

#Shape Our Place

Canning Highway Residential Density and Built Form Study



GHDWOODHEAD

Executive Summary

Canning Highway is a key transport and urban corridor which plays an important role in the City of South Perth. GHD has been engaged to undertake a study to examine the residential density and built form (including dwelling types and building height limits) for a section of Canning Highway and the area approximately 100 metres either side of the highway. This includes making recommended changes to the City's Town Planning Scheme No. 6.

The study, known as #ShapeOurPlace, has stemmed from a recommendation of the City's Draft Local Housing Strategy (2011). This study identified Canning Highway for medium density and recommended investigation into providing an appropriate transition between the existing high density areas on the highway and the low residential areas in the suburban streets.

The vision for #ShapeOurPlace is:

To articulate a desirable future character for Canning Highway and adjacent areas, reflecting an appropriate scale and intensity for the strategic context of the place. #ShapeOurPlace will facilitate the development of Canning Highway as an urban corridor while enabling a transition that harmoniously integrates development between the highway and the suburbs. #ShapeOurPlace promotes activation of places, sustainable living through increasing use of public transport and reinforces the strong relationship the community has with its local area.

The objectives of #ShapeOurPlace are:

- To provide clear guidance for future development situated on or adjacent to Canning Highway.
- To recommend changes to the City's Town Planning Scheme No. 6 to facilitate desirable built form outcomes.
- To recommend appropriate dwelling types and building heights for the area.

- To facilitate an harmonious transition of density and built form from Canning Highway to the lower density suburban areas.
- To protect the amenity of the existing residential areas, both within and adjacent to the study area.
- To facilitate an appropriate interface between residential and non-residential uses.

#ShapeOurPlace aligns with current state planning framework including the draft Perth and Peel at 3.5 Million, which identifies Canning Highway as an urban corridor. The plan recommends a transition of high densities along urban corridors, medium density in the transition area behind the highway and low density in the residential area.

#ShapeOurPlace initially investigated a wide study area to ensure residential surrounds were considered in the analysis and that there was sufficient area to accommodate a residential density and built form transition. The study area was later consolidated following the first phase of consultation. The consolidated study boundary is shown in Figure 1.

The area is highly diverse and is dissected by a major piece of road infrastructure. Canning Highway is affected by a Metropolitan Region Scheme 'Primary Regional Road' Reservation to facilitate road widening. The widening has a significant impact on properties abutting the highway, particularly on the southern side. There is an opportunity through #ShapeOurPlace and the road widening to improve the highway environment both in the public realm and the private realm through revitalisation.

The first step of #ShapeOurPlace was a comprehensive site analysis of the area to understand the dwelling types, streetscape character and street presentation based on the current town planning scheme zonings. The character of the area varies, from east to west and north to south. This is generally a result of the building ages, lot sizes and lot layout. The suburbs of Kensington and South Perth have a high proportion of single houses, whereas Como has

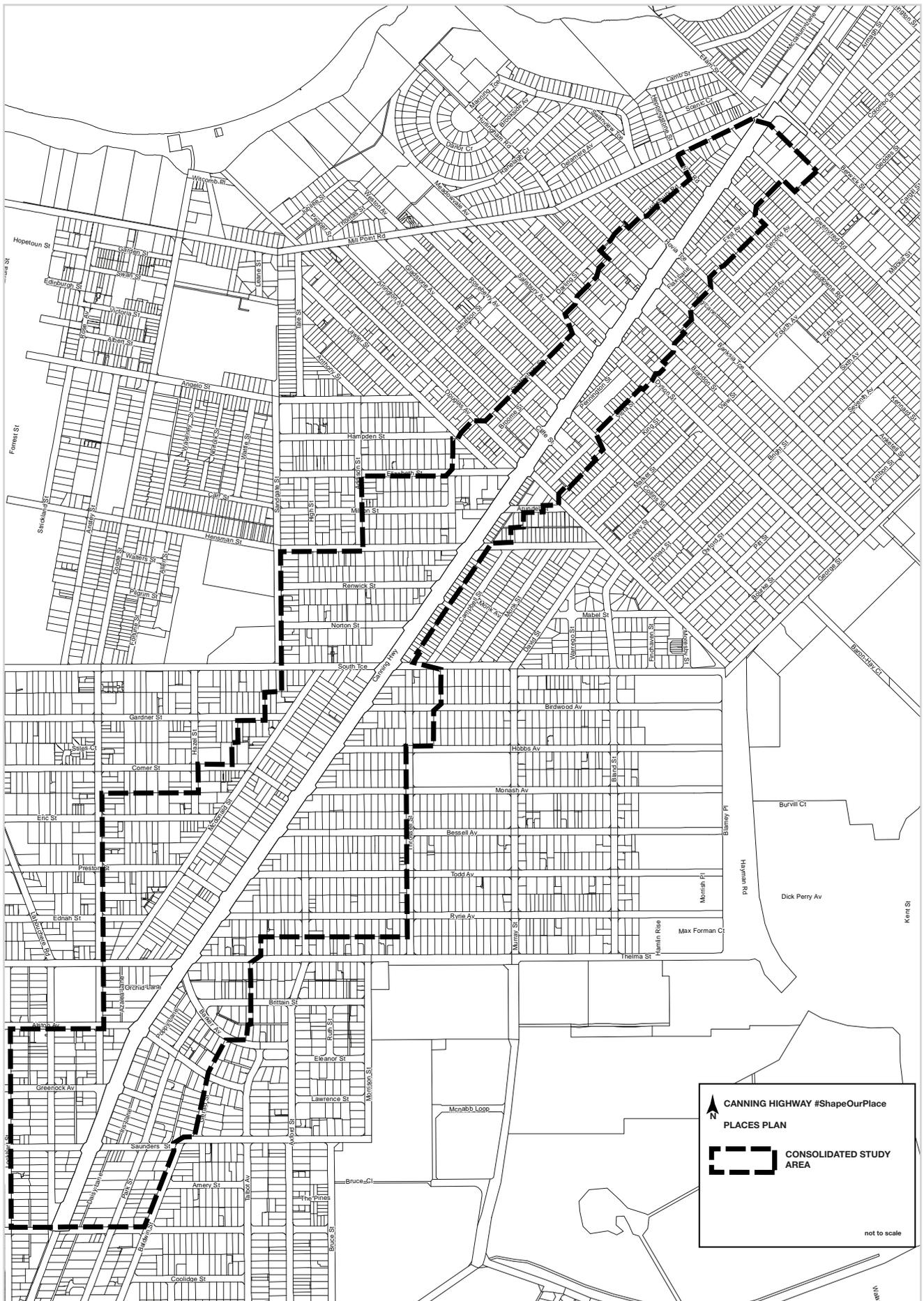


Figure 1: Consolidated study boundary

a prevalence of both grouped dwellings and single houses.

The next stage of #ShapeOurPlace was to undertake consultation with the community and State Government stakeholders. #ShapeOurPlace engaged with its community and key stakeholders, to ensure that the study recommendations are reflective of community aspirations and directly informed by stakeholder planning priorities and identified challenges. It was seen as vital that the community was involved from the outset, in shaping their future urban corridor, Canning Highway.

The stakeholders raised a number of key considerations, in particular:

- Limiting direct access on to Canning Highway;
- Concentrating development around public transport services;
- Consideration of pedestrian and cyclist movement throughout the area; and
- Consideration of supporting studies (traffic and access) to support the project.

Consultation with the community was undertaken in two phases. The first phase was to establish an understanding of the community's desire for the future including what built form is preferred. This was facilitated through a community workshop, an online discussion on Facebook and through the submission of general feedback. The community were invited to share their thoughts and ideas about the appropriate built form (building type and appearance) for the area and where it was appropriate to be located. The key outcomes included:

- A preference for single houses throughout the area;
- A preference for more intense development at key locations (e.g. Way Road/Mill Point Road, the intersection of Douglas Avenue and Canning

Highway, between Thelma Street and Cale Street and between Dyson Street and Douglas Avenue);

- Design and built form elements that break up the bulk and scale of a building (e.g. large areas of landscaping, large balconies, eaves and large setbacks); and
- Some preference for lower scale heights in certain locations (2 storeys or less) and some preference for greater height in other locations.

The second phase of consultation involved obtaining feedback on proposed height concept plans and cross sections for the consolidated study area.

The purpose was to determine whether the scale of development was appropriate for the area and whether the transition from the highway to the residential streets was appropriate. The key outcomes included:

- Preference for lower scale heights in Kensington;
- Concerns associated with increased traffic and parking as a result of increased development;
- Consideration of character study for Kensington; and
- Some consideration of greater heights and zonings in Como.

The feedback from the stakeholders and community led to a series of key recommendations proposed in the built form study.

#ShapeOurPlace proposes that the future development of the area be categorised into three streetscape types – highway, urban and suburban. Within these three streetscape types, there will be six key housing typologies likely to be developed: single house, town house, terrace, manor house apartment, apartment and mixed use development.

The highway streetscape relates to all lots that are directly facing Canning Highway. The streetscape rhythm and pattern for this category reflects high intensity development, comprising apartments, mixed use developments and terraces. The urban streetscape relates to those properties behind the highway. The character shares similar characteristics to the highway streetscape including smaller setbacks and a denser urban form; however the scale is between that of the highway and suburban street. The suburban streetscape is reflective of a typical residential street. The streetscape is open with large setbacks and open spaces.

The proposed location of the streetscape types is shown in Figure 2.

In order to achieve the indicative character of the proposed streetscapes, there are a number of key built form elements that require additional control through the town planning scheme or further design provisions through a policy framework.

#ShapeOurPlace recommends that the City of South Perth Town Planning Scheme No. 6 include the provisions relating to:

- Density (town planning scheme maps) to manage the type of built form that can be developed;
- Building heights (using the same approach as currently utilised by the City) to manage the scale of development;
- Setbacks (front, side and rear) to manage the bulk of developments and control open space; and
- Any changes to access arrangements including ceding land for rights of way, enabling easements and requiring lot amalgamation.

The specific design control elements that should be managed through policy or through the implementation of the deemed-to-comply provisions of the R-Codes, include:

- Streetscape and typology types to specify the desired character of an area;
- Building design to provide mechanisms to add interest to buildings and break up the bulk and scale;
- Sustainable design to facilitate sustainable living particularly in a higher density environment;
- Open Space, outdoor living area and communal open space to reduce bulk and scale and provide useable open space areas within a higher density environment;
- Visual privacy to ensure the impact on surrounding developments is minimised;
- Solar access to ensure the impact of overshadowing on surrounding developments is minimised;
- Garages to ensure they are appropriately integrated with the development;
- Landscaping to assist in breaking up the bulk and scale of the development and soften the urban environment; and
- Fencing to provide privacy to dwellings without creating barriers to the public realm.

It is recognised that the #ShapeOurPlace study area is highly diverse and therefore provides a high level overview of the current environment and where it should move to in the future. Due to this, further planning should be undertaken to understand in more detail the intricacies of the various localities and further consult with the local community. It is recommended that this planning be undertaken on a place by place basis rather than as one larger study, as it is recognised that within the broader study area there are sub-precincts within it that have a unique character.

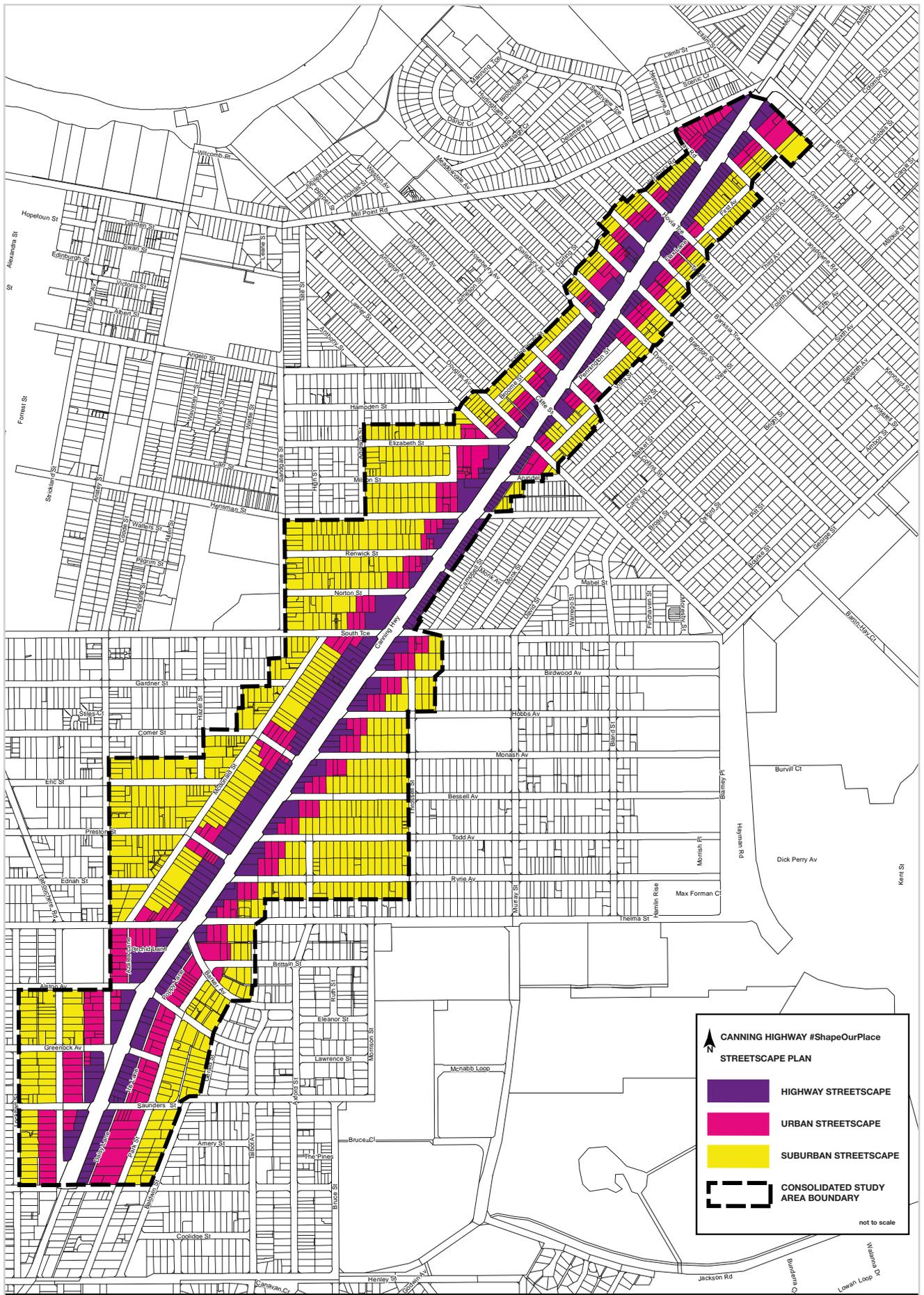


Figure 2: Streetscape plan

In addition, it is recommended that additional studies be undertaken including:

- *Access study* to investigate alternative access arrangements for highway properties;
- *Character study* to undertake a comprehensive review of the existing building stock and understand how this impacts future development;
- *Detailed design guidelines* for individual areas to provide more detailed local planning provisions;
- *Community infrastructure plan* to determine whether there are adequate facilities to support the envisaged increasing population;
- *Review of existing planning policies* to determine where there may be cross overs with the existing framework; and
- *Consultation* to continue with the community particularly in areas where there were low response rates for this study.

The next step in the project will be for Council to endorse the overall study then progress with individual projects within the broader study. This will be through amendments to the City of South Perth Town Planning Scheme No. 6 and local planning framework. Consultation with the community will occur throughout all of these processes as it is recognised that the community plays a key role in shaping their local area for the future.

#ShapeOurPlace



David Vincent Reserve, Kensington

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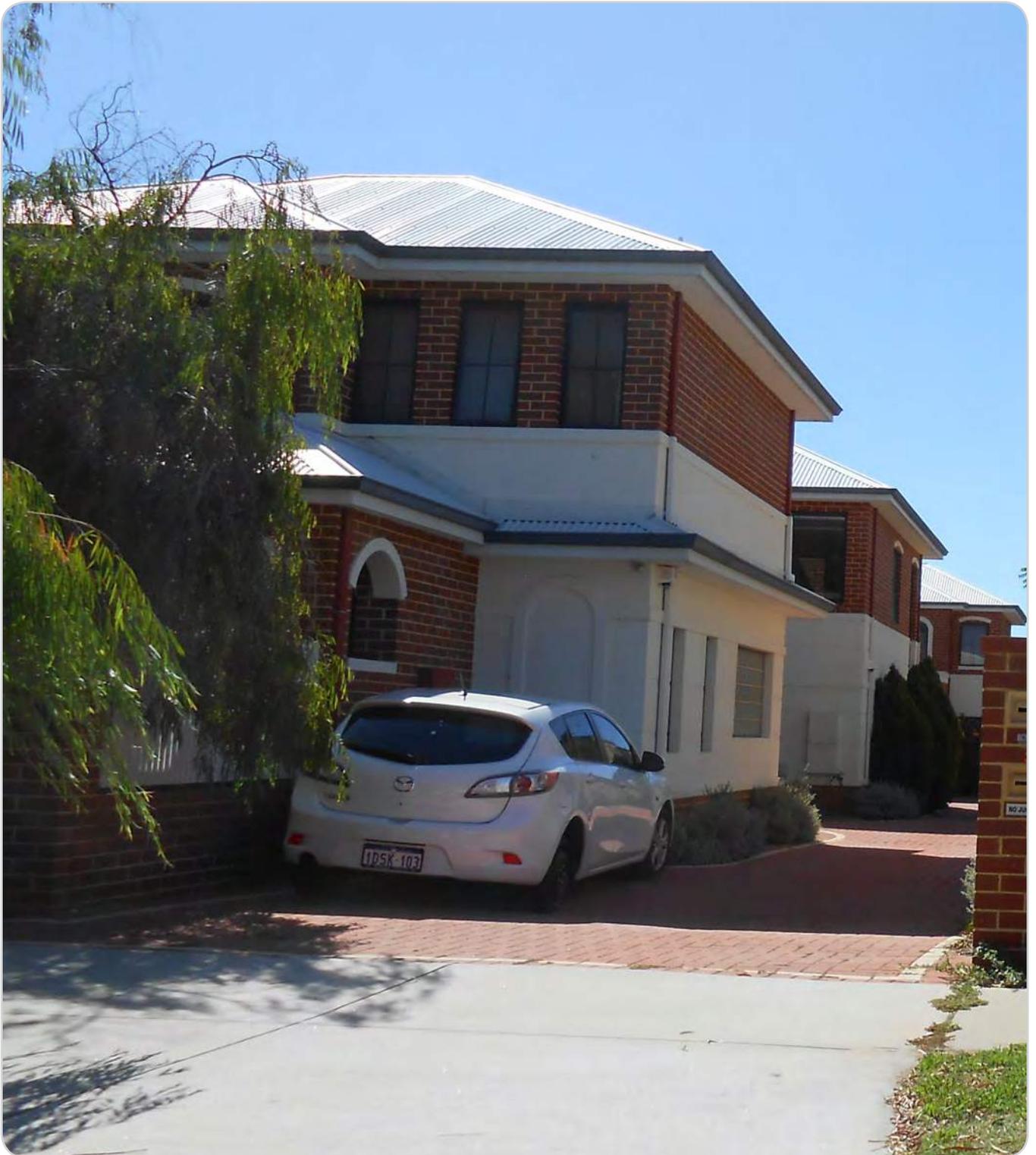
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First Avenue, Kensington

Part 1-Project Background



First Avenue, Kensington

1.1 Introduction

Canning Highway #ShapeOurPlace is a study initiated to examine the residential density and built form for Canning Highway and the area approximately 100 metres either side of the highway. #ShapeOurPlace is a comprehensive document encompassing the foundations of the study, the consultation that has guided the study, the key issues, constraints and opportunities that exist and a set of outcomes and recommendations that will enable the City of South Perth to progress with the future planning of the area.

The study has stemmed from a recommendation of the City's Draft Local Housing Strategy (2011) which identified Canning Highway for medium density, to provide an appropriate transition between the existing high density areas on the highway and the low residential areas in the suburban streets.

This study is divided into seven parts:

- Project background
- Urban context
- Consultation
- Built form study
- Design controls
- Strategic considerations and recommendations

1.2 The Vision

Canning Highway has the potential to be an activated, highly utilised urban corridor that promotes sustainable growth and development, however it is important for the scale and character of future development to integrate with the surrounding locality.

The vision for the study is:

To articulate a desirable future character for Canning Highway and adjacent areas, reflecting an appropriate scale and intensity for the strategic context of the place. #ShapeOurPlace will facilitate the development of Canning Highway as an urban corridor while enabling a transition that harmoniously integrates development between the highway and the suburbs. #ShapeOurPlace promotes activation of places, sustainable living through increasing use of public transport and reinforces the strong relationship the community has with its local area.

1.3 The Study Area

The intent of the draft Local Housing Strategy was to examine an area within 100 metres either side of Canning Highway. #ShapeOurPlace investigates a wider study area to ensure residential surrounds were considered in the analysis and that there was sufficient area to accommodate a residential density and built form transition.

The #ShapeOurPlace study area is shown in Figure 1.



Canning Highway

The study boundary was reduced to a more consolidated area following consultation with the community. Early during the project it was communicated to the community that it was never the intention that the whole study area be changed. The study area includes suburban areas that, while not likely to be directly impacted by changes to the planning framework, are close enough to Canning Highway that it was considered important to gain feedback from residents. In areas where existing suburban character is strongly valued and changes to the planning framework are not considered necessary at this time, the original study boundary was amended and the study focussed on areas where changes may be required.

The transition from highway densities and built form will remain close to the highway. In the areas where there was desire or planning rationale to see more change, wider transitions are provided. Some areas were removed from the study as they were considered too far removed from the focus area of Canning Highway (e.g. parts of Gwentyfred Road and Mill Point Road).

The adjusted boundary reflects a more practical implementation of the study recommendations. The study area was further divided into five places as shown in Figure 2, for the purpose of this study.

1.4 Study Objectives

The objectives of #ShapeOurPlace are:

- To provide clear guidance for future development situated on or adjacent to Canning Highway.
- To recommend changes to the City's Town Planning Scheme No. 6 to facilitate desirable built form outcomes.
- To recommend appropriate dwelling types and building heights for the area.
- To facilitate an harmonious transition of density and built form from Canning Highway to the lower density suburban areas.
- To protect the amenity of the existing residential areas, both within and adjacent to the study area.
- To facilitate an appropriate interface between residential and non-residential uses.

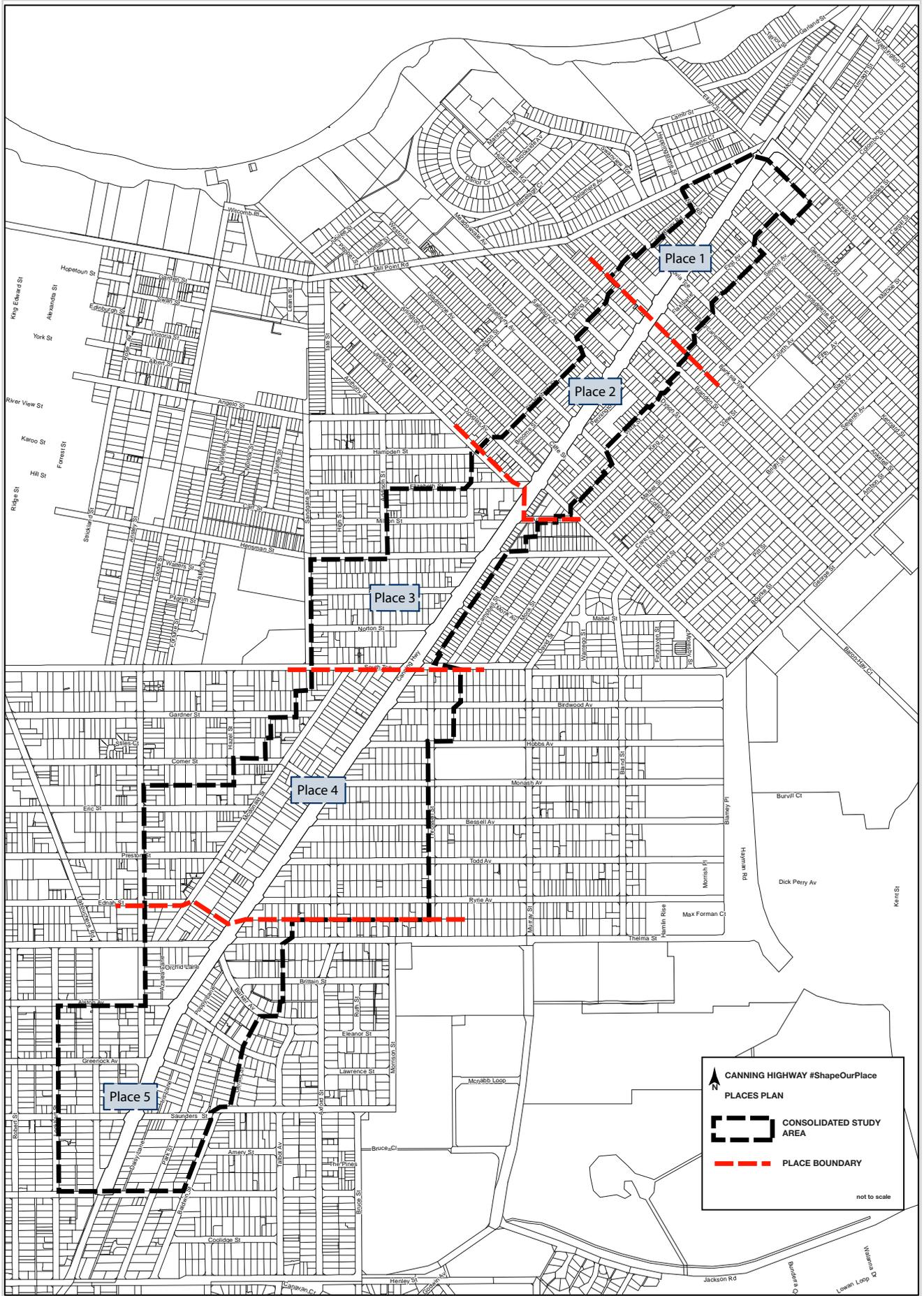


Figure 2: Place Map

1.5 Planning Context

Future density and built form in the study area will be strongly guided by the current planning framework set by the State Government and local studies from the City of South Perth. Key influencing policies and decisions are described below.

1.5.1 State Planning Framework

Directions 2031 and Beyond

Directions 2031 and beyond (Directions 2031) was the key spatial planning framework for the Perth and Peel regions at the commencement of the #ShapeOurPlace study. Directions 2031 provides a framework for guiding growth and delivering housing, infrastructure and services to accommodate the growth. It sets a vision for Perth to be a liveable, prosperous, accessible, sustainable and responsible city. It also identifies the City of South Perth within the central sub region and sets dwelling targets for local governments in order to accommodate the growing population of Perth. The dwelling target for the City of South Perth was 6,000 additional dwellings by 2031.

Perth and Peel at 3.5 Million

In May 2015, the Western Australian Planning Commission (WAPC) released the *draft Perth and*

Peel @ 3.5 Million which builds on the principles established in Directions 2031. This strategy aims to guide where future growth should be targeted to ensure the sustainable development of the Perth metropolitan and Peel regions. It suggests that by the year 2050, Perth and Peel will have a population of 3.5 million. Perth and Peel @ 3.5 Million has particular focus on urban consolidation and setting infill housing targets. An increase to the infill housing target from that of *Directions 2031*, for the City of South Perth is 8,300 additional dwellings by 2050.

Urban consolidation principles were set by *draft Perth and Peel at 3.5 Million* to guide where infill should be targeted. The document identifies corridors as key location for concentrating urban consolidation, with Canning Highway being highlighted as one of these corridors (Figure 4). Future planning for the corridor should integrate both land uses and transport and consider all transport modes, parking and utilities whilst providing a pedestrian friendly environment.

Draft Perth and Peel at 3.5 Million provides an indicative cross section of urban corridors, illustrating appropriate densities for urban corridors and how the residential coding should be stepped down away from the urban corridor towards the existing neighbourhood. This is demonstrated in Figure 3 below.



Figure 3: Urban Corridors Cross Sections (Source: *Draft Perth and Peel @ 3.5 Million*, Western Australia Planning Commission, 2015)

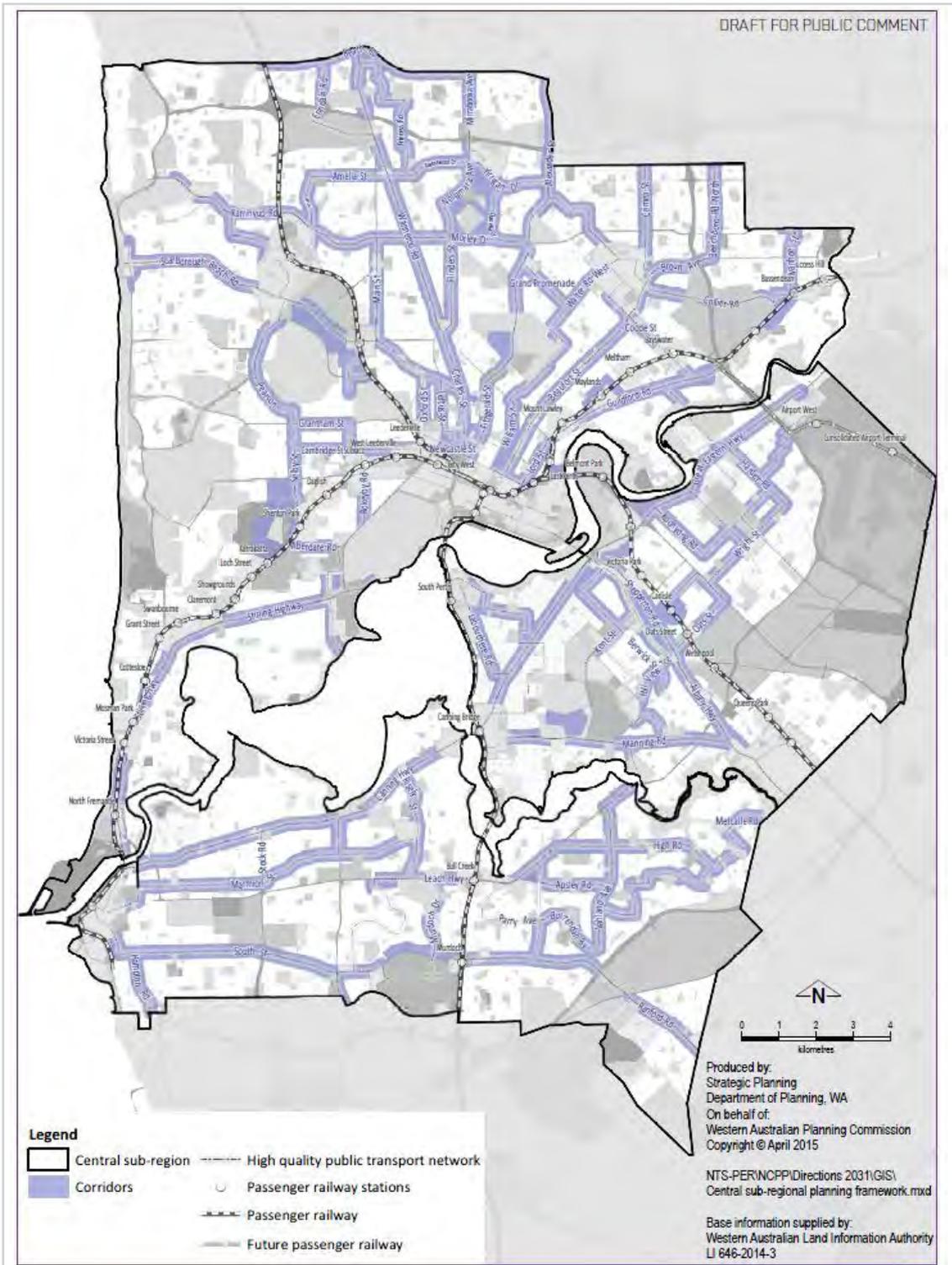


Figure 4: Urban Corridors (Source: *Draft Perth and Peel @ 3.5 Million*, Western Australia Planning Commission, 2015)

Residential Design Codes (R-Codes)

The Residential Design Codes (R-Codes) are the primary tool for residential development control throughout Western Australia. All residential development is to comply with the objectives and standards of the R-Codes. Proposed residential development can either be assessed using the 'deemed-to-comply' requirements or the 'design principles'. The 'deemed to comply' requirements provide a more quantitative assessment whilst the 'design principles' provide a more qualitative and outcomes based assessment. Both mechanisms are designed to provide a comprehensive assessment process.

The R-Codes outline provisions for a range of low, medium and high densities. Low residential density applies to land coded less than R30 and predominantly contains single houses. Medium density residential applies to land coded R30 to R60 and contains grouped dwellings and single houses. High density residential applies to codings greater than R60 or an activity centre coding and predominantly contains grouped and multiple dwellings. Perth and Peel @ 3.5 Million defines medium density slightly differently; referring to medium density as R40-R60.

Part 5 of the R-Codes outlines the requirements for all single houses and grouped dwellings, and multiple dwellings in areas coded less than R40. Part 6 provides the required design elements for multiple dwellings in areas coded R40 or greater, mixed use development and activity centres.

As the R-Codes apply across the whole State, they cannot account for all local conditions. Consequently, the R-Codes allow the local government to vary certain requirements through the local planning scheme and policy framework.

The City of South Perth utilise the R-Codes, along with their local planning scheme and policies, to assess residential development.

1.5.2 Local Planning Framework

City of South Perth Town Planning Scheme No. 6

The City's existing Town Planning Scheme No. 6 provides the statutory framework for land use planning. Canning Highway is reserved 'Primary Regional Road' under the Metropolitan Region Scheme (MRS) and the land surrounding Canning Highway is predominantly zoned 'Residential' with small pockets of 'Highway Commercial' along Canning Highway. There are some areas of higher density along the highway (Residential R80) however immediately adjacent the residential densities are predominantly low (Residential R15). The #ShapeOurPlace study area includes a range of residential zonings ranging from Residential R15 to Residential R80. The predominant residential coding throughout the study area is R15.

The City of South Perth Town Planning Scheme No. 6 does not permit multiple dwellings in areas coded R40 or lower.



Canning Highway, Kensington



LEGEND

REGION SCHEME RESERVES (MRS)

- | | |
|---------------------------------|---|
| Civic and cultural | Public purposes |
| Other regional roads | CP Public purposes - car park |
| Parks and recreation | CG Public purposes - Commonwealth Government |
| Parks and recreation restricted | HS Public purposes - high school |
| Port installations | H Public purposes - hospital |
| Primary regional roads | P Public purposes - prison |
| Railways | SU Public purposes - special uses |
| State forests | SEC Public purposes - State Energy Commission |
| Waterways | TS Public purposes - technical school |
| Water catchments | U Public purposes - university |
| | WSD Public purposes - Water Authority of WA |

LOCAL SCHEME RESERVES

- (see scheme text for additional information)
- | | |
|-----------------------------------|-------------------------------------|
| Local roads | C Public purposes - Clinic |
| Parks and recreation | K Public purposes - Kindergarten |
| CP Public purposes - Car park | PS Public purposes - Primary school |
| CC Public purposes - Civic centre | T Public purposes - Telstra |
| | W Public purposes - Western Power |

LOCAL SCHEME ZONES

- (see scheme text for additional information)
- | | |
|--------------------------------|---------------------------------|
| District centre commercial | Mixed use commercial |
| Highway commercial | Neighbourhood centre commercial |
| Local commercial | Private institution |
| Mends Street centre commercial | Public assembly |
| | Residential |
| | Technology park |

OTHER CATEGORIES

- (see scheme text for additional information)
- | | |
|---|---|
| Scheme boundary | P3 South Perth civic precinct |
| Local Government boundary | P15 South Perth station precinct |
| R20 R Codes | SCA1 Special control area South Perth station |
| A1 Additional uses | P14 Waterford precinct |
| P5 Arlington precinct | No zone |
| P7 Collier precinct | Waterbodies |
| P9 Como Beach precinct | |
| P9 Como precinct | |
| Development contribution area South Perth station | |
| P4 Hurlingham precinct | |
| P11 Karawara precinct | |
| Karawara redevelopment area | |
| P6 Kensington precinct | |
| P12 Manning precinct | |
| P10 Midouglie Park precinct | |
| P1 Mill point precinct | |
| P13 Saller Point precinct | |
| P2 South Perth central precinct | |

Disclaimer: This scheme map has been prepared by combining the scheme maps sourced from the WAPC website and may not accurately represent the lots and zonings. An accurate version of the scheme should be obtained from the WAPC.

Figure 5: Town Planning Scheme No. 6 (Source: *City of South Perth Local Planning Scheme No. 6*, Department of Planning)

Local Policy P351.5 Streetscape Compatibility - Precinct 5 'Arlington' and Precinct 6 'Kensington'

This local planning policy provides guidance for development within the Arlington and Kensington Precincts excluding the properties with frontage to Canning Highway only. The intention of the policy is to maintain the character and amenity of the locality. This policy applies to some parts of the #ShapeOurPlace study area, as shown in Figure 6. The #ShapeOurPlace project recommendations have been prepared having due regard to the policy provisions and intent. The policy provides planning controls that ensure that future development is of a bulk and scale that is compatible with the subject streetscape. Multiple dwellings are not covered by this policy; however, amendments may be required to this policy in the future to include provisions for multiple dwellings.



Figure 6: Precinct 5 'Arlington' (top) and Precinct 6 'Kensington' (Source: *City of South Perth local planning policy P351.5 Streetscape Compatibility – Precinct 5 'Arlington' and Precinct 6 'Kensington', City of South Perth*)

City of South Perth Local Housing Strategy (Draft)

The City prepared a Local Housing Strategy in 2011 to help guide the review of Town Planning Scheme No. 6. The strategy identifies Canning Highway for medium density development, to provide a suitable transition between the high density Highway Commercial zoning and low density residential development in the adjoining suburbs. In addition, the Strategy recommends upper-medium to high density zoning to be investigated at the following intersections:

- Baker Avenue/Thelma Street/Canning Highway;
- Douglas Avenue/Canning Highway; and
- South Terrace/Canning Highway.

The southern end of the #ShapeOurPlace study area is the Canning Bridge Activity Centre Structure Plan which was endorsed by the City of South Perth in 2015. At the northern end of the study area the Local Housing Strategy recommends further investigation of the Eastern Activity Centre, which was identified in the Draft Capital City Planning Framework. However the Eastern Activity Centre has not been explicitly recognised in more recent State strategic documents such as *draft Perth and Peel @3.5 Million* and is therefore considered as part of #ShapeOurPlace.

The Local Housing Strategy recognises the challenge presented with higher densities along Canning Highway abutting lower densities behind and the need to provide an appropriate treatment to facilitate a transition. The extent of the medium density development is suggested to extend 100 metres either side of the highway.

The draft Local Housing Strategy identifies that Canning Highway will experience a shift from the existing built form of single lot dwellings to a more urban form through the application of medium densities. This is consistent with the State Government identification of Canning Highway as a key urban corridor.

NOTE: This Local Planning Strategy (Housing) Map has been developed to illustrate the direction of the Strategy subsequent to Council's November 2012 resolution on Item 10.0.3. The Local Planning Strategy (Housing) Map will be further revised as further investigations (guided by Council's November 2012 resolution), and other planning studies are progressed.

Details of Council's November 2012 resolution on Item 10.0.3 are available at: <http://www.southperth.wa.gov.au/Documents/Our-Council/Minutes-and-Agendas/2012/Nov-Ord.Council/Minutes.pdf>

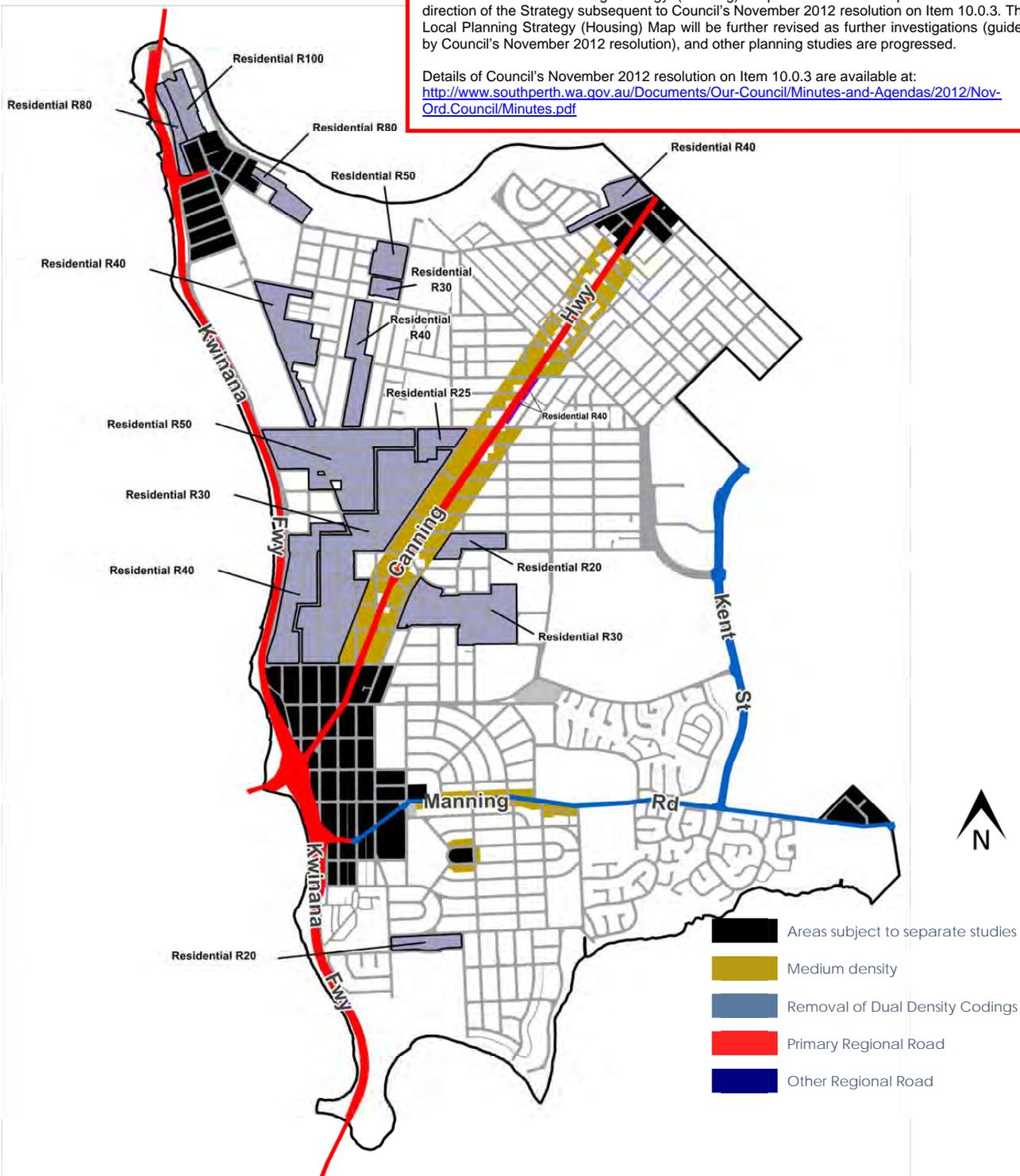


Figure 7: Draft Local Housing Strategy (Source: City of South Perth, Local Housing Strategy Draft, City of South Perth 2012)

1.5.3 Local Planning Decisions

A key precursor and influence to this study are previous Council decisions which highlight the development challenges being experienced along Canning Highway and the abutting residential area. In November 2012, the Council considered the Draft Local Housing strategy – Engagement Report and Next Steps report. The Council resolved a number of matters during the consideration of this report including:

(i) *Progress detailed investigations into Action 4.1A with stronger emphasis on localised areas. Further detailed investigations are to include (but not be limited to):*

- (A) *Discontinue investigations into increasing density within the Canning Highway density flank for all properties fronting Campbell Street, Kensington;”*
- (B) *Specific densities in individual locations with respect to lot dimensions, size and orientation in specific areas;*
- (C) *Boundaries for density coding changes, including consideration on the use of streets as buffers between different densities, and the graduation of densities within the density flank area;*
- (D) *Outcomes of the Canning Highway Road Reservation Review and the future direction of the City in dealing with this Review;*
- (E) *Outcomes of the Activity Centres Strategy, existing and future nonresidential uses, and their interface with residential development;*

- (F) *Provision of an R40 density coding to properties fronting Canning Highway on the eastern side of the Highway between Hensman Street and the residential zone properties up to South Terrace; and*
- (G) *Investigation of residential densities surrounding the Canning Highway/South Terrace intersection, and the interface between residential densities and existing non-residential land uses.’*

In addition the City has received a number of development applications within the study area. On a number of occasions planning approval has not been granted by the Council as the developments were considered to be out of character with the streetscape, particularly in relation to setbacks, overshadowing and inconsistencies with the scheme objectives.

#ShapeOurPlace provides the analysis, tools and recommendations for the City to implement a planning framework that will assist to manage how new development can better integrate with the existing character of the area. This framework will provide future developers with a clear understanding of what is expected for the locality so that regardless of whether the Council or the Development Assessment Panel is the determining authority, the planning intent for the area is known.

1.5.4 Canning Highway Road Reservation

Canning Highway is a key transport and urban corridor in the study area. As identified earlier, Canning Highway is denoted as a 'Primary Regional Road' in the MRS. The road reservation denoted on the MRS makes provision for future road widening.

The road reservation has the potential to include:

- Two lanes of traffic in each direction;
- A transit/bicycle lane in each direction;
- Wider verges for pedestrians, shared use and utilities/services; and
- A median strip.

The timeframe for the widening is not known however the future urban form needs to be cognisant of the future road widening. Spatially, the impact of the road widening affects the south east side of Canning Highway more than the North West side of the highway. The impact on affected lots will be reduced lot sizes and resultant development potential.

In addition, direct access from local roads onto the highway will be reduced over time. This may impact local traffic movements in the area.



Corner of Todd Avenue and Canning Highway, Como



Corner of Monash Avenue and Canning Highway, Como



Corner of Comer Street and Canning Highway, Como

Part 2 - Site Analysis



Canning Highway, Kensington

2.1 Site analysis introduction

The study area is highly diverse with the streetscape character varying throughout. This section provides an overview of the subdivision and street layout characteristics, open space, landscapes, movement and the interfaces that exist throughout the area.

Generally, the character of the study area between Berwick Street and South Terrace, Kensington and South Perth is reflective of an earlier period with a prevalence of original dwellings. Whilst between South Terrace and Cale Street, Como there are a greater number of grouped dwellings and the housing is more reflective of the past three decades. Regardless of the dwelling style, the majority of the streets have a suburban character with wide, grassed verges with street trees. Canning Highway has an urban character with narrow footpaths and minimal street plantings.

2.2 Subdivision and street layout

A site analysis was undertaken to understand the built form character of the study area and the streetscape character. A detailed summary of the site analysis was provided in a memorandum dated 9 March 2015. The initial site analysis divided the study area into eight areas (four on each side of the highway). The findings detailed in the memorandum have been realigned into five Places (that were described in Figure 2) and a summary has been provided in this section of the report. These places have similar built form character, zoning and lot sizes and orientation.

The site analysis provides a general description of the dwelling types, streetscape character and street presentation based on the current town planning scheme zonings. The analysis was undertaken in this manner to determine whether there was a distinct built form and streetscape character at the zoning level and what variation existed between the highway

lots and non-highway lots. For the purpose of the analysis, three streetscape types were recognised as described below.

- A suburban streetscape – Predominantly single houses with garden; however there is a presence of grouped dwellings in the form of units and battle axe developments. Dwellings typically have side setbacks and are either single or two storey.
- Urban streetscape – Range of housing types (townhouses and multiple dwellings) with a harder street edge (smaller setback). Building heights are greater than the suburban streets.
- Highway streetscape – Range of housing types with harder street edge. Building heights are potentially greater. There is often a presence of commercial development.

The character on the west and east sides of the highway varies, which is generally a result of the building ages and period in which the areas developed. As a result, the five places have been divided into the north-west and south-east sides of the highway.



Brandon Street, Kensington

2.2.1 Place 1 - Berwick to Banksia

North-west

Existing development on the Highway Commercial/R80 lots on Canning Highway are single storey, with the exception of the section between Hovia Terrace and Banksia Street where heights vary. Residential development on Canning Highway varies in height and style. The highway lot sizes vary considerably between 265m² and 3,830m². Setbacks are inconsistent due to the angle of the highway. The footpaths and verges are narrow and generally paved.

Residential R15 development behind the highway is typically single storey original dwellings, or two storey new builds. The majority of the area has suburban streetscapes with the exception of Mill Point Road which has more of an urban streetscape. Lot sizes typically vary between 490m² and 600m².

Residential R15/40 development behind the highway is an eclectic mix of building typologies including original single storey houses, two storey new build single houses and three storey walk up old build multiple dwellings. Lot sizes typically vary between 232m² and 2,405m².

In the R15 and R15/40 areas, setbacks are generally wide and consistent. The streets have wide grassed verges, with street trees, however they are less established than in other parts of the study area. Verges have high numbers of crossovers.

There is an abrupt transition in density code between Highway Commercial R80 and residential R15 areas.



Canning Highway, South Perth

East

The Highway Commercial/R80 zoned lots consists of two storey commercial developments.

Residential development on R80 lots are typically single storey original dwellings at present. Lot sizes vary between 370m² and 740m². Canning Highway has an urban streetscape character, dominated by high, solid walls with varying setbacks. The footpaths along the highway are narrow and verges are paved. First Avenue has a suburban streetscape character with wide setbacks both paved and grassed. The street verges are wide with established street trees.

Residential R60 lots are characterised by two storey walk up old build multiple dwellings and townhouses. Lot sizes vary between 356m² and 4,250m². The streets have a suburban streetscape character with wide front setbacks. Street verges are also wide with street trees.

Residential R15 areas are typically single house with a mix of original single storey houses and two storey new build single houses. Lot sizes vary between 473m² and 543m². The streets have a suburban streetscape character with wide front setbacks. Typically street verges are wide with grass and street trees of varying sizes.

There is a significant presence of original dwellings throughout the area.

There is a small area of R30 and R50 lots. This area has a suburban character, with wide grassed street verges with street trees of varying sizes. The front setbacks are wide.

There are abrupt transitions between R80 and R15 areas, and some more gradual transitions from the highway to the suburban areas from R80 to R50 to R30 between Banksia Terrace and Brandon Street.



First Avenue, Kensington

2.2.2 Place 2 - Brandon to Lawler/Arundel

North-west

Existing development on Highway Commercial/R80 lots on Canning Highway is single storey. The character is reflective of an urban streetscape area distinguished by the narrow footpaths and narrow to nil front setbacks. The lot sizes are highly variable.

Residential development throughout the area ranges in age.

Residential R15 development behind the highway is typically single storey original dwelling. The predominant lot size is 438m² and 521m². The streetscapes are reflective of a suburban streetscape with grassed verges with street trees.

Residential R40 development is eclectic, with most forms of grouped dwellings and single storey original

dwellings present. Lot sizes vary, particularly in the streetblock bounded by Lawler Street, Angelo Street, Douglas Avenue and Canning Highway, depending on whether the lot has been subdivided or not.

There is an abrupt transition in density code between Highway Commercial R80 and residential R15 areas.



Canning Highway, South Perth

East

Highway Commercial/R80 lots along Canning Highway and Douglas Avenue have primarily single storey commercial developments.

The Residential R80 area along the highway addresses Pennington Street rather than the highway.

There is a small portion of land coded Residential R30 with lots sizes typically 615m² and a small area of R50 with lots between 596 m² and 640 m². The houses in the area are predominantly single residential houses.

The Residential R25 areas are characterised by single dwellings with lot sizes varying between 306m² and 533m². The dwellings are consistently setback with grassed street verges with few street trees.

Residential R15 development is typically original single storey houses. The lot sizes are typically between 420 m² and 675 m². Front setbacks are consistent and street verges are grassed with street trees present.

The houses in this area are generally original, with some new developments present.

There is an abrupt change between the coding of the lots on Canning Highway (R80) and the adjacent residential area (R30, R25 or R15).



Brandon Street, Kensington

2.2.3 Place 3 - Lawler/Arundel to South Terrace

North-west

Highway Commercial/R80 lots on Canning Highway are characterised by single storey and two storey commercial development, which is reflective of an urban streetscape generally with narrow footpaths and narrow paved and grassed verges.

Residential R60 development is characterised by two and three storey walk up old build multiple dwellings.

Residential R15 development behind the highway is typically single storey original dwellings with lot sizes of approximately 900m². The streets have a suburban streetscape character with wide setbacks and well established street trees on wide grassed verges.

Residential R40 development is eclectic, with most forms of grouped dwellings and single storey original

dwellings present. Lot sizes vary however many are larger than 1,000m². The streets have a suburban streetscape character and well established street trees on wide grassed verges.

Residential R20 development is predominantly villas and original single storey houses. Lot sizes vary in this area however front setbacks are generally consistent.

Residential development throughout the area ranges in age.



Renwick Street, South Perth

East

The houses in this area are generally original, with some new developments present. Lots sizes are typically 506m² with more variation in lot sizes in the streetblocks bounded by Canning Highway, Hensman Street and Arundel Street. There are wide front setbacks and wide grassed verges with well established street trees.

There is no transition of zonings as all of the lots (with the exception of three corner lots on Canning Highway) are coded R15.



Campbell Street, Kensington

2.2.4 Place 4 - South Terrace to Ednah/ Ryrie

North-west

Highway Residential R40 development is characterised by villas, townhouses, original single storey houses and new and old battle axe lots. Lot sizes vary between 974m² and 1,948m² depending on whether amalgamation has taken place. There is predominantly suburban streetscape character; however narrow verges and footpaths, and the proximity of development to the road, gives the area an urban streetscape character.

Residential R20/30 development is generally a mix of single houses and grouped dwellings ranging from one to two storeys giving the area a suburban streetscape character. There is very little consistency in lot sizes. Front setbacks are wide and generally paved. The verges are wide and grassed and the tree coverage varies.

Residential R15/25 development is generally a mix of single houses and grouped dwellings ranging from one to two storeys giving the area a suburban streetscape character. Lot sizes are typically 974m² or greater than 1,000m². Front setbacks are wide and mostly paved. There are wide verges with well-established street trees.

The age of the dwellings varies within the area.

The zoning transition between Canning Highway and the residential area adjacent is less abrupt compared to other areas along the highway.



McDonald Street, Como

East

Highway Commercial R80 development is characterised by commercial uses.

Residential R80 development in this area is predominantly single storey houses however the streetscape has a more urban streetscape character feel with narrow footpaths adjacent to the highway. Lot sizes vary, as do front setbacks. In some locations the road widening setbacks have already been taken into account, resulting in some development being significantly setback from the highway.

Residential R15/20 development is reflective of a suburban area including original single storey houses, new and old battle axe, villas and townhouses. Lot sizes are typically 1,012m². Front setbacks are wide, as are street verges, which are grassed with street trees present.

Residential R15 development is predominantly original single storey house and two storey new build single house. Development is reflective of suburban streetscape with lot sizes typically 1,012m². Front setbacks are wide and the street verges are grassed with street trees present.

The age of dwellings varies throughout the area.

There is an abrupt change in density coding between the R80 areas and the adjacent R15 areas.



Bessell Avenue, Como

2.2.5 Place 5 - Thelma to Cale

North-west

R40 residential development on Canning Highway is characterised by original single storey houses, terrace housing and two storey walk up old build multiple dwellings. The lots are irregular in both size and shape. The streetscape is generally reflective of a suburban street with elements of an urban streetscape including high solid walls along Canning Highway and narrow footpaths and verges. Front setbacks are highly variable due to the angle of Canning Highway.

R20/30 residential development is characterised by original single storey houses, townhouses and villas. Lot sizes are typically between 1,012 m² and 1,151m². The streetscapes are reflective of a suburban streetscape, and wide grassed verges with established street trees. The front setbacks are wide

and generally consistent in depth, however some variation exists particularly where grouped dwellings are present.

The age of dwellings varies however there are a number of 1980's grouped dwelling developments throughout the area.

There is a gradual transition between the lots on Canning Highway and those adjacent.



Saunders Street, Como

East

Highway Commercial R80 development includes commercial uses predominantly in the form of converted single houses. Lots sizes vary considerably between 195m² and 3,013m². These lots have a commercial character with varying setbacks including some with nil setbacks. The verges are paved and where setbacks are larger, these are typically paved.

R60 residential development along Canning Highway is predominantly original single storey houses and original house with second storey addition. The lots are generally greater than 1,000m². Similar to the other side of the street, the character is reflective of a suburban streetscape with elements of an urban streetscape including narrow footpaths and verges. Setbacks vary due to the angle of the highway and where development has already implemented the required setbacks associated with the road widening.

R30 zoned areas are dominated by villas with lot sizes varying between 274 m² and 4,358 m². The streets exhibit a suburban streetscape character with varying front setbacks that are generally narrow. The verges are neither wide nor narrow and are grassed with street trees.

R20/30 zoned areas are dominated by villas with lots greater than 1,000m². The streets have a suburban streetscape character with wide front setbacks however some variation exists due to the irregularity in street block shape. The street verges are grassed with street trees.

R20 residential development is predominantly original single storey houses and single storey new builds. Lot sizes vary between 545m² and 1,000m². The streets exhibit a suburban streetscape character with wide front setbacks. The verges are grassed with street trees.

R15/20 residential development is predominantly original single storey houses with some villas. The

lots are generally greater than 1,000m² and exhibit a suburban streetscape character. Front setbacks are wide with some variation in the depth. The street verges are typically grassed with street trees.

The age of housing varies however there are a high number of 1980s style dwellings.

There is an abrupt change between the areas coded Highway Commercial/R80 and R15/20 and R20. There is a more gradual transition of zonings between Saunders and Cale Street. The zoning decreases from R60 on Canning Highway, to R30 behind the highway then to R20 in the subsequent street blocks.



Poppy Lane, Como

2.3 Study area landscape

2.3.1 Topography

Canning Highway traverses a ridge line resulting in the highway sitting higher than the surrounding area. There is a noticeable decline from the highway towards the river.

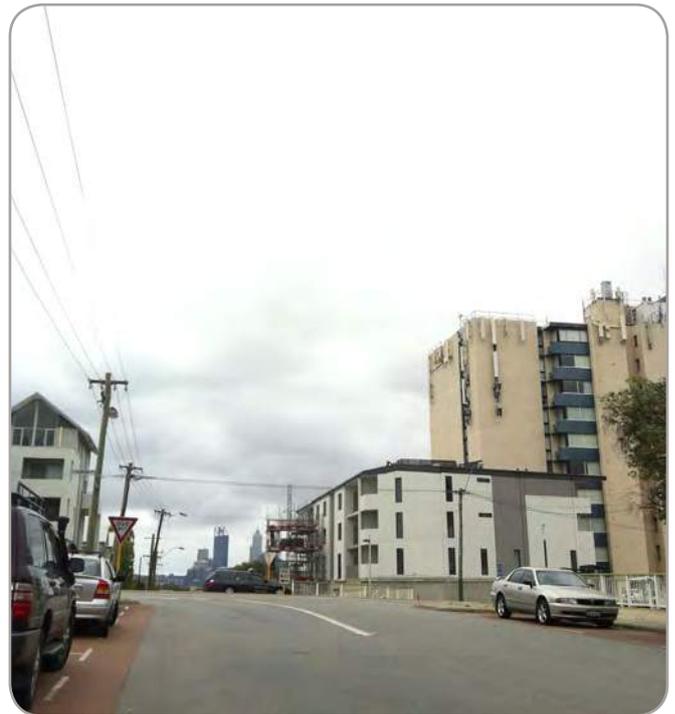
This will need to be taken into consideration when proposing future heights of development, particularly on the south-east side of highway where overshadowing will be more prevalent, as will the sense of bulk and scale.

2.3.2 Public Open Space

Figure 8 illustrates that local parks within and adjacent to the study area and the 400m walkable catchment. The open spaces shown in the figures correspond to those areas reserved in the Town Planning Scheme No.6. The majority of the parks are outside the study area even though a large proportion of the study area is within a 400m walkable catchment.

This highlights the importance of private and communal open spaces in developments.

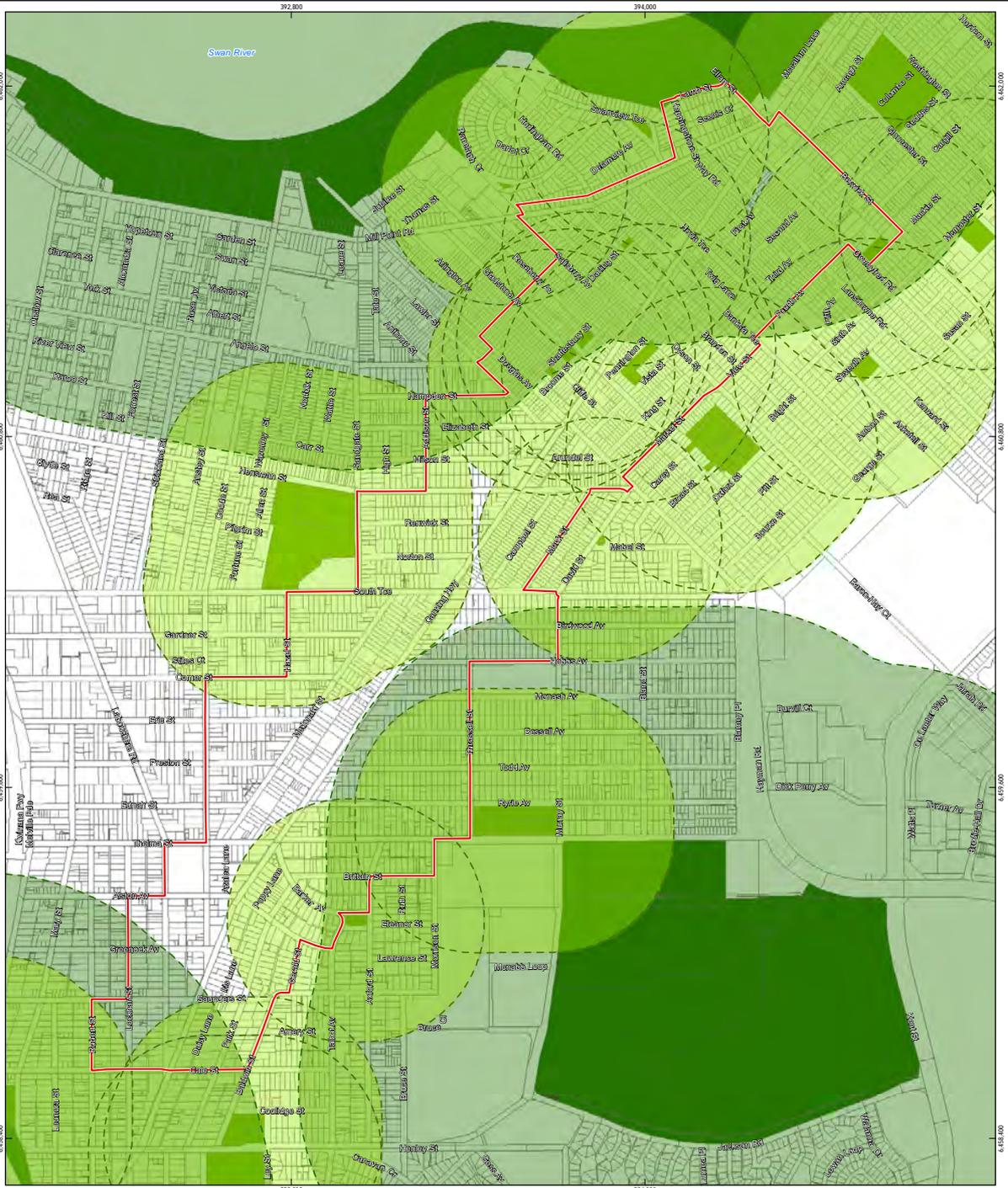
An 800m walkable catchment has been applied to regional open spaces. The foreshore reserve west of the Kwinana Freeway has not been included in this map as it is considered that the freeway creates a significant barrier for pedestrians, particularly as the foreshore can only be accessed from designated locations.



Banksia Terrace, Kensington, looking towards the Swan River



Banksia Terrace, Kensington looking east



- LEGEND**
- Local Reserve
 - MRS Reserve
 - 800m Buffer of MRS Reserve
 - 400m Buffer of Local Reserve
 - Study Boundary
 - Cadastre

1:12,000 at A3

0 60 120 240 360 480 600
Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1984
Grid: GDA 1994 MGA Zone 50

City of South Perth
Canning Highway Residential Density Study

Job Number | 61-31851
Revision | 0
Date | 27 Nov 2015

Park within 400m and 800m Buffers

239 Adelaide Terrace Perth WA 6004 Australia T 61 8 6222 8222 F 61 8 6222 8555 E permail@ghd.com.au W www.ghd.com.au

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Data source: Landgate: Road Names - 20150316; Cadastre - 20150316; GHD: Study Boundary - 20150316; Local Reserve/MRS Reserve/400m Buffer of Local Reserve/800m Buffer of MRS Reserve - 20151021. Created by: mczok.

Figure 8: Public Open Space

2.3.3 Streetscape patterns

As discussed in section 2.2 above, the majority of the streets in the study area exhibit a suburban streetscape character. These streets typically have wide street verges with street trees of varying sizes. The greening of the streets through street trees and verges can play a more significant role in creating a suburban character compared to the dwelling style. In the streets where there are a high number of crossovers, there was a noticeable difference in the size of the street trees compared to streets with fewer crossovers.

Along Canning Highway there is an absence of street plantings and verges in the public realm. In addition the angle of Canning Highway results in variation in the orientation of the buildings.



Absence of vegetation in parts of Canning Highway

Table 1: Number of motor vehicles within the study area suburbs and Western Australia (data source: 2011 Census, ABS)

Number of registered motor vehicles	South Perth	Kensington	Como	Western Australia
None	8%	6.1%	7.9%	6.1%
1 motor vehicle	44.9%	32.5%	44.7%	32.6%
2 motor vehicles	34%	44.9%	33.9%	38.5%
3 motor vehicles	11%	14.3%	11.1%	20.0%
Number of motor vehicles not stated	2%	2.3%	2.3%	2.8%

2.4 Movement

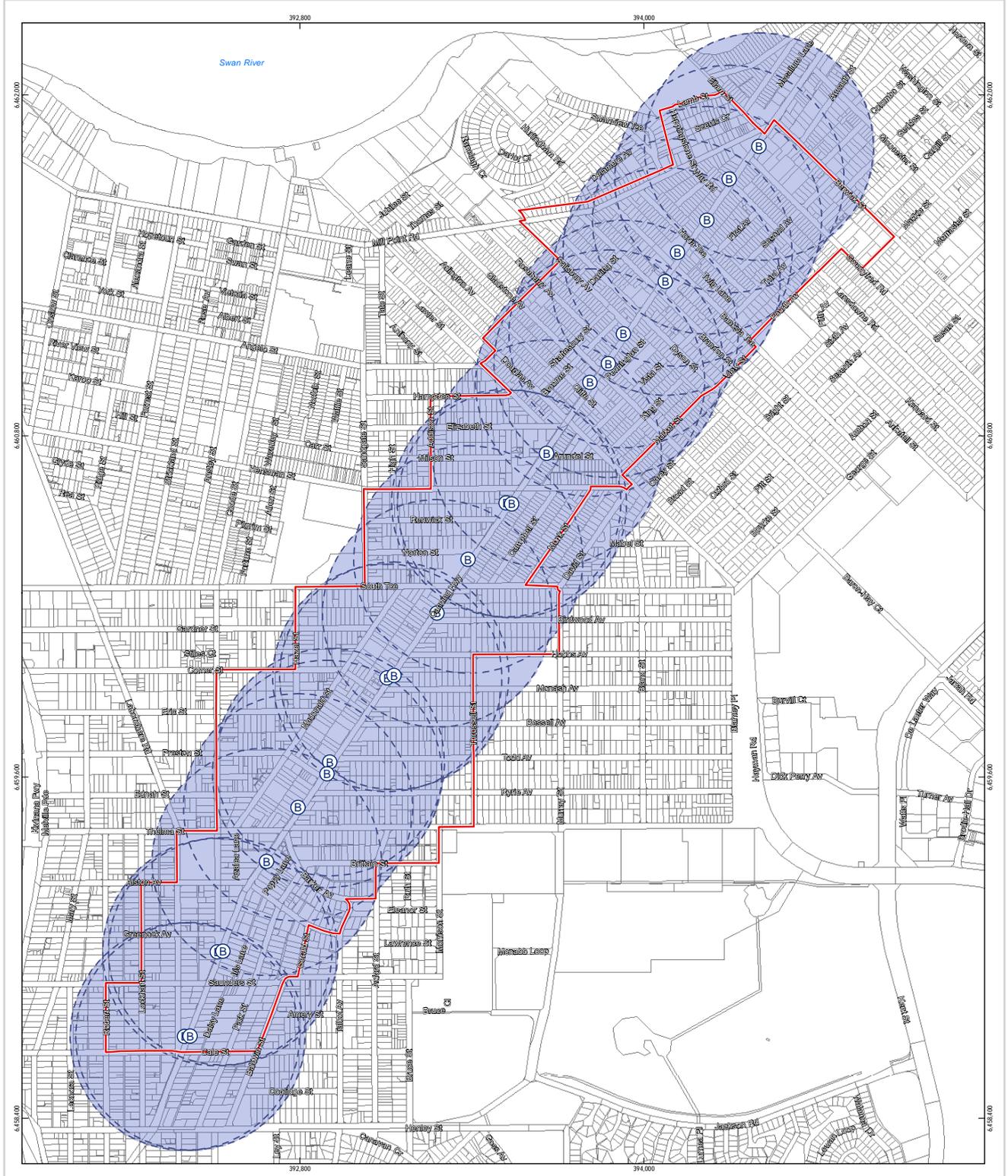
2.4.1 Vehicle movement

Canning Highway is the main thoroughfare within the study area which is intersected by key transport routes including Mill Point Road/Way Road, Douglas Avenue and South Terrace. With the exception of Canning Highway (MRS – Primary Regional Road Reserve), all streets within the study area are zoned as a local road reserve.

Canning Highway is a high frequency bus route with the entire length of the highway in the study area being within a 400 metre walkable catchment of a bus stop. There are only small portions of the study area that do not fall within the Canning Highway walkable catchment. This is illustrated in Figure 9.

To investigate private vehicle use, the 2011 Census was reviewed. Table 1 below illustrates that generally there are fewer households with 2 or more vehicles in the study area compared with the State.

Anecdotal evidence obtained through the consultation indicated that while the route is classified as high frequency, during some periods there are insufficient services to enable passengers to board the service and on weekends the service times are not convenient. It is recommended that the City of South Perth facilitate ongoing conversations with the Department of Transport and Public Transport Authority to investigate the feasibility of providing additional services along this route. The introduction of new and/or additional services would assist to reduce reliance on private car use.



- LEGEND**
- Bus Stop
 - 400m Buffer of Bus Stop
 - Study Boundary
 - Cadastral

1:12,000 at A3
 0 60 120 240 360 480 600
 Metres

Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 50



City of South Perth
 Canning Highway Residential Density Study

Job Number 61-31851
 Revision 0
 Date 27 Nov 2015

Bus Stops within 400m Buffer

G:\6131851\GIS\Map\Working\6131851_G003_Rev0.mxd 239 Adelaide Terrace Perth WA 6004 Australia T 61 8 6222 8222 F 61 8 6222 8555 E permail@ghd.com.au W www.ghd.com.au
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 Data source: Landgate: Road Names - 20150316, Cadastre - 20151021; GHD: Study Boundary - 20150316, 400m Buffer of Bus Stop - 20151021; PTA: Bus Stop - 20151021. Created by: mcrakej

Figure 9: Bus stop map

2.4.2 Access

In most instances, access to properties is from the front of the property on both Canning Highway and the residential streets. Key State Government agencies have indicated that direct access on to Canning Highway will be discouraged as future development occurs, particularly once the road widening progresses further. A large proportion of the lots abutting the highway do not have right of way (ROW) access or access from a secondary street. Alternative access solutions will need to be investigated for a number of highway lots to facilitate the wider State Government agenda.

In the residential streets, dwellings are typically front loaded as many properties do not have access to a ROW. On street parking is also prevalent throughout the precinct. A large proportion of non-highway lots do not have access to a ROW. This results in numerous cross overs breaking up street verges and can impact on street trees.

2.4.3 Pedestrian movement

There are pedestrian paths on either side of Canning Highway however the pedestrian environment requires improvement. The footpaths are narrow, resulting in pedestrians being in close proximity to a busy transport route. There are very few street plantings, so the area is highly urbanised and footpaths are poorly shaded. Many properties have been poorly maintained over many years, which also reduces the amenity of the environment.

In the suburban streets there are pedestrian paths, however they are separated from the road by wide street verges, resulting in a more pleasant, safer pedestrian environment.

2.4.4 Constrained sites

A number of lots along the highway are constrained, either by access or lot size and in some instances lots are impacted by both of these constraints.

There are a number of sites along Canning Highway that do not currently have alternative means of access other than directly off the highway.

In addition there are a number of lots along the length of Canning Highway that will be significantly reduced in size as a result of the proposed road widening. Figure 10 provides a spatial representation of those lots which are either, or in some instances both, constrained by limited access or reduced site area.

For the purpose of this analysis, those lots highlighted as being site area constrained, are lots that will result in an area less than 380m². This figure represents the minimum lot area/ rear battleaxe for lots coded Residential R40-R80.



Narrow pedestrian footpaths along Canning Highway



Residential streets with grassed verges and street trees

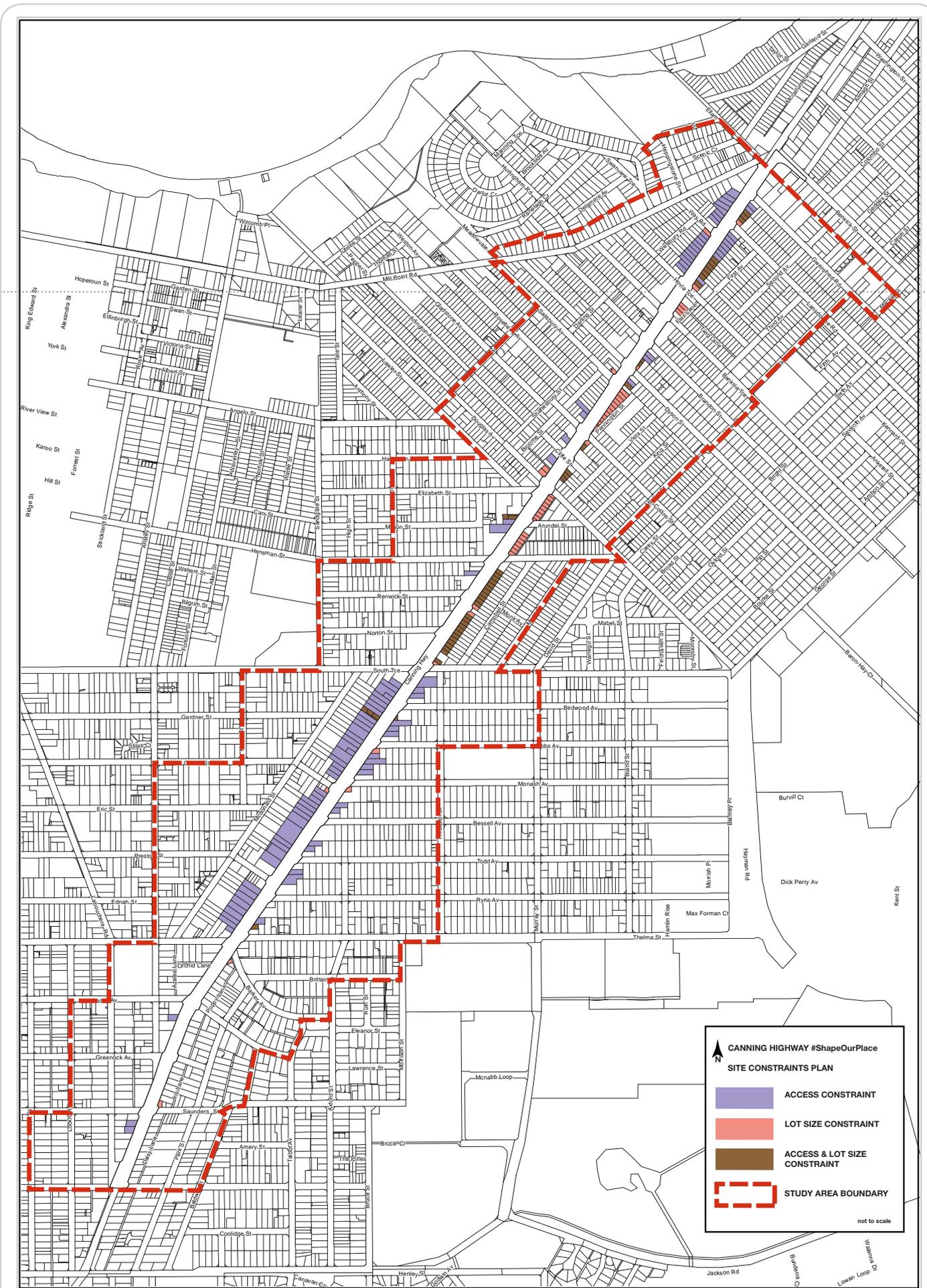


Figure 10: Site Constraints

Disclaimer: This map has been prepared using the City of South Perth Intramaps tool to determine lot areas. GHD does not guarantee that this represents all access and site area constrained properties.

2.5 Transitions

One of the objectives of this study is to create harmonious built form transitions from the highway to the adjacent lower density residential areas. There are a number of density transitions that exist throughout the study area, including transitions between:

- Highway properties and non-highway properties.
- Non-residential zoned properties and residential zoned properties.
- Streets with varied densities.
- Properties within the study area and outside.

Each of these are described below.

2.5.1 Highway and non-highway properties

A large proportion of the highway is zoned for high residential density (R80) and medium densities (R60 and R40). In a number of locations these highway zonings abut directly on to low density (R15) as illustrated in Figure 11 along Bessell Avenue.

This transition is considered to be very abrupt as the scale of development that can be produced in these locations is vastly different. More gradual transition exist where there are medium densities located between the high and low zonings, as illustrated along Banksia Terrace and Brandon Street in Figure 12.

Where a right of way (ROW) exists behind the highway lots the gradual transition can be facilitated by providing an additional setback area to minimise the impacts of bulk and scale and subsequently overshadowing and overlooking.

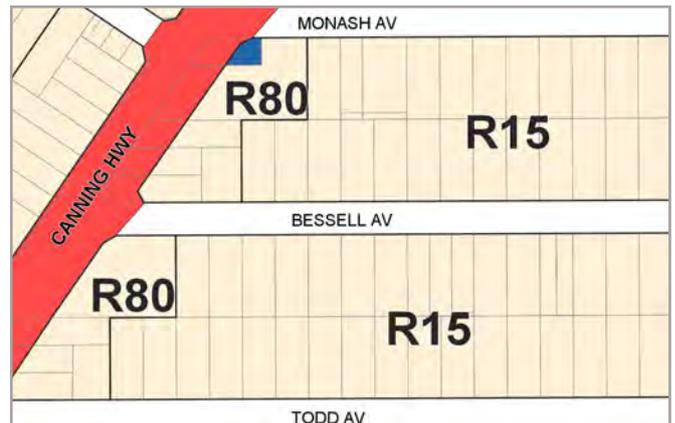


Figure 11: Abrupt highway to non-highway R-Code transitions



Figure 12: Gradual highway to non-highway R-Code transitions

2.5.2 Non-residential and residential properties

There are a number of highway commercial zoned properties along the length of Canning Highway. Commercial properties typically have different built form characteristics to residential dwellings including lesser setbacks, ground floor parking, larger ground floor footprints, little or no landscaping and services and amenities.

The scale of commercial development on the highway is currently of a relatively low scale, therefore the impact of bulk and scale is minimal. However current zonings could facilitate far greater development, potentially in the form of mixed use developments.

There are locations on the highway where the Highway Commercial/R80 area directly abut R15 areas. (Figure 13). This is an abrupt transition, particularly given that setback requirements for commercial developments are typically lesser than that of residential developments.

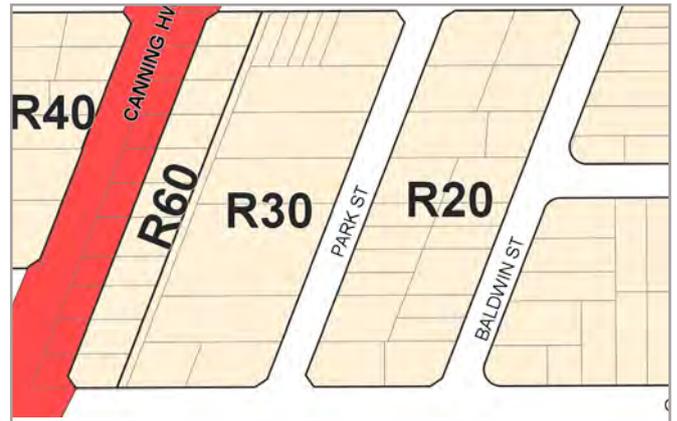


Figure 14: Gradual residential R-Code transition



Figure 13: Abrupt residential to non-residential R-Code transitions



Figure 15: Abrupt residential R-Code transition

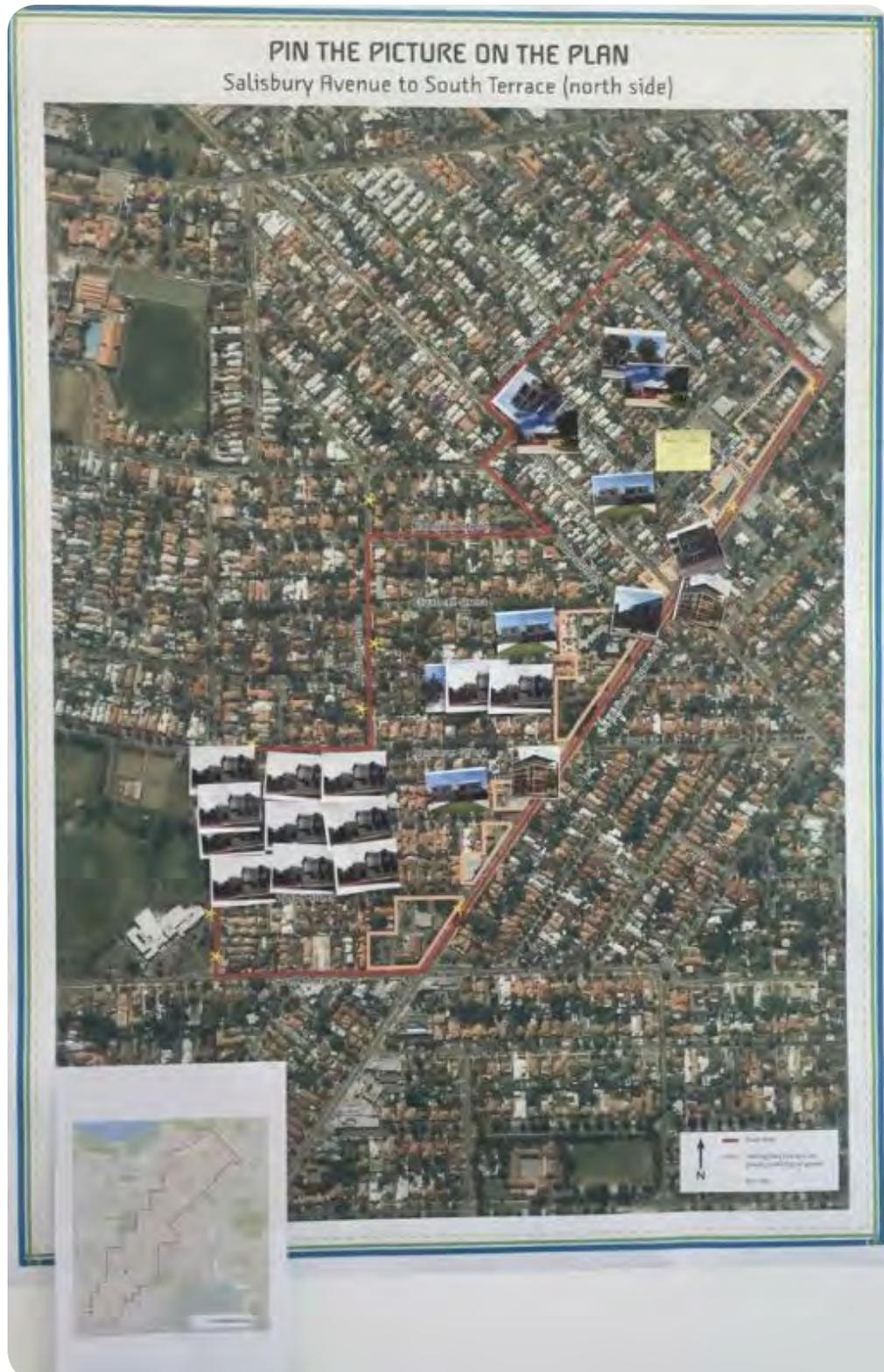
2.5.3 Streets with different R-Code densities

There are streets within the study area that have different densities on either side of the street. This is not problematic in areas where the zonings result in similar built form outcomes for example Park Street, Como (Figure 14). However there are streets where the variation in densities can produce a very different built form outcome, for example First Avenue in Kensington (Figure 15).

2.5.4 Inside and outside the study boundary

The properties within the study area may be identified for future rezonings and additional planning controls through this study. A change in density may be perceived to impact on areas outside the study boundary where zonings are not proposed to change. These properties have been designated as 'edge' properties and will require more detailed policy/development controls to manage the transition, such as greater side setbacks.

Part 3 - Consultation



Consultation has been undertaken with State Government agencies as well as the local community. Each play different, but important roles in shaping the future of this area.

The City of South Perth purposefully sought to engage with its community and key stakeholders, to ensure that the study recommendations are reflective of community aspirations and directly informed by stakeholder planning priorities and identified challenges. It was seen as vital that the community was involved from the outset, in shaping their future urban corridor, Canning Highway.

3.1 Elected Members

Consultation was also held with the Council members. An initial session was held with the Council to provide an overview of the study. The second Council briefing was to outline the proposed height plan and cross section prior to consulting with the community. There was some concern raised in regards to the increased heights, however only minor amendments were made to the plans prior to being presented to the community.

This report will be presented to Council for discussion of the findings and recommendations. It will be up to Council to decide how to progress with the recommendations.

3.2 Stakeholders

In addition to the provision and maintenance of infrastructure, the State Government owns many properties adjacent to Canning Highway. As a major landowner, the Government has a large influence on the built form adjacent to the highway.

Canning Highway is a major infrastructure asset for the State, therefore it was important to include key State Government agencies in the #ShapeOurPlace discussion early in the project. The way in which Canning Highway develops will be largely influenced

by the road widening as this will significantly impact on how buildings interface with the street, the sizes of the lots and what is feasible to develop.

Throughout the development of the project, workshops have been held with the City of South Perth, Department of Planning, Department of Transport, Main Roads WA, Public Transport Authority and the Department of Housing to ensure that the agencies which will play a key role in the future development of the highway are involved in the conversations. During the first stakeholder workshop a vision for the highway was developed:

To use built form outcomes to enable improved highway safety and management and encourage mode shift towards public and active transport whilst enabling a transition that harmoniously integrates development between the highway and the suburbs.

Key considerations that have resulted from the discussions were:

- Minimise direct access on to Canning Highway;
- Higher density around nodes and within the public transport walkable catchment;
- Facilitating increased use of the public transport network;
- Movement of pedestrians and cyclists through the area;
- Road considerations (e.g. queue jump lanes, side street requirements);
- Traffic and access studies to support any changes;
- Use of visual imagery in the study to help communicate ideas;
- Concentrating density in particular locations to minimise the need to change lower density areas;
- Use of planning tools such as activity centre coding and form based codes rather than the R-Codes;

- Consideration of density infill targets;
- Influence of local studies – Local housing strategy and local commercial strategy;
- Power requirements associated with increased density; and
- Open space and parking.

3.3 Community

Consultation for #ShapeOurPlace involved significant community consultation and engagement. The consultation undertaken will be a key influence for future decision-making, including policy and town planning scheme provisions.

A separate report detailing the consultation outcomes has been prepared for the City dated August 2015. A summary of the key outcomes has been included in this report.

#ShapeOurPlace aims to ensure that any future planning for the area is reflective of the community wants and aspirations, and factors in the strategic planning already in place for the Canning Highway study area. Acquiring a solid understanding of both what the community aspirations and stakeholder priorities are for the future formed a solid basis for the recommendations on how the future development and built form along Canning Highway and the land immediately adjacent can be achieved

The methodology employed to undertake the community consultation comprised two key phases - Phase 1 to establish the community desires and aspirations for the area and Phase 2 to seek feedback on concept plans for the area.

The City's Facebook page was used for this project, with the aim to offer those community members who were unable to attend the workshops the opportunity to participate and engage with the study through an online forum. There was a mixed response to utilising the online forum for engaging with the community, with some actively participating in any online

consultation taking place and others opposed to this approach, because of it being restricted to those who already had a Facebook account.

3.3.1 Phase 1

Phase 1 introduced the study to the wider community and enabled the project team to gain a better appreciation of what type and intensity of development was regarded as generally acceptable by the community.

Specifically, the initial phase of consultation aimed to paint the picture of the future Canning Highway and its surrounding environment by:

- Gauging an understanding of the community preference for built form typologies;
- Determining the community's opinion of appropriate design of the locality; and
- Understanding the community's opinion of the spatial locations of the suburban, transitional and urban forms of medium density development.

During the first phase of consultation three key mechanisms were used to consult with the local community.

- A community workshop - to provide an opportunity for community members to tell us where they wanted to see certain types of development, and identify what they liked and didn't like about a range of building types presented.
- An online social media discussion facilitated through Facebook - to encourage community members to provide examples of preferred development types for the area, as well as comment on a range of imagery supplied to stimulate discussion amongst the community to understand what the preferred built form is and where it is appropriate.
- General Comments – to enable the community members to submit comments to the City of South Perth about the project that may or

may not have aligned directly with the above conversations.

The community workshop was attended by approximately 125 community members. There was active discussion and participation on the Facebook page (via posts and 'likes') and 29 individual comments were submitted to the City regarding the study. The five most 'liked' images are shown on this page, including the photo caption.

In addition, the community were encouraged to comment on whether the development was appropriate for the study area. A number of comments relating to particular built form elements were noted on Facebook, as detailed in Table 2.



Photo caption - Would this building be appropriate on or around Canning Highway in the future? (12 'likes' on Facebook discussion)



Photo caption - Would this building be appropriate next to a single house? Would it be appropriate next to a 3 storey apartment building? (8 'likes' on Facebook discussion)



Photo caption - Would this building be appropriate next to a single house? Would it be appropriate next to a 3 storey apartment building? (8 'likes' on Facebook discussion)



Photo caption - Would this building be appropriate next to a single house? Would it be appropriate next to a 3 storey apartment building? (8 'likes' on Facebook discussion)



Photo caption - Would this building be appropriate on or around Canning Highway in the future? (8 'likes' on Facebook discussion)

Table 2: Key built form themes raised during phase 1 of the community consultation

Built form Element	Preference	Dislike
Height	<ul style="list-style-type: none"> No specific comments noted. 	<ul style="list-style-type: none"> Concerns relating to overshadowing caused by a 3 storey single house Development that contained dwellings too large for the block
Setbacks	<ul style="list-style-type: none"> Large setbacks Setbacks for pedestrians 	<ul style="list-style-type: none"> Development that is too close to the road and did not have a large enough setback
Traffic and car parking	<ul style="list-style-type: none"> Garages to assist alleviating street parking issues 	<ul style="list-style-type: none"> Garages that dominated the street Developments that did not provide car parking Concerns relating to increased traffic and car parking issues (impacts on local streets)
Landscaping	<ul style="list-style-type: none"> Developments that had front gardens, and vegetation, trees and grassed areas on or around the site 	<ul style="list-style-type: none"> No specific comments noted.
Character	<ul style="list-style-type: none"> Character retention New developments to better integrate with, and be sympathetic to, existing housing stock Developments that were original or attempt to mimic original character 	<ul style="list-style-type: none"> No specific comments noted.
Design	<ul style="list-style-type: none"> Developments with large balconies New developments to consider the use of sustainable design (e.g. consideration of green roofs, solar panels) Developments with eaves Developments that were new and modern Developments with varied facades and used different textures 	<ul style="list-style-type: none"> The use of certain materials Concerns about precinct streetscape policies that include arbitrary aesthetics requirements Built form that was sterile
Building interface	<ul style="list-style-type: none"> No specific comments noted. 	<ul style="list-style-type: none"> Built form that results in overlooking of neighbouring backyards Backyards with security fences and many rubbish bins

Community members were also encouraged to post their own examples of desirable built form they would like to see in the study area. Some of the images posted are shown below.



For Monk and Campbell Streets



Either side of Canning Highway



Location not specified

During the community workshop an exercise known as 'pin the picture on the plan' allowed the community to stick certain types of development onto the study area to understand the sorts of development that were appropriate in certain locations. The exercise broke the study area into 8 areas (4 either side of the highway). An example of the exercise is shown in Figure 16.

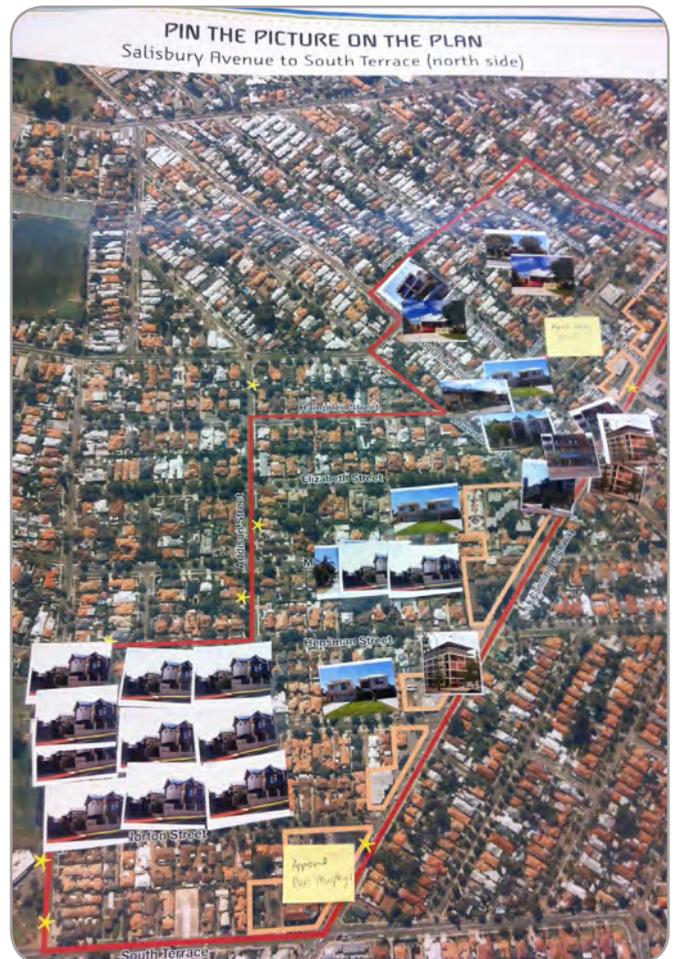


Figure 16: Example of 'pin the picture on the plan'

The concept of a 'green buffer' was raised by the local residents of Campbell Street. The idea proposes that rather than developing the land along eastern side of Canning Highway between South Terrace and Hensman Street, the land be vegetated and left as a green buffer between the highway and the residential streets. There was concern that with the reduced lot sizes along the highway with no direct access that vehicle movement would be pushed onto local streets such as Campbell Street. The image below was posted by a community member as the preferred interface between Campbell Street and Canning Highway.

While this concept is noted, #ShapeOurPlace has not proposed to include this option. The green buffer on the highway is not considered to be a useable area of open space. It would likely require considerable maintenance, otherwise the area may become unsafe and unattractive due to overgrown vegetation. This would also result in the rear fences of those properties along Campbell Street abutting the highway and resulting in no surveillance to the street in this location.

While the individual lot sizes will be considerably reduced, collectively this will be a large area of land. The State Government is currently acquiring lots along the highway in order to facilitate the proposed road widening. If this continues to happen, particularly in this location, the lots could be amalgamated and a more consolidated development could be proposed.

A feasibility assessment would need to be undertaken to consider this option and whether the costs are feasible as it will result in a loss of developable land and the maintenance costs involved in maintaining the space.

Preferences for more intense form were identified at:

- The area bounded by Canning Highway, Way Road and Mill Point Road
- The intersection of Canning Highway and Douglas Avenue
- Along Canning Highway between Thelma and Cale Streets (north)
- Along Canning Highway between Dyson Street and Douglas Avenue (south)

The transition area behind Canning Highway was predominately recognised as an area for single houses and grouped dwellings. Multiple dwellings were pinned to the plan mainly on the north side of the highway between Thelma and Cale Streets.

Overall, there was a preference for single houses throughout the study area, but more specifically in:

- Comer Street (between Coode and McDonald Streets)
- Canning Highway (between Lansdowne and Brandon Streets south)
- Fourth Avenue
- Market Street
- Campbell Street
- Monk Street



Facebook post suggestion for green buffer on the highway.

Table 3 below provides a more detailed breakdown of the key built form preferences.

Table 3: Key built form themes raised during phase 1 of the community consultation

Area	Preference
Ellam Street to Salisbury Avenue (north side)	<ul style="list-style-type: none"> • 3 and 6 storey multiple dwellings and 3 storey terraces in the area bounded by Canning Highway, Way Road and Mill Point Road • 3 and 6 storey multiple dwellings near the intersection of Canning Highway and Salisbury Avenue and Dyson Street.
Salisbury Avenue to South Terrace (north side)	<ul style="list-style-type: none"> • 3 and 6 storey multiple dwellings around the intersection of Canning Highway and Douglas Avenue. • 2 storey large house grouped dwellings near Sandgate Street, Hensman Street and Norton Street. • 2 storey single houses and grouped dwellings behind the highway lots.
South Terrace to Thelma Street (north side)	<ul style="list-style-type: none"> • Single houses on Comer Street (between Coode and McDonald Streets). • 2 storey single houses, townhouses and grouped dwellings on Eric Street (between Coode and McDonald Streets).
Thelma Street to Cale Street (north side)	<ul style="list-style-type: none"> • 3 and 6 storey multiple dwellings and 3 storey terraces along Canning Highway. • 3 storey terraces and multiple dwellings behind Canning Highway. • 2 storey terraces and townhouses with some 3 storey developments in the suburban area.
Berwick Street to Dyson Street (south side)	<ul style="list-style-type: none"> • Single houses on Canning Highway between Lansdowne Street and Brandon Street. • Single houses along Fourth Avenue. • 3 storey multiple dwellings and terraces east of Gwentyfred Road.
Dyson Street to South Terrace (south side)	<ul style="list-style-type: none"> • 3 storey terraces and multiple dwellings on Canning Highway between Dyson Street and Douglas Avenue. • Original style single houses along Market Street between Dyson Street and Douglas Avenue. • Single houses on Campbell Street (both original and new). • Trees and green space along Canning Highway adjacent to Campbell Street
South Terrace to Thelma Street (south)	<ul style="list-style-type: none"> • Single houses (old and new) throughout the area. • Some multiple dwellings and grouped dwellings along parts of Canning Highway.
Thelma Street to Cale Street (south)	<ul style="list-style-type: none"> • Single houses behind the highway. • Higher intensity development particularly around Baldwin and Saunders Street and near the intersection of Canning Highway and Barker Avenue/Thelma Street. • A commercial strip near the intersection of Canning Highway and Cale Street.

3.3.2 Phase 2

Phase 2 built on the findings from the first phase of community consultation, providing the community with an overview of the project to date, including general feedback received through Phase 1, and presenting suggested ways to introduce medium density development into parts of the study area. A package of material was released for community feedback (Appendix A), which included:

- Project background;
- Overview of Phase 1 consultation;
- Draft design guideline area;
- Draft maximum building heights plan;
- Example building cross sections; and
- Example typical building heights.

The purpose of the second round of consultation was to:

- Understand community opinion of a draft height plan for the study area;
- Illustrate how heights will transition back into the residential areas through the provision of cross sections; and
- Determine the community's opinion of the draft design guidelines area (later referred to as the consolidated study boundary).

During the second phase of consultation, community members were encouraged to provide written feedback on the concepts. This was further supported by a community workshop. Facebook was used primarily as a tool to direct the community to the City's website, where they were able to access a full suite of consultation material. In total, the City received approximately 150 written submissions and the community workshop held on 1 August 2015 was attended by approximately 100 people.

Some of the general comments received included:

- Consideration of parking and concerns

associated with increased cars.

- Concerns about increased vehicle access in residential streets.
- The buses are not frequent enough.
- Concerns raised regarding increasing heights bringing more cars and reduced safety.
- Opportunities to retire in place.
- Queries regarding adequate open space and vegetation.
- Queries regarding adequate infrastructure to support changes.
- Suggestion for community infrastructure plan.
- Consideration of on street parking timing restrictions.
- Consideration of character study prior to changes in height.

Given the large extent of the study area, the feedback received reflected a spatial distribution of locations within the study area where there was significant community interest and expectations for their local area, and by contrast, where there was very minimal community interest and engagement. This trend reflected a variance between local areas, that required a more specific and focused understanding, to ensure that the local concerns and community aspirations were appropriately identified and captured.

The outcomes of the consultation were divided into five places to better understand the local context. The five places are:

Place 1 - Berwick Street to Banksia Terrace

Place 2 - Brandon Street to Douglas Avenue

Place 3 - Lawler Street/Arundel Street to South Terrace

Place 4 - South Terrace to Ednah Street/Ryrie Avenue

Place 5 - Thelma Street to Cale Street

Place 1

Place 1 received the most feedback throughout the second round of consultation. Note: While it is acknowledged that Kensington includes areas outside Place 1, comments referencing Kensington as a whole are reported on within Place 1.

There was a distinction between the east (Kensington) and west (South Perth) side of Canning Highway within Place 1, with community opinion differing on a range of issues.

The Kensington community overwhelmingly suggested that building heights were too high in this area and that the concept plans were not reflective of the outcomes of the first round of consultation. Additionally, the community identified issues with character and heritage properties and requested a Character Area Assessment be completed before any further changes are made. The increase of building height limits and the proposed design guideline area was not well received in and around First Avenue and Hovia Terrace.

Conversely, community members were seemingly more receptive of increasing building height limits on the South Perth side, particularly surrounding the existing Metro Hotel and the area bounded by Canning Highway, Way Road and Mill Point Road.

Some comments received included:

- Heights are too high particularly around First Avenue, Second Avenue, between Hovia and Banksia Terraces and behind Metro Hotel.
- Area bounded by Canning Highway, Way Road and Mill Point Road to be six storeys.
- A character study should be undertaken prior to any changes in heights.
- Increasing height limits on the South Perth side to buffer the bulk of the Metro Hotel.



Figure 17: Place 1

- A set of commercial design guidelines for properties zoned Residential Commercial.
- Removing the stretch of properties with a two storey height limit on Gwenyfred Road from the proposed design guideline area.
- Three storeys along Canning Highway.

Place 2

Place 2 contains portions of the suburbs of South Perth (west) and Kensington (east) adjacent to Canning Highway. Generally like in Place 1, comments suggested that the proposed building height for the area was too high, and that it detracted from the character and amenity of the locality. There was additional concern about traffic movement, particularly rat running and parking within the suburban streets.

Other specific comments included:

- A request for increases in height limits for particularly properties on Vista Street and Collins Street.
- Decrease in height limits between Collins and Douglas Avenue.
- Traffic and congestion issues at the Douglas Avenue traffic lights.
- Consideration of topography at Douglas Avenue and Vista Street.
- Consideration of partial road closure on Pennington Lane with land to be ceded to those properties adjacent to Canning Highway.
- Heights are too high towards King Street, Douglas Avenue, and between Collins and Cliffe Streets.
- Three storeys is too high for the three properties on Dyson Street that back onto David Vincent Park.
- A full character assessment for Kensington be undertaken.

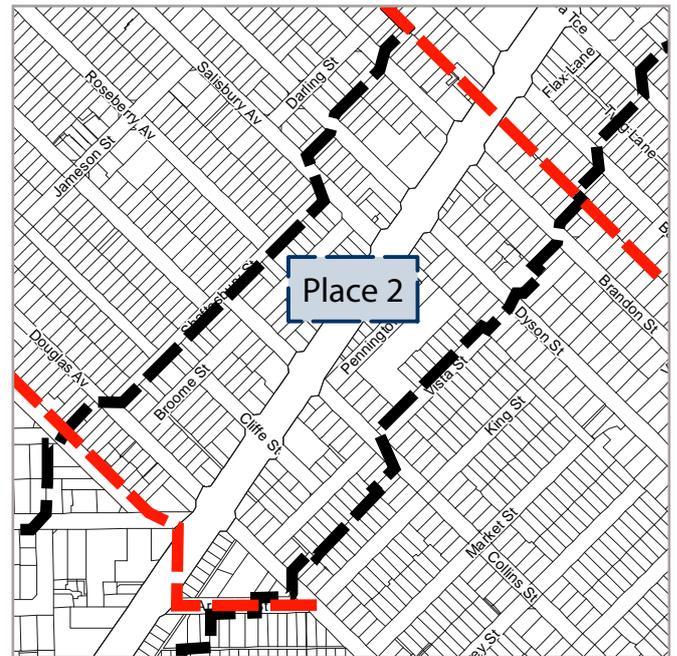


Figure 18: Place 2

Place 3

Place 3 contains portions of the suburbs of South Perth (west) and Kensington (east) adjacent to Canning Highway. Generally comments related to traffic and parking concerns, specifically relating to Campbell Street, and the protection of character and amenity in Kensington.

Though there was a significant amount of comments relating to the increase in building heights on the Kensington side of Canning Highway, some community members questioned why there was no transition allowed for east of Canning Highway between Hensman Street and South Terrace.

Other specific comments related to:

- The introduction of a green buffer between Canning Highway and Campbell Street.
- Increasing building heights and extending the transition area further into South Terrace.
- More appropriate building heights on Norton Street to South Terrace responding to the existing character of the area and the Como Hotel.
- Unbalanced height on Norton Street.
- Reducing building heights along Canning Highway from South Terrace to Hensman Street.
- No three storeys near Hensman Street.
- A revision of Policy P351.5 Streetscape Compatibility – Precinct 5 Arlington, and Precinct 6 Kensington.
- Two storeys adjacent to Campbell Street, no multiple dwellings over looking.
- Consideration of density transition between the highway and Campbell Street.
- A full character assessment for Kensington.

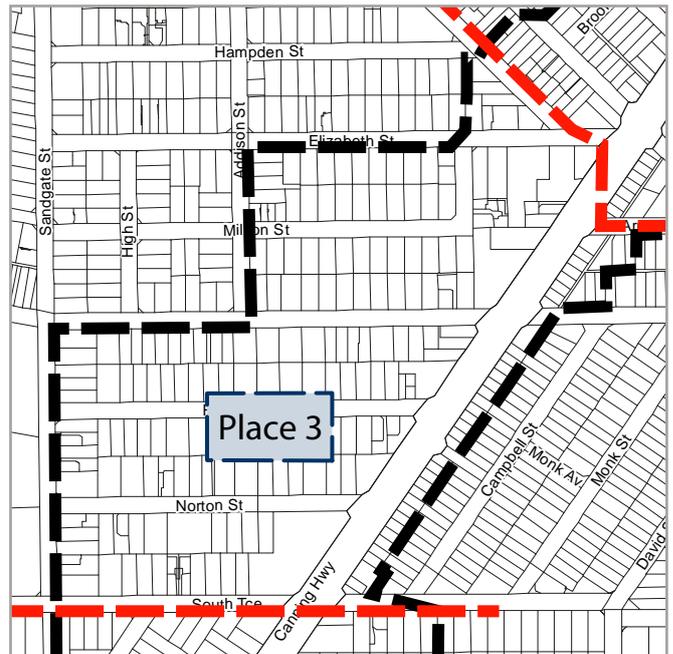


Figure 19: Place 3

Place 4

Place 4 contains portions of the suburb of Como. Generally comments were positive, with the majority supporting the proposed design guidelines area, proposed height plan and the transition from Canning Highway into the surrounding streets. There were some comments that suggested building heights should be increased in the area, particularly on the eastern side of Canning Highway.

Other specific comments related to:

- Rezoning of 'the Avenues' from R15 to R20
- Increasing building heights on 'the Avenues' to three storeys.
- Request for rezoning on Comer Street.
- Hazel Street, McDonald Street, Gardiner Street and South Terrace to be R20/30 or R30/50.
- Good opportunity to rezone lots between the highway and McDonald Street to encourage amalgamation.
- Three and four storeys on 'the Avenues' is too high.

Place 5

Place 5 contains portions of the suburb of Como. Due to the limited amount of comments received in relation to this area, it is difficult to identify a general view on the proposed concept plans.

Other specific comments related to:

- Cohesion of design guidelines with the Canning Bridge Structure Plan.
- Road safety on Labouchere Road and Alston Avenue.
- Increase in density and building height on Labouchere Road and Cale Street.
- 6 storeys too high for Canning Highway between Barker Avenue and Cale Street.

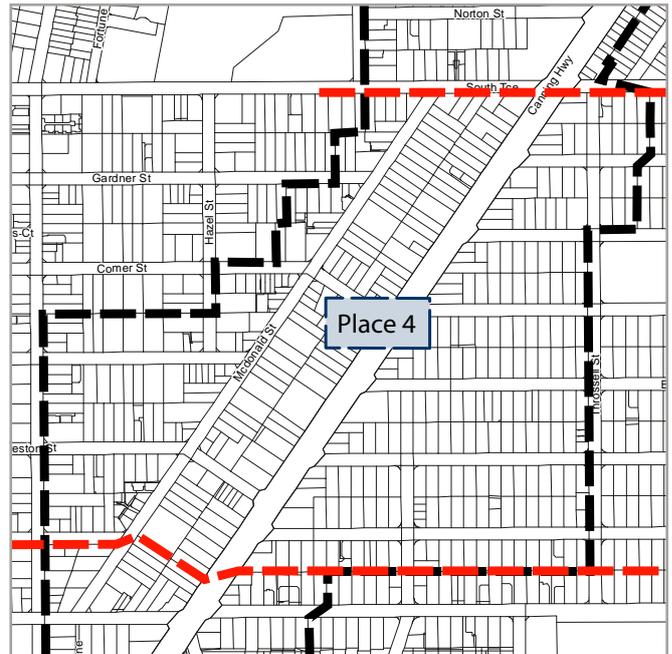


Figure 20: Place 4

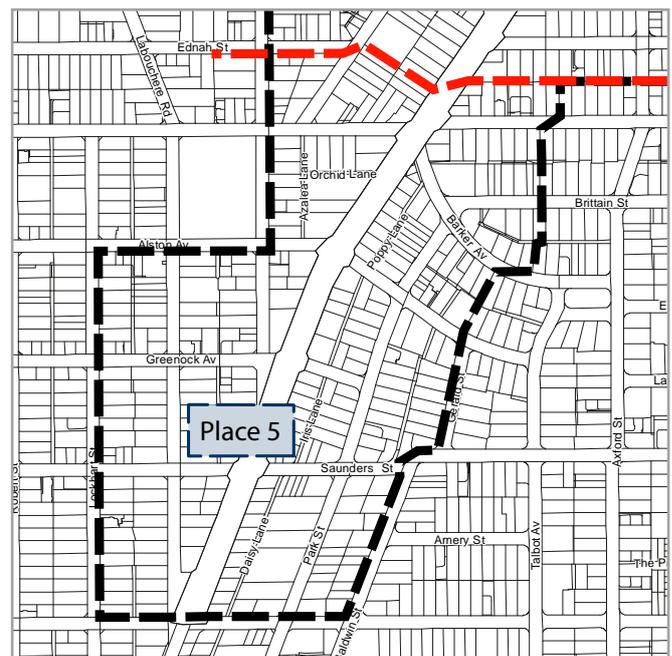


Figure 21: Place 5

3.4 Key Findings

The community and stakeholder consultation and engagement garnered a number of key findings relating to the future development along Canning Highway. The findings from the stakeholder consultation and engagement are based in the most part on technical investigations and future planning for Canning Highway, while the findings from the community consultation component of the study reflect a community that is actively engaged and invested in shaping the future development along and adjacent to Canning Highway. The key findings have been divided into two parts, being 'General' and 'Locational'.

3.4.1 General

The following provides a summary of the general key themes derived from consultation with both the stakeholders and wider community.

Density

- The introduction of medium density along Canning Highway and land immediately adjacent is generally supported by both the community and stakeholder groups;
- However, there are areas where changes to the existing planning framework are not supported without more detailed investigations and/or community engagement;
- There is a preference for concentrated areas of mixed use development in nominated locations such as at key intersections, and where it is within the public transport walkable catchment area;
- Increased development and height along Canning Highway is generally supported, with the exception of land abutting the highway at Campbell Street, and in the northern portion of the study area, mainly in the Kensington area;

- Preferences for more intense form were identified at:
 - The area bounded by Canning Highway, Way Road and Mill Point Road;
 - The intersection of Canning Highway and Douglas Avenue;
 - Along Canning Highway between Thelma and Cale Streets (north);
 - Along Canning Highway between Dyson Street and Douglas Avenue (south).
- The transition area behind Canning Highway was predominantly recognised as an area for single houses and grouped dwellings. In some areas, multiple dwellings were deemed appropriate, particularly in the north side of the highway between Thelma and Cale Street;
- There was a preference for single houses throughout the study area but specifically in:
 - Comer Street (between Coode and McDonald Streets);
 - Canning Highway (between Lansdowne and Brandon Streets south);
 - Fourth Avenue;
 - Market Street;
 - Campbell Street;
 - Monk Street.



Residential area in Leederville

Built Form

- Development proposed within the transition zone between the highway and the suburban areas needs to respond to the existing streetscape patterns and built form style;
- New development needs to respond appropriately to the built form and streetscape context within which it is proposed;
- Bulk and scale of development needs to be appropriately managed through development control mechanisms.

Height

- Two storey townhouses and grouped dwelling developments were notably the preferred residential built form for medium density development located away from the highway;
- There was a preference for three storey townhouses and apartments to be located on the highway and on immediately abutting lots fronting the highway (ie transition zone). Three storey developments were generally not supported elsewhere, with the only exception being where there is already highway commercial uses, such as at the intersection of Douglas Avenue and Canning Highway, or Way Road and Mill Point Road;
- Where there is existing height (ie Metro Hotel), increases to height limits should be supported, in order to reduce the visual impact of the existing height on surrounding areas.

Interface

- Interfaces between highway and non-highway need to be appropriately managed, particularly with respect to bulk and scale and access.

Setbacks

- Any new development should complement the existing street setback patterns;
- The use of setback areas for landscaping and vegetation should be actively encouraged;

- Visual privacy and overshadowing were primary concerns expressed by the community. Appropriate design controls should be put in place to ensure that these impacts are minimised;
- There was a noted preference for larger rather than smaller street setbacks for lots fronting existing residential streets.

Streetscape character

- Streetscape appearance and preservation was a key focus area for the majority of the community, with a strong desire to see the design and streetscape appearance of any new development to sit comfortably within the existing streetscape;
- Areas with notable character, namely Kensington, should have full character assessment study undertaken prior to any rezoning occurring.



Preservation of original character building, Perth



Preservation of original character building, Perth

Design

- Development control measures, such as Design Guidelines, that promote good quality built form design, are supported and seen as necessary to ensure proper and orderly planning and development within the study area;
- Materials and façade treatments for new development should be varied, particularly in character areas, should be sympathetic to existing housing stock and/or incorporate elements of original housing stock into the design;
- Large balconies are a noted preference for new developments;
- New development should seek to incorporate sustainable design into the design of any built form, with such design elements as green walls and roofs, sustainable material selection, eaves and built form orientation.

Movement and access

- Reducing access onto and from the highway is strongly supported across both stakeholder and community groups;
- Traffic management will need to be addressed as a matter of priority to ensure that feeder traffic onto and off the highway utilising neighbourhood streets is appropriately managed;
- There are concerns relating to street parking in residential streets;
- The impact of garages and off-street parking needs to be appropriately managed, particularly by ensuring that streetscapes do not become dominated by garages;
- Consideration needs to be given towards the safe movement of pedestrians and cyclists through the study area and along Canning Highway;
- Facilitating the use of the public transport network should be a key focus for relevant stakeholder agencies.

Services

- Investigations need to be undertaken to ensure that there is adequate existing in-built or planned capacity of key services such as power, water and gas to cater for increased densities being introduced into the area;
- The provision of supporting community infrastructure (open space, waste collection, community hubs) that caters for the increased population base needs to be planned for and provided.



Examples of varied design materials in East Perth



Examples of varied design materials in North Perth

3.4.3 Key Issues and Challenges

Overall, the findings and key outcomes from the community consultation provide a solid basis and reference point for developing an appropriate set of recommendations for the future development along Canning Highway and the land immediately adjacent.

A number of common themes were identified through community and stakeholder feedback. This highlights the need for more specific development controls to be introduced or investigated in order to achieve the optimum and most appropriate built form outcomes for the area. A summary is provided below and discussed in more detail in Part 5 of this study. In summary, these themes include consideration of:

- The specific location of preferred and appropriate building typologies;
- Appropriate building heights for the area;
- The preferred building design elements, including:
 - Façade treatment
 - Streetscape contribution
 - Sustainable design
- Appropriate setbacks for the locality, including street, side and rear setbacks;
- Areas for open space, outdoor living areas and communal open spaces;
- Visual privacy of residents;
- Solar access and overshadowing on adjoining properties;
- Parking requirements and ensuring sufficient parking for the locality and the impact on the residential area;
- Garages and their impact on the streetscape;
- Appropriate ways to incorporate and enhance landscaping in development;
- Safe access for vehicles and pedestrians, particularly along Canning Highway; and

- Appropriate location for commercial areas.

3.4.4 Next Steps

The consultation undertaken during this study has informed the project outcomes and recommendations for the area. The steps to progress the project will be further discussed in Section 6, however any changes to the planning framework (Town Planning Scheme No. 6 and/or local planning policies) will require further Council consideration and community consultation prior to any changes being implemented. This study is the first step in the investigation process to understand the area and the community's desires for its future.



Varying building materials and treatments, Claremont

Part 4 - Built Form Study



Corner of Comer Street and Canning Highway, Como

The aims of this study were to investigate potential for medium density along the length of Canning Highway and within an appropriate distance of the highway and aims to determine appropriate built forms for the area.

Following the first phase of consultation it was evident that were areas where no change was required in order to facilitate an appropriate residential density and built form transition away from the highway.

As a result the original study area was reduced and a consolidated study area (known as the design guideline boundary during the consultation) was established. For the purpose of the following discussion, the #ShapeOurPlace study from relates to the consolidated study boundary.

4.1 What is medium density?

The R Codes identifies medium density as:

The medium-density residential development outcome would be generally land coded R30 to R60, and would be developed under the provisions of parts 5 and 6 of the R-Codes, depending on the type of development proposed. These areas predominantly contain grouped dwellings and single houses.

The application of parts 5 and 6 of the R Codes will facilitate all built form types – single houses, grouped dwellings and multiple dwellings, resulting in areas with diverse building typologies.

Canning Highway currently exhibits a range of zonings including Residential R80/Highway Commercial and Residential R15, R40, R60 and R80. The majority of the southern side of the highway has an R80 zoning, while there is more variation in the northern side. Based on the R Code definition, a large proportion of the highway already falls outside the 'medium density' classification and instead is considered to form part of the high density category.



Examples of a Residential R30 dwelling. Key features include large front setbacks and large areas of open space.



Examples of a Residential R40 dwelling. Key features include large front setbacks and large areas of open space.



Examples of a Residential R50 dwelling. Key features include smaller front setbacks, large areas of open space and small individual lot sizes.



Examples of a Residential R60 dwelling. Key features include smaller front setbacks, large areas of open space and small individual lot sizes.



Examples of a Residential R80 dwelling. Typically in the form of a multiple dwelling and includes small front setbacks and balconies.

The images provided demonstrate the range of dwelling types that can be developed under the R-Code 'medium density' classification.

This study does not propose to down code any properties within the study area as there are implications for the City and State Government relating to compensation under the planning legislation that prevent down-coding. Therefore those areas of high density on and off the highway (R80) will remain. Typically R80 products would be in the form of multiple dwellings, however it can also include single or grouped dwellings.

Planning for major roads and their adjacent neighbourhoods is not a unique challenge to South Perth. There are a number of other key corridors throughout the metropolitan area that experience similar conditions including Lord Street, Stirling Highway and Charles Street. The MRS reservations and local reservations applicable to each of these are as follows:

- Lord Street, Highgate and East Perth – Predominantly Residential R80 and R60 with MRS Other Regional Road Reservation
- Stirling Highway, Nedlands – Predominantly Residential R35 and Office/Showroom with MRS Primary Regional Road Reservation
- Charles Street, North Perth – Predominantly Residential R60 zoning with local road reserve with Planning Control Area for road widening.

It is acknowledged that these roads, like Canning Highway play an important role in traffic movement, however they also provide opportunities to create development corridors. The zonings on these routes varies between medium and high density and there is often an element of non-residential zonings along the route as well.



Charles Street, North Perth



Stirling Highway, Nedlands



Lord Street, Highgate

There is sometimes a misperception about what density means and what it looks like. The imagery that was 'liked' by the community (as discussed in section 3.1.1) was generally more reflective of medium density. The products included mixed use developments, townhouses and terrace style development. However it is noted that there was still a considerable desire for single houses.

The outcomes of the first phase of consultation indicates that there is some desire from the community to see some medium density products within the study area. #ShapeOurPlace chose to

focus more on the built form outcomes and the preferred built form products rather than the density code. Density can be a difficult concept to grasp particularly medium density where the development product can vary considerably.

The application of the appropriate density for this study will be investigated using built form typologies and streetscapes types. This allows the focus to be on the built form outcome rather R-Code density. An appropriate R-Code can then be applied based on the preferred built form and streetscape type.

4.2 Built Form Typologies

There are six key built form typologies that are likely to be developed within the study area that range from low to high density built form products. These include:

- Single house
- Townhouse
- Terrace house
- Manor house apartment
- Apartment
- Mixed use development.

Each of these has been described in the following pages including an overview of their key characteristics, the typical densities where the product is found and where the community prefer to see this product based on the outcomes of phase 1 consultation.

4.2.1 Single House

A 'single house', under the R Codes, is defined as:

A dwelling standing wholly on its own green title or survey strata lot, together with any easement over adjoining land for support of a wall or for access or services and excludes dwellings on titles with areas held in common property.

'Single houses' are typically found in lower density areas such as R15 and R20 where average lot sizes as per the R-Codes are 666m² and 450m² respectively, however they can generally be built in all zones unless a minimum density or development standard exists. Vehicle access to single houses is typically from the primary or secondary street or a

ROW where one exists.

There was community preference for single houses throughout the study area, particularly in Kensington.

Key features of 'single houses' include:

- Dwelling addresses the primary street.
- Wide front setbacks.
- Garden in the front setback.
- Car ports and garages accessible from the primary street via a driveway. Alternatively vehicle parking is on the street or from a right of way.
- Single storey or two storeys in height.



Examples of single house in Como



Examples of single house in South Perth

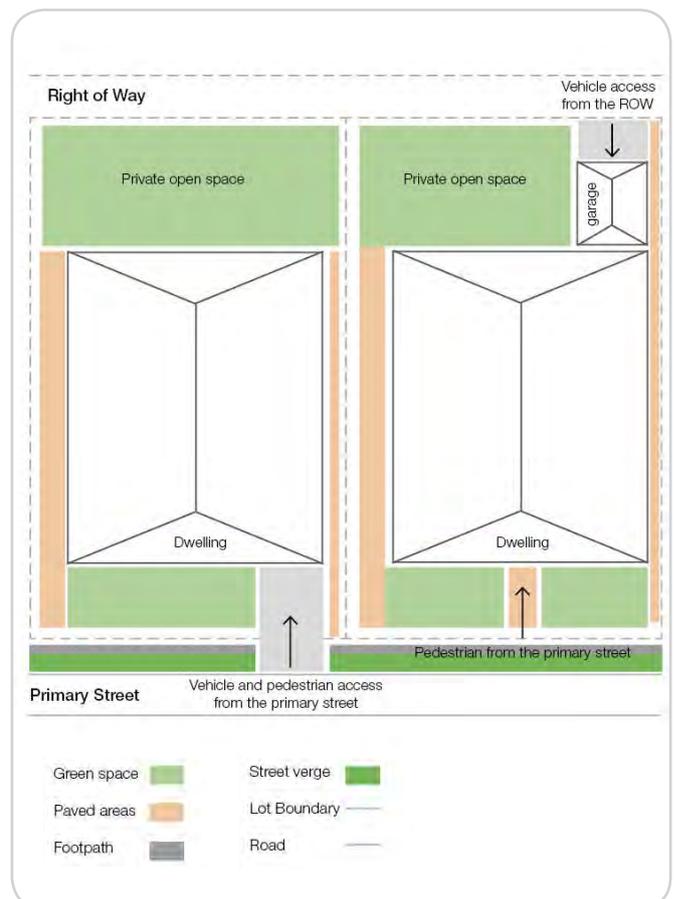


Figure 22: Indicative lot layout of 'single house'

4.2.2 Townhouse

A 'townhouse' is also known as a 'grouped dwelling' as per the R Codes and is defined as:

A dwelling that is one of a group of two or more dwellings on the same lot such that no dwelling is placed wholly or partly vertically above another, except where special conditions of landscape or topography dictate otherwise, and includes a dwelling on a survey strata with common property.

'Townhouses' are typically found in medium density areas such as R30, R40, R50 and R60 where average lot sizes as per the R-Codes are 300m², 220m², 180m² and 150m², respectively. Vehicle access to single houses is typically from the primary or secondary street or a ROW where one exists.



Examples of 'townhouse' development in North Perth



Examples of townhouse development in Yokine

There was community preference for townhouses in close proximity to Hensman Street, South Perth and Gardner and Lockhart Streets, Como.

Key features of 'townhouses' include:

- Front dwelling addresses the primary street, all other dwellings address driveway.
- Wide to narrow front setbacks.
- Courtyards in the front setback.
- Shared driveway either along the boundary fence or in the centre of the development.
- Front fences along the primary street.

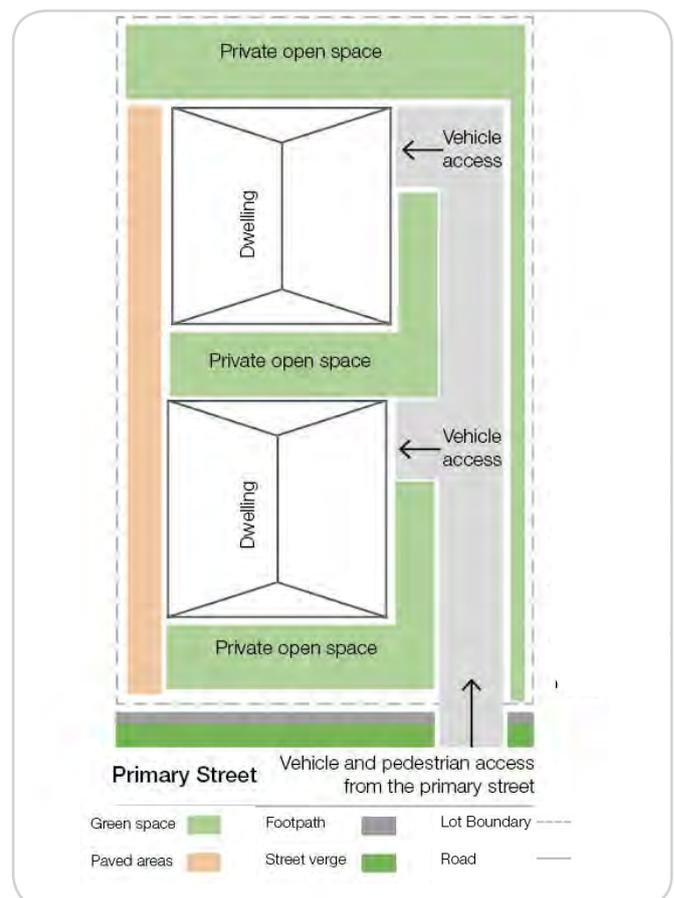


Figure 23: Indicative lot layout of 'townhouse'

4.2.3 Terrace House

A 'terrace house' is a dwelling that is one of three or more dwellings erected side by side and sharing common walls. Each terrace dwelling has frontage to a public road and has its own exclusive useable site (i.e. front yard and back yard). Under the R-Codes, a 'terrace house' can be defined as grouped dwelling or a single house, depending on whether the lot has been subdivided.

'Terrace houses' are typically found in medium density areas such as R30, R40, R50 and R60 where average lot sizes as per the R-Codes are 300m², 220m², 180m² and 150m², respectively. Terraces are also present in higher density areas such as R80 where the average lot size is 120m². Vehicle access



Examples of terrace development North Perth



Examples of terrace development in Mount Hawthorn

to terrace houses is typically from a single point from the primary or secondary street or from a ROW, or alternatively to each individual dwellings from the primary street or ROW.

There was community preference for terrace houses in close proximity to Labouchere Road, Alston Avenue and Lockhart Streets, Como and close to the intersection of Douglas Avenue and Stirling Highway.

Key features of terrace houses include:

- Dwelling addresses the primary street.
- Shared walls.
- Courtyards in the front setback.
- Generally upper floor is not setback from ground floor.
- Vehicle access from a single point.

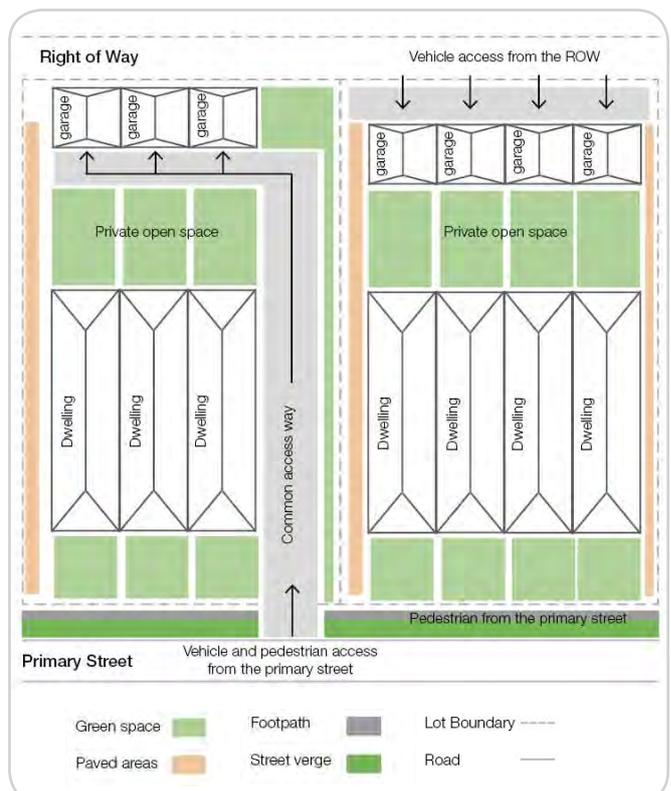


Figure 24: Indicative lot layout of 'terrace house'

4.2.4 Manor House Apartment

A 'manor house apartment' comprises two or more multiple dwellings but must look like a single detached dwelling. Its streetscape appearance, including access onto the site, must mimic that of a single detached dwelling, with any additional parking being provided in a basement location, and a minimum of two bays per dwelling.

Where applicable, a 'manor house apartment' is defined as a 'multiple dwelling' as per the R-Codes.

A dwelling in a group of more than one dwelling on a lot where any part of the plot ratio area of a dwelling is vertically above any part of the plot ratio area of any other but:

- does not include a grouped dwelling; and
- includes any dwellings above the ground floor in a mixed use development.

'Manor house apartments' are typically found in medium density areas such as R30, R40 and R60 where average lot sizes are 300m², 220m² and 150m², respectively. Vehicle access to manor house apartments is typically from a single point off the primary street.



Examples of manor house development in West Perth

The key principle of a manor house apartment is that it has the same appearance as a two or three single houses. As a result the key features and indicative lot layout is similar to that of a single house.

No examples of 'manor house apartments' were provided for discussion in phase 1 of consultation.

Key features of a 'manor house apartment' include:

- Appearance of single house.
- Dwelling addresses the primary street.
- Wide front setbacks.
- Garden in the front setback.
- Single pedestrian access point from the primary street.
- Vehicle access from a single point from the primary street or right of way.

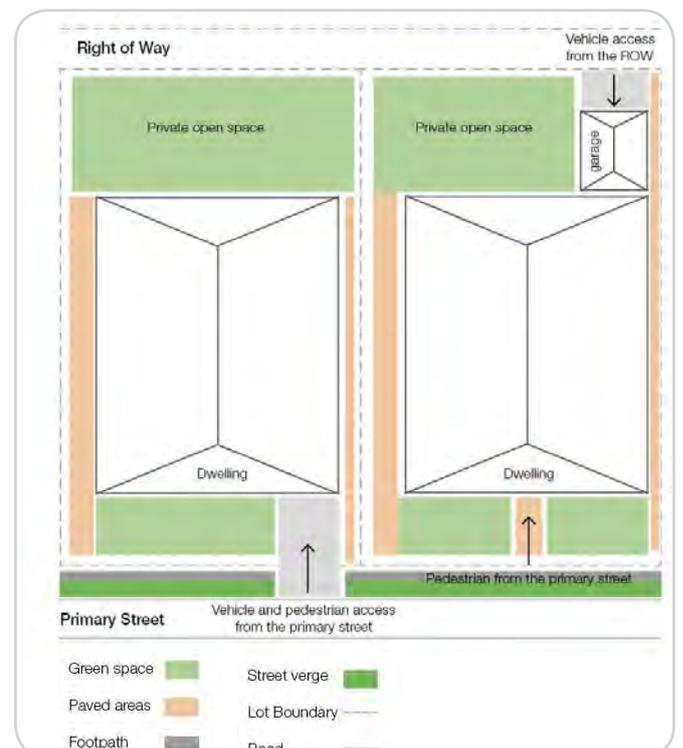


Figure 25: Indicative lot layout of 'manor house apartment'

4.2.5 Apartment

An 'apartment' is a single building that contains two or more dwellings, but does not include a semi-detached dwelling, terrace dwelling or grouped dwelling. A typical feature of a development involving a residential apartment building is a shared driveway and dwellings joined together and/or constructed above other dwellings.

Where applicable, an 'apartment' is defined as a 'multiple dwelling' as per the R-Codes. Apartments are typically found in areas coded higher than R40.

There was community preference for apartments in close proximity to Way Road/Mill Point Road/Canning



Examples of apartment development in Perth



Examples of apartment development in North Perth

Highway, South Perth, at the intersection of Douglas Avenue and Stirling Highway, Canning Highway/Labouchere Road/Saunders Street, Como and at various points along Canning Highway.

Key features of an 'apartment' include:

- Two or more storeys in height.
- Narrow front setbacks.
- Courtyards in the front setback.
- Balconies addressing the primary street.
- Single pedestrian access point from the primary street.
- Vehicle access from a single point from the primary street or right of way.

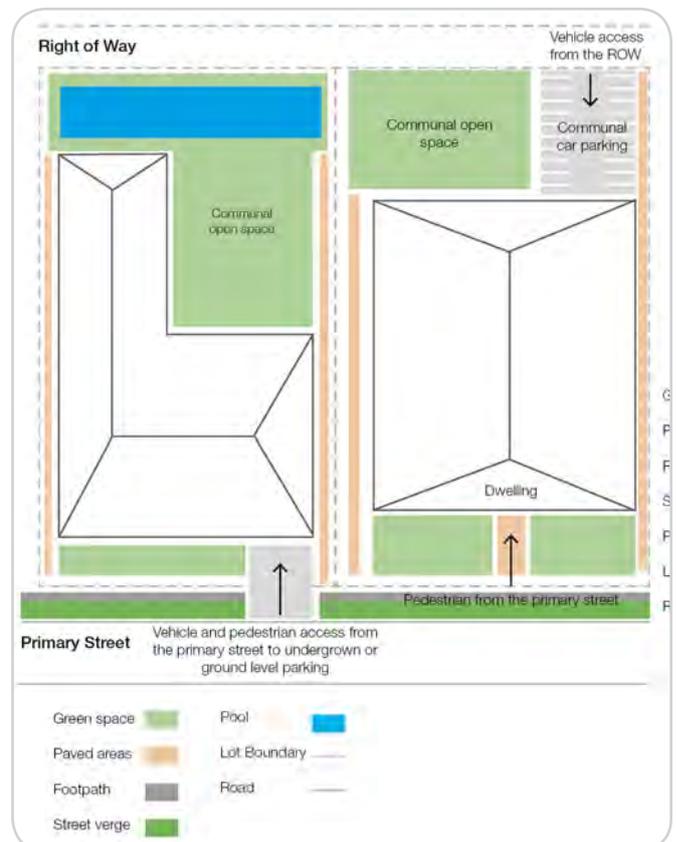


Figure 26: Indicative lot layout of 'apartment'

4.2.6 Mixed Use Development

A 'mixed use development' is one that includes both residential and non-residential uses within the one development and typically the same building. The ground and first floor are typically occupied by non-residential uses with residential uses in the upper floors. The appearance of a mixed use differs from a development that is purely residential due to the interface on the ground floor which typically has more interaction with the street.

Where applicable, a 'Mixed use development' is defined as a 'mixed use development' as per the R-Codes as outlined below;

Buildings that contain commercial and other non-residential uses in conjunction with residential dwellings in a multiple dwelling configuration.

'Mixed use developments' generally occur on land that has either a commercial zoning or a mixed use zoning.



Examples of mixed use development in Leederville

There was community preference for mixed use development in close proximity to Way Road, South Perth, at the intersection of Douglas Avenue and Canning Highway, on the east side of Canning Highway between South Terrace and Hobbs Avenue.

Key features of 'mixed use development' include:

- Two or more storeys in height.
- Narrow or nil front setbacks.
- Non-residential tenancies on the ground floor.
- Balconies addressing the primary street.
- Single pedestrian and vehicle access to residential component of development.
- Separate pedestrian and vehicle access for non-residential tenancies.

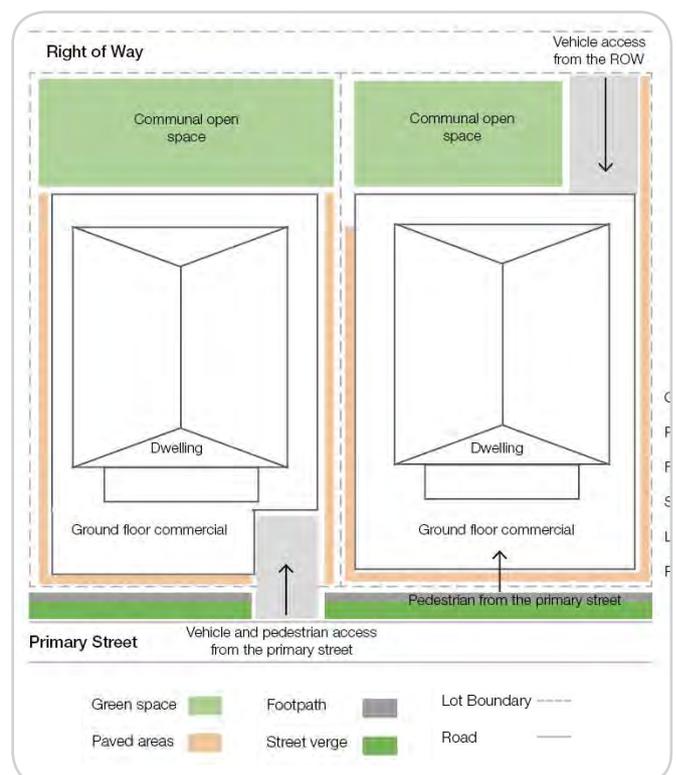


Figure 27: Indicative lot layout of 'mixed use development'

4.3 Streetscape types

The collection of individual built form typologies make up the overall character of a streetscape along with other elements of the public realm.

The initial site analysis undertaken made an observation of what type of streetscapes currently exist throughout the area. #ShapeOurPlace now proposes to use streetscape types as a tool to guide the future character and development intensity of the area by suggesting appropriate built form typologies and densities that align with the streetscape characteristics.

In order to manage the transition from Canning Highway into the residential streets, the density, scale and form of development should be reduced as it moves away from the highway. Canning Highway will typically be characterised by high to high-medium density products such as apartments, mixed use developments and terrace houses. Behind the highway a more medium density product including terraces, town houses and smaller apartments will allow the development scale and density to be stepped down. This will then be further stepped down into the low-medium/low density areas where built form including town houses, manor houses and single houses are more appropriate.

#ShapeOurPlace proposes three different streetscape types to facilitate this transition from Canning Highway to the residential suburban streets.

- Highway streetscapes: for high density (R80 and greater), high-medium density (R60-50) and mixed use products.
- Urban streetscapes: for high-medium (R60-50) and medium density (R40) products.
- Suburban streetscapes: for medium (R40) low-medium (R30) and low density (R20 and lower) products.

Identifying the type of streetscape gives the City, the land owners and the developers a clear understanding of the level of development intensity envisaged for the locality. The streetscape type guides the look and feel of the street from the public realm and pedestrian scale. The streetscape also describes those elements that impacts on the character of the street however are outside the private lot, including footpaths, verge widths and treatments, street trees and vehicle movement.

The streetscapes provide an indication of what built form typologies are appropriate to achieve the desired streetscape and in turn create an appropriate transition. It is recognised that the existing Residential R80 coding that is present along parts of Canning Highway is more reflective of a high density development. It is not the intention of the study to reduce these codings.

The following pages provides an overview of the three streetscape types proposed within the #ShapeOurPlace study area, their characteristics and preferred built form typologies. It is intended that future development be reflective of the allocated streetscape.



Hovia Terrace, South Perth

4.3.1 Highway Streetscape

As the name suggests, this streetscape area relates to all lots that are directly facing Canning Highway. The streetscape rhythm and pattern for this category reflects high intensity development, comprising apartments, mixed use developments and terraces. There is variance in building heights and development intensity along the highway, with key nodes defining areas of higher mixed use activity.

The built form along the highway streetscape typically has nil or narrow setbacks, particularly where the ground floor is occupied by a non-residential land use. Generally, there are no street verges and footpath widths are varied. Some street planting may exist, however it is generally of a smaller, less established size due to the presence of awnings or proximity to the road. To create a strong relationship with the street, car parking in the front setback is discouraged for all forms of development.

Development in the highway streetscape should address the street and provide surveillance through use of balconies. Developments should exhibit high

quality design, utilising a range of building materials to assist break up the bulk and scale.

Highway streetscapes typically encompass high (R80) or medium density development (R60) and mixed use development.



Examples of Highway streetscape type, Perth

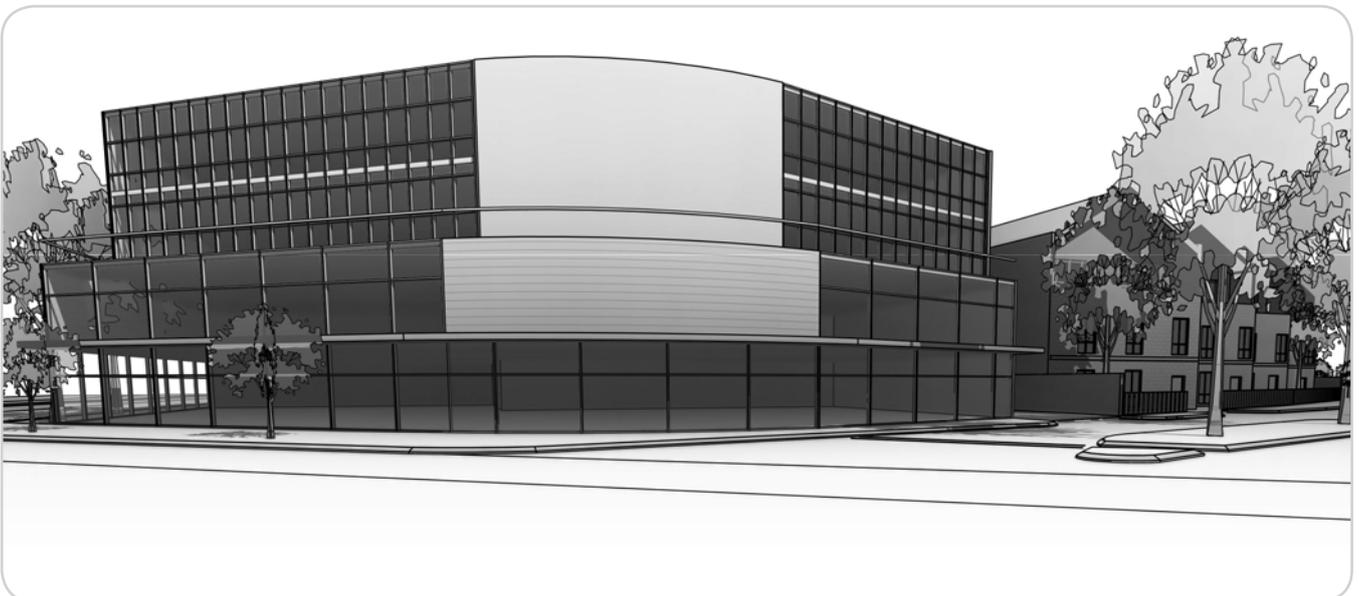


Figure 28: Model perspective of highway streetscape

4.3.2 Urban Streetscape

Properties identified within this category of streetscapes, are located immediately adjacent to Highway Streetscape lots. They represent a transition area between the highway area and lower density development situated further away from the highway streetscape. The form of development is similar to that of the highway however the scale of development is more reflective of the suburban streetscape. Development in the urban streetscape typically includes terraces, townhouses and small scale apartments.

The built form is located close to the street with courtyards provided in the narrow setback area. Street verges (paved or grassed) vary in width, however established street trees exist. The presence of footpaths facilitate pedestrian movement. Vehicle access is generally accessed from a single point or right of way, minimising disruptions in the streetscape. The built form has a strong relationship with the street through the use of windows and balconies.

Dwellings are located close to one other, with small side setbacks denser residential environment, whilst height limits facilitate a reduced building bulk and scale.

Urban streetscapes typically encompass medium density development ranging between Residential R60 and Residential R50.



Examples of Urban streetscape type, North Perth



Figure 29: Model perspective of urban streetscape

4.3.3 Suburban Streetscape

This streetscape reflects a more traditional suburban development and lot layout. Development in this streetscape needs to integrate with existing residential areas, ensuring that any new development is compatible with existing streetscape patterns. The suburban streetscape comprises manor houses apartment, townhouses and single houses. The suburban streetscape includes the area known as the 'edge'. These are those lots which abut directly onto a property outside the consolidated study area.

The built form is typically setback from the street to enable large landscaped front gardens. Street verges generally wide, grassed with establish street trees exist. The presence of footpaths facilitate pedestrian movement. Vehicle access to dwellings is generally via crossovers along the length of the street or from the right of way where possible.

Dwellings are setback from one another and building heights are limited to facilitate a more open residential environment.

Suburban streetscapes typically encompass medium density development ranging between Residential R40 and Residential R30 and low densities less than Residential R30.



Example of Suburban streetscape type, Mount Hawthorn

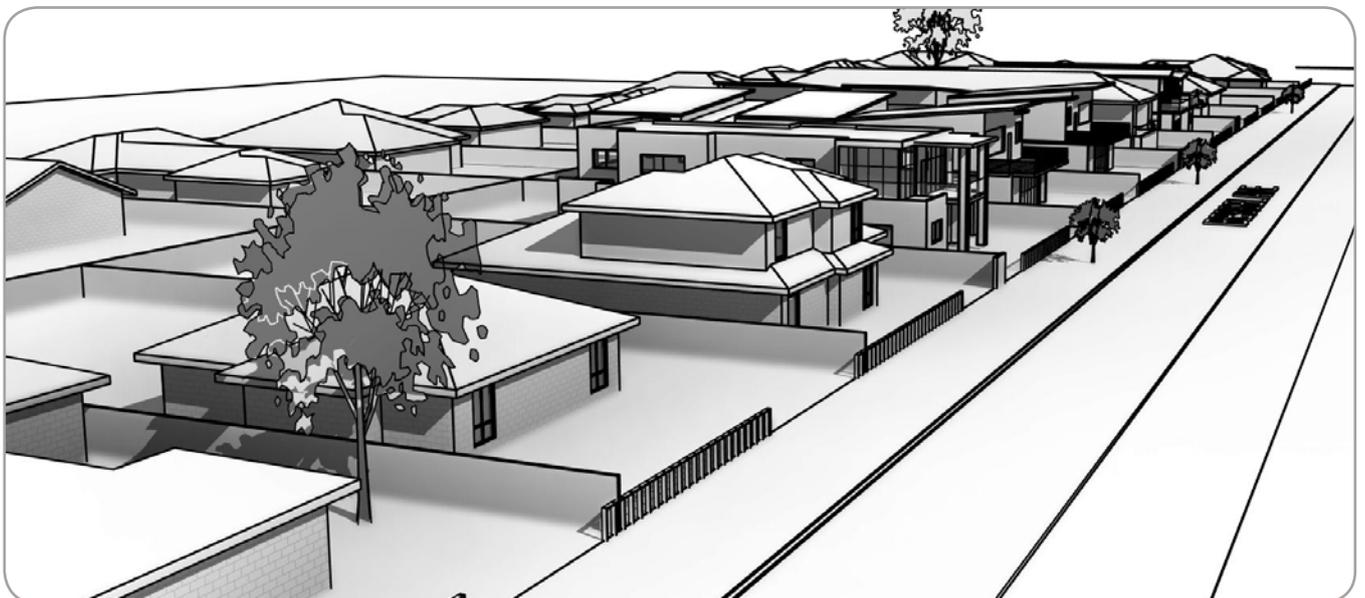


Figure 30: Model perspective of suburban streetscape

4.4 Streetscape plan

#ShapeOurPlace depicts a spatial plan detailing appropriate locations for streetscape types. The designation of streetscapes are reflective of both the community's desires as well as the Metropolitan planning framework. The streetscape plan is shown in Figure 31.

The streetscape plan should be viewed in conjunction with the indicative height plan (Figure 32) to understand the intensity of the development proposed in the location.



Residential apartment in Northbridge

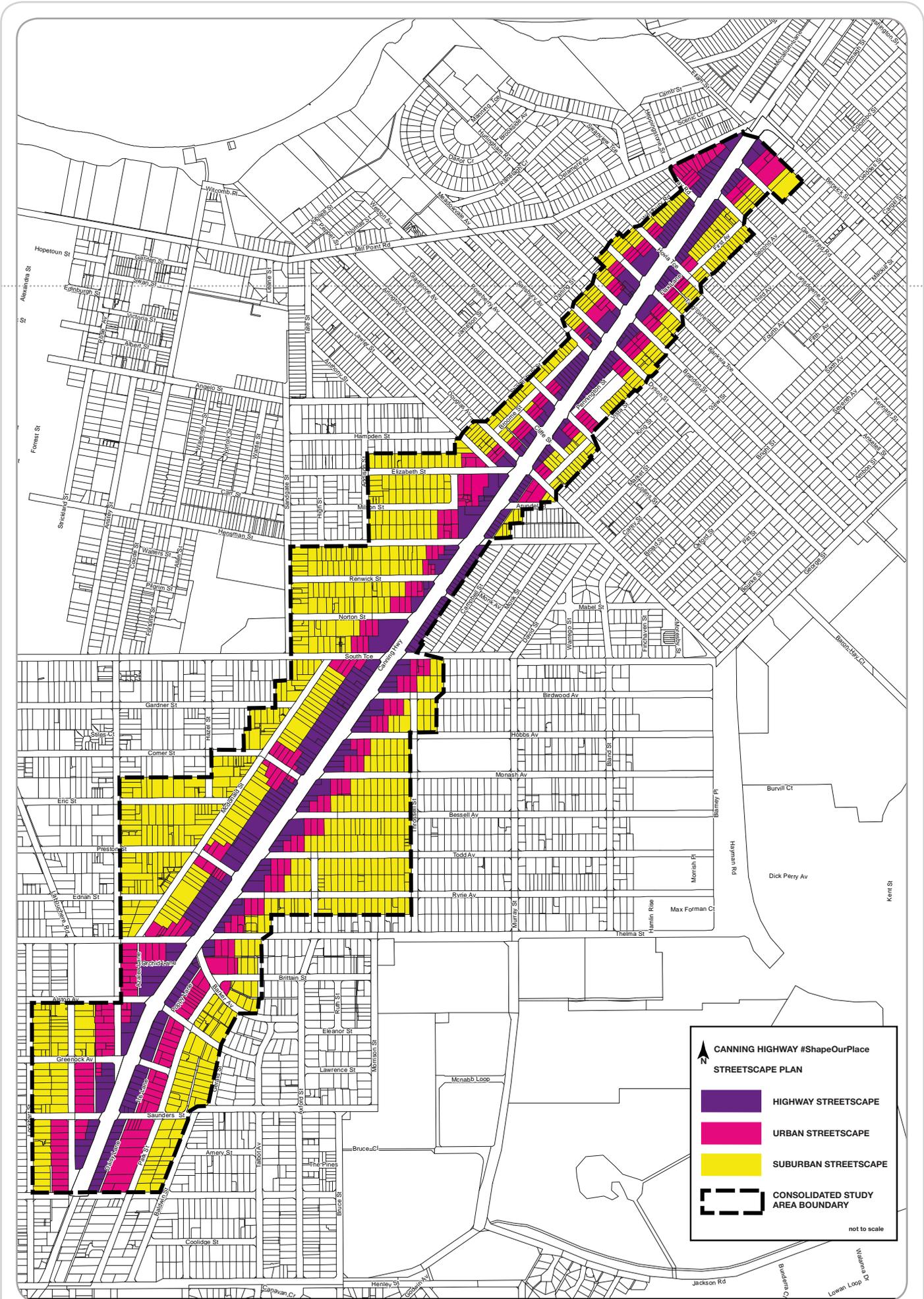


Figure 31: Proposed streetscape plan

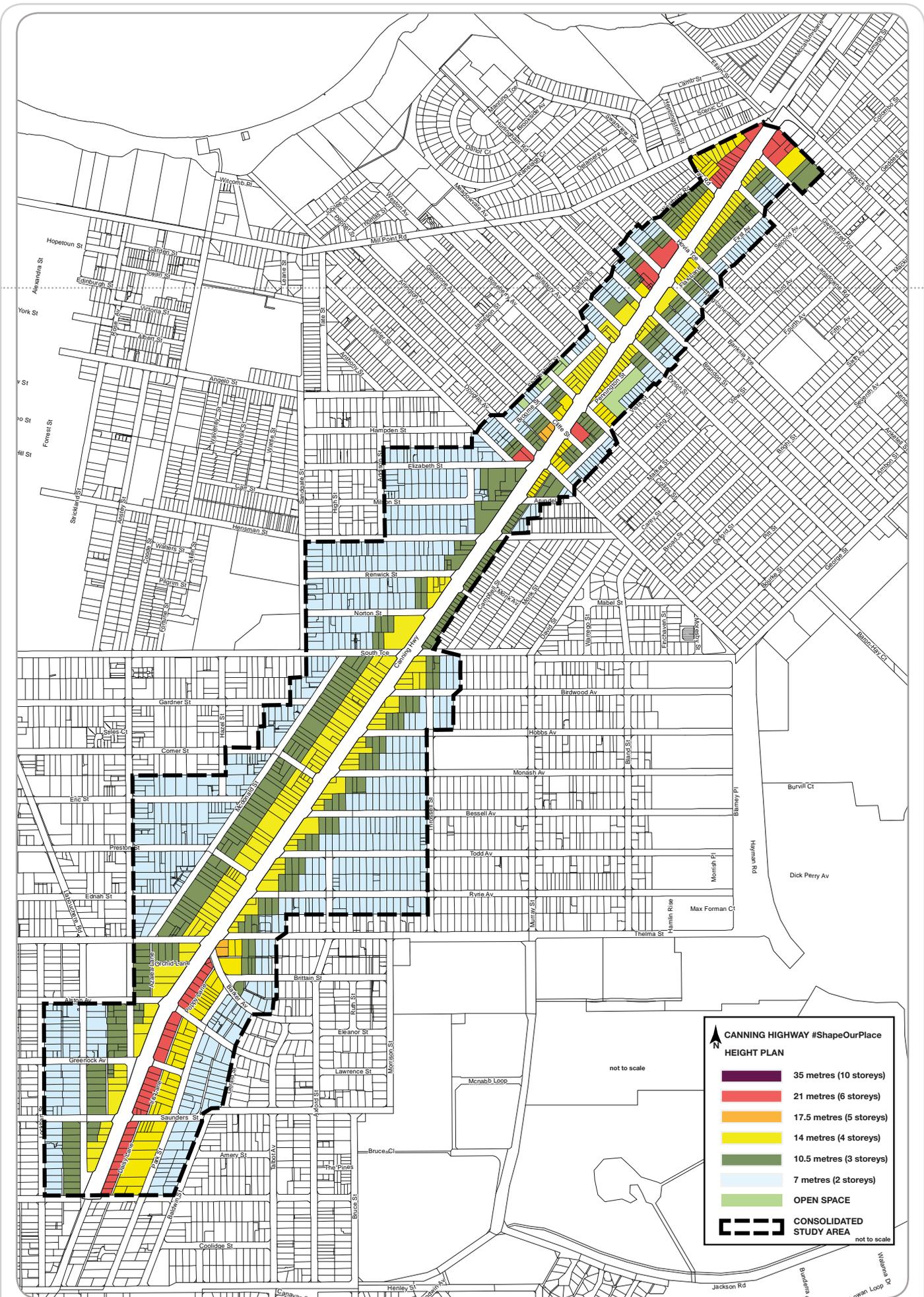


Figure 32: Proposed height plan

4.5 Local centres

The Canning Highway urban corridor includes small commercial local centres along its length, connected by medium to high density residential development and low scale commercial uses (Figure 33). #ShapeOurPlace does not propose rezoning any properties from 'Residential' to a non-residential zoning within the study area.

There are four nodes of commercial activity within the study area these occur, specifically where Canning Highway intersects with:

- Way Road/ Gwenyfred Road;
- Douglas Avenue;
- South Terrace; and
- Thelma Street.

4.5.1 Way Road/ Gwenyfred Road

This area is referred to as the 'Eastern Activity Centre' in the City's draft Local Housing Strategy and is recommended for separate planning consideration. However in recent State Government planning documents the area has not been identified as a significant future activity centre. Regardless, this intersection is a key gateway into the City of South Perth and has the opportunity to provide iconic buildings as an entry statement into the City, as well as a link with the secondary centre of Victoria Park.

4.5.2 Douglas Avenue

The local centre at the intersection of Douglas Avenue and Canning Highway provides a range of active commercial uses such as cafés and retail stores.

4.5.3 South Terrace

The local centre at the intersection of Canning Highway and South Terrace plays an important role in connecting local and regional traffic. This intersection includes the iconic 'Como Hotel' which represents

the largest Highway Commercial lot in this centre. It is envisaged that this centre will remain relatively low scale, with commercial uses contained predominantly on the ground floor.

4.5.4 Thelma Street

The local centre at the intersection of Canning Highway and Thelma Street is the smallest of the local centres. This centre is envisaged to provide local services such as consulting rooms, hair dressers and specialist retail shops to service the local community. There is an opportunity for cafés, restaurants and deli's along Barker Avenue where they are of a scale compatible with the surrounding residential area.

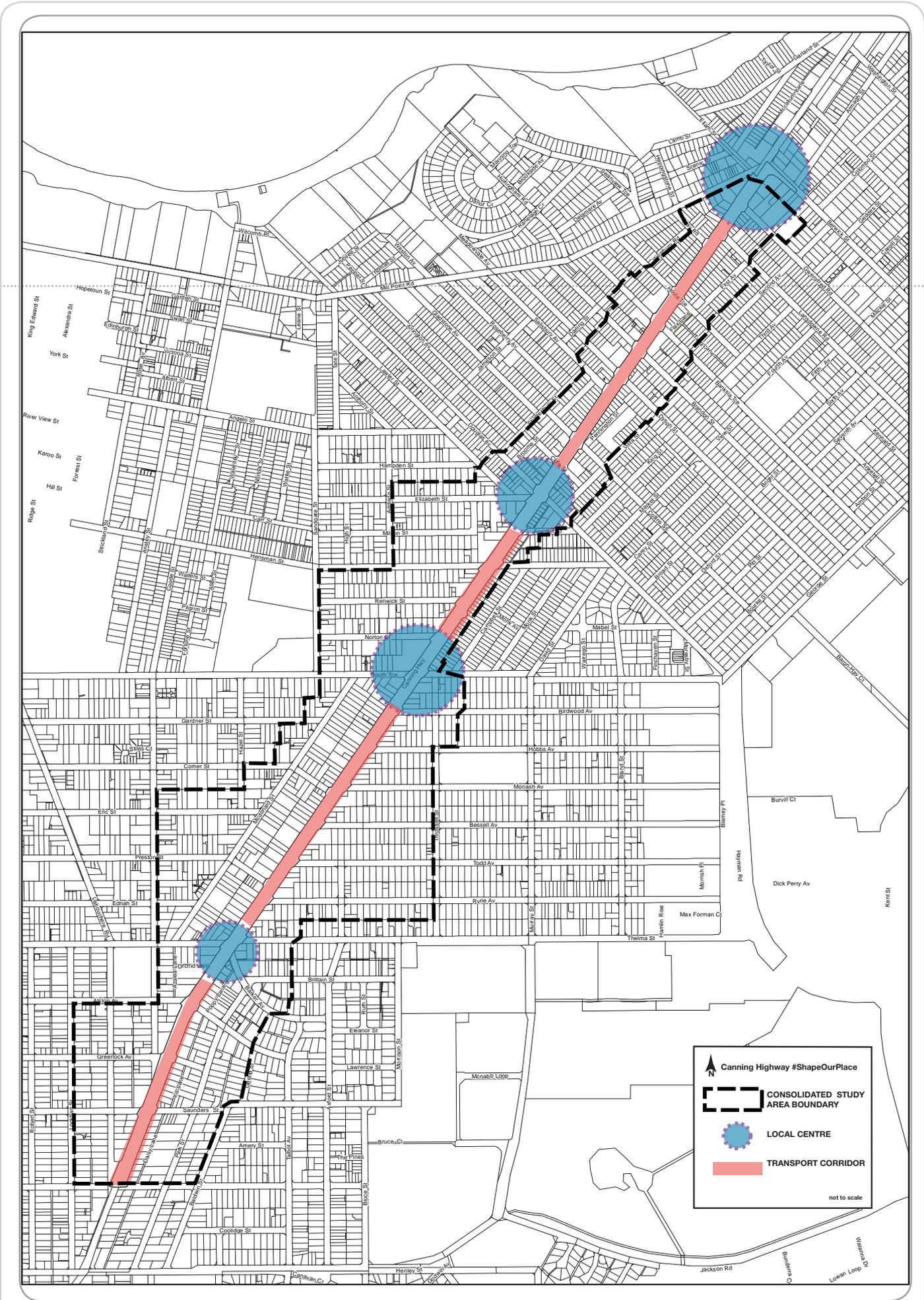
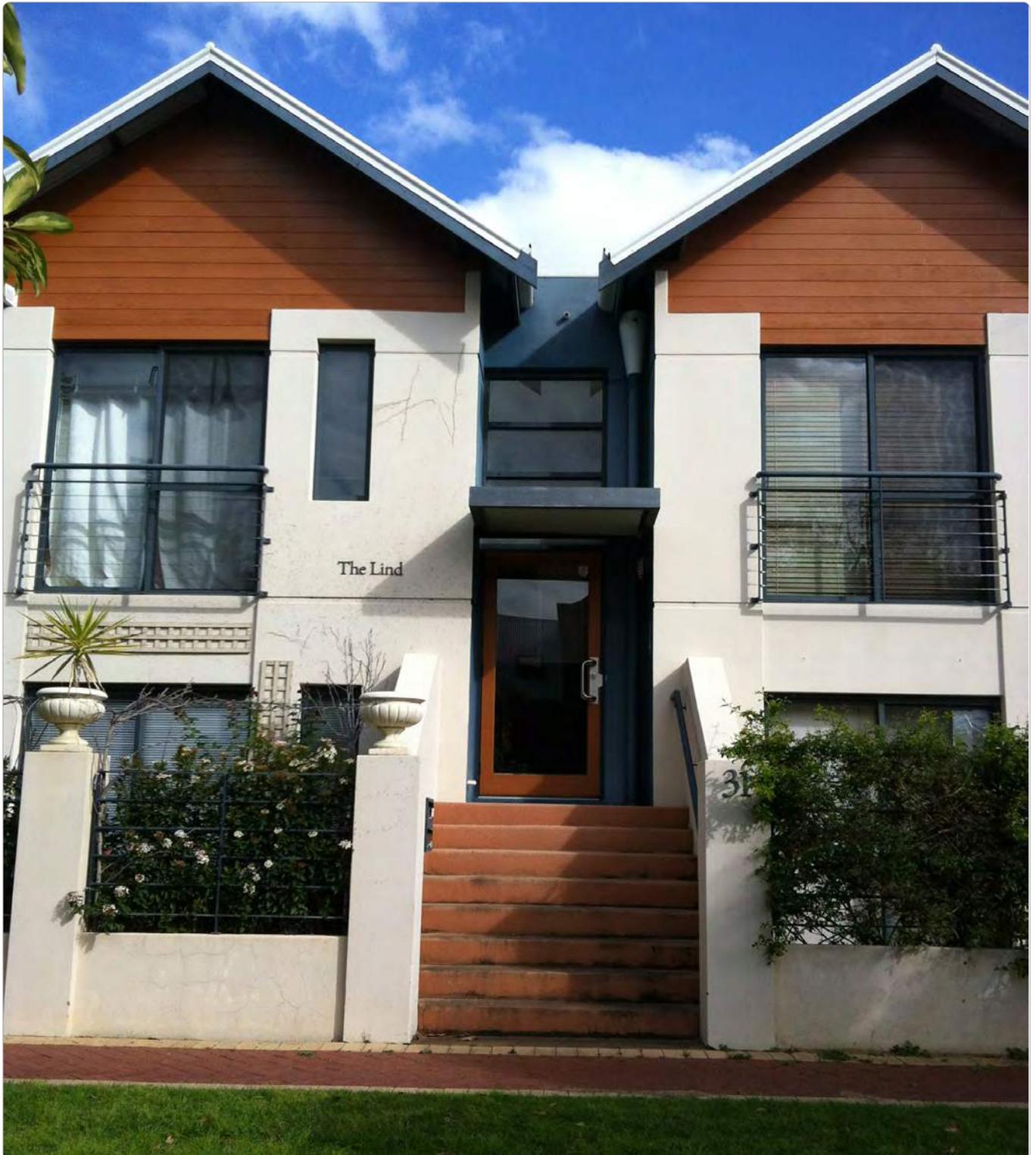


Figure 33: Local centres

Part 5 - Design Controls



Residential dwelling in North Perth

5.1 Introduction

The stakeholder and community engagement undertaken for this study highlighted a number of key issues and challenges needing to be addressed in relation to medium density development within the consolidated study area. While the community was generally receptive of medium density development, as suggested through the workshopping and built form typologies presented, there was concern that the current development control mechanisms will not adequately address the impacts of increased density, particularly in relation to bulk and scale, for local areas.

The study purposefully sought to dispel the general perception within the community that medium density translates to intense forms of development and results in a significant reduction in amenity for adjoining properties. The nomination of built form and streetscape typologies, as referred to and explained in Part 4, provide a foundation for more specific development control mechanisms to be introduced and applied for specific design and built form elements. It is suggested that the R-Codes form the basis for more specific development controls that relate to the City of South Perth and study area context.

The Residential Design Codes are the primary tool for residential development control within the City of South Perth. It is suggested that the City continue to use the R-Codes as the primary reference tool to inform density and general development control for residential development. However, it is also recommended that greater guidance for discretion and more stringent development controls be applied in certain circumstances, to ensure that the optimum and most appropriate development outcome is achieved for any new development proposed, within the study area.

In response to key issues and challenges identified through the consultation phase of the project, a framework has been developed as an initial step towards preparing a more formal set of design criteria for development located within the study area. The rationale and suggested design controls to address these concerns have been detailed in the following section of this report.



Pennington Lane

5.2 Application of the R-Codes

Residential density is defined in the R Codes and applied through local planning schemes. The R Codes provide a quantitative (deemed to comply) and qualitative (design solution) method of assessment. They also provide local governments the ability to vary code provisions through local planning frameworks to provide a local response to certain requirements. In addition, local planning schemes have the ability to include provisions that vary the R Codes, again to factor in local conditions.

The R Codes are divided into two key parts those being Part 5 – single houses, grouped dwellings and multiple dwellings in areas coded less than R30 and 6 – multiple dwellings, mixed use and activity centres. Within both parts, there are a number of provisions which are controlled by density and those that are not. Tables 4 and 5 and provides a breakdown of the provisions which are density controlled and those that are not for Parts 5 and 6 of the R Codes, respectively.

It is evident from tables 4 and 5 that those elements that are density controlled are elements that play a key role in the overall bulk and scale of the development.

Table 4: R Code Part 5 Provisions density and not density controlled

R Codes - Part 5: single houses, grouped dwellings and multiple dwellings in areas coded less than R30	
Density Controlled	Not density controlled
Site area	Communal open space
Street setbacks	Height
Lot boundary setbacks	Setback of garages and carports
Open space	Garage widths
Outdoor living areas	Street surveillance
Retaining walls	Street walls and fences
Visual privacy	Sight lines
Solar access	Appearance of retained dwelling
Outbuildings	Landscaping
Aged or dependent person's dwellings	Car parking
Single bedroom dwellings	Vehicular access
	Pedestrian access
	Site works
	Stormwater management
	External fixtures
	Ancillary accommodation

Table 5: R Code Part 6 Provisions density and not density controlled

R Codes - Part 6: multiple dwellings, mixed use and activity centres	
Density Controlled	Not density controlled
Building size (plot ratio)	Street surveillance
Height	Street walls and fences
Setbacks	Sight lines
Open space	Building appearance
Visual privacy	Outdoor living areas
Solar access	Landscaping
outbuildings	Car parking
	Design of car parking
	Vehicular access
	Site works
	Retaining walls
	Stormwater management
	Building diversity
	External fixtures

Table 6 outlines the parts of the R Codes identifies those development controls relating to medium density development that are considered relevant to the study objectives.

The R-Codes perform a key function in determining appropriate development and design of buildings and siting for development within the study area. In instances where there is opportunity to strengthen the provisions outlined in the R Codes to achieve a better and more suitable outcome that relates to the local context, it is suggested that additional design control measures be adopted that are different to those specified in the R Codes.

The focus of any design framework should be on the discretionary elements of the R-Codes (Design Principles) as this is where locally specific interpretation is needed to achieve locally desired outcomes.

Table 6: Relevant design elements

Relevant part of R-Code	Relevant design elements to this study
Part 5: Design elements for all single house(s) and grouped dwellings; and multiple dwellings in areas coded less than R30	5.1 Context 5.2 Streetscape 5.3 Site planning and design 5.4 Building Design (5.5 Special Purpose Dwellings)*
Part 6: Design elements for multiple dwellings in areas coded R30 or greater; within mixed use development and activity centres	6.1 Context 6.2 Streetscape 6.3 Site planning and design 6.4 Building Design

Table 1 : General site requirements for all single house(s) and grouped dwellings; and multiple dwellings in areas coded less than R40

Table 4 : General site requirements for multiple dwellings in areas coded R40 or greater, within mixed use development and/or activity centres

5.3 Design Controls Framework

It is recommended that a Design Controls Framework be established comprising a combination of the R Codes provisions as well as specific built form provisions to help guide future development. Design elements have been identified as needing more specific development control measures in order to achieve the overall strategic objective of the study for medium density development.

It is also recommended that some elements should remain discretionary to facilitate appropriate design. Any discretionary built form design elements should be provided as provisions in local planning policies.

Where no discretion is recommended, the City can consider incorporating provisions into the Town Planning Scheme No. 6. Those elements where no discretion should apply, are the built form elements which play a vital role in achieving the project objectives and outcomes.

Draft design objectives have been prepared to outline the intention of the provision and guide what the vision is for those elements that are suggested to be discretionary.

5.3.1 Building typologies and streetscapes

As outlined earlier in this study report, due to the extent and diversity within the study area, it has been divided into five Places. The boundaries of each of these Places has been based on similar character, lot configuration and size and the general concentration of community feedback based on location.

The establishment of both streetscape and built form typologies, as outlined in Part 4 of this report, provides a solid basis from which further and more specific design controls can be introduced. The streetscape and built form typologies have a direct relationship, and will ensure that there is a consistent approach applied, when developing and subsequently implementing specific policy provisions for each of the areas.

Suggested development control

The streetscape typologies of Highway, Urban and Suburban ensures that any medium density development responds to and delivers a transition that minimises the impact on amenity and streetscapes for areas immediately abutting the study area and is contained, from a community perspective, within a defined area.

This built form element should be discretionary as the built form typology appropriate and achievable on the site will be dependant on the lot size, applicable zoning and feasibility of the development. The preferred built form typologies could be listed in a local planning policy.

To ensure an appropriate built form response for properties located within the study area, it is suggested that clear guidance with regard to what built form typology is considered appropriate for each streetscape type be provided. This type of development control measure will ensure that any new development proposed will meet the desired streetscape character and built form typology that

Table 5: Preferred housing typologies for streetscapes

		Housing Typology				
		Single house	Townhouse	Manor house apartment	Terrace	Apartment
Streetscape Type	Highway	X	X	X	✓	✓
	Urban	✓	✓	✓	✓	✓
	Suburban	✓	✓	✓	X	X

has been identified as appropriate for this study area. Table 5 provides a matrix that identifies the built form typologies considered appropriate for the relevant streetscape type.

A local planning policy should include clear objectives for each of the three streetscape types as detailed below.

Highway

The streetscape rhythm and pattern for the highway streetscape reflects high intensity development within a non-discretionary height limit, comprising apartments and medium rise terraces. There is variance in building heights and development intensity along the highway, with key nodes defining areas of higher mixed use activity. There is a strong relationship with the urban environment of the street with development typically including a harder street edge. Developments are typically in the form of apartments and terraces and are located close together to provide an urban boulevard.

Urban

The urban streetscape represents a transition area between the highway area and lower density development situated further away. The form of development is similar to that of the highway however the scale of development is more reflective of the open streetscape. Development in this location varies from terraces and small scale apartments.

Suburban

The lots located within this streetscape area reflect a more traditional suburban development and lot layout characterised by open space and a softer landscaped edge. Development in this area needs to integrate with existing residential areas, ensuring that any new development is compatible with existing streetscape patterns. The suburban streetscape comprises manor houses, townhouses and single houses.

5.3.2 Building Heights

Building height is often interpreted by the community as the most notable feature of bulk and scale for a building, and is considered one of the most contentious design issues relating to this study. The assignment of building heights in specific locations is based on a combination of streetscape and built form typologies. It is suggested that height is concentrated in key locations where it will deliver an acceptable outcome and distribution of building height that is appropriate to that location.

Heights above two storeys should be concentrated along the highway and at key locations such as intersections with commercial nodes. Generally, existing building height limits within the study area are predominantly two storeys with some areas permitting three storeys along and adjacent to the highway. There is potential to increase the height limits in some locations to permit medium-density development and promote redevelopment.

A height plan has been prepared (refer Figure 38), based on what is considered an appropriate scale of development for the study area. The heights specified on the height plan are the maximum permissible heights based on location, as measured from natural ground level and variations to the heights should not be permitted. This will provide a level of certainty to the community and ensure that the scale of development remains appropriate to the locality. The maximum heights should not be viewed as a given. Some lots in their current form are not considered an appropriate size to support the level of development proposed and as a result a sliding scale for heights is recommended based on an increased lot size. This is to encourage amalgamation of lots. This is further discussed in Part 6 – Strategic Considerations.

There are no minimum lot sizes required to achieve a two storey height limit, as this height is permitted as of right. Similarly no minimum lot size has been prescribed for three storey developments, as there are properties that already exist in the area that permit three storeys and the study does not intend to reduce

the development potential of existing lots.

Heights in excess of three storeys will be predominantly concentrated in the 'Highway' streetscapes, with small pockets in the 'Urban' streetscapes. Table 6 provides a suggested approach relating to development control for building heights, whereby the minimum lot size required to achieve heights greater than three storeys is provided. The R20 average lot size of 450m² has been used as the increment to for greater heights. A large portion of the study area has a base residential density of R15 or R20 therefore, using the R20 average lot size gives a general indication of the common lot sizes throughout the precinct. Therefore lot amalgamation will be required in order to achieve the maximum permissible height outlined in Table 6.

Suggested development control

Building height should not be discretionary. It is important that the heights proposed are the maximum permissible heights so that the community has a level of certainty about what could be developed in the area. Building heights can be listed in the scheme similar to City's current height requirements.

It is suggested that the City amend the existing height plan in Town Planning Scheme No. 6 to reflect the proposed height plan. This will require further consultation with the local community. Any changes to the height plan will need to be preceded by recoding to allow higher density. No changes to the height plan are recommended until the relevant residential coding is amended.

It is also suggested that a design guideline framework

include a sliding scale for permissible heights. It is not recommended that this be included in the scheme, unless a 5% site area variation is included, as this could be considered too prescriptive.



Residential apartment in East Perth

Table 6: Proposed minimum lot sizes to achieve building heights

		Permissible building height			
		2 & 3 storeys	4 storeys	5 storeys	6 storeys
Streetscape Type	Highway	No minimum lot size	900m ²	1,350m ²	1,800m ²
	Urban	No minimum lot size	1,350m ²	-	-
	Suburban	No minimum lot size	-	-	-

5.3.3 Building Design - Facade design and treatments

Building design comprises many different elements that can result in either good or bad design outcomes. Appropriate development control and design guidance can improve the design quality of the built form that will help achieve better built form and aesthetics of buildings and streetscapes; promote developments that will be a long term asset to the neighbourhood and maximise the amenity, safety and security afforded by the development and to the public realm.

The articulation of buildings, including the façade of buildings, will help ameliorate the sense of bulk and scale, if done appropriately. Through the use of articulation, buildings offer visual interest to the street, and definition of the building structure.

Suggested development control

It is suggested that any design guideline framework or built form provisions require development to include appropriate design treatments that assist to add interest and reduce the bulk and scale of a development. Built form elements relating to building design should be discretionary to enable creativity.

Suggested treatments may include variation to:

- colours;
- materials;
- setbacks;
- heights;
- roof pitches.

Furthermore, building articulation should be encouraged through appropriate design and planning policies, to ensure that solid facades are avoided. Articulation can be achieved through such design features as:

- insertion of balconies;
- adding awnings and eaves to a proposed building;

- windows and openings that address the street.

The suggested design objective is:

Developments should be designed so as to minimise the bulk and scale on the street and surrounding properties through the implementation of varied facade treatments and materials and building articulation.

5.3.4 Building Design - Sustainable Design

Sustainable building design should be a requirement for all new dwellings. The community is particularly interested in seeing that any development proposed incorporates sustainable design principles. Such design measures as material selection, orientation and siting of dwellings and outdoor living areas, and the inclusion of windows and openings in locations which offer cross-ventilation are design control areas that the City should develop and implement as part of any development application.

Suggested Development Controls

It is suggested that the following design controls and provisions be considered and included as a part of any future planning policies that may be developed for residential development within the Study Area. They should remain discretionary.

- Indoor and outdoor living areas should be located on the northern side of the dwelling to capture the benefits of passive solar design;
- Windows and openings should be located facing the direction of prevailing breezes with openings located opposite each other to maximise air flow through the dwelling creating cross-ventilation;
- Windows on the east and west elevations should be minimised or appropriately shaded. Eaves or fixed awnings should be used to shade all major openings on the northern, eastern and western sides of a dwelling;
- Notwithstanding the requirements of the Building Codes of Australia, dark roof and wall colours will generally not be supported. Light coloured

roof finishes ensure that heat is reflected and the internal temperature of the dwelling is reduced.

5.3.5 Setbacks - Street

Primary street setback areas are important parts of the streetscape and are fundamental to the amenity and particular character of residential localities. They should enable a clear view between homes and the street and provide a comfortable and secure transition between homes and the street. From a visual point of view, an open setback area in suburban areas provides a more attractive setting for the building.

Upper floor street setbacks are also an important built form element that assists to reduce the bulk and scale of a development. Low density areas tend to have large setbacks whereas higher density areas tend to have smaller setbacks. In areas coded R40 or higher, it is suggested that an additional setback be required for upper levels so as to reduce the impact of large and bulky dwellings that detract from the established streetscape.

Primary street setbacks relating to properties on the highway need careful consideration. Given the prevalence of residential development that is likely to occur along the length of Canning Highway, it is important to manage the interface this development will have with the highway. It is recognised that by limiting the extent of the commercial development along the highway, particularly on the ground floor, there may be potential urban design issues that will result from this. This is further discussed in Part 6 – Strategic Considerations.

Suggested Development Controls

It is suggested that street setback not be discretionary. Setbacks play an important role in achieving the desired streetscape and assist to manage open space.

The following nominal minimum street setbacks, which include garages but exclude carports in terms of urban and suburban streetscapes, are suggested to be applied for all street frontages, based on

streetscape typology:

- Highway: To be determined following further investigation*
- Urban: 2-4 metres
- Suburban: 4-6 metres

Upper floors should be setback from all street frontages, with a suggested additional 2.0m setback being required.

*It is recommended that setback provisions for properties that abut the highway be further investigated with the overall objective to retain primarily residential land use along the highway. With the exception of those key commercial nodes that have been identified, setbacks will need to address both the amenity expectations for the residential development, while still ensuring that the highway function is not hindered by residential development.

A nominal 2 metres setback is proposed for development on the highway where there are no dwellings directly abutting the street or the ground floor is raised or a solid fence is provided. 4 to 6m setback where ground floor contains dwellings abutting the street.



Example of an urban streetscape in East Perth

5.3.6 Setbacks - side and rear

Side and rear setbacks play an important role managing the sense of bulk of a building viewed from the street, and are important to providing an interface to adjoining properties. #ShapeOurPlace proposes that setbacks consider the nature of the streetscape. Upper floors should also be required to be setback from lower floors.

Where a highway property abuts an open streetscape, the rear setbacks may need to be increased further to ensure that an appropriate transition is provided within the site.

Suggested Development Controls

Setbacks play an important role in achieving the desired streetscape outcomes and assist to manage open space requirements. It is suggested that side and rear setbacks not be discretionary.

The deemed-to-comply setback provisions in the R-Codes are considered appropriate to achieve the outcomes desired by #ShapeOurPlace.



Stepping of heights and providing internal setbacks, Claremont

5.3.7 Open space, outdoor living area and communal open space

A key factor that influences the bulk and scale of a development is the amount of open space that surrounds a building and exists between buildings. Regardless of the building typology in the area, open space should be adequate and not varied to a scale that shifts the character of a place from suburban to urban, or to a level reflective of a higher density. It is not considered acceptable to compromise the level of open space in order to achieve a larger development or one with more dwellings.

In addition to open space, private and communal open spaces should be adequate and of a useable size. Any planning policy, design guidelines and/or scheme provisions will therefore need to make appropriate recommendations for these spaces.

Suggested Development Controls

Being cognisant of the underlying density coding and respective minimum open space requirements outlined in Tables 1 and 4 of the R Codes, it is suggested that the City of South Perth consider using the following minimum open space design objectives:

Highway

Highway streetscapes are to provide highly functional, attractive communal and private open spaces to facilitate a desirable retreat from the urbanised environment of the highway.

Urban

Urban streetscapes are to provide functional open spaces that enable established gardens whilst still facilitating an urban environment.

Suburban

Suburban streetscapes are dominated by open space to provide for landscaping, access, living areas and an open character.

5.3.8 Visual Privacy

Visual privacy is a key element to consider when contemplating an intensification of development in an area. This is particularly important to note as topographical profiles within the Study Area mean that parts of Canning Highway is higher than the surrounding properties in some locations, particularly on the western side, where the land drops away quite significantly towards the Swan River.

To ensure that appropriate design responses are incorporated into the design of new development, the application of the streetscape typologies and the underlying density coding should provide better guidance and relationship between transitioning development types and reduce the potential for highly different development being located adjacent to one another.

Suggested Development Controls

Visual privacy requirements can remain discretionary and can be managed through policy provisions or through the application of the deemed-to-comply visual privacy provisions in the R-Codes. The R-Code deemed-to-comply provisions are considered appropriate in this instance as they do not relate to streetscape character.

The following design objective should apply.

Development should be designed in manner that maximises the visual privacy on the adjoining properties through appropriate setbacks, screening and orientation.

5.3.9 Solar access

Solar access is an important consideration and contributor to amenity. The intensification of development on sites affected by this study should not result in a reduced level of amenity, resulting from significant overshadowing, between properties. Similar to visual privacy considerations, the topographic profile is particularly important to note as in many locations Canning Highway is higher than the surrounding properties which could result in greater overshadowing.

Suggested Development Controls

Solar access requirements can remain discretionary and can be managed through policy provisions or through the application of the deemed-to-comply visual privacy provisions in the R-Codes. The R-Code deemed-to-comply provisions are considered appropriate in this instance as they do not relate to streetscape character.

The following design objective should apply.

Development should be designed in manner that minimises the overshadowing impacts on the adjoining properties through appropriate setbacks, orientation and building height.

5.3.10 Garages

With the likely increase in density, along with the reduction in access points onto and off the highway, on street parking will need to be systematically removed wherever possible, and on-site parking required for all new development. The location of on-site parking will play an important role on the streetscape pattern and pedestrian environment, and as such design controls that minimise this impact will be a necessary requirement to ensure that streetscape character is preserved. Guidance, in particular for garages, will need to be clearly provided. With the potential for garages to dominate the presentation of a dwelling to the street, and sometimes overwhelm the street frontage, the placement of garages and their extent in relation to the remainder of the dwelling will need to be clearly defined.

Suggested Development Controls

It is suggested that requirements for garages can remain discretionary and the provisions included in a policy. Policy provisions could include the following design controls:

- All new development should provide on-site car parking. In the instance the development proposes a garage, the location of the garage should be either behind the building line of the proposed dwelling or to the rear.
- Clear guidance should also be provided that highlights the requirement for the extent of the garage to be less than 50% the total frontage of the dwelling.
- In the instance of manor house apartments, undercroft car parking will be required, and/or integrated into the design of the building.
- The number of crossovers will need to be reduced onto site.

The following garage design objectives are suggested:

Highway

Garages and parking areas are located away from the street frontage, or screening is used to provide an attractive, enjoyable street environment.

Urban

Garages and parking areas are located away from the street frontage, or screening is provided to provide an attractive, enjoyable street environment.

Suburban

Garages are not the dominant visual structure on the lot, and are located and designed to provide a facade that integrates with the character of the dwelling.



Example of a garage in South Perth



Example of a garage in Yokine

5.3.11 Landscaping

Landscaping is a key component of developments that helps to break up the bulk and scale and provides an attractive streetscape environment. Front gardens give an area a welcoming and pleasant feel, so it is important that front setbacks have substantial vegetation and the gardens are displayed to the street. Landscaping and well-designed front gardens ensure that dwellings do not become dominated by impervious surfaces. Where open spaces are proposed, both private and communal, a minimum percentage of the area to be landscaped should be specified. In addition, where possible the number of crossovers should be minimised to enable verge plantings. In some parts of the study area this may be achieved via amalgamation of lots and redevelopment as medium density grouped or multiple dwellings where access is consolidated or provided via a right of way.

Suggested Development Controls

It is suggested that requirements for landscaping can remain discretionary and the provisions included in a policy or the deemed-to-comply landscaping, setback and access provisions in the R-Codes are appropriate to achieve the outcomes desired by #ShapeOurPlace.

Focus on setbacks and open space provides the necessary space for landscaping.

In addition to the R-Codes the following design controls should be considered to encourage greater landscaping.

- Minimum percentages of soft landscaping to be provided within the front setback.
- Removal of trees on site shall be replaced with the equal amount.

5.3.12 Fencing

The location and height of walls and fencing in the street setback area has a significant impact on the streetscape. The desire is to see streetscape appearance preserved in order for it to offer an attractive and safe pedestrian environment.

For properties located on the highway, in particular, fencing and wall treatment, will require clear guidance and development controls in order to preserve the pedestrian environment, and not impact on it negatively. Large blank walls should be actively discouraged. It is noted that the City's local planning policy P350.7 relating to Fencing and Retaining Walls allows solid fencing to a maximum height of 1.8m along the following roads within the study area Canning Highway, Douglas Avenue, Labouchere Road (Mill Point Road to Thelma Street), South Terrace, Thelma Street (Labouchere Road to Canning Highway) and Way Road. The rationale for this provision would be to alleviate noise from the street as well as provide a clear separation between the highway and property, affording privacy as well.

It is also important that passive surveillance is facilitated through design. Every dwelling must contribute to the safety of its neighbourhood by allowing a high level of passive surveillance.

The preferred streetscape is one without front walls or fences. If a fence or wall is to be built, low fences and walls will provide the most desirable outcome. They make streets more open, attractive and hospitable places to live.

Suggested Development Controls

Given the contribution fencing and walls have on the streetscape character, it is important that the construction and style of fencing is managed well. Through appropriate development controls such as the restriction of height and the requirement for fencing to generally be of a low profile, it will ensure that streetscape character is preserved and not compromised.

To minimise the potential for 1.8m solid fences along

the length of the highway, it is suggested that solid fences be permitted to 1.2m and the additional 600mm should be visually permeable.

This will require an amendment to the City's local planning policy P350.7 relating to Fencing and Retaining Walls which currently allows 1.8m high fences along Canning Highway, Douglas Avenue, Mill Point Road (Labouchere Road to Canning Highway), South Terrace, Thelma Street (Labouchere Road to Canning Highway) and Way Road.

1.8m fences are typically allowed to minimise the noise impacts of the road. Other mechanisms such as double glazing should be considered for these properties.

There is an opportunity to incorporate artwork into fencing to add interest and activate the street.



Example of a visually permeable fence in South Perth



Example of a fence in Yokine

5.3.13 Access

There is a strong desire to see access onto and from the highway minimised wherever possible. Both the stakeholders and the community recognise that the reduction in the number of local road points to the highway will result in increased traffic in residential streets. Investigations into how this will be achieved and appropriately managed will need to be undertaken. This is further discussed in Part 6 – Strategic Considerations.

To optimise the development potential of lots fronting the highway, access to these lots will need to be provided by a laneway/ROW to the rear of these properties. The provision of laneways that will provide access to the rear of these properties will need to be programmed and facilitated by the City and land developers.

Over time Main Roads WA will seek to reduce direct access from properties onto Canning Highway. Alternative access options that could be considered include:

- A requirement to cede land to facilitate the development of a right of way;
- Providing access from the secondary street;
- Providing access via another street by obtaining land from rear properties; and
- Encouraging amalgamation of lots from the Highway to the rear to shift the point of access.

Removing primary street vehicle access should not be limited to those properties along Canning Highway. Managing access from residential streets in the urban and suburban streetscapes facilitates the establishment of green street verges by reducing the number of cross overs. Where a right of way exists, access to properties should be from the rear. Where lot amalgamations occur that results in a consolidated development, vehicle access should be from a single point. These matters should be clearly shown on a Development Application.

Suggested Development Controls

It is noted that there will need to be further investigation undertaken to understand how the reduction of access from the highway, and provision of rear access to those sites that abut the highway, can and will be provided. Properties that are only accessible directly from Canning Highway are shown on Figure 10.

It is nominally suggested that gradually removing access from Canning Highway will best be managed through making it a requirement of Development Approval that access is not permitted from the highway for all new development proposed.

The provisions for changing access arrangements will need to be managed through the scheme. Any changes to access arrangements should be discussed with Main Roads WA and the Public Transport Authority to ensure a coordinated approach and response is taken.

Suggested development controls could include the following:

Highway Streetscape

For developments within the highway streetscape, developments shall provide a 6 metre right of way to enable vehicle access from the rear.

Where access can be obtained from the secondary street, a 6 metre right of way is not required, unless required to facilitate future access to adjacent highway lots.

Vehicle access hierarchy

The following hierarchy is suggested when considering vehicle access.

1. From a right of way;
2. From the secondary street;
3. From the primary street from a single point (access to more than one dwelling); and
4. From the primary street to an individual property.

5.3.14 'Edge' areas

Properties that may be up-coded through scheme amendments prompted by this study, that are adjacent to unchanging properties, should be subject to additional controls that require setbacks, open space, and other relevant design considerations to mimic the lower density code along that property boundary. Such controls provide reassurance to neighbours that the increased density will not subject them to a different built form impact that could not otherwise be built at the existing density.

5.3.15 Commercial areas

There are areas along the highway that are zoned for 'Highway Commercial'. The intention is that where these properties exist, mixed use developments should be accommodated. #ShapeOurPlace focusses on the built form outcome rather than the building composition. Therefore the development standards that apply to the residential areas will generally also apply to the commercial properties. The only difference will be in relation to the street setbacks. Ground floor commercial developments can have a nil setback in order to create an active urban edge to the street.

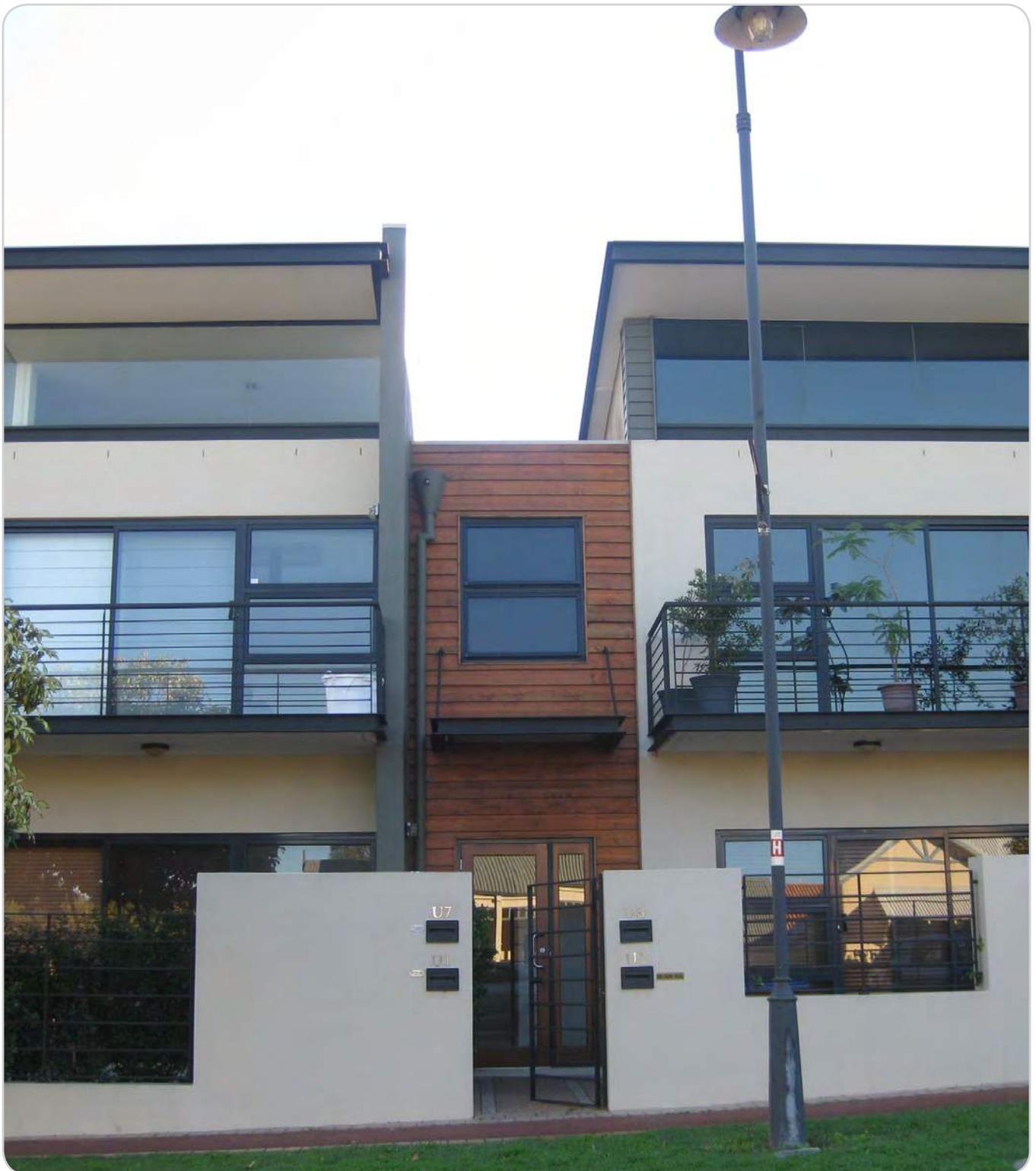
In locations where commercial development is permitted, developments should form a relationship with the public realm. Land uses will be determined in accordance with the land use permissibility under the local planning scheme. It is suggested that focus be placed on the ground floor treatments, that will assist in proving the relationship of the building interface with the street.

Suggested Development Controls

Commercial and mixed use developments should apply the following design responses to add interest and activation to the public realm.

- Large windows (mandating a minimum percentage of glazing);
- Al fresco dining, where appropriate;
- Use of public art;
- Use of varying materials;
- Awnings; and
- Street infrastructure - Planter boxes, benches, bike racks.

Part b - Strategic Considerations and Recommendations



Residential apartment in North Perth

6.1 Strategic Considerations

This study has taken a long term view of the future development of the study area. Part 5 highlights the suggested development control mechanisms that should be considered and incorporated into a local planning policy framework. To ensure that the development control mechanisms can be achieved, there a number of key strategic considerations that need to be factored into the future planning and development control framework.

Those strategic considerations that are considered fundamental to informing the greater planning framework that will deliver the built form outcome for the study area, have been identified as follows:

- Services
- Access
- Public Transport Strategy
- Highway Interface
- Incentives for development

Part 6 provides an overview to appreciate what each of these strategic considerations entail.

6.1.1 Services

Planning for increased density needs to consider the implications on the existing and planned capacity for infrastructure and key services such as power, waste water, gas and telecommunications. Discussions will need to be held between the respective servicing authorities and the City of South Perth, to understand and ensure that adequate planning is put in place to cater for the forecast demand on service infrastructure.

#ShapeOurPlace does not make recommendations on the upgrades required to essential service infrastructure and this will need to be planned for by servicing authorities in consultation with the City of South Perth.

6.1.2 Access

The increasing importance of Canning Highway as a key transport corridor, located close to the Perth CBD, means that the appropriate strategic planning needs to be put in place to ensure that its function is preserved and that any future road widening is unhindered. To this end, and reflecting stakeholder feedback, access onto and from the highway needs to be removed with redevelopment.

Reducing access to and from the highway will have a significant impact on those lots that currently about the highway and have direct access. In order to address this removal of direct access from the highway for these properties, Main Roads WA and the City will need to investigate ways and mechanisms to ensure that those affected lots are afforded appropriate access from the rear. Planning for and subsequent construction of rights of way (ROWs) to the rear of these properties will need to be considered as the preferred option to address the restricted front access from the highway.

The creation of a ROW at the rear of those properties fronting the highway with no alternative access will mean that 'bookend' properties that currently have access from a secondary street will also be affected. These lots will be instrumental in enabling the creation and ultimately providing access to the ROW.

Other strategic mechanisms that could be employed to facilitate this include:

- Encouraging lot amalgamation to facilitate vehicle access from the secondary street.
- Encouraging lot amalgamation to facilitate vehicle access from an alternative street.
- Creating easements over the rear of properties to facilitate access from the secondary street.

These indicative scenarios are illustrated in Figure 34.

It is recommended that a detailed access study be undertaken to determine the most appropriate solution for managing access along the highway. The study should provide a comprehensive review of land ownership arrangements, mechanisms for alternative access and the best options for implementation.

Alternative access arrangements can be implemented through a local planning policy or the application of a Special Control Area in the local planning scheme.

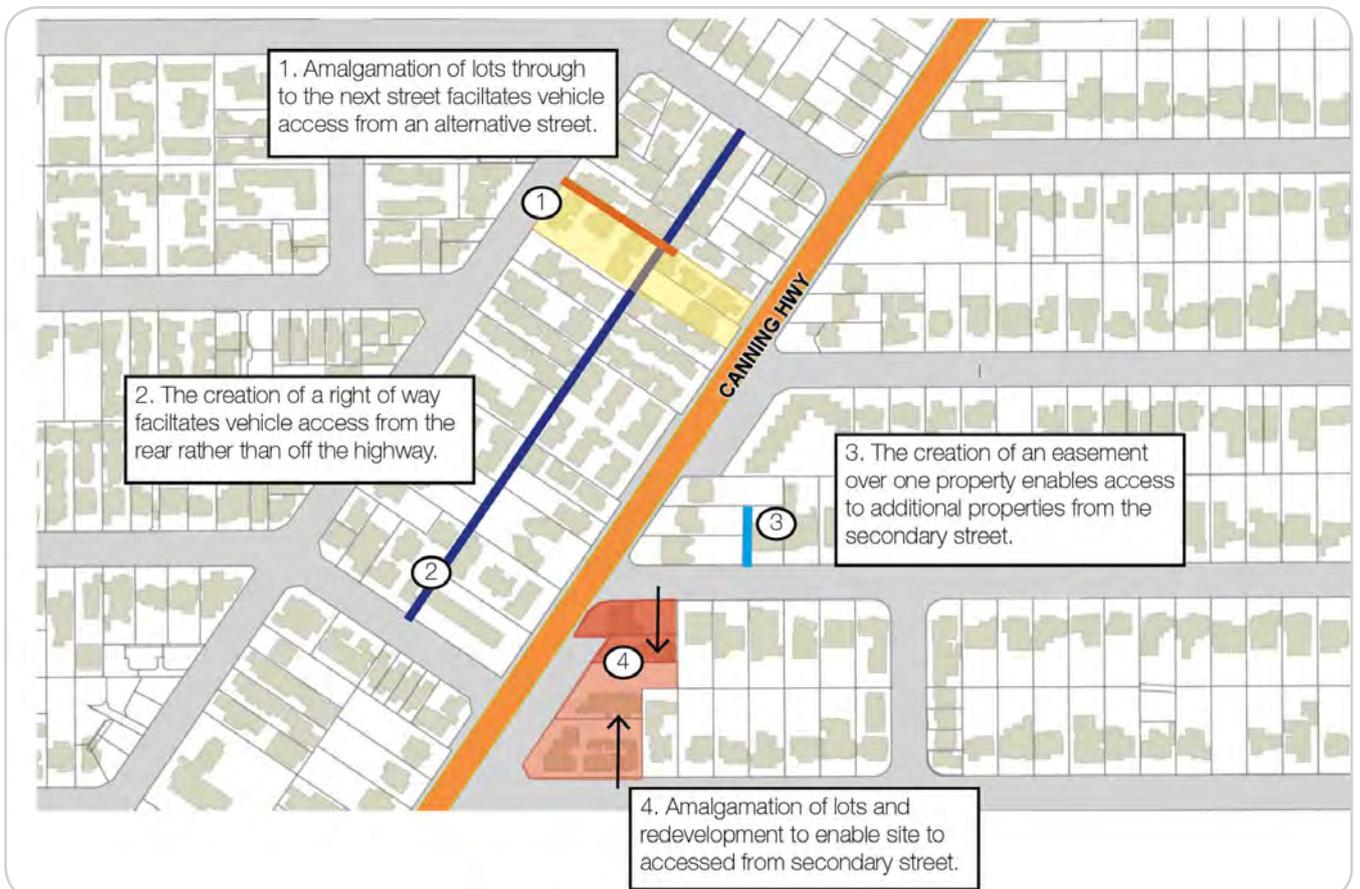


Figure 34: Potential alternative access scenarios
(Source: Base image City of South Perth Intramaps, 2015 (Note: road labels removed))

6.1.3 Public Transport

As Perth continues to grow both in population and area, there will be a continuing pressure on the regional road network, including Canning Highway. It should be acknowledged that changes in the #ShapeOurPlace study area will not be the sole source of increased traffic.

The most appropriate way to manage traffic through this area is to achieve a mode shift from private car use to other forms including active (walking and cycling) and public transport. There is a need for improved public transport throughout this area, which should be prioritised by the Public Transport Authority and the Department of Transport.

In the long term, it is intended that a dedicated bus lane be provided along Canning Highway. This will facilitate more efficient services through the area and could increase take up in users.

In the interim, some alternative options, that could be considered, include:

- Exploring options for queue jump lanes for buses at traffic lights (i.e. similar to the intersection of Walcott Street and Alexander Drive).
- Exploring options for peak hour bus lanes in the outer lane of the existing road network (i.e. similar to Beaufort Street).
- Increasing the number of services available along Canning Highway.

It is highly recommended that the City continue conversations with Main Roads WA, the Public Transport Authority and the Department of Transport to discuss ways to improve public transport efficiency and availability through this area. The results of the #ShapeOurPlace project may be used by the City to advocate for improved transport infrastructure.

6.1.4 Highway Interface

The City's Local Commercial Strategy (2004) states that 'no additional areas are recommended for Highway Commercial zoning other than those already identified in TPS6.' As a result, the commercial and mixed use development on the highway will be limited to those areas currently zoned 'Highway Commercial'. Commercial uses on the ground floor create an enhanced pedestrian environment as these forms of development typically have a harder street edge with active uses on the ground floor.

Canning Highway will be predominantly residential therefore consideration needs to be given to the interface with the highway. Given the significance of the road, there are amenity impacts for people living directly abutting the highway. As previously discussed there are some mechanisms that can be applied through the local planning framework to improve the ground floor interface. These include:

- Providing adequate front setbacks to reduce the proximity of ground floor residential dwellings to the highway; and
- Requiring landscaping in front of front fences.

Where residential land uses are proposed on the ground floor, there may be a tendency to raise floor levels which can be detrimental to the street by creating large expanses of blank walls at pedestrian level. Alternatively the ground may be used for car parking, however again this can be detrimental to the pedestrian realm.

Other alternatives to ground floor parking or residential development could include home offices, communal gyms, communal property entrances/foyers, store areas and essential services. These will need to be designed in a manner that provides interaction with the streetscape.

The interface with the highway will need to be carefully managed to ensure the street does not

become dominated by high solid walls and ground floor car parks. When undertaking more detailed planning for each place it is recommended that the appropriate street setbacks are recommended for specific areas, ensuring that this responds to the lot depth and the impacts of the road widening. In addition, ground floor treatments such as fencing and entry ways should be further detailed.

Alternatively, the City may wish to consider the introduction of commercial uses on the ground floor for certain areas. To ensure this does not detract from other centres, low intensity commercial uses could be considered and the uses limited within the local planning scheme.



Example of solid walls to the street in West Perth

6.1.5 Incentives for Development

The study recognises that in order for the desired outcome of this study to be achieved, there will need to be incentives put in place to attract landowners and developers to develop properties. A list of some potential incentives are outlined below, however as more detailed planning takes place, this list of incentives may be expanded or reduced depending on the local issues.

1. Encouraging lot amalgamation by providing minimum lot sizes for heights greater than three storeys. Where the lot size is increased to a certain size, the development can be built to the maximum permissible height.
2. Consideration of plot ratio/density bonuses where single bedroom or affordable dwellings are provided.
3. Consideration of plot ratio/density bonuses where aged or dependent persons' dwellings are provided.
4. Consideration of plot ratio bonus/density bonuses where the development cedes land to facilitate alternative access arrangements (e.g. A ROW or easement).
5. Consideration of density bonuses where a development maintains the existing dwelling to ensure the character of the streetscape is maintained.

Note: It should be recognised that while bonuses will apply in some instances, certain requirements such as height, open space and minimum boundary setbacks should not be compromised or varied in the process.

6.2 #ShapeOurPlace Recommendations

The length of Canning Highway encompassed within this study is extensive and the area highly diverse. #ShapeOurPlace provides a high level overview of the opportunities and challenges that exist and outlines the community desires and aspirations for this area.

This section outlines the key recommendations of the study.

6.2.1 Scheme Provisions

There are two key areas where changes could be made to the town planning scheme.

1. Residential up-codings
2. Scheme development provisions

Proposed up-codings

In order to facilitate an appropriate transition from the highway to the residential streets, rezoning will need to occur in some areas. The study area has been divided into streetscape types and based on these streetscapes a range of zonings are considered appropriate as detailed below to facilitate built form typologies in line with the findings of the study (Table 7).

The applicable zoning will be dependent on the

existing zoning in the locality and the streetscape character. Where the transition is proposed to remain close to the highway (for example in Kensington), it is recommended that the lower range of densities are applied to the streetscape. Where the transition is larger, the higher range of densities can be applied or a greater diversity of densities can be applied.

When considering the application of new densities, there should be no reduction in development potential for the property, therefore no down coding is recommended as part of this study.

Scheme text changes

As recognised in Part 5, there are a number of design controls which require further guidance in order to meet the expectations of the community. It is recommended that the reliance on achieving the desired built form outcomes for the study area should be largely managed through the policy framework, rather than scheme provisions. This ensures that as the area becomes developed over time, there is an ability to easily amend and adjust policy provisions to respond to areas where it may not be achieving the desired outcomes. Including specific scheme provisions in relation to the built form for this area would serve to constrain what development could be achieved on sites, as the level of discretion would be markedly less than that which would be afforded in a planning policy or precinct plan.

Table 7: Suggested densities for applicable streetscapes

Streetscape	Recommended Zoning Ranges	Built form that will be facilitated
Highway	Residential R60 and R80 (R40 adjacent to Campbell Street*)	Apartments, mixed use developments and terraces.
Urban	Residential R40 - R60	Apartments (low scale), terraces and townhouses.
Suburban	Residential R30 - R40	Single houses, manor houses and townhouses

*As per Council resolution 27 November 2012 item 10.0.3(a)(i)(F)

Notwithstanding this, there are some built form elements that should be included within the town planning scheme. This will allow the key principles of the study are being met.

It is recommended that the scheme include the following provisions:

- Density (town planning scheme maps);
- Building heights (using the same approach as currently utilised by the City);
- Setbacks (front, side and rear); and
- Changes to access arrangements including ceding land for rights of way, enabling easements and requiring lot amalgamation.

A set of objectives that relate to the future planning of the area appropriate for inclusion in the Scheme, could also be considered.

6.2.2 Local Planning Policy Framework

The local planning policy framework enables the City to provide an additional level of guidance for development, whilst still allowing a level of discretion. A set of comprehensive design guidelines should be prepared on a Place by Place basis and endorsed as a local planning policy. The design guidelines should encompass:

- A vision for the Place;
- Objectives;
- Design controls; and
- Identify areas for Local Development Plans.

The specific design control elements will include:

- Streetscape and Typology types
- Building Design
- Sustainable design
- Open Space outdoor living area and communal open space
- Visual privacy

- Solar access
- Garages
- Landscaping
- Fencing

Where specific planning is required, a Local Development Plan can be developed.

The policy framework will assist to guide those discretionary provisions of the R-Codes (Design Principles). This will be managed by providing clear objectives about what the streetscapes should entail and the desired character for the area.

6.2.3 Place Specific Recommendations

Given the diversity and unique character of the five places, there are some place specific recommendations as noted below.

It is recommended that further consultation be undertaken in the individual places as part of any further planning in the area.

Place 1

- Undertake detailed planning for local centre at Way Road/Gwenyfred Road.
- Prioritise areas for rezoning close to the Highway to manage the transition from R80 to R15.

Place 2

- Undertake detailed planning for the local centre at Douglas Avenue.
- Investigate road and lot alignment for Pennington Lane in light of the road widening impacts.

Place 3

- Undertake detailed planning for the local centre at South Terrace.
- Investigate the feasibility of developing land along Canning Highway between South Terrace and Hensman Street in light of access and site constraints.

Place 4

- Prioritise areas for rezoning close to the Highway to manage the transition from R80 to R15 in the Avenues.

Place 5

- Undertake detailed planning for the local centre at Thelma Street.

6.2.4 Additional Studies

It is recognised that there are a number of outstanding matters that will require additional studies or more detailed investigation to enable the City of South Perth to meet the community expectations for the area, and meet the strategic direction of the State Government in relation to corridor planning.

#ShapeOurPlace recommends the following additional studies be undertaken.

- *Access Study:* To investigate alternative access arrangements for properties that currently only have access via Canning Highway.
- *Character Study:* To undertake a character study of Kensington to provide a comprehensive review of the existing building stock and how future development should be undertaken if necessary. This may include amendments to the local planning scheme or policies. It is suggested that this study apply to areas outside the #ShapeOurPlace study area. #ShapeOurPlace has purposefully restricted the extent to which possible increases in densities will occur to provide a balance between Metropolitan planning direction and the community desire to retain the character of the suburbs.
- *Detailed Design Guidelines:* #ShapeOurPlace highlights the design controls that require additional consideration in order to meet the expectations of the community in relation to built form. Comprehensive design guidelines should be prepared on a place by place basis, with Local Development Plans for those

properties requiring further controls. These areas have been highlighted in the place specific recommendations in section 6.2.3.

- *Community Infrastructure Plan:* This study is proposed to review the existing community infrastructure in the study area catchment and understand whether there are adequate facilities to service the envisaged increase in population. The study will ensure that the community has access to the necessary services and facilities.
- *Review of existing planning policies* to determine where there may be cross overs in development requirements.
- *Consultation:* In parts of the study area, namely places 4 and 5, there was a low response rate to the second round of consultation. To ensure that the community's views are adequately known, it is suggested that further consultation be undertaken in these areas particularly through the development of any detailed design guidelines. All places will require further consultation when developing detailed design guidelines and undertaking scheme amendments.

6.3 Next Steps

#ShapeOurPlace covers a large, highly diverse area of the City of South Perth. The existing development ranges from high density highway development, to single dwelling original homes. Due to the extent of the area included in the study, high level recommendations have been prepared however in order for these to be investigated further the following 'next steps' are recommended.

Council Endorsement

The City of South Perth Council will consider the study in its entirety and endorse the study. Endorsement of the study does not necessarily mean that all the recommendations of the study need to be implemented, however it will give the Council a framework to work from to progress future projects.

Once the Council has endorsed the document, the City will have the opportunity to progress with individual components of the larger study. This may include:

- Scheme amendments to recode areas to align with the recommendations of #ShapeOurPlace. The City and Council may choose to undertake scheme amendments in smaller areas where there are existing transition issues or where areas are ready for redevelopment.
- The recommendations of #ShapeOurPlace will result in the need to amend some of the existing local planning policy framework including the City's fencing policy (P350.7) and Streetscape Compatibility - Arlington and Kensington (P351.5) to align with #ShapeOurPlace.
- The recommendations of #ShapeOurPlace includes the development of new design guidelines. These could be developed on a place by place basis.

Community Consultation

The endorsement is the first step in a longer term project for the area, therefore there are many other opportunities for consultation with the community in the future.

All scheme and policy amendments include a period of consultation. This will provide the community with the opportunity to provide further comments on any proposed changes. The proposals will be area specific and include a greater level of detail than what can be provided in #ShapeOurPlace.

In addition, those areas where there were low response rates in the consultation phase, should be further consulted with.

Appendix A - Phase 2 Consultation Pack



Canning Highway

Canning Highway #ShapeOurPlace

What is #ShapeOurPlace?

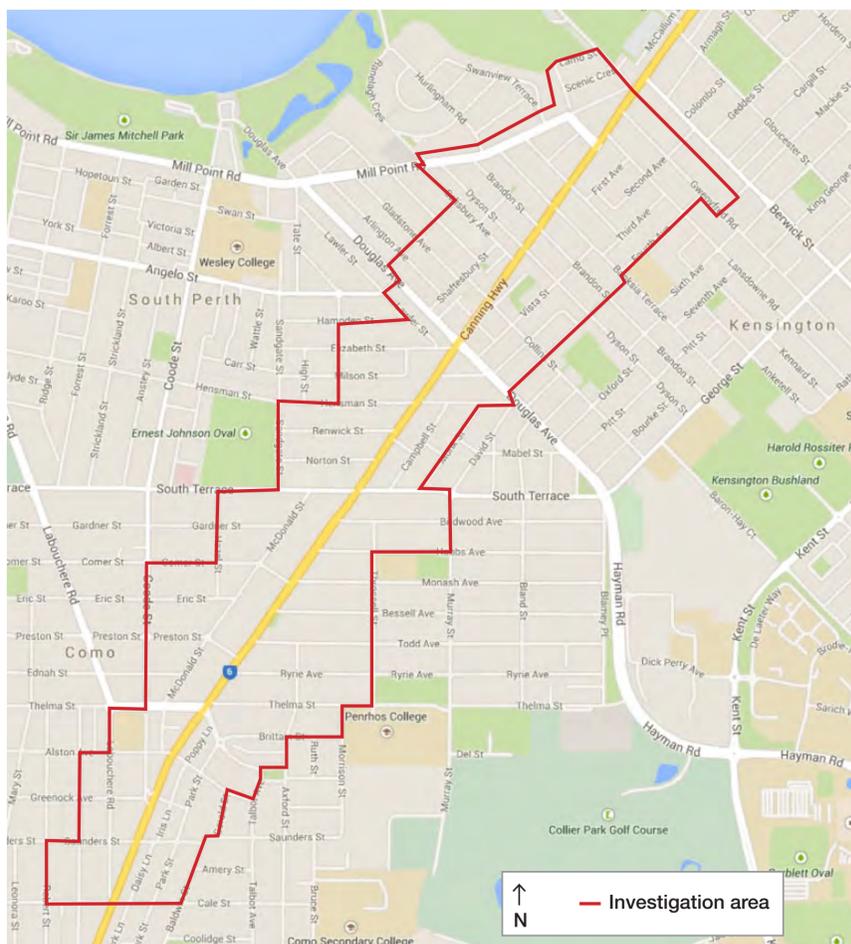
The City of South Perth is reviewing existing and future built form (how buildings look) along Canning Highway and the adjacent low density suburbs. The review will help the City to better manage the future development of the highway and how it relates to the surrounding development. The project also looks at the impact of the future road widening for Canning Highway by the State Government.

What is involved in the review?

The review is about understanding the existing character and appearance of the buildings within the study area and discovering what sort of development the community would like to see in the future. Generally, the properties along Canning Highway can be developed to greater intensities (more height and more dwellings) and therefore it is important to manage the transition from the highway into the residential streets behind.

Where is the project study area?

The area outlined in red on the map is the study area. However not all of the study area will be affected by the final project outcomes.



What are the project outcomes?

The review will recommend changes to the City's Town Planning Scheme No. 6 to:

- Encourage high quality development that meets community expectations;
- Protect existing amenity;
- Create a harmonious built form transition from the highway to the lower density residential areas.





Canning Highway #ShapeOurPlace

What has happened so far?

The first phase of stakeholder and community consultation involved a Facebook conversation, community workshop and email submissions that ran between March and April 2015.

The aim of this consultation was to understand what types of buildings the community like and don't like, and where they wish to see certain types of development within the study area.

What people liked:

- Large setbacks (the distance between the building and the street).
- Lots of vegetation, landscaping and greenery.
- New and modern building styles and existing heritage houses.
- Large balconies and eaves.
- Varied facades, different materials and sustainable design of the building.

What people didn't like:

- Garages that dominated the street frontage.
- Developments that were too bulky for the street or too large for the block.
- A lack of car parking.
- A lack of privacy in buildings.
- Buildings over six storeys high.

Where people wanted to see change:

- Greater heights along Canning Highway, particularly at key intersections.
- Character areas, particularly in Kensington.
- Areas of single houses and grouped dwellings (duplex, terrace housing, town houses) behind Canning Highway.
- A green buffer along Canning highway.

A heritage protection area to preserve character homes within the City, in particular Kensington, would be required to be addressed in a separate study.



3

I THINK... WE NEED... OUR FUTURE... MY CITY...
Canning Highway
#ShapeOurPlace

These are some of the preferred building types identified by community members in March and April 2015:



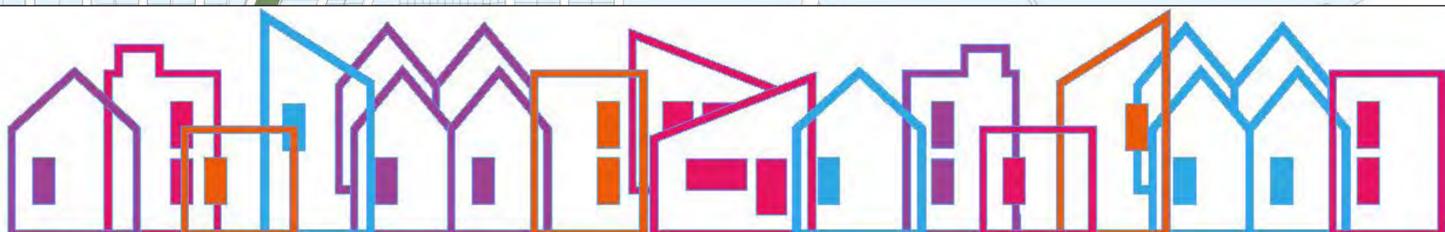
I THINK... WE NEED... OUR FUTURE... MY CITY...

Canning Highway #ShapeOurPlace

What did we do with your feedback?

A key element of how a building looks is how tall it is. The draft maximum height plan below has been prepared based on the feedback from the community and key Government stakeholders. Please note that two storey development is already permitted as of right throughout the City of South Perth.

The plan also proposes a Design Guideline area (outlined in pink on the map). Properties within the design guideline area would have to abide by the guidelines when undertaking future development, in addition to staying within the maximum height limit.



OUR FUTURE...
MY CITY...
WE NEED...
I THINK...

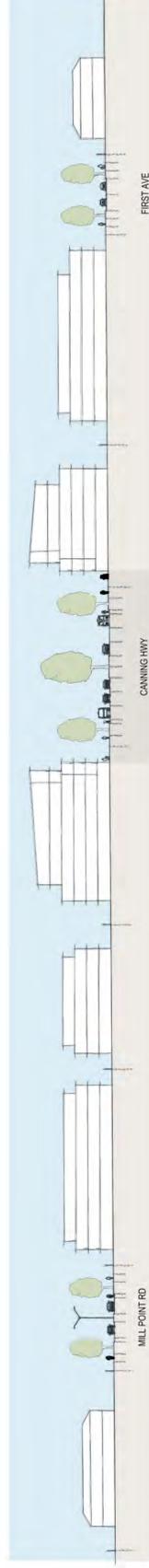
Canning Highway

#ShapeOurPlace

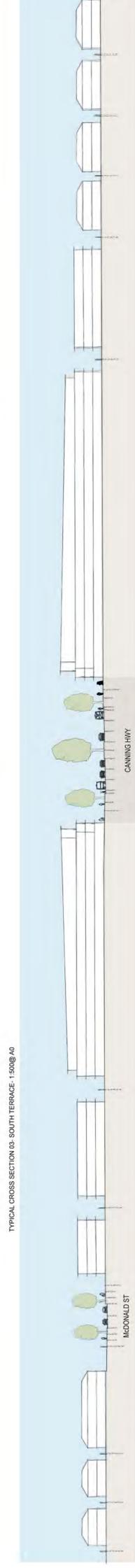
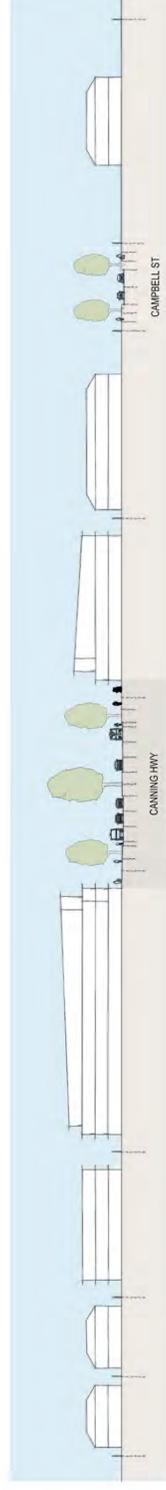
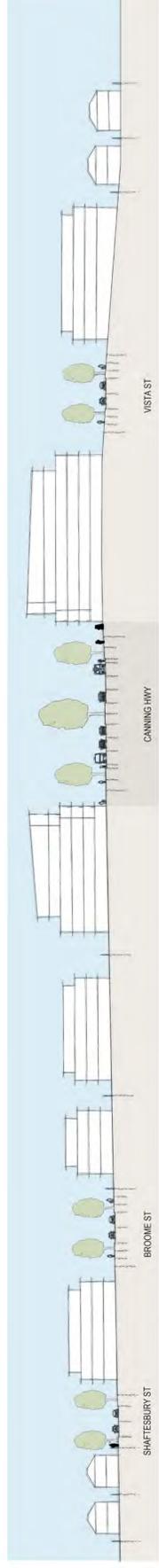
How will the heights change from the highway to the residential area?

These typical cross sections allow you to visualise the changing heights from the highway back towards the residential streets. The heights are stepped down as you move away from the highway. The setbacks (distance between the building and property boundary) is greater for the taller buildings.

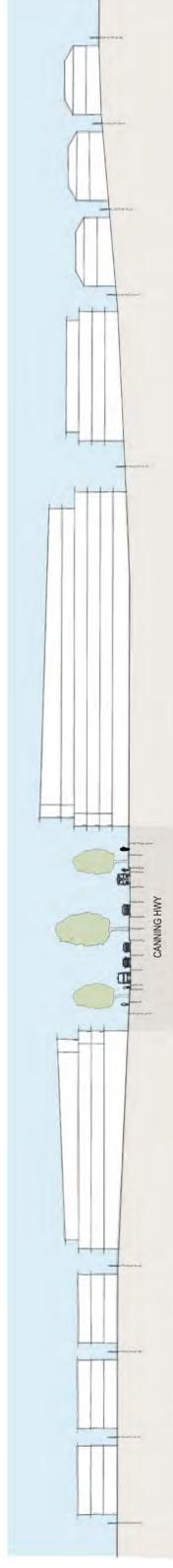
Note: the existing residential area is shown as 2 storey because that is the current building height limit



Note: these images only show maximum height allowance and are not reflective of the future or existing built form.



TYPICAL CROSS SECTION 04- TODD AVENUE- 1:500@A0





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What does it mean if my property is in the 'Design Guideline Area'?

The Design Guidelines will provide provisions for matters that impact the appearance of the building. For example heights, setbacks and landscaping.

The aim of the guidelines will be to ensure that the development on the highway and adjacent residential streets is managed to maintain the amenity of the locality.

Why is the 'Design Guideline Area' different from the original 'Study Area'?

The study area was established at the beginning of the project. It represented an area approximately within 100 metres of Canning Highway. Following the consultation with the community and discussion with key stakeholders, it was apparent that many areas within the study area should remain the same (i.e. the planning provisions that currently apply will continue to apply). The design guidelines will not apply where there is no change proposed to the existing planning framework.

The design guidelines will apply where:

- Change is proposed to the existing height and/or
- There is no change to the height, but the building type may change (e.g. a single house may become a townhouse).

What about the character areas?

It was recognised during the consultation that there are a number of areas, particularly in Kensington, where there is a desire from the community to protect the character of the area. A heritage protection area to preserve character homes within the City would need to be addressed in a separate study.



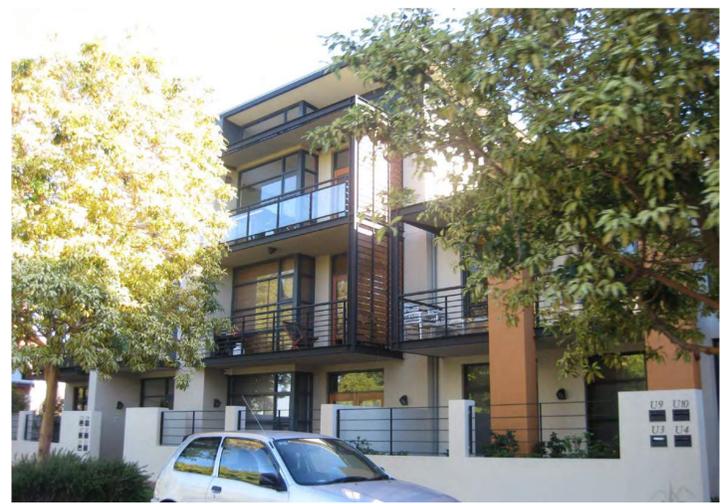
I THINK... WE NEED... OUR FUTURE... MY CITY...

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Dwellings that might be supported in the design guidelines area include:



Up to 6 storey areas - along Canning Highway



Up to 4 storey areas - Along Canning Highway and behind the properties along



Up to 3 storey areas - Along Canning Highway and behind the properties along Canning Highway



Up to 3 storey areas - Along Canning Highway and behind the properties along Canning Highway



Up to 2 storey areas - in the transition area and residential streets



Up to 2 storey areas - in the transition area and residential streets



Up to 2 storey areas - in the transition area and residential streets





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Things the City can't change:

There are some things that we cannot change as part of this study.

1. Down Coding Properties - We cannot down code properties to be a lower density. There are implications for the City and State Government relating to compensation under the planning legislation which are associated with properties being down coded.
2. The Canning Highway road reservation - This has been set by the State Government. Widening Canning Highway is a long term project that will aim to improve traffic and movement along the highway.





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Where to from here?

Now we need to know what you think! Provide your comments on the draft plans **before 5pm, Friday 21 August 2015** to help inform the preparation of the Design Guidelines and Project Report recommendations. The questions below may provide some guidance for your submission and will help us to best understand your comments.

- Which area are your comments about?
- Are the heights proposed appropriate for the area? Are they too high or not high enough?
- What do you think of the transition from heights along Canning Highway back into the residential area? Is the transition gradual enough?
- Should the transition be larger, or smaller? Or is the transition spot on?
- Is the 'Design Guideline Area' appropriate?

Have your say online:

Visit the City's website www.southperth.wa.gov.au for more information. Fill in the Feedback Form via the City's Out For Comment section on the website or email your comments to enquiries@southperth.wa.gov.au.

Follow the Canning Highway study online @CityofSouthPerth #ShapeOurPlace

Have your say in writing:

Write to us at:

City of South Perth

#ShapeOurPlace

Cnr Sandgate St and South Tce

South Perth WA 6151

Have your say in person:

Attend the Community Workshop to tell us what you think about the plans.

When: 1– 3pm, Saturday 1 August 2015

Where: South Perth Community Hall, Cnr Sandgate St and South Tce, South Perth

RSVP: By Friday 31 July 2015 to 9474 0777 or email enquiries@southperth.wa.gov.au.

Copies of the #ShapeOurPlace plans will be available at the Civic Centre and South Perth and Manning libraries.



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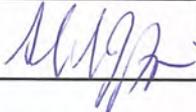
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Document Status

Rev No.	Author	Reviewer		Approved for Issue		
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B	R Marie	A Piper		A Piper		27/11/15

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