houses</b>		At least 75% of dwellings in a development are to receive a minimum of 3 hours direct sunlight between 9am and 3pm on the winter solstice (June 21) to a living room and private open space.	As per MD Code	
	<b>Villas/ townhouses</b>		n/a	The living room or private open space in each dwelling is to receive a minimum of 2 hours direct sunlight between 9 am and 3pm on the winter solstice (June 21).	
	<b>Terraces</b>		The living room or private open space in each dwelling is to receive a minimum of 2 hours direct sunlight between 9 am and 3 pm on the winter solstice (June 21).	As per MD Code	

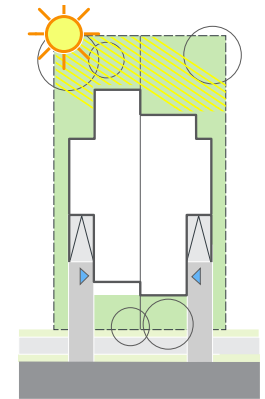


Table 20 DCP Recommendations - Solar access to dwellings



### 4-14 Car parking rates

**Recommendation:** Consider reducing the minimum parking rate for 3-bedroom dwellings (multi-dwelling housing) less than 800m from a railway station or less than 400m from a B3 or B4 zone from 1.4 to 1 car space.

A reduction of the minimum provision for 3+ bedroom dwellings in the proximity of a railway station and/or business zone to one car space is recommended, as there is a potential that this control discourages the delivery of some medium density typologies.

For example, a front loaded three storey terrace development in an R3 zone with three or more bedrooms is likely to have a single garage and insufficient space for a second car space in the 3.5m front setback.

**Recommendation:** Consider reducing the complexity of the controls, in particular the 'minimum parking rates for all other areas' category which refers to small, medium and large dwellings defined in Part J of the DCP.

Consider applying maximum parking rates for all development, linked to the number of bedrooms:

*up to 3 bedrooms: 1 car space*

*more than 3 bedrooms: 2 car spaces*

It is recommended that the current provisions are reviewed and if possible 'translated' so that they are easier to understand. One option may be to link maximum parking provisions with the number of bedrooms as suggested above.

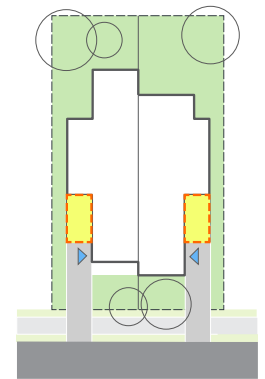
**Recommendation:** Consider amending minimum visitor parking requirements as follows:

*0-4 dwellings: 0 visitor car space*

*5-9 dwellings: 1 visitor car space*

*10+ dwellings: 1 space per 5 dwellings*

The above suggestion aims at encouraging the delivery of medium density development by reducing the required visitor parking provision for smaller development less than 10 dwellings.



Car parking rates													
	Current DCP	MD Code	DA Guide	DCP Recommendation									
	<p><b>Dual occupancies</b></p> <p>Maximum 1 CS (car space) per dwelling</p> <p>Any parking in excess of the maximum is to be counted as gross floor area.</p>	1 CS per dwelling	As per DCP	<i>Retain current DCP controls.</i>									
Multi dwelling housing	<p><b>Manor houses</b></p> <p><b>Maximum</b> parking rates for dwellings located in B4 zones, and <b>minimum</b> for dwellings less than 800m of a railway station or less than 400m of B3 or B4 zone:</p> <table border="1"> <tr> <td>1 bedroom</td> <td>0.6 CS</td> </tr> <tr> <td>2 Bedroom</td> <td>0.9 CS</td> </tr> <tr> <td>3 Bedroom</td> <td>1.4 CS</td> </tr> </table>	1 bedroom	0.6 CS	2 Bedroom	0.9 CS	3 Bedroom	1.4 CS	1 CS per dwelling	As per DCP	<p><i>Consider reducing the <b>minimum</b> rate for 3-bedroom dwellings from 1.4 to 1 car space.</i></p>			
	1 bedroom	0.6 CS											
	2 Bedroom	0.9 CS											
3 Bedroom	1.4 CS												
<p><b>Villas/ townhouses</b></p> <table border="1"> <tr> <td>1 bedroom</td> <td>0.6 CS</td> </tr> <tr> <td>2 Bedroom</td> <td>0.9 CS</td> </tr> <tr> <td>3 Bedroom</td> <td>1.4 CS</td> </tr> </table>	1 bedroom	0.6 CS	2 Bedroom	0.9 CS	3 Bedroom	1.4 CS	n/a	<p>As per DCP</p> <p>Visitor parking is to be provided where the development contains more than 5 dwellings. Provide 1 space per 5 dwellings.</p>	<p><i>Consider reducing complexity of controls and applying maximum parking rates for all development, linked to the number of bedrooms:</i></p>				
1 bedroom	0.6 CS												
2 Bedroom	0.9 CS												
3 Bedroom	1.4 CS												
<p><b>Terraces</b></p> <table border="1"> <tr> <td>Visitors</td> <td>1 per 5 dw</td> </tr> </table> <p>All other areas depend on size of dwelling as per Part J Definitions:</p> <table border="1"> <tr> <td>Small dw</td> <td>1 CS</td> </tr> <tr> <td>Medium dw</td> <td>1.5 CS</td> </tr> <tr> <td>Large dw</td> <td>2 CS</td> </tr> <tr> <td>Visitors</td> <td>0.5 CS</td> </tr> </table> <p>Any parking in excess of the maximum is to be counted as gross floor area.</p>	Visitors	1 per 5 dw	Small dw	1 CS	Medium dw	1.5 CS	Large dw	2 CS	Visitors	0.5 CS	1 CS per dwelling	<p>As per DCP</p> <p>Where a basement carpark serves more than 10 dwellings, 1 visitor space per 5 dwellings is to be provided.</p>	<ul style="list-style-type: none"> <li><i>up to 3 bedrooms: 1 car space</i></li> <li><i>more than 3 bedrooms: 2 car spaces</i></li> </ul> <p><i>Consider amending visitor parking requirements as follows:</i></p> <ul style="list-style-type: none"> <li><i>0-4 dwellings: 0 car spaces</i></li> <li><i>5-9 dwellings: 1 car space</i></li> <li><i>10+ dwellings: 1 space per 5 dwellings</i></li> </ul>
Visitors	1 per 5 dw												
Small dw	1 CS												
Medium dw	1.5 CS												
Large dw	2 CS												
Visitors	0.5 CS												

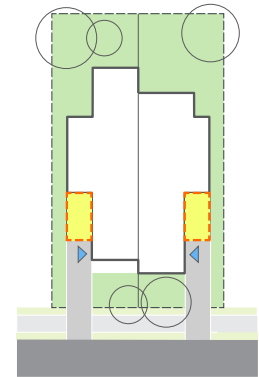


Table 21 DCP Recommendations - Car parking rates

### 4-15 Driveways and garages

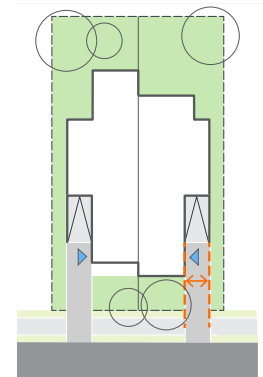
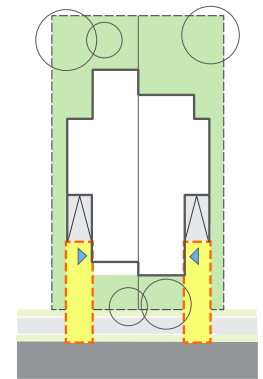
**Recommendation:** Retain current DCP driveway controls with the only amendment suggested to require all vehicular crossovers to be a maximum width of 3.5m at the boundary, despite the width of the lot.

Add new DCP control that states that for dual frontage lots, driveway access is to be provided where streetscape impacts are less and to maximise landscaping in the front setback. This can be achieved by encouraging driveway access on separate streets or off the wider frontage where possible.

It is recommended that the maximum crossover width in the DCP is 3.5m despite the width of the lot. This would align the DCP with the MD Code. The current DCP control that states that the first 4.5m should be at grade should be enforced for all new development in the CCB LGA.

**Recommendation:** Adopt the MD Code controls for the maximum width of garage doors.

The DCP currently permits wider garages on narrower lots compared to the MD Code. For example, the DCP allows a 5.6m wide garage on a 14m wide lot (40% of frontage), compared to a maximum of 3.2m under the MD Code. It is recommended to adopt the MD Code provisions to improve streetscape amenity outcomes.



Driveways					
	Current DCP	MD Code	DA Guide	DCP Recommendation	
Multi dwelling housing	<b>Dual occupancies</b>	For narrow lots <12m wide the maximum crossover width is 3.5m. For wider lots >12m the maximum crossover width is 4m.	Any vehicular crossing should have a maximum width of 3.5m at the street boundary.	As per MD Code	<p><i>Retain current DCP controls with the only amendment suggested to require all vehicular crossovers to be a maximum width of 3.5m at the boundary, despite the width of the lot.</i></p> <p><i>Add new DCP control that states that for dual frontage lots, driveway access is to be provided where streetscape impacts are less and to maximise landscaping in the front setback. This can be achieved by encouraging driveway access on separate streets or off the wider frontage where possible.</i></p>
	<b>Manor houses</b>	Maximum 1 vehicle crossing per site (after subdivision).  The first 4.5 metres of any driveway should be at grade.	Any vehicular crossing should have a maximum width of 3.5m at the street boundary.	As per MD Code	
	<b>Villas/ townhouses</b>		n/a	n/a	
	<b>Terraces</b>		n/a	n/a	

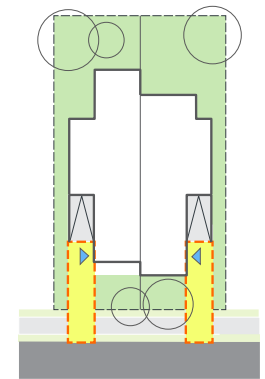


Table 22 DCP Recommendations - Driveways

Garages						
	Current DCP		MD Code		DA Guide	DCP Recommendation
Dual occupancies	Lot width	Max. width of garage doors	Lot width	Max. width of garage doors	As per MD Code	It is recommended to adopt the MD Code provisions.
	<20m	40% of frontage	12-15m	3.2m		
	>20m	30% of frontage	>15-20m	6m		
	Garages for each dwelling within an attached dual occupancy should be single car width only.		>20-25m	9.2m		
			>25m	12m		
Multi dwelling housing	Manor houses		Maximum width of all garage doors facing a street is 6m.	Lot width	Max. width of garage doors	It is recommended to adopt the MD Code provisions.
	Villas/ townhouses		n/a	12-15m	3.2m	
	Terraces		For access to a common basement: maximum width of all garage doors facing a street is 6m.  For individual lots:  Lot width    Garage width	>15-20m	6m	
		8-12m	3.2m	>20-25m	9.2m	
		>12m	6m	>25m	12m	

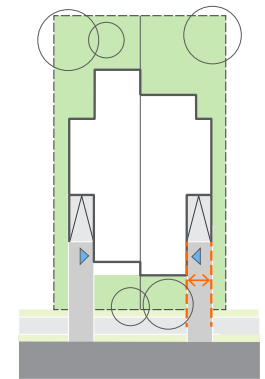


Table 23 DCP Recommendations - Garages

### 4-16 Basement car parking

**Recommendation:** Create a dedicated section in the DCP that regulates basement parking.

The DCP contains comparably few provisions that specifically regulate basement/ underground parking. Basement parking impacts on pedestrian safety and the streetscape character. It is recommended that the revised DCP contains a separate section for basement parking supported by diagrams.

**Recommendation:** Strengthen the 'at grade' requirement and include diagrams (plan and section) in the DCP to elevate and clearly communicate this control.

The DCP contains the following control: "The first 4.5 metres of any driveway should be at grade". Recent development, in particular Dual Occupancies with underground parking, has delivered properties with steep driveways close to the footpath (see adjacent photo). It is recommended that the 'at grade' requirement is amended to say 'must' rather than 'should'.

**Recommendation:** Consider including similar controls that regulate the permissible ramp location and gradient within the front setback.

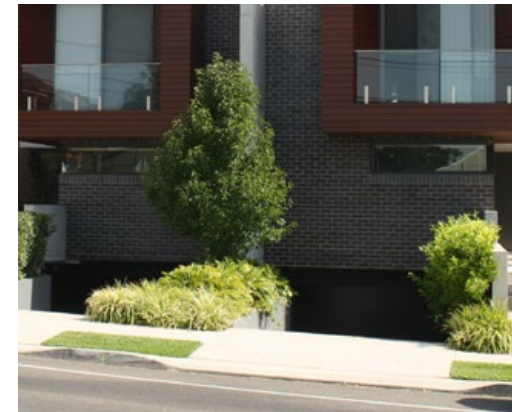
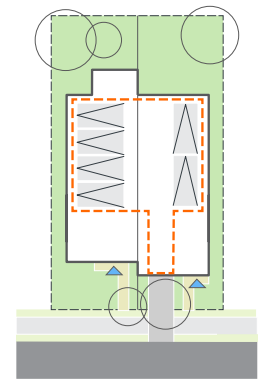
**Consult traffic engineers to determine maximum gradient and transitions suitable for basement ramps adjacent to the footpath and street and to ensure all developments comply with Australian Standards AS 2890.1:2004 – Parking facilities – Part 1: Off-street car parking.**

Some council policies such as the Sutherland Shire DCP do not permit ramps accessing basement car parking forward of the building line unless the following is achieved: compatibility with the streetscape, safe pedestrian crossings and adequate line of sight for cars entering or leaving the carpark.

The Sutherland DCP also requires that "access to a basement carpark is to be achieved by way of a gentle gradient so that the driveway is not greater than 1m below natural ground level within the setback to the street".

**Recommendation:** Adopt the maximum basement carpark entry dimensions as per MD Code and incorporate into a dedicated new basement car parking section in the DCP.

The MD Code and DA Guide requires that basement carpark entries are a maximum of 2.7m high and 3.5m wide.



Steep ramps close to the footpath reduce a driver's visibility of the road and footpath when exiting the basement, impacting on pedestrian safety



Basement car parking					
	Current DCP	MD Code	DA Guide	DCP Recommendation	
Multi dwelling housing	<b>Dual occupancies</b>	Entries to underground car parking are to be set back behind the building line.	Basement car parking should not be provided within the required setbacks.	As per MD Code	<i>Create a dedicated section in the DCP that regulates basement parking.</i>
	<b>Manor houses</b>	The first 4.5 metres of any driveway should be at grade.	Carpark entries are a maximum 2.7m high and 3.5m wide.	Basement car parking is not to protrude more than 1m above finished ground level except at the entrance to the car park.	<i>Strengthen/ elevate the current DCP control that requires driveways to be at grade for the first 4.5m from the front boundary, i.e. through diagrams and replacing 'should' with 'must'.</i>
	<b>Villas/ townhouses</b>		n/a		<i>Consider including controls that regulate the permissible ramp location and gradient within the front setback.</i>
	<b>Terraces</b>		Carpark entries are a maximum 2.7m high and 3.5m wide.		<i>Adopt the maximum carpark entry dimensions of 2.7x3.5m as per MD Code.</i>

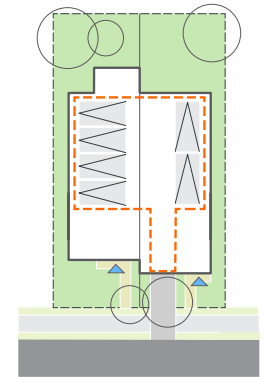


Table 24 DCP Recommendations - Basement car parking



## CHAPTER 5 LOCAL CHARACTER

5-1 Introduction

Over the last few years the NSW Department of Planning & Environment has provided increased guidance on local character and how local character can be integrated within the planning system. This section of the report considers Council's previously developed draft Character Statements against more recent guidance and makes recommendations about the opportunities for Character Areas in the Development Control Plan to guide design outcomes for Low Rise Medium Density typologies in Canada Bay.

A previous version of the Canada Bay DCP identified eleven (11) character areas accompanied by written statements (in Appendix E). The size of these character areas, as shown in the map below, vary significantly. The smallest, located in Five Dock North, is six hectares and the largest, located in Concord/ North Strathfield, is 160 hectares. The combined size of the character areas is 475 hectares of land which is approximately 25% of the entire Canada Bay LGA.

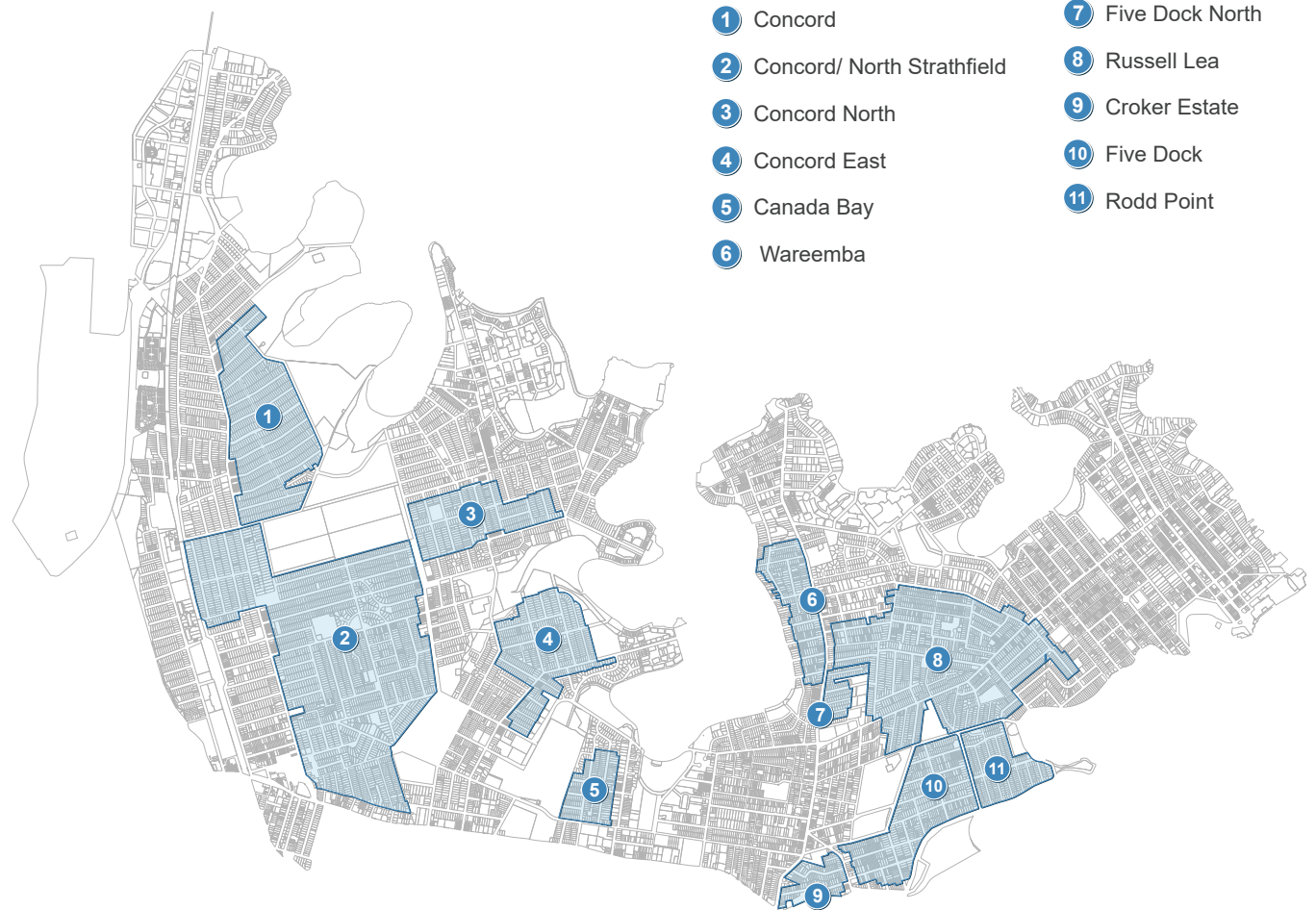


Figure 19 Draft character areas in the Canada Bay LGA

Defining the future local character plays an important role in shaping new development.

Key planning controls such as height, setbacks and landscaped area are important, however, other finer details are also required to ensure quality development is achieved that addresses the specific character of an area. Materiality, roof scape, trees and landscaping, fencing and positioning of the dwelling on the block all shape how a neighbourhood and street is perceived.

Development approved under a complying development pathway relies on the content of local character statements. The DA Guide requires all Complying Development Certificate (CDC) approved development to be consistent with the local character statement.

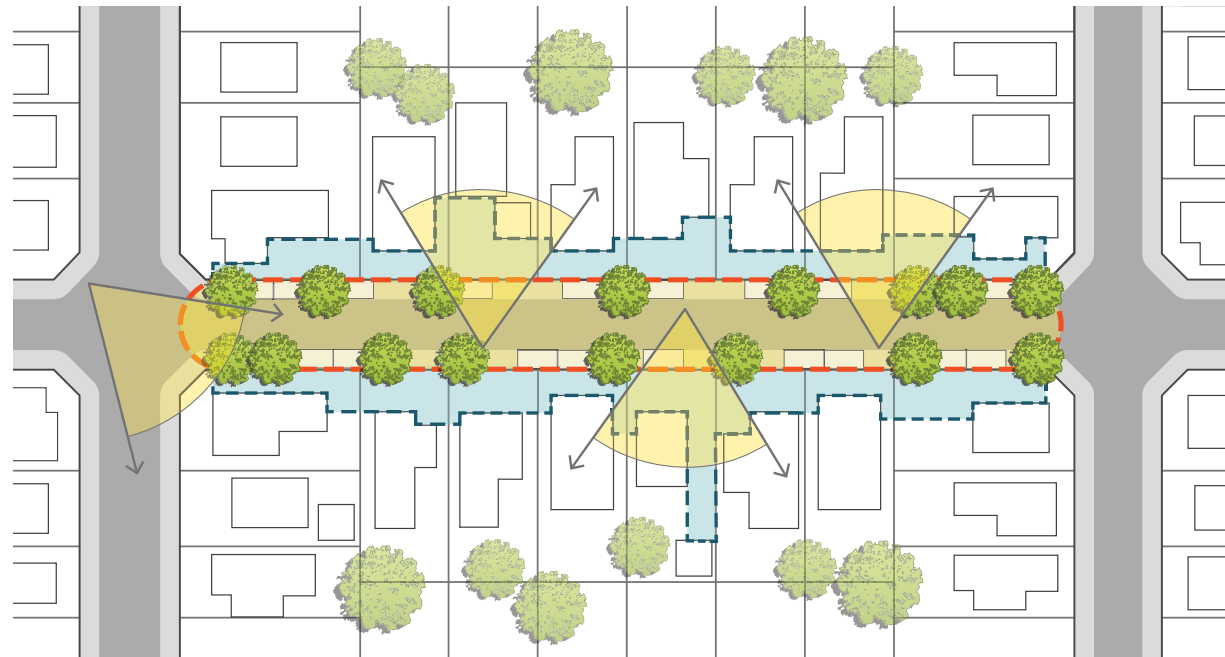








Figure 20 Diagram showing the area and elements with the highest contributory factor in shaping local character

-  Public land defining/ contributing to local character
-  Trees on public land
-  On-street parking arrangement
-  Private land defining/ contributing to local character
-  Trees on private land (front, side and rear)
-  Views from public domain

## 5-2 Draft character areas

The statement, accompanying the character area, focuses on describing the predominant existing character and the values to be protected and provided detailed design guidelines for new development and alterations. The description of character focuses on the built form (i.e. 1 storey detached Inter-War and California Bungalow style housing), its characteristics and materials and location on the site.



The draft Canada Bay Character Statements are structured as follows:

- Background - a short description of the subdivision era/ period and where applicable, access to transport;
- Physical Character - housing style, e.g. Federation or Inter-War, building features, fencing and high-level landscape character;
- Desired Future Character - short paragraph on how future development should relate to the character of the area;
- Design Guidelines - guidance for future development i.e. streetscape and landscape, scale, building form, materials and colours, and garages and driveways.

Many of the draft character statements for the different areas are predominantly the same and the desired future character appears focused on protection of the character created by the existing built form. Other economic, social and environmental considerations are not included.

The statements aim at providing guidance on how to integrate new development into the context of detached Federation, Inter-War and California Bungalow style housing. There are no character areas or statements for medium to high density residential areas, local centres or more recent developments such as Breakfast Point.

All of the draft character areas are located in the R2 Low Density Residential Areas (see Figure 21) with the exception of Concord/ North Strathfield which incorporates some land zoned R3.

Figure 22 overlays the 22 Heritage Conservation Areas in Canada Bay onto the draft character areas which shows that some lie within or adjacent to the draft character areas, ranging from small zones comprising 1-2 houses to larger pieces of land such as the Bourketown Conservation Area which is 36 hectares in size. The most notable overlap of a conservation area and R3 Medium Density Residential zone occurs in Drummoyne.



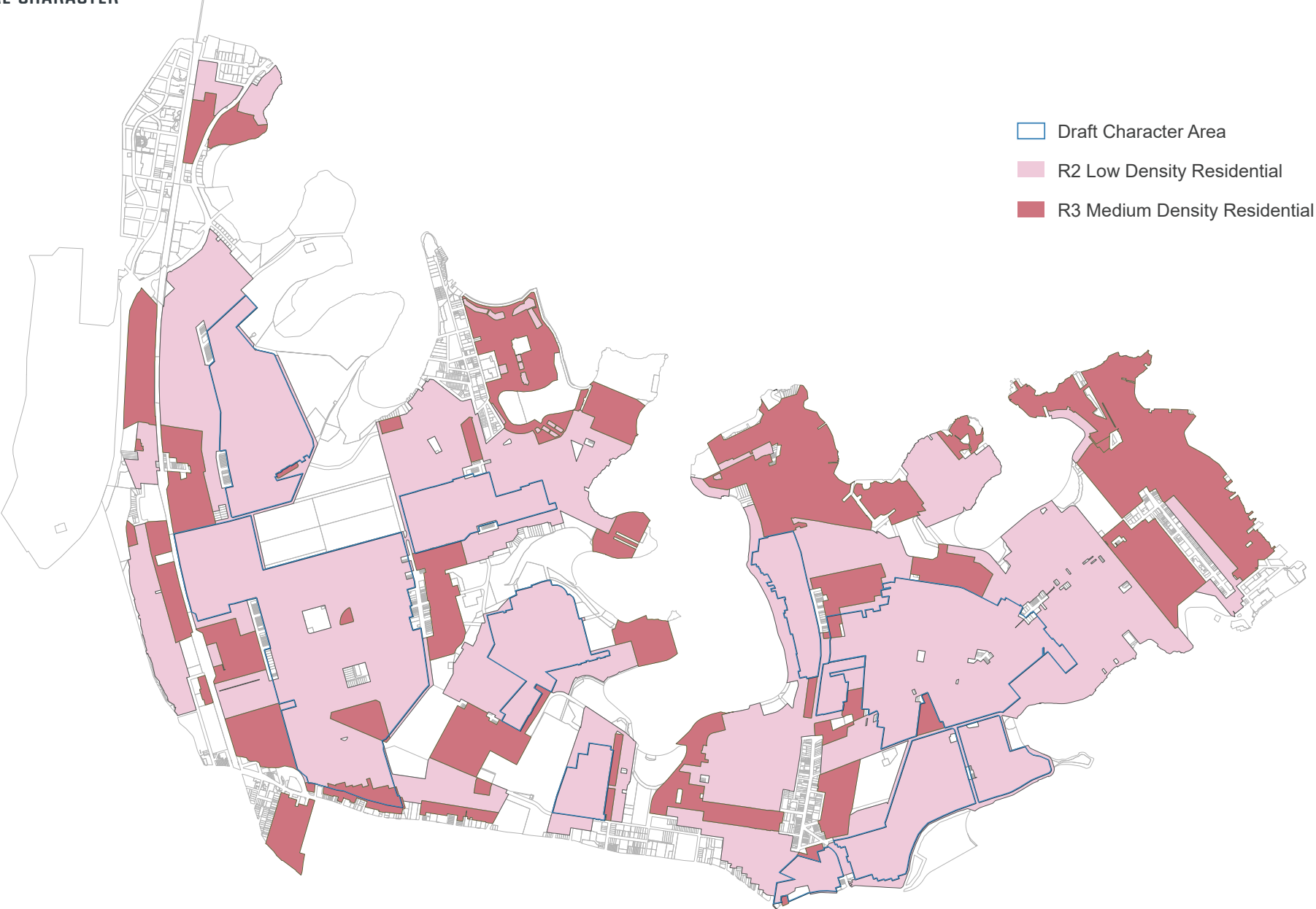


Figure 21 Land use zoning (R2, R3) overlay map



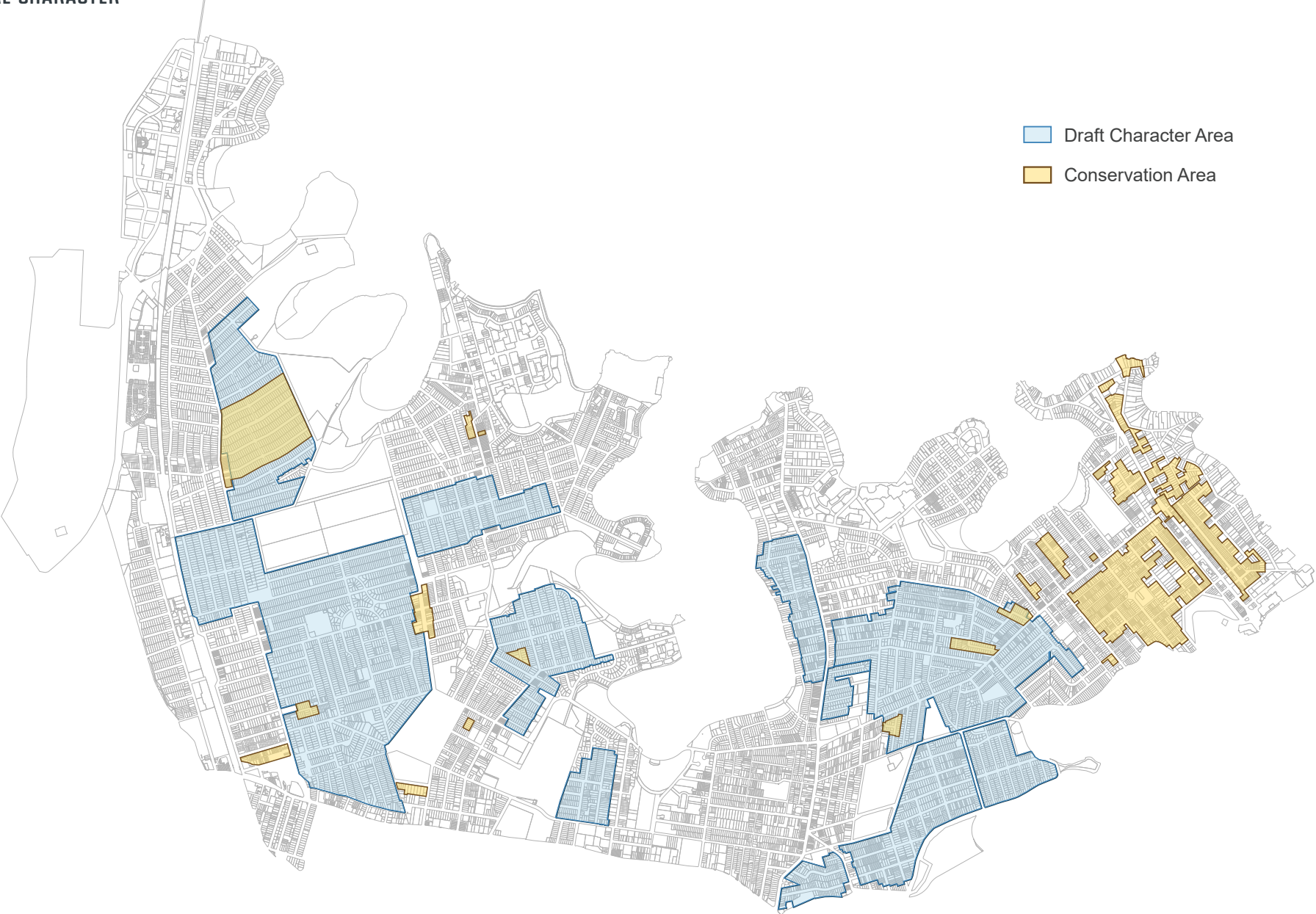


Figure 22 Conservation zones overlay map

### 5-3 Opportunities

The draft character areas are considered well chosen for their homogeneous character. All eleven areas are predominantly low residential scale, have historic subdivision patterns typically dating back to Federation and Inter-War eras, and contain housing in the Federation, Inter-War and California Bungalow styles with widespread use of unpainted brickwork and terracotta roof tiles.

The draft LSPS includes an action for precluding Complying Development under the Housing Code and Low Rise Medium Density Housing Code from Local Character Areas. The focus on low rise, low density housing suggests that possibly these character areas could be seen as conservation areas more than character areas as defined in recent DP&E guidance.

The draft LSPS also includes an action to review the interim local character statements and prepare new local character statements for areas identified for change, and areas with an existing distinctive urban form and character. The draft character areas should be reviewed to confirm that the character described has remained intact. New dwellings and dual occupancies have been popular in areas of Canada Bay, and may have altered the character described in the draft statements.

To improve outcomes for Low Rise Medium Density typologies, Council could also develop character statements for medium density residential areas. Although not relevant to this study there would also be value in creating character statements for high density areas, town centres and areas with more recent development, which have a character that is valued by the community.

Character areas could be incorporated into the Canada Bay DCP, either as a new Part after Part C General Controls or as an Appendix. The character area statements should be revised and extended, following recent guidance provided by the NSW Department of Planning & Environment. An overview of this guidance is provided on the following pages.

*"Character is what makes one neighbourhood distinctive from another. It is the way a place 'looks and feels'. It is created by the way built and natural elements in both the public realm and private domain interrelate with one another, including the interplay between buildings, architectural style, subdivision patterns, activity, topography and vegetation."*

Planning circular, Respecting and enhancing local character in the planning system, 16 January 2018

*"The Development Control Plan has the capacity to include a character statement or character description which would set the context for development assessment."*

Local Character and Place Guideline, February 2019



### Local Character and Place Guideline

Part one of the Local Character and Place Guideline (LCPG), published in February 2019 by the NSW Department of Planning & Environment, provides information to clarify the key influences of local character and place, how local character can be integrated into the planning system and current approaches for the inclusion of local character in local planning.

Part two introduces the Character Assessment Toolkit which provides steps to determine the character of a place, including engagement, sources of data, and strategies for mapping local character. It then provides guidance on how governments and communities can produce a character assessment and set the desired future character of an area.

Part three provides an outline for how to integrate consideration of local character into the strategic planning framework and statutory controls.

### Approaches for integrating local character

The Department outlines three possible, common approaches on how Council can integrate local character. The difference between the three approaches is which local plan will contain the local character description and identify the desired future character.

- *Approach 1* - LSPS: character statements are incorporated into the LSPS, with a need to then align the LEP and the DCP
- *Approach 2* - LEP: character statements are stand-alone but the LEP would provide a map overlay, the LEP would need to be reviewed and the DCP controls would need to be aligned
- *Approach 3* - DCP: the DCP includes the character statements and outlines controls to deliver on the desired future character.



Figure 23 Integration of local character within local planning (source: Local Character and Place Guideline)



**Character Assessment**

The Department suggests a character assessment process to identify the characteristics of an area as a key step in the preparation of local character statements. The Local Character Wheel shown adjacent identifies 23 components of local character, structured under the headings of 'Social', 'Environmental' and 'Economic'.

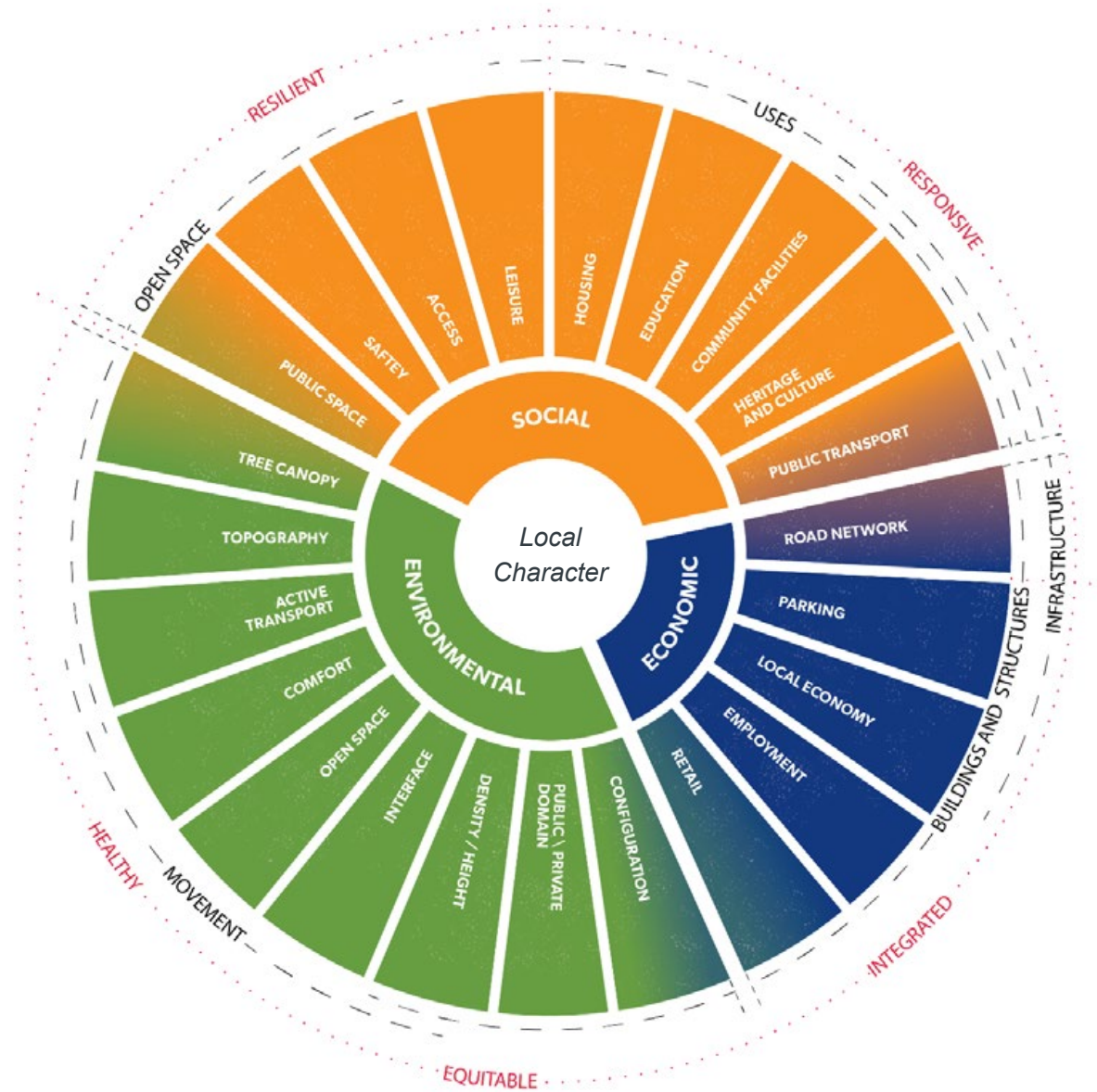


Figure 24 The Local Character Wheel (source: Local Character and Place Guideline )

### 5-4 Croker Estate Example LCS

An example of a local character statement can be found on the following pages.

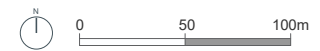
#### The Place

Croker Estate is a small neighbourhood situated between the arterial Great North Road and Ramsay Road in Five Dock, NSW.

Croker Estate is zoned R2 - Low Density Residential and the predominant residential built form is single storey California Bungalow style housing. The main retail/commercial focus for this residential community is the Five Dock Town Centre which is located approximately 500m north of the area. A secondary small cluster of local shops is situated on the corner of Harrabrook Avenue and Ramsay Road to the south-east of the study boundary.



Figure 25 Aerial map of Croker Estate Example Character Area





- \* Terminating view
- Distant view
- Ⓟ Bus stop
- On-road cycle path
- - - 2m contour line
- Prominent tree
- Public open space
- Croker Estate character boundary
- - - Consider revision of character boundary



Figure 26 Place analysis map of Croker Estate Example Character Area





### Existing Character

#### Land Form

The topography of the area is gradually sloping downwards towards the Iron Cove Creek in the south. The topography creates a high side and low side to the street along Harrabrook Avenue. The highpoint along Harrabrook Avenue provides distant views towards the city skyline in the east.

Iron Cove Creek is a watercourse that runs parallel to the southern boundary of Croker Estate and flows into the Parramatta River via Iron Cove Bay.

Street trees contribute to the landscape character of the area with Murralong Avenue and Croker Park featuring well established trees that provide large amounts of shade and greenery. Shrubs and low height trees such as Callistemon (bottle brush) are found along Harrabrook Avenue.



Distant city views from along Harrabrook Ave

#### Urban Form

Croker Estate predominantly consists of two east-west streets being Murralong Avenue and Harrabrook Avenue. These connect to the arterial Great North Road to the west and Ramsay Road to the east. Kingsford Avenue is a 90m long cul-de-sac accessed from Ramsay Road.

Murralong and Harrabrook Avenues are meandering, slow speed streets that are more pedestrian friendly than Great North Road and Ramsay Road. The bends in the meandering streets results in diverse terminating views of sides of properties and front fences.

The road reserves within Croker Estate are generally 20m wide and consist of a 8m carriage way with a 2m footpath and a generous 4m grass verge on either side of the road.

Lots within the area are predominantly long and narrow averaging approximately 40m in depth and are between 8m and 15m wide. An exception of this is around Kingsford Avenue where lots are generally shorter at 27m in depth.

Langsworth Avenue is a narrow north - south link that provides pedestrian connection between Murralong and Harrabrook Avenue. This through-site link extends towards Croker Park and provides a break in the 400m long block.



Large trees provide significant shade along Murralong Ave

Croker Park is located at the southern edge of the character area with steep topography falling away from Harrabrook Avenue. The park is predominantly grass and includes children's play equipment as well as two tennis courts in the south west corner on Henley Marine Drive. The edges to the park are not formally defined and there is no formal entry or pathways through the park.

There are bus routes within walking distance to Croker Estate, with bus stops along Great North Road and Ramsay Road that travel to Drummoyne, Hurstville and the CBD.

## Built Form

The predominant residential built form in the area is single storey California Bungalow style housing. Houses are typically detached dwellings with only a handful of dual occupancies or secondary dwellings prevalent. Gabled roof forms, asymmetrical designs and verandahs fronting the street are common architectural elements found across the area.

Front setbacks of properties are generally consistent and in line with neighbouring buildings. Front setbacks are typically 5m from the front boundary. Driveways and garages that are located to the rear of properties help to ensure that car parking does not dominate the streetscape. On narrower sites, parking is generally located in the front setback but lightweight open carports contribute to the pedestrian experience by allowing views and surveillance between homes, front gardens and the street. Typically carports have been designed to match the colours and design of the dwelling.

Timber picket and brick front fences are predominantly low height and help define the front gardens. Low shrubs, lawn, ornamental bushes and some hedges are located in the front setback of properties in the area.



Curved roads lead to terminating views of properties



Gables addressing the street are a key characteristic



Single storey masonry buildings are typical for the area



Kingsford Ave terminates in 3-storey residential apartments



Low height front fences are a common element



Garages on wider lots are typically located to the rear



### Key Community Aspirations

Specific characteristics and aspirations for the area to be completed following council engagement with local community. Possible to be ascertained through online surveys, consultation, photo competitions etc.

Community response may likely include:

- new buildings and alterations & additions need to fit with the surrounding houses
- street trees are valued in the area
- the under-use of Croker Park with a desire for additional seating / lighting / pathways

### Desired Future Character

*Change and development may be expected within Croker Estate as it is not a heritage conservation area nor does it contain a large number of heritage listed properties. Regardless of any future changes, the area should retain its leafy, suburban character with small scale residential properties and significant street trees that offer seclusion from surrounding busy streets.*

### Guiding Principles

Ensure street trees are retained in the area, particularly along Murralong Avenue. Recommend additional tree planting along Harrabrook Avenue

Attached or detached garages are to be lightweight and not completely enclosed. For wide lots, garages are to be located to the rear or side of the property as to not dominate the streetscape

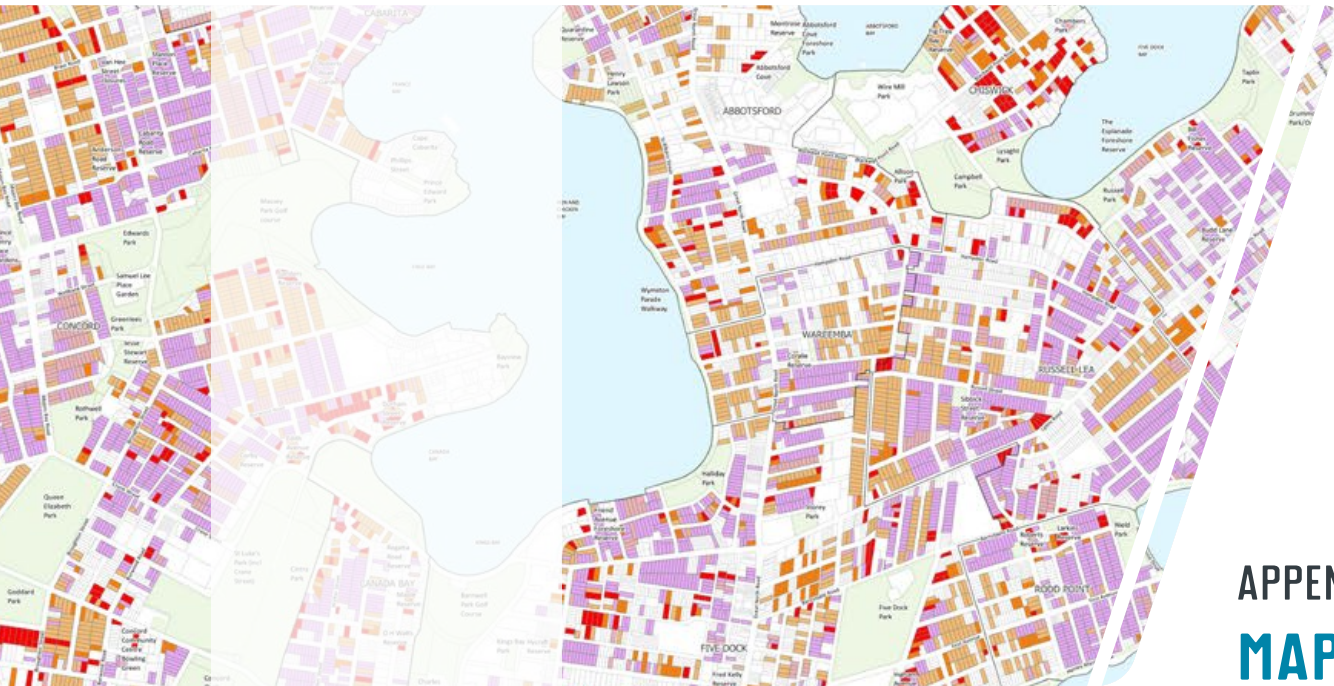
Retain low front fencing which does not exceed 450mm in height and allows views of the house from the street

Single storey development should be encouraged and a significant upper storey setback enforced for any two storey developments

Encourage asymmetrical street elevation of house and garage in keeping with existing California Bungalow form

Masonry construction with red and dark natural coloured bricks and similar toned roof tiles should remain the preferred material palette.

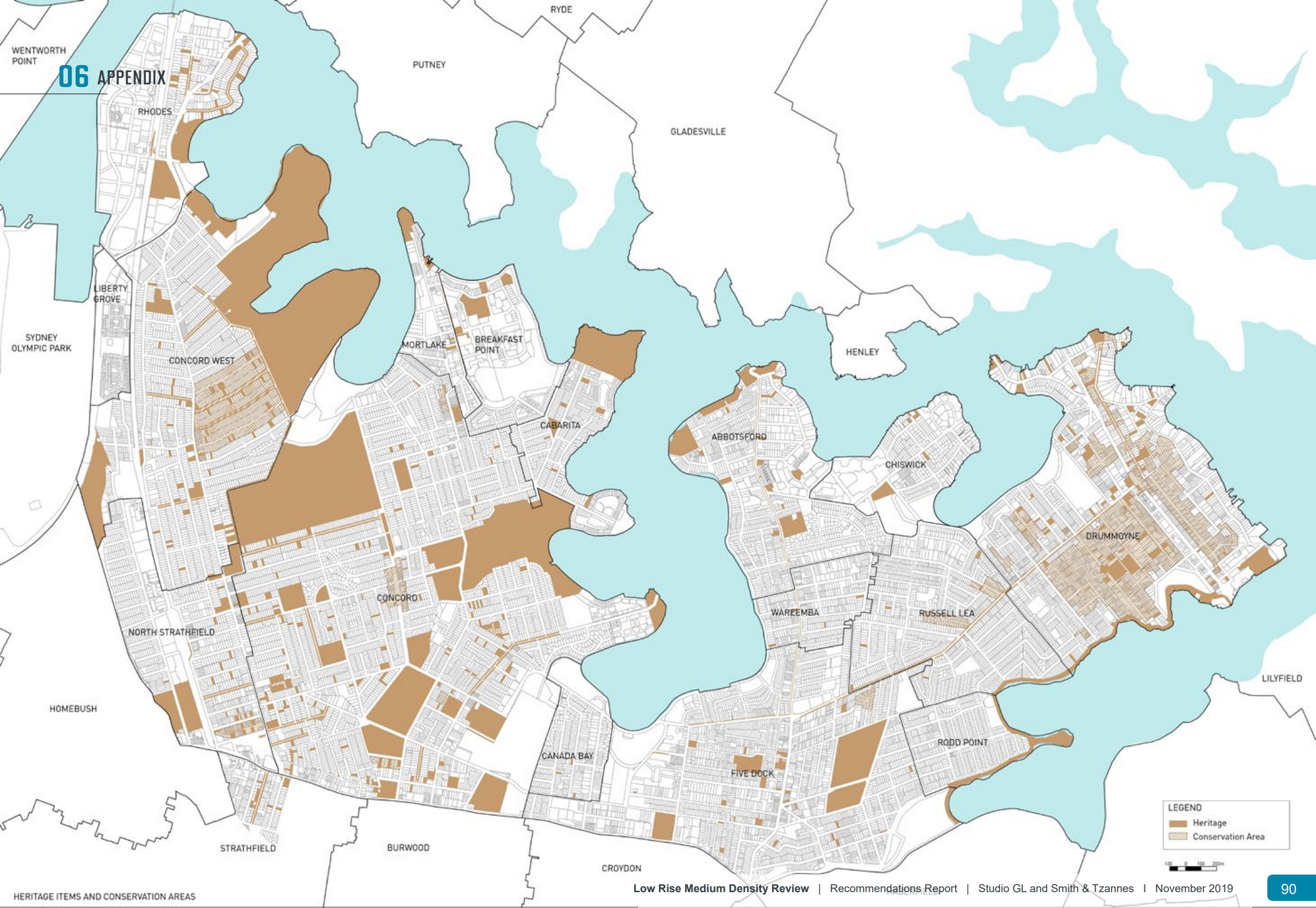




## APPENDIX A MAPPING



06 APPENDIX



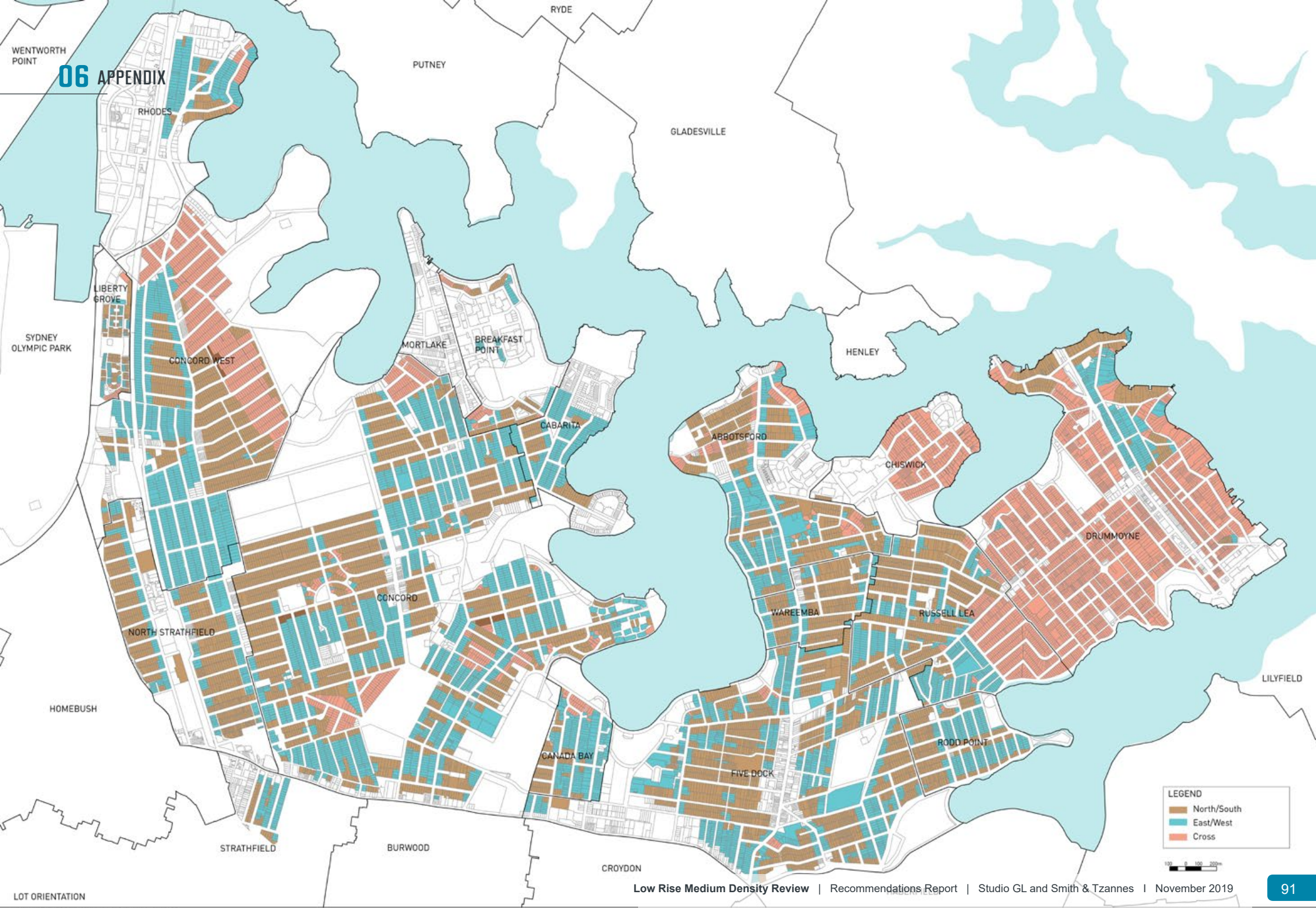
LEGEND

- Heritage
- Conservation Area





# 06 APPENDIX



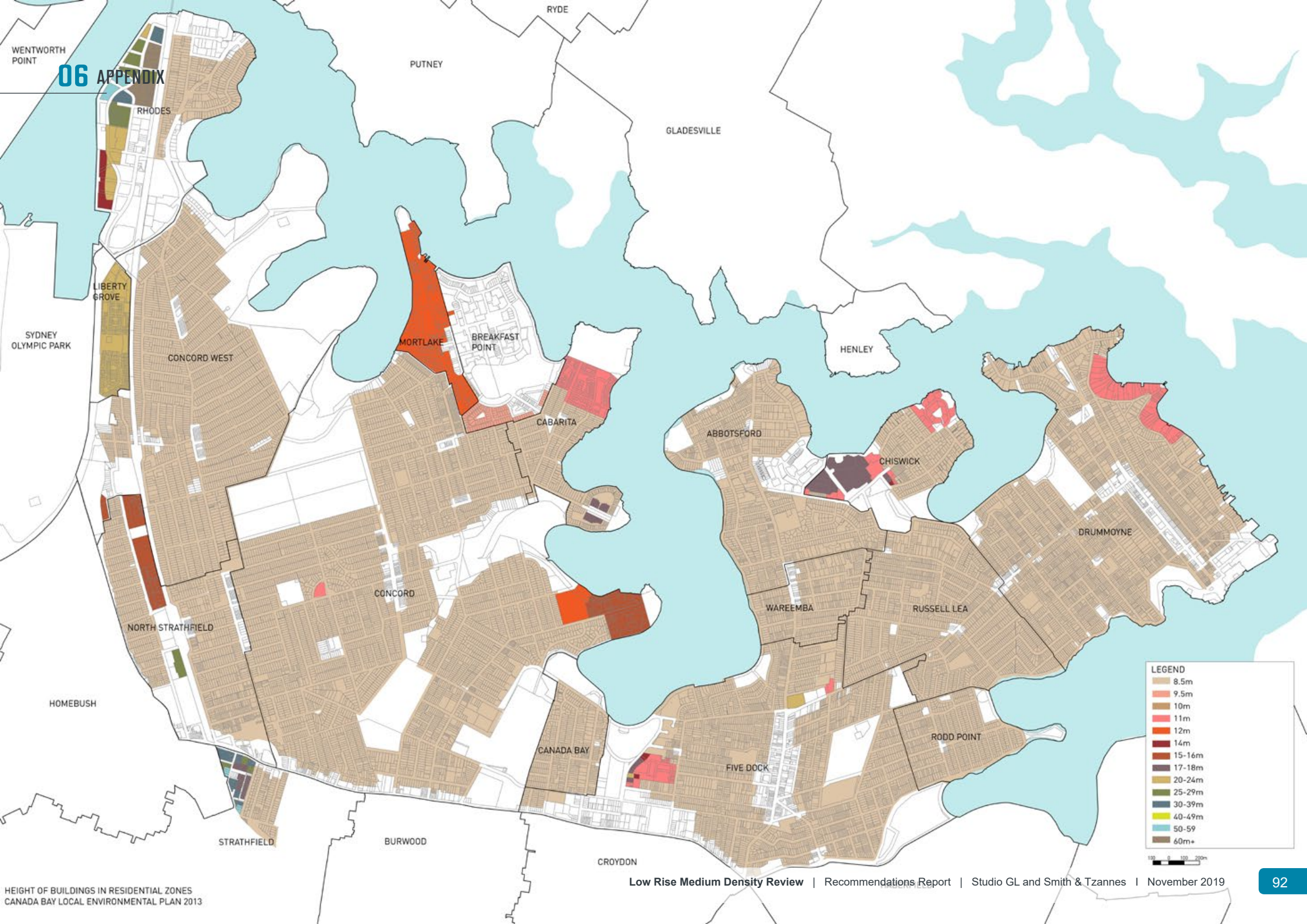
**LEGEND**

- North/South
- East/West
- Cross





# 06 APPENDIX



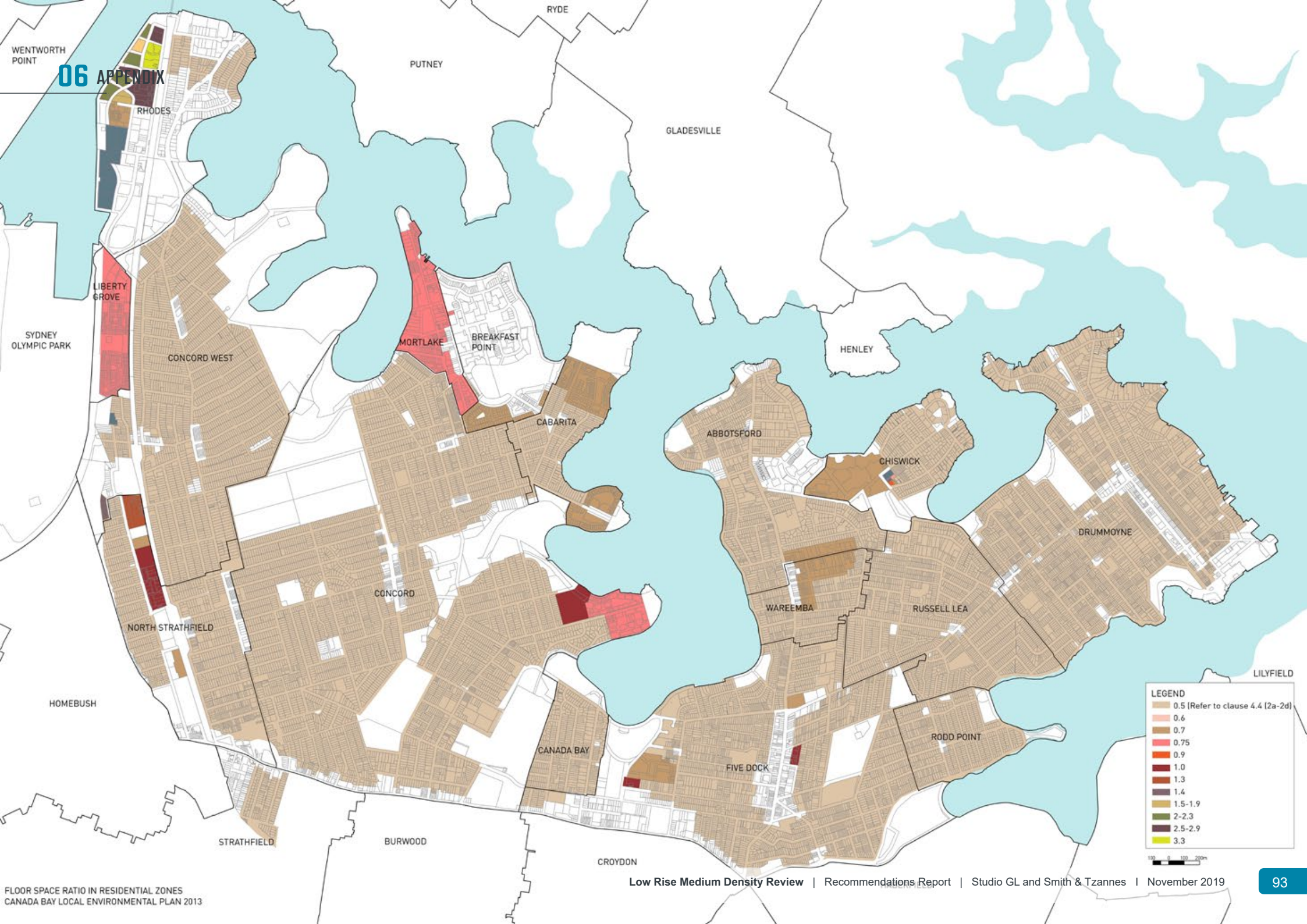
**LEGEND**

8.5m
9.5m
10m
11m
12m
14m
15-16m
17-18m
20-24m
25-29m
30-39m
40-49m
50-59
60m+



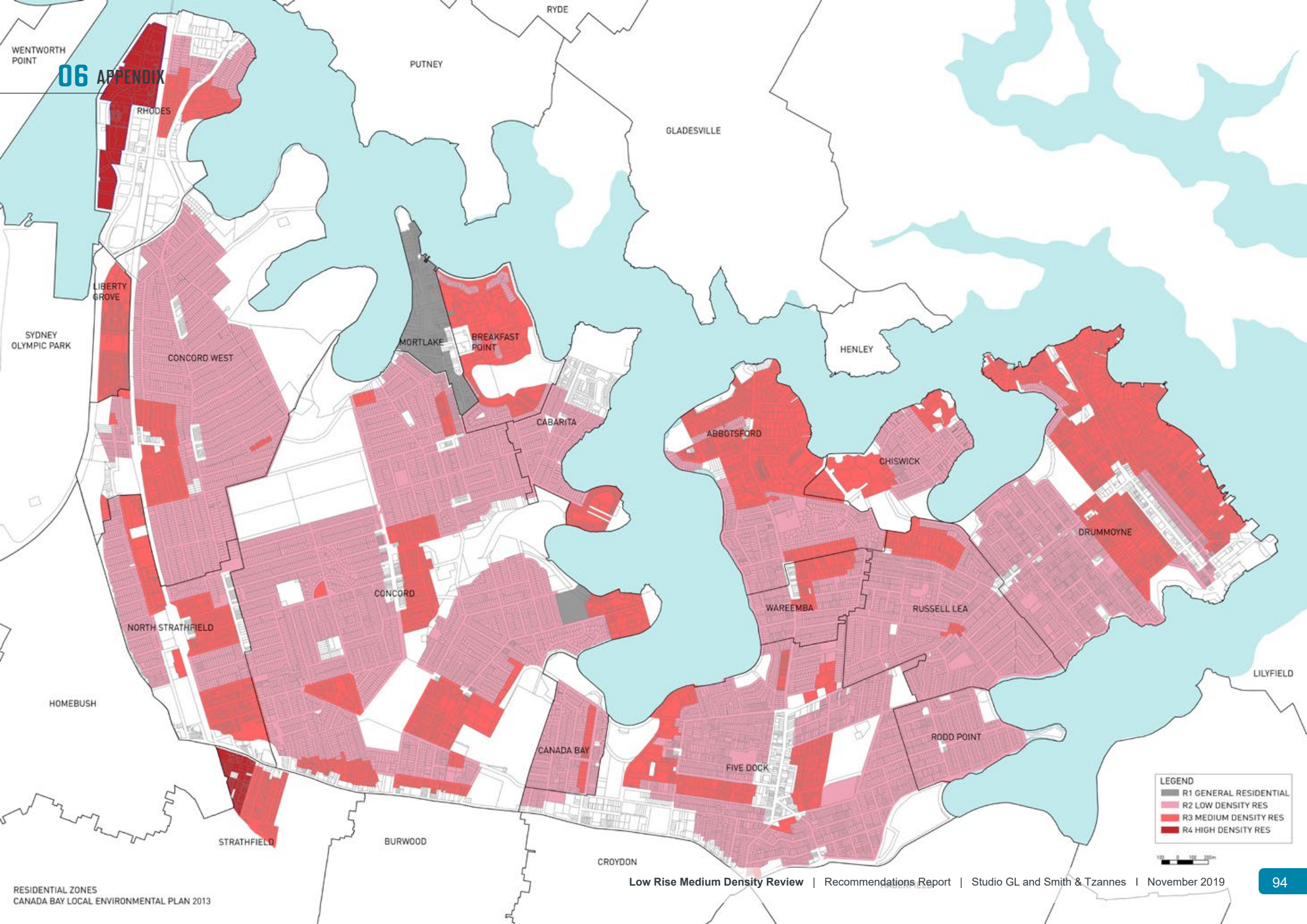


06 APPENDIX





# 06 APPENDIX



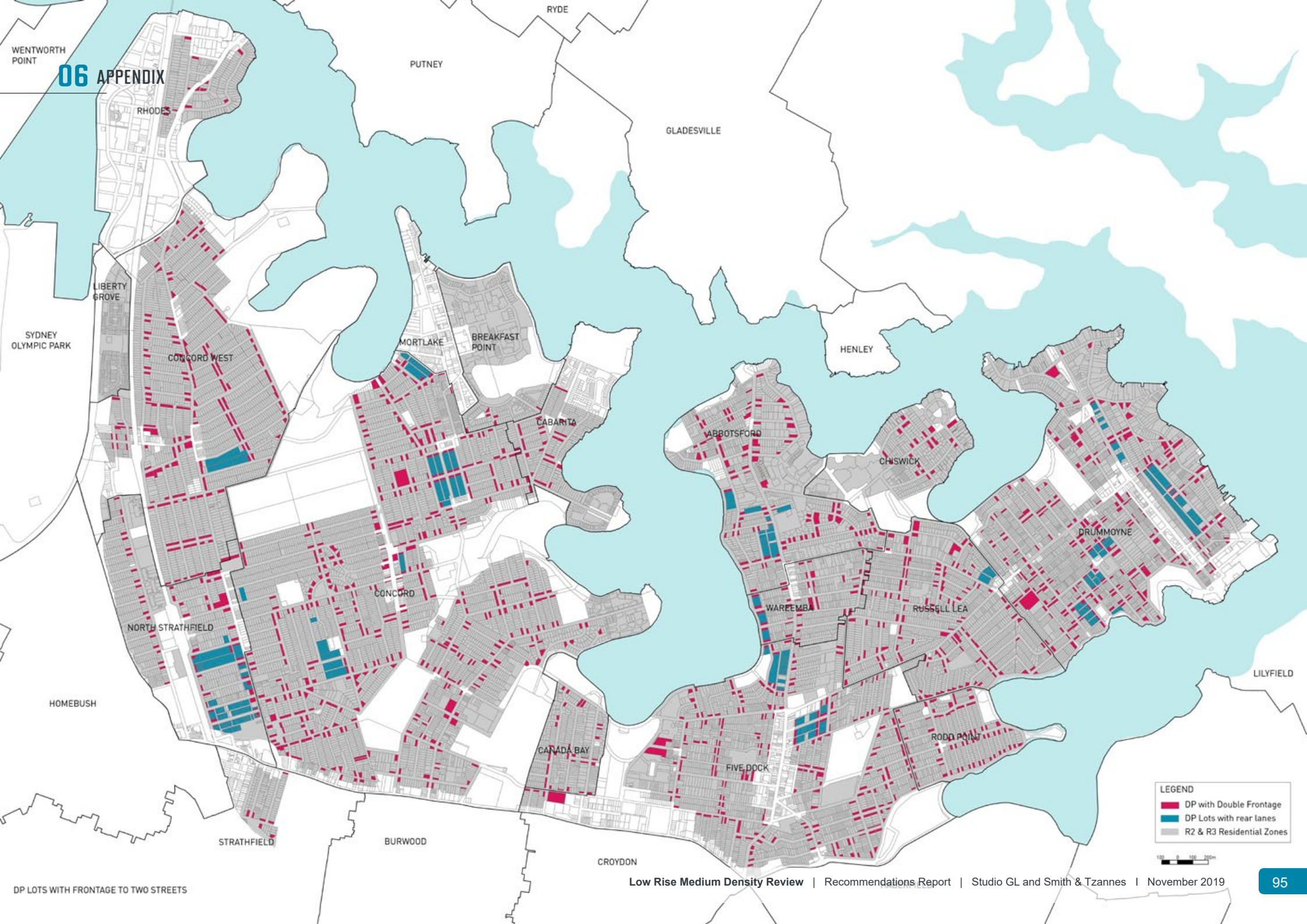
**LEGEND**

- R1 GENERAL RESIDENTIAL
- R2 LOW DENSITY RES
- R3 MEDIUM DENSITY RES
- R4 HIGH DENSITY RES





# 06 APPENDIX



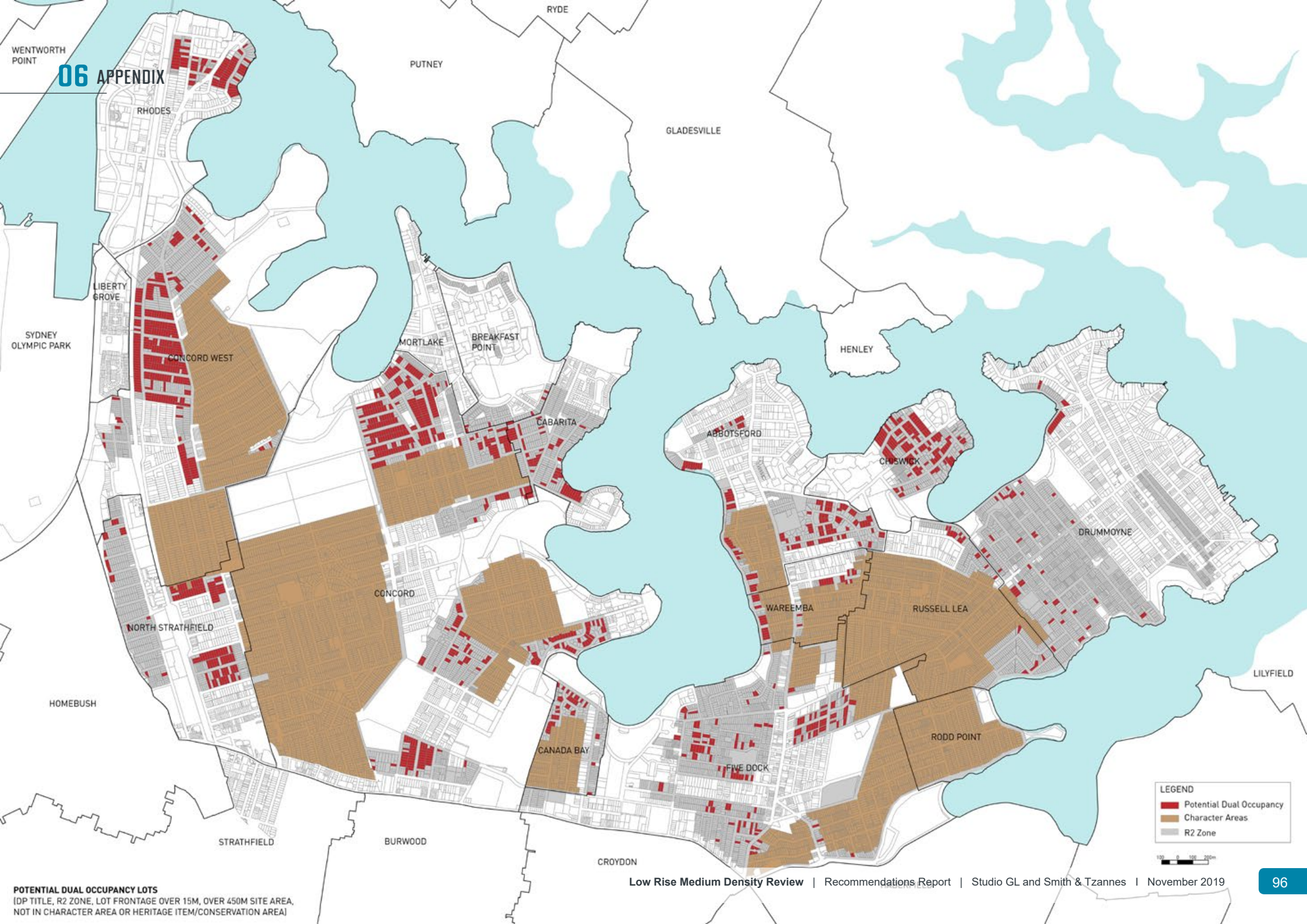
**LEGEND**

- DP with Double Frontage
- DP Lots with rear lanes
- R2 & R3 Residential Zones





# 06 APPENDIX



**LEGEND**

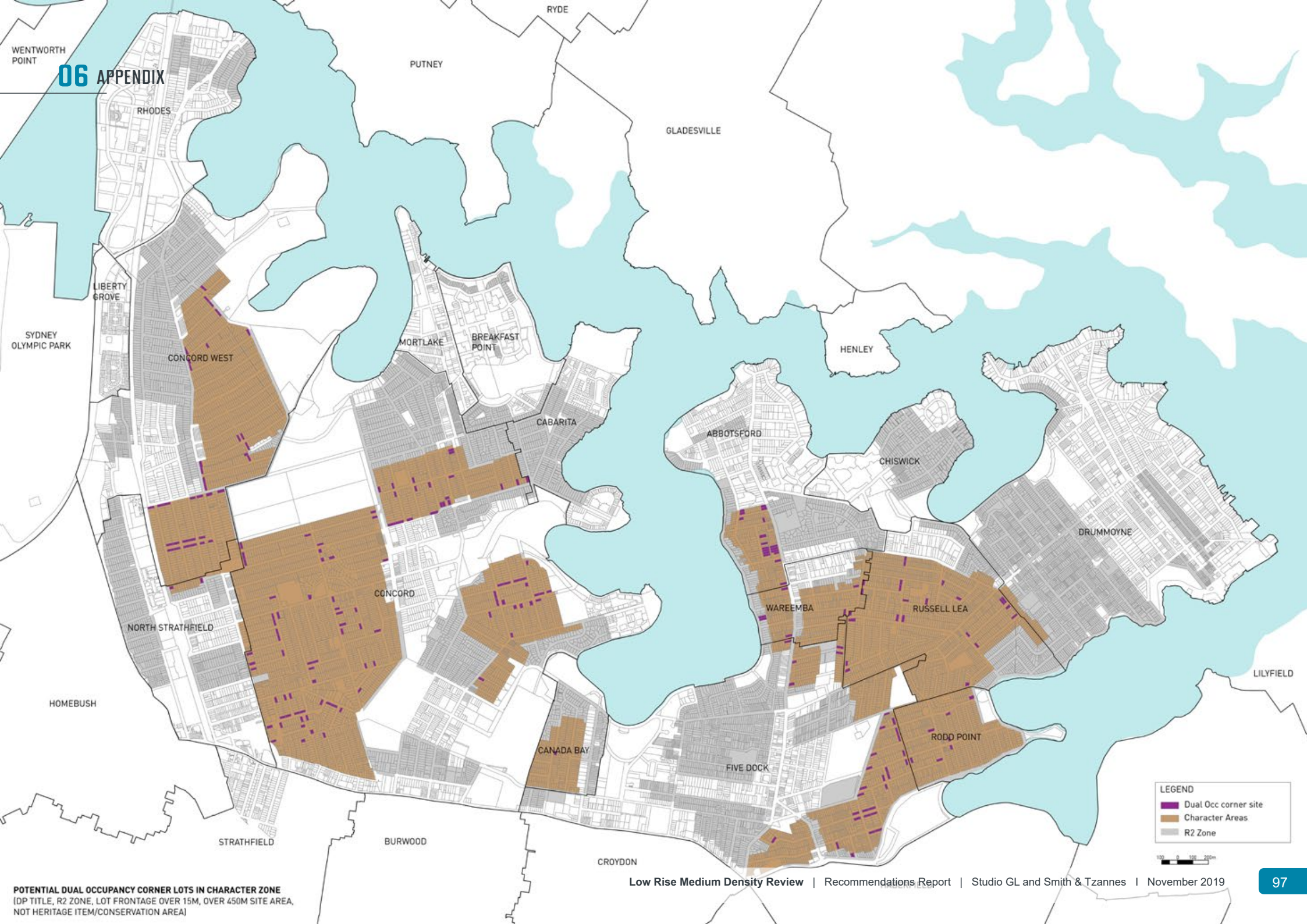
- Potential Dual Occupancy
- Character Areas
- R2 Zone



**POTENTIAL DUAL OCCUPANCY LOTS**  
 (DP TITLE, R2 ZONE, LOT FRONTAGE OVER 15M, OVER 450M SITE AREA,  
 NOT IN CHARACTER AREA OR HERITAGE ITEM/CONSERVATION AREA)



# 06 APPENDIX



**LEGEND**

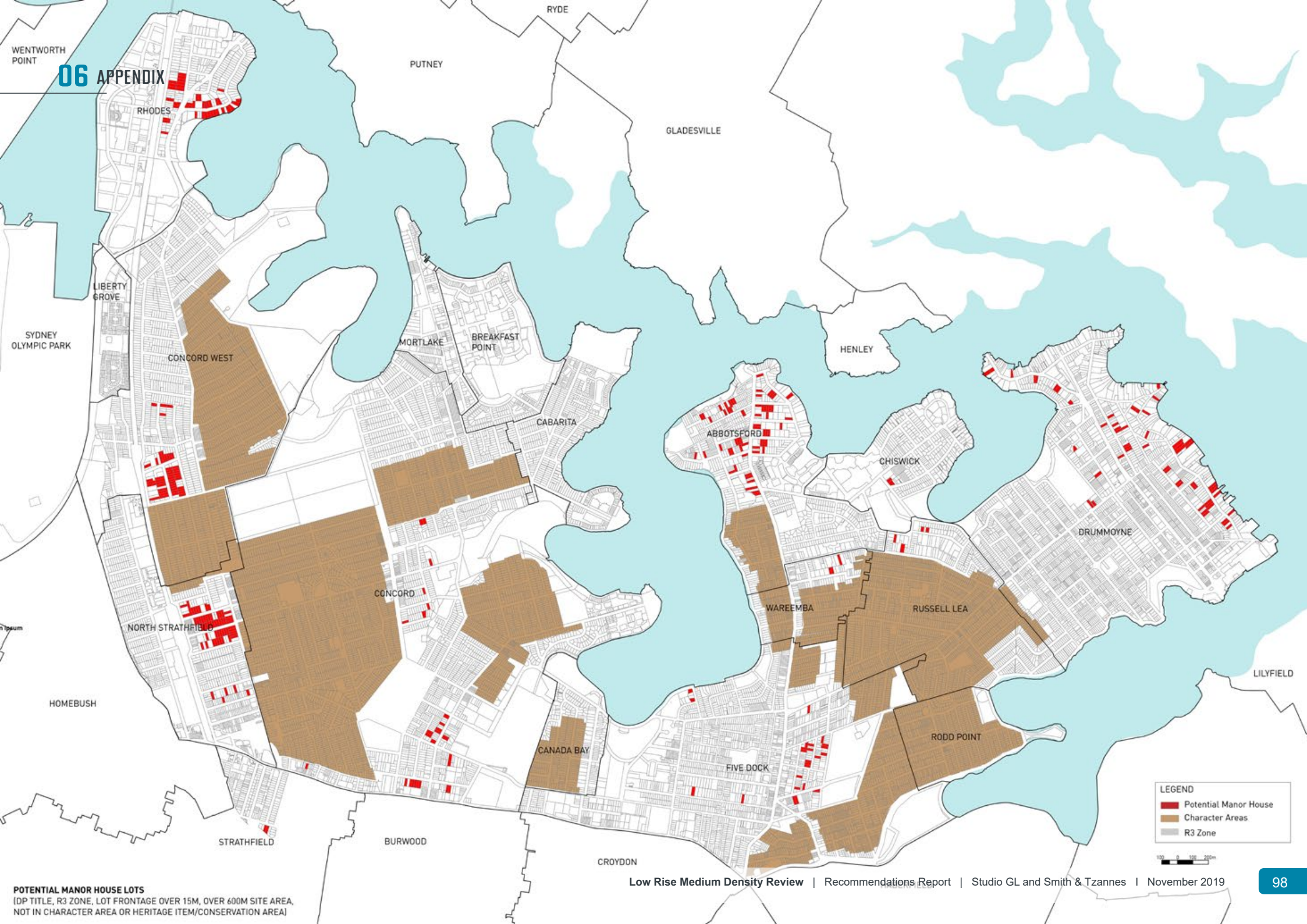
- Dual Occ corner site
- Character Areas
- R2 Zone



**POTENTIAL DUAL OCCUPANCY CORNER LOTS IN CHARACTER ZONE**  
(DP TITLE, R2 ZONE, LOT FRONTAGE OVER 15M, OVER 450M SITE AREA, NOT HERITAGE ITEM/CONSERVATION AREA)



# 06 APPENDIX



**LEGEND**

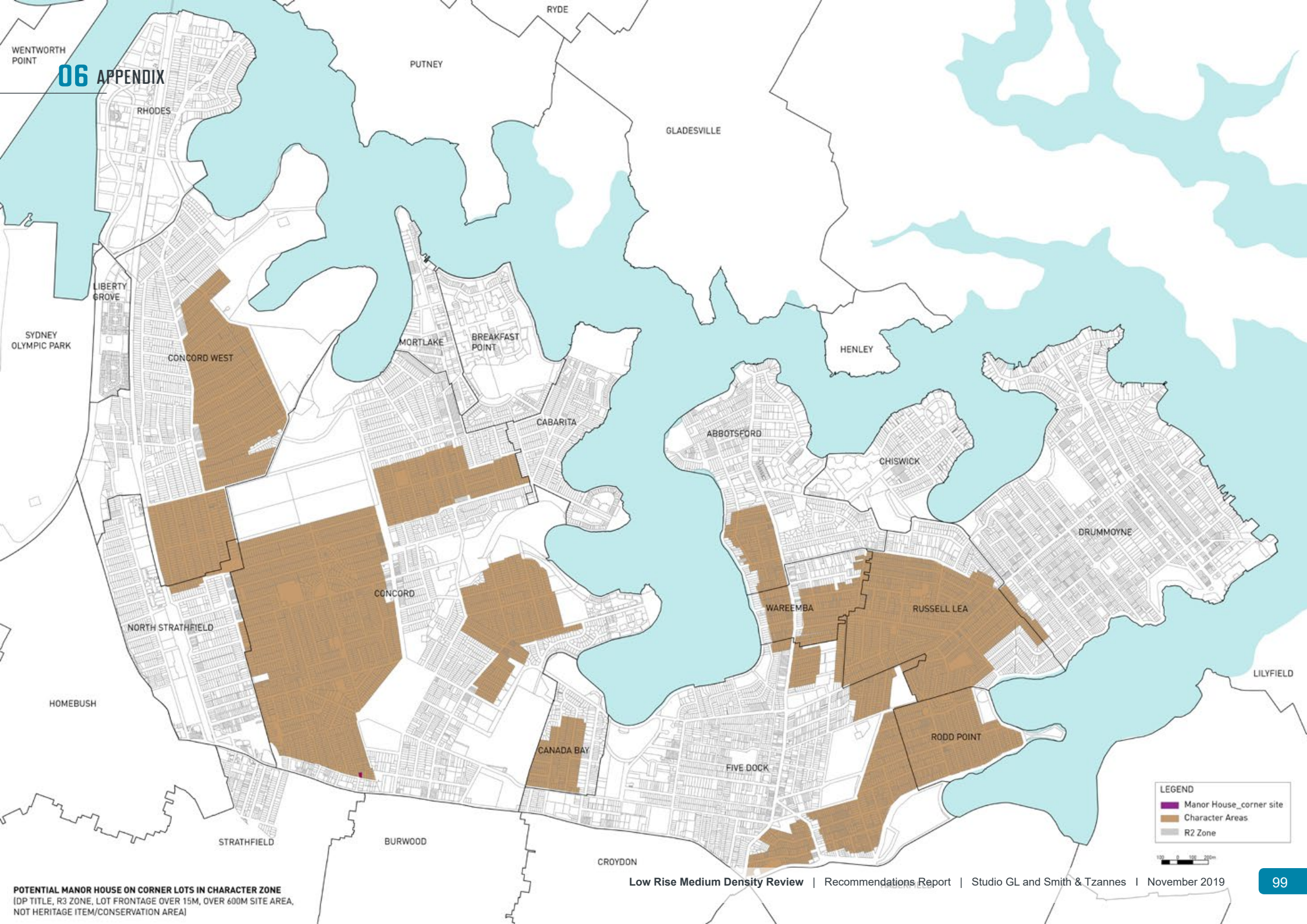
- Potential Manor House
- Character Areas
- R3 Zone



**POTENTIAL MANOR HOUSE LOTS**  
[DP TITLE, R3 ZONE, LOT FRONTAGE OVER 15M, OVER 600M SITE AREA, NOT IN CHARACTER AREA OR HERITAGE ITEM/CONSERVATION AREA]



# 06 APPENDIX



**LEGEND**

- Manor House\_corner site
- Character Areas
- R2 Zone



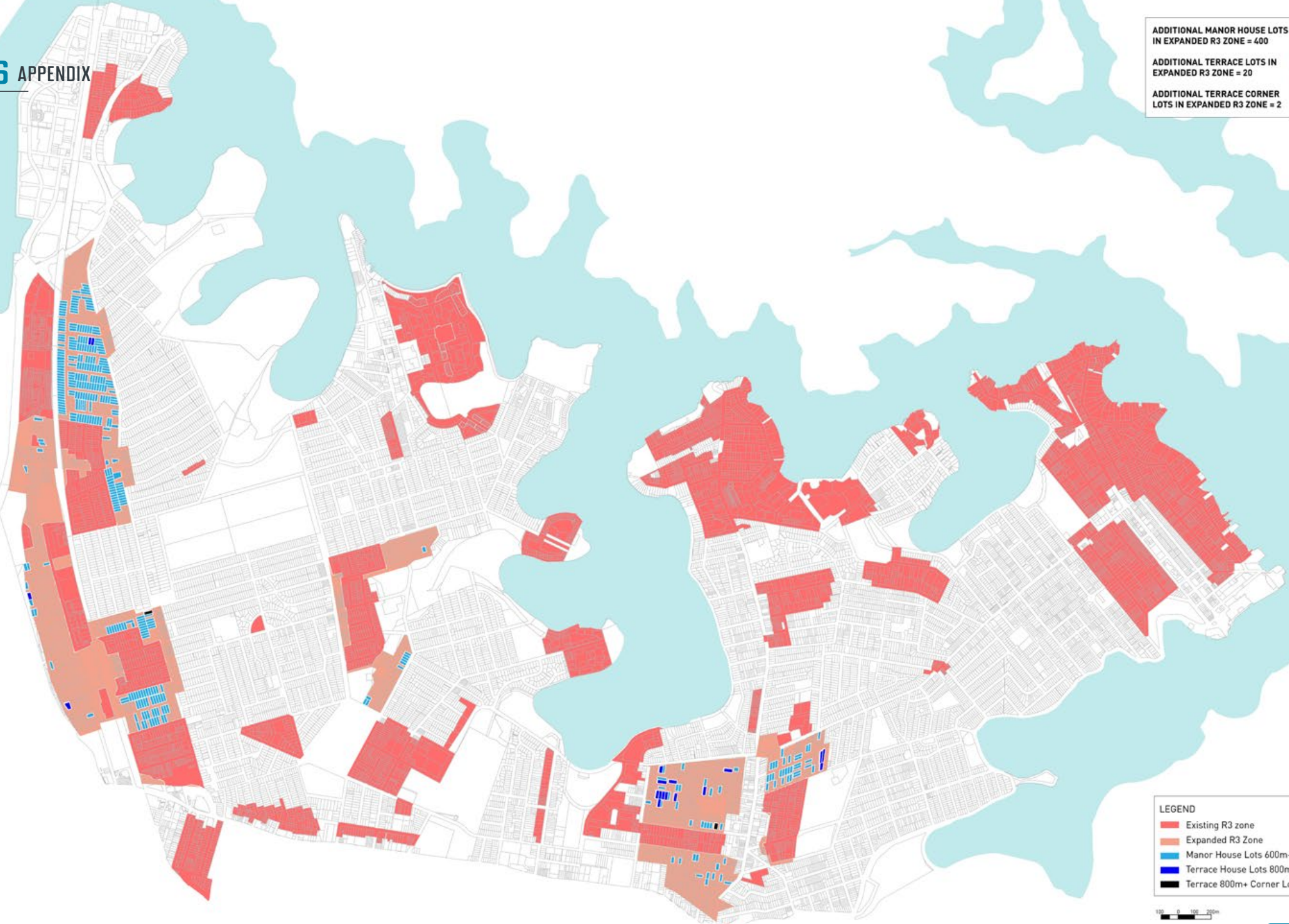
**POTENTIAL MANOR HOUSE ON CORNER LOTS IN CHARACTER ZONE**  
(DP TITLE, R3 ZONE, LOT FRONTAGE OVER 15M, OVER 600M SITE AREA, NOT HERITAGE ITEM/CONSERVATION AREA)



ADDITIONAL MANOR HOUSE LOTS  
IN EXPANDED R3 ZONE = 400

ADDITIONAL TERRACE LOTS IN  
EXPANDED R3 ZONE = 20

ADDITIONAL TERRACE CORNER  
LOTS IN EXPANDED R3 ZONE = 2



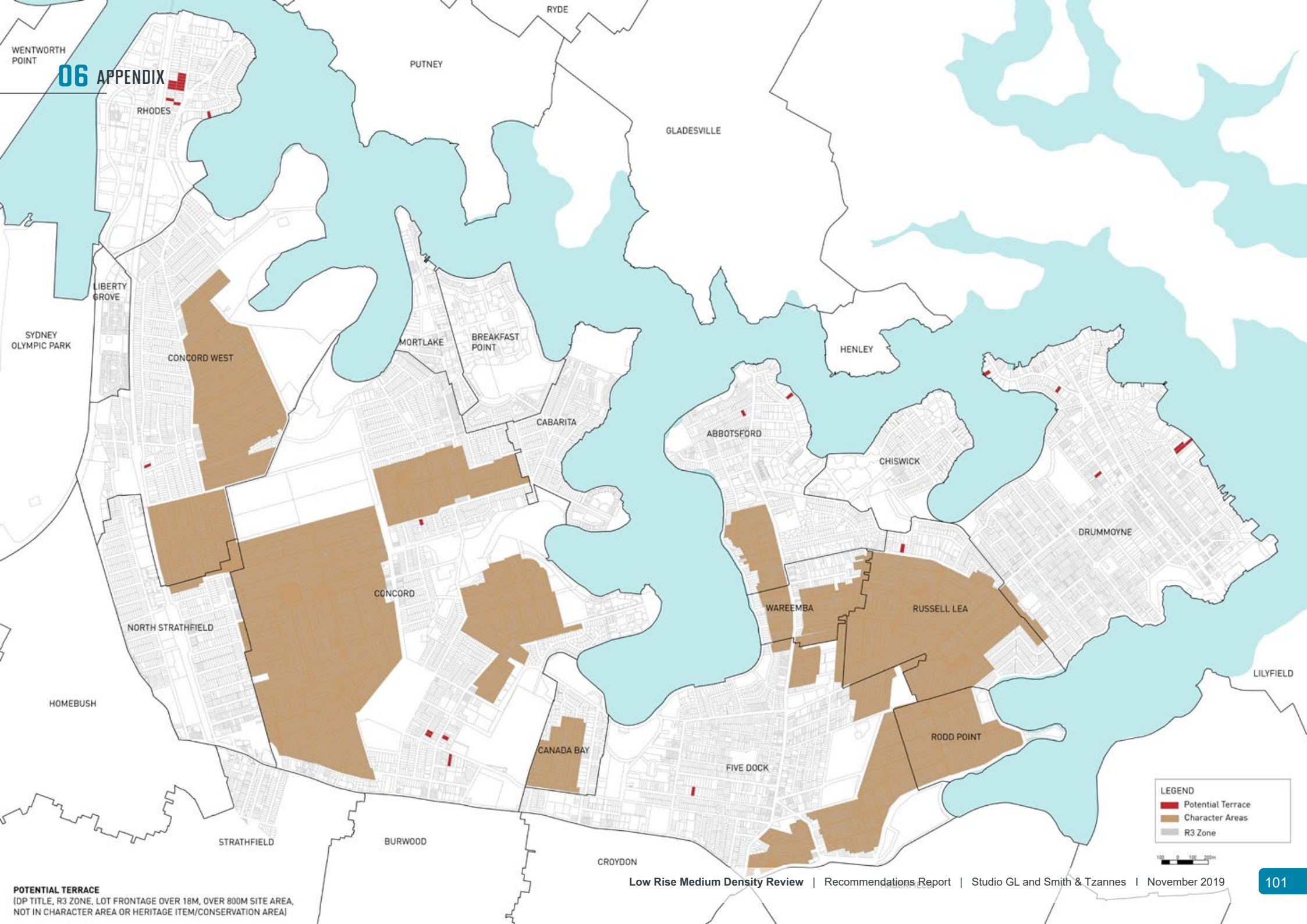
LEGEND

- Existing R3 zone
- Expanded R3 Zone
- Manor House Lots 600m+
- Terrace House Lots 800m+
- Terrace 800m+ Corner Lots





# 06 APPENDIX



**LEGEND**

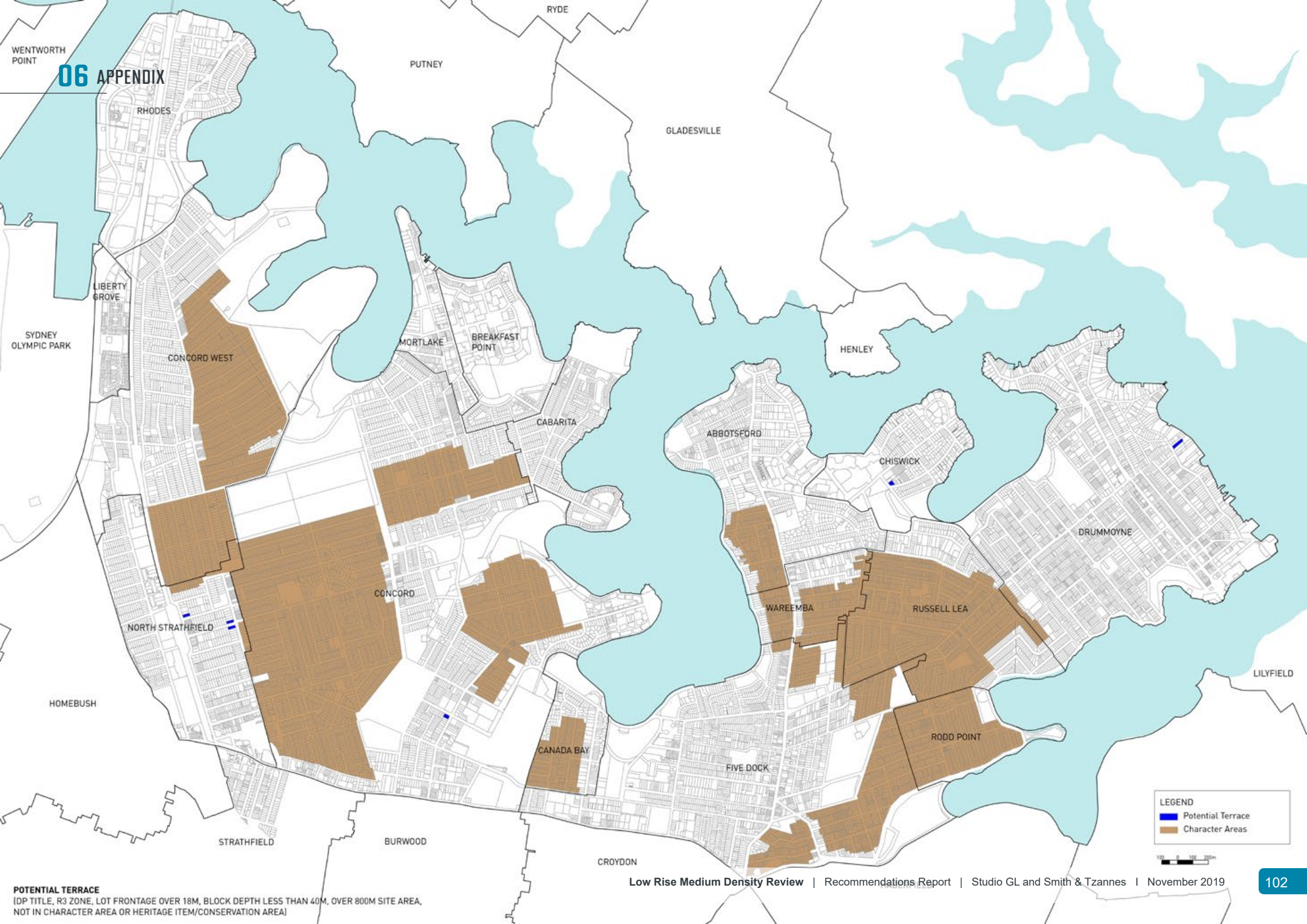
- Potential Terrace
- Character Areas
- R3 Zone



**POTENTIAL TERRACE**  
[DP TITLE, R3 ZONE, LOT FRONTAGE OVER 18M, OVER 800M SITE AREA, NOT IN CHARACTER AREA OR HERITAGE ITEM/CONSERVATION AREA]



# 06 APPENDIX



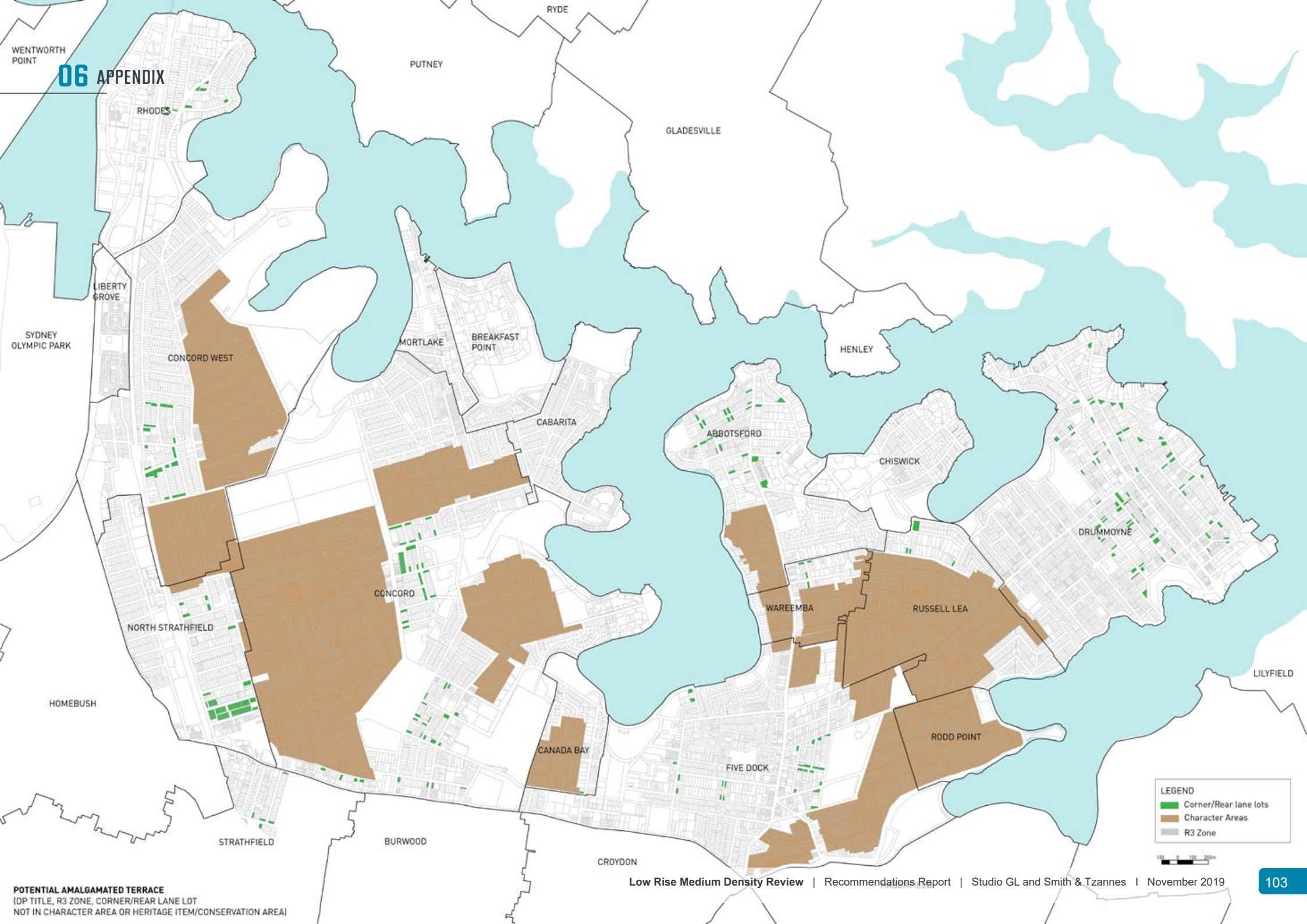
**LEGEND**  
■ Potential Terrace  
■ Character Areas



**POTENTIAL TERRACE**  
[DP TITLE, R3 ZONE, LOT FRONTAGE OVER 18M, BLOCK DEPTH LESS THAN 40M, OVER 800M SITE AREA, NOT IN CHARACTER AREA OR HERITAGE ITEM/CONSERVATION AREA]



# 06 APPENDIX



**LEGEND**

- Corner/Rear lane lots
- Character Areas
- R3 Zone



**POTENTIAL AMALGAMATED TERRACE**  
[DP TITLE, R3 ZONE, CORNER/REAR LANE LOT  
NOT IN CHARACTER AREA OR HERITAGE ITEM/CONSERVATION AREA]