Part Two: Non-Statutory (Explanatory) Section

1. BACKGROUND

1.1 Introduction and Purpose

The Riseley Activity Centre Structure Plan has been prepared by the City of Melville (the City) to support the future revitalisation and growth of the Riseley Activity Centre in line with urban outcomes envisaged within the State Government's high level spatial framework and strategic plan Directions 2031 and Beyond.

The purpose of the Riseley Activity Centre Structure Plan is to set out a clear vision for the future development of the Riseley Activity Centre. By way of its implementation, it is intended for this document to act as a catalyst for both private sector and government revitalisation and development, benefitting its visitors, businesses and residents within and surrounding the centre by providing an improved level of amenity; activity; and diversity of housing choice and employment.

The structure plan builds upon and progresses past activities undertaken over previous years, which included community visioning, stakeholder surveys, forums, workshops, planning and economic analysis, culminating in the Draft Vision for the Riseley Centre.

1.2 Summary of Consultation Process and Outcomes

The preparation of the structure plan involved a variety of consultation and engagement activities. Each sought to inform the community and stakeholders about specific issues within the centre.

Activities provided the opportunity for participants to provide meaningful input into the development of concepts and ideas. Later processes focused on refinement of concepts to create preferred concepts, which form the basis of this Structure Plan.

The process was guided through the development of a Community and Stakeholder Engagement Plan (CSEP). Its purpose was to provide an overview of the key engagement and communication objectives, methods and approaches, which contributed to the preparation of a structure plan for the Riseley Centre.

The objectives for the engagement and consultation process were to:

- Involve the community and key stakeholders in the development of the working stakeholder and community engagement plan;
- Provide opportunities for genuine and representative community input into the project and ensure that the local views and aspirations of the community are taken into consideration and reflected in the SP;
- Identify the extent to which the community will be able to influence the project at the beginning of the engagement process;
- Review previous community and stakeholder concerns and seek to negotiate a suitable outcome for all;
- Provide clear and accurate project information to the community and all key stakeholders;
- Ensure a diverse range of appropriate methods were used to maximise community and stakeholder participation and project understanding;
- Manage community expectations and effectively address any issues/concerns in a timely and responsive manner; and
- Provide regular communication and feedback to the community and all key stakeholders and to keep the community informed and updated as the project progresses.

Specific engagement processes and their outcomes are summarised as follows:

1.2.1 Vision and Validation Workshop

A community workshop was held 15 May 2013 and attended by over 200 participants. Residents and stakeholders within a 1 kilometre radius were invited and those within the broader catchment were encouraged to attend by reaching out through local media and online channels.

Participants were taken through an interactive and informative process that sought to highlight and discuss local issues. From there, participants also worked through each of the objectives outlined in Section 1.7 and provided feedback on how they would like to see each of those objectives addressed within the Riseley Centre.

The process highlighted the following:

- Need for improved provision and management of car parking in the centre for greater accessibility to the local community (e.g. provision of decked and on site underground car parking facilities);
- Desire for traffic calming within the centre to respond to peak period traffic congestion on Riseley Street and Canning Highway as key regional traffic routes;
- Need for improved pedestrian accessibility, comfort and safety to encourage greater uptake of alternative transport modes;
- Desire for better traffic management to reduce traffic speed, rat running and to achieve a more appropriate balance between pedestrian and vehicle access and movement;
- Desire to strengthen existing business and encourage a greater diversity of activity within the centre through the introduction of new residential opportunities through mixed use development between three (3) and six (6) storeys;
- Desire for greater (public and private) investment to facilitate improvement to streetscapes, buildings, landscape and place making outcomes; and
- Preference for development to be focused on the southern side of Canning Highway around the main core of existing commercial activity.

Outcomes of this workshop were fed into the process of developing four concepts that would form the basis for exploration with the local community during later stages of engagement.

1.2.2 Interagency Meeting

Representative from the key government agencies were invited to a briefing and discussion on the Riseley Centre, held in 1 May 2013. The session focused on revisiting past plans and reaffirming key objectives for the centre.

The following agencies were invited to participate:

- Main Roads WA;
- Department of Planning;
- Department of Transport; and
- Public Transport Authority.

In attendance were:

- Department of Transport; and
- Public Transport Authority.

The following key points were discussed at this meeting:

- Programmed upgrades to Canning Highway, including priority bus lane are being progressed by the PTA, however specific timeframes were not advised;
- Light rail routes along Canning Highway, and potentially Riseley Street, being considered as part of the Department of Transport's strategic transport plan;
- It was acknowledged that traffic is presently an issue for the centre and that the future expansion of the Booragoon Shopping Centre will further contribute to the issue;
- General support for lowering speed to 40 kilometres an hour along Riseley Street;
- Concern that any significant changes to the existing movement system will prompt drivers to choose alterative routes, which will have a detrimental affect on the surrounding residential streets; and
- General discussion around alterative approaches to managing car parking within activity centres.

1.2.3 Elected Members Briefing

On 25 June 2013, Elected Members were provided with a briefing on the outcomes of the vision and validation workshop. Councillors offered individual feedback and reaffirmed their understanding of key issues within the Riseley Activity Centre, which generally corresponded to the outcomes of the workshop.

1.2.4 Council Authorisation for Public Advertising

Council resolved to endorse the public advertising of 4 Concept Plans for the future of the centre at its Ordinary Meeting of 16 July 2013.

1.2.5 Public Advertising and Community Workshop's

The City advertised the 4 concept plans from Monday 29 July 2013 to Monday 24 August 2013 (28 days). The engagement methods used included:

- Approximately 2,100 letters were sent to all residents and absentee landowners within approximately 800 metres of the centre, people who signed the petition made to the City in May 2012, local politicians and community groups;
- community workshops held on 8 August, 12 August and 14 August 2013;
- 2 pop up information booths at the Riseley Centre on 2 August and 15 August 2013;
- Information and copies of the concept plans on the City's website;
- An online forum and Question and Answer service on the City's community engagement platform - the We're Listening Melville website;
- Emails sent to 131 people on the Project Update database;
- Information in the 'About Melville' section in the Melville Times on 6 August 2013 and 13 August 2013; and
- Information in the City's Mosaic magazine.

Four preliminary concepts were developed for the purpose of further discussion and investigation with the community and stakeholders in a series of workshops. The intent of the four concepts was to generate a broad range of discussion to understand what participants liked and disliked about each plan with a view to culminating feedback into a revised plan that addressed identified opportunities, suggestions and concerns.

The themes for each concept is as follows:

- Concept 1 – Local Living, Local Life: Mixed-use town centre with a focus on a moderate increase in residential development in and around the centre.
- Concept 2 – Live, Work and Play: Promote a place for people model with a more intensive mix of land uses and residential development.
- Concept 3 – Transit, Walk and Ride: Create a town centre well-supported by public transport and improving walking and cycling options.
- Concept 4 – Green and Smart: Promote environmentally sustainable development, reduce the need for car use and promote social, economic and environmental innovation.

Three (3) workshops were held with the community and stakeholders from 8-14 August 2013. Each workshop was attended by up to 40 people. Each workshop was closely repeated in format and content. Hosting multiple workshops enabled activities to be undertaken in smaller groups, providing clear lines of communication between participants and the project team.

The workshop programme of each workshop included:

- A summary of the previous engagement activity outcomes and key issues;
- A summary of the key elements featured within each of the four (4) concepts; and
- An interactive session where tables of participants worked through the concepts and provide feedback under the guidance of facilitators.

The feedback from participants was varied, and although many of the elements of Concept 1 resonated with the community, there were however elements and opportunities from other concepts that some people felt should be included.

Key themes that emerged reiterated the outcomes of the vision and validation workshop. Further specific matters that were considered in the development and refinement of the preferred structure plan include:

- Buildings of up to six storeys (as per Council's past resolution) should be focused on the central core, including Canning Highway, Riseley Street and Kearns Crescent, with a transition downwards to lower buildings at the periphery of the centre;
- Where proposed new taller buildings abut existing residential development for which minimal change is proposed, setbacks should ensure that building bulk does not adversely impact on access to light or result in an inappropriate sense of enclosure; and
- Feedback indicated that the proposed structure plan area captured a greater area than required, resulting in reconsideration of the structure plan boundary. On this basis, the extent of the Structure Plan boundary was reduced as shown in Figure 1: Redefined Structure Plan Boundary.

RISELEY REDEFINED STRUCTURE PLAN BOUNDARY

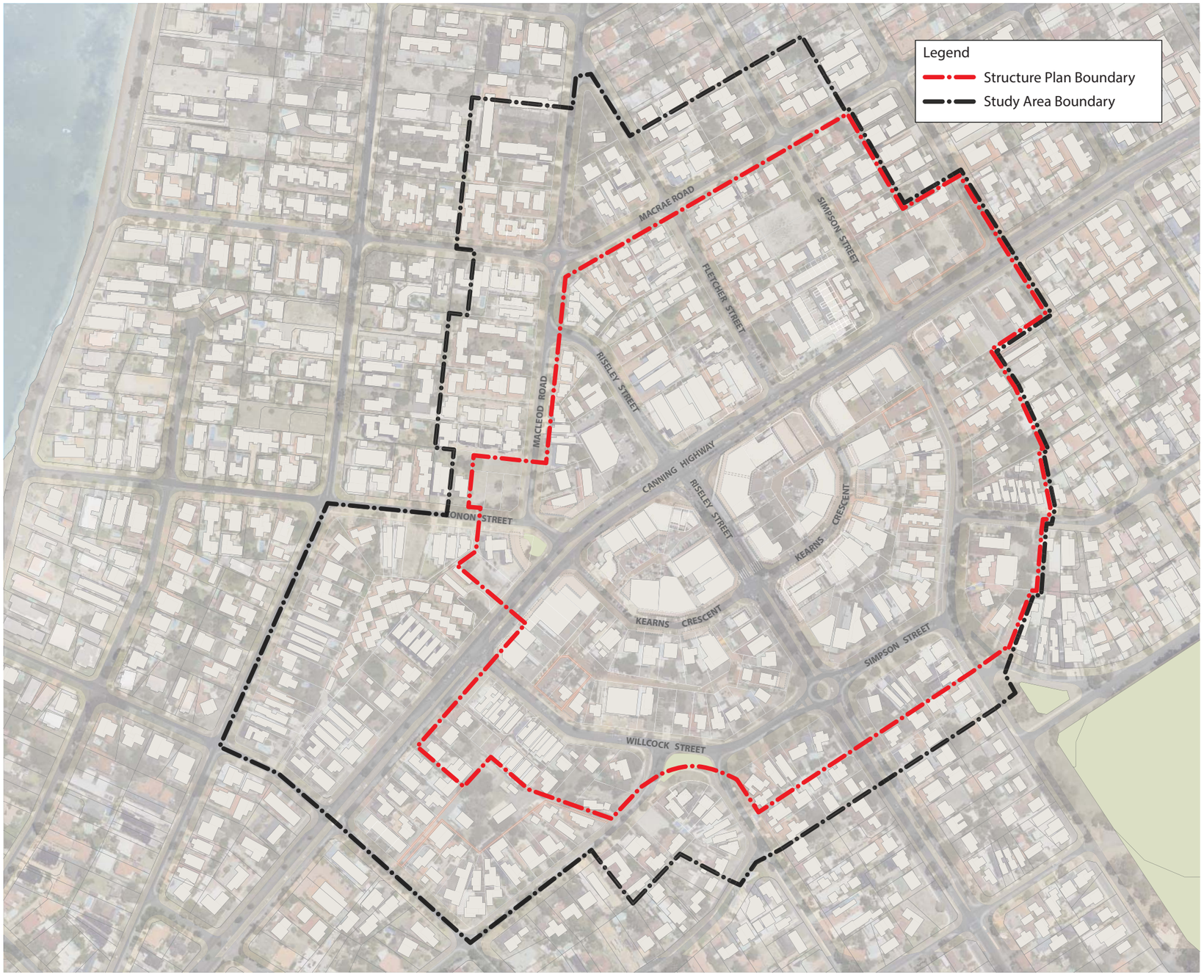

Fig 1. Redefined Structure Plan Boundary

1.3 Centre Concept, Vision and Objectives

The Riseley Activity Centre Structure Plan (Figure 2) and Indicative Development Plan (Figure 2) envisages a diverse and activated mixed use centre that provides a variety of housing choices, employment opportunities and a vibrant public realm.

The key objectives for the Riseley Activity Centre, which form the basis of this structure plan are to:

- Create an attractive and sustainable activity centre that is a vibrant, desirable and safe place to live, work and socialise;
- Facilitate viable, enduring and high quality development in the activity centre with an appropriate mix of land uses;
- Enhance the character, streetscapes and public spaces in the activity centre;
- Appropriately manage traffic, parking and accessibility issues;
- Promote a mix of housing choices;
- Encourage local employment and business opportunities; and
- Provide certainty to enable investment decisions to be made with reasonable confidence.

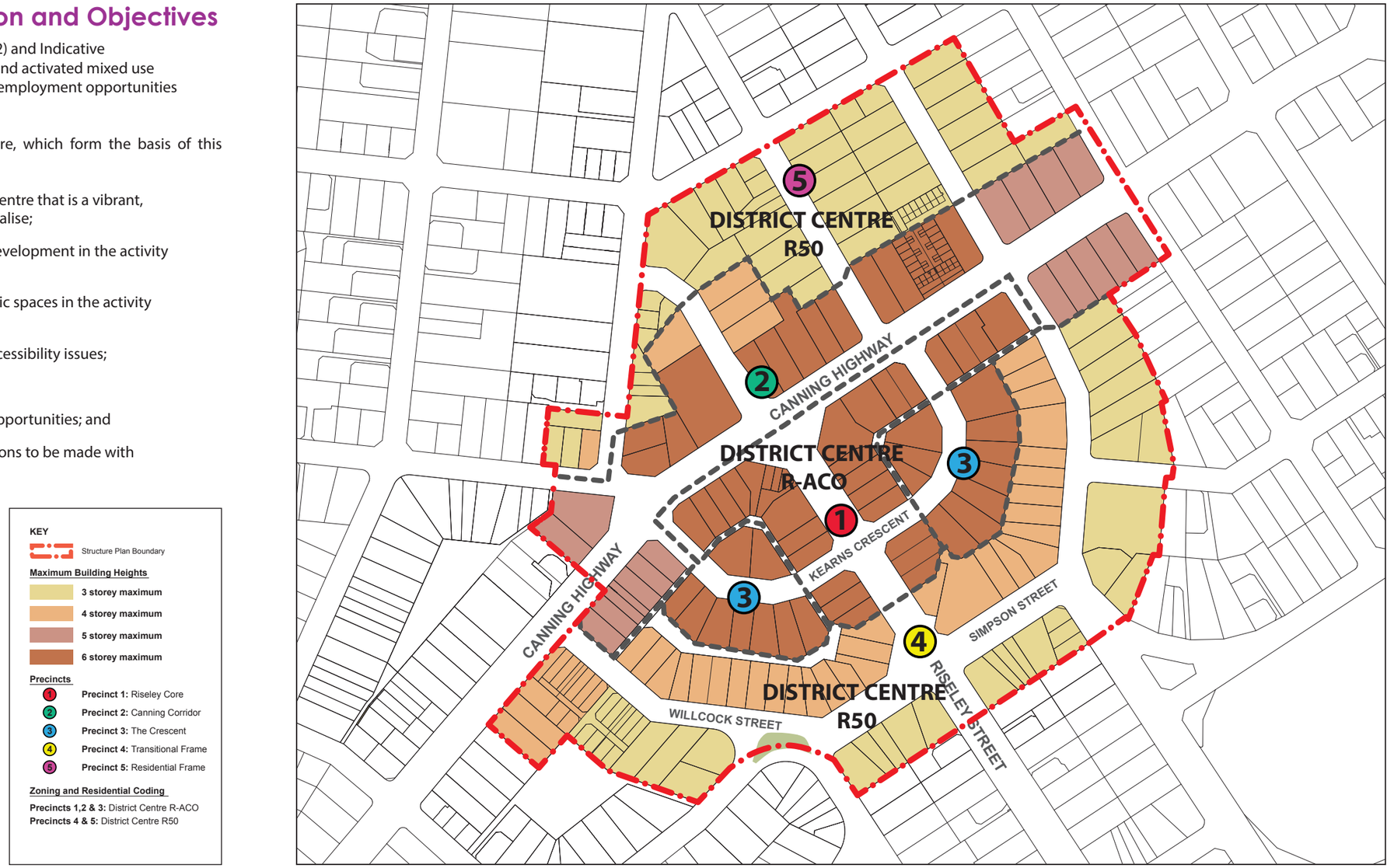

Fig 2. Riseley Activity Centre Structure Plan Map

RISELEY INDICATIVE DEVELOPMENT PLAN

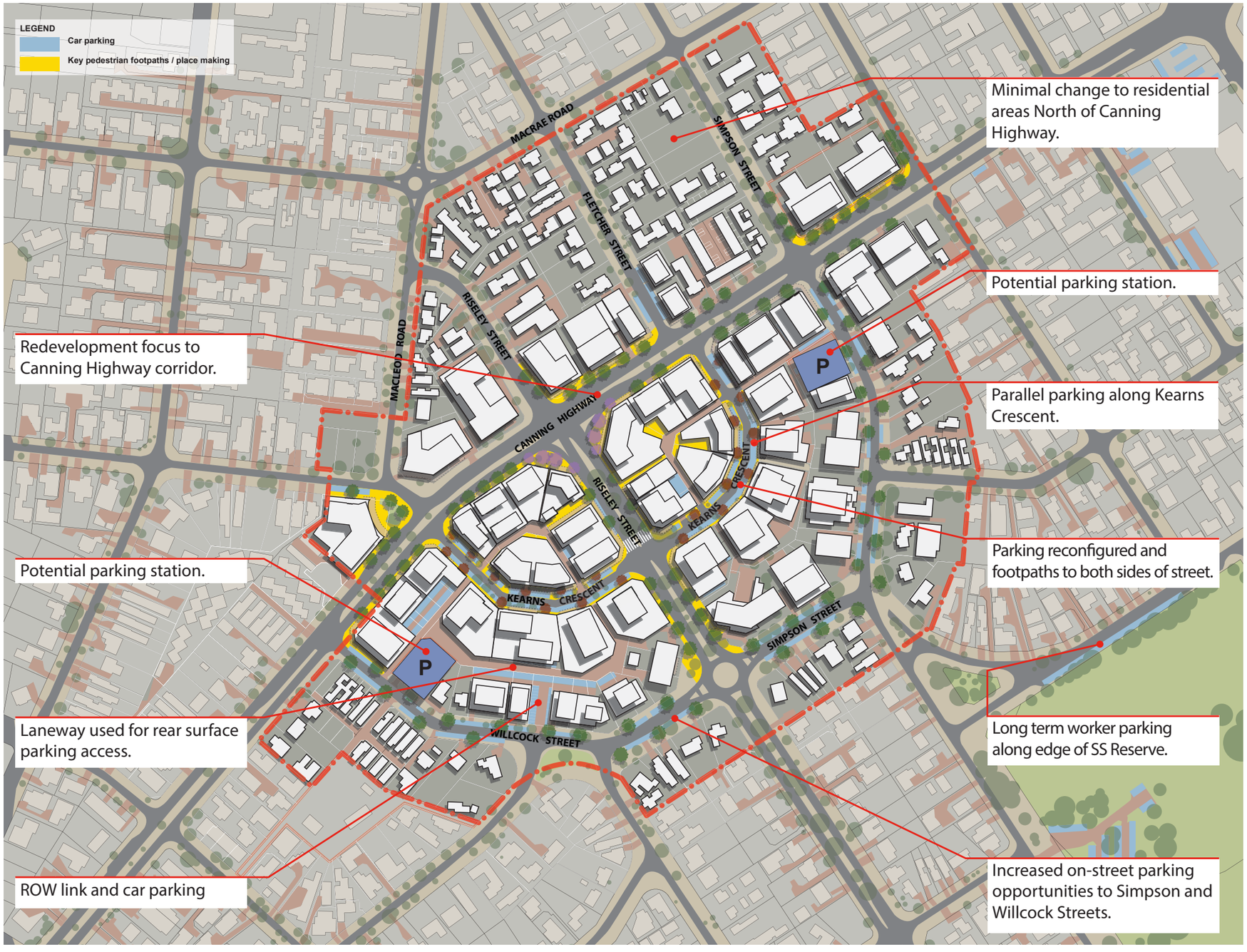

Fig 3. Riseley Indicative Development Plan

2. CENTRE CONTEXT AND BACKGROUND

2.1 Land Description

2.1.1 Location

The Riseley Activity (District) Centre is located within the City of Melville local government area, approximately eight (8) kilometres from the Perth Central Business District (CBD). It is situated along Canning Highway, a primary regional road running between the Kwinana Freeway and Fremantle. The centre is located approximately two (2) kilometres west of Canning Bridge District Centre and a similar distance north of Booragoon Secondary Centre.

2.1.2 Boundary Area

The Riseley Activity Centre Structure Plan boundary is illustrated in Figure 4: Aerial Photograph.

2.1.3 Existing Land Uses

Existing land uses within the structure plan boundary depicted in Figure 3: Aerial Photograph include:

- Low to medium density residential uses towards the periphery of the centre;
- Commercial (office and health) related activities to the north side of Canning Highway;
- Retail, entertainment, some office uses and mechanical repairs within the central core bound by Kearns Crescent and Canning Highway; and
- Community and cultural activities such as St David's Church, Chinese Presbyterian Church and City of Melville Bridge Club.

The structure plan boundary is generally surrounded by low density residential, with Shirley Strickland Reserve and Wireless Hill Reserve providing the principal open space destinations. Melville City Centre (Garden City, Booragoon) Shopping Centre, Applecross Senior High School and riverside recreational activities are also located in close proximity to the Riseley Activity Centre.

2.1.4 Land Tenure

Land tenure within the centre is generally fragmented and under multiple ownership. Analysis of land tenure revealed a limited number of consolidated private or Council owned land parcels.

Encouraging or incentivising existing and future landowners to collaborate across or consolidate multiple land parcels to achieve a coordinated development outcome will be important to achieving some of the outcomes envisaged within this structure plan.

Fig 4. Aerial Photograph

2.2 Planning Framework

2.2.1 Zoning and Reservation

2.2.1.1 METROPOLITAN REGION SCHEME

The subject land is zoned "Urban" under the provisions of the Metropolitan Region Scheme (MRS), which is an appropriate zone for an Activity Centre to be developed.

Fig 5. Metropolitan Region Scheme

2.2.1.2 CITY OF MELVILLE COMMUNITY PLANNING SCHEME NO. 5

The City of Melville Community Planning Scheme No. 5 (the Scheme) stipulates the following zonings within the structure plan area. The core of the centre is zoned "District Centre" with a density of R60; outside of the core, the Riseley Frame is zoned "Commercial Centre (Riseley) Frame" to a density of R50; and the remainder of the structure plan areas is zoned "Residential" with densities varying between R15 and R40.

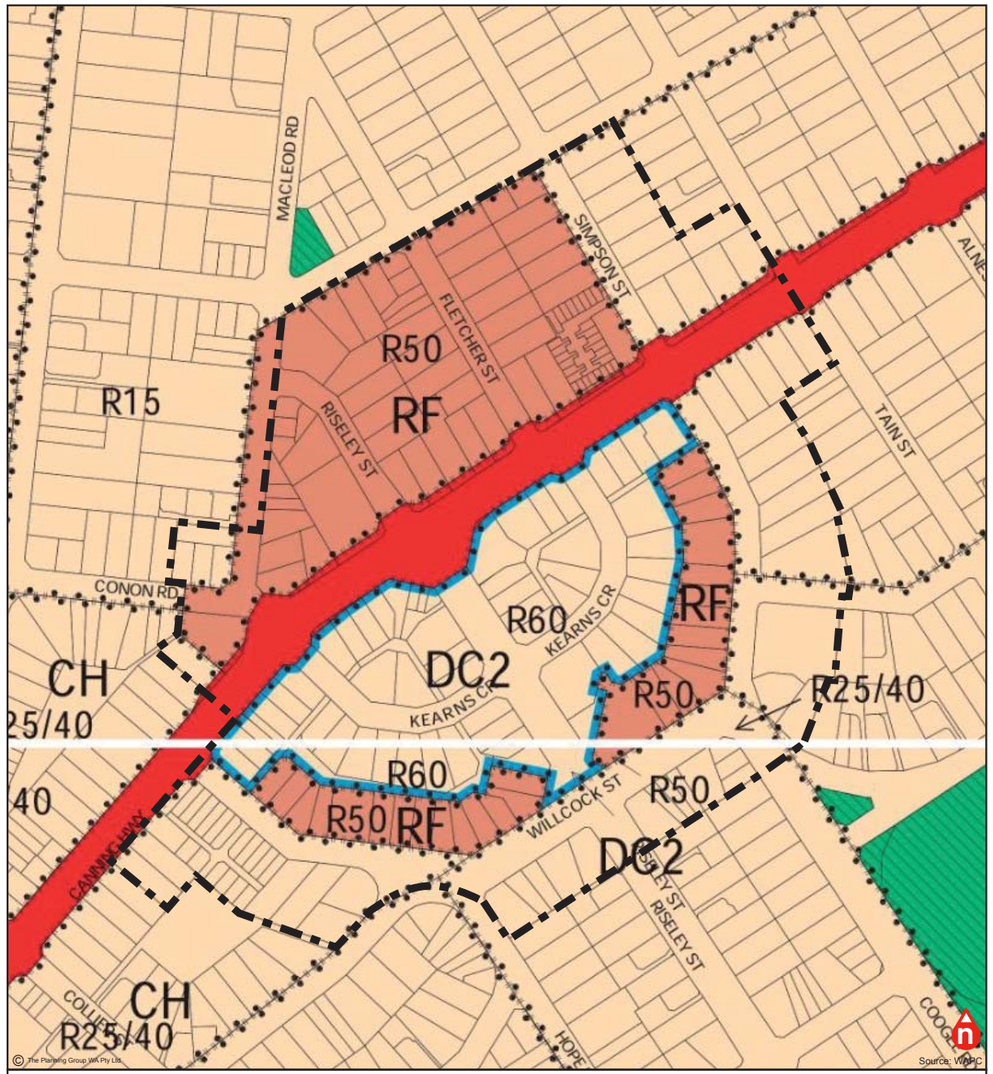

Fig 6. Community Planning Scheme No. 5

The following tables (Tables 1 – 5) outline development permissibility within the structure plan area.

Table 1: District Centre Zone – Riseley Centre Precinct

District Centre Zone – Riseley Centre Precinct DC2		
Statement of Intent	Primarily retail shopping, boutiques, small-scale offices, restaurants and other commercial activities and residential use.	
R Code	R60, in accordance with Clauses 5.1, 5.2.	
Minimum Lot Area	As per R Codes.	
Maximum Plot Ratio (non-residential)	0.6.	
Minimum Setback	Nil, provided that Clause 5.7 shall apply at the edge of the Precinct where residential lots abut.	
Minimum Landscaping (non-residential)	25% of site area and in accordance with Clause 5.9.	
Maximum Building Height	11 metres to eaves, 13.5 metres maximum, having regard to Council Policy.	
Minimum Car Parking	Residential	As per R Codes.
	Non-residential	One bay per 15 square metres gross leasable area, in accordance with Clause 5.8 and having regard to Council Policy.
Advertising Control	Tower and roof signs are prohibited. At the discretion of the Council other signs may be approved in accordance with the Signs, Hoardings and Billposting by-laws, as specified in Clause 5.10.	
Retail Floor Space	Generally in accordance with the Local Commercial Strategy, as specified in Clause 5.17. Maximum 11,300 square metres (NLA).	

Table 2: Commercial Centre Frame – Riseley Frame

Commercial Centre Frame – Riseley Frame (RF)		
Statement of Intent	Primarily residential but may include offices, medical practitioners and churches where privacy of neighbours is respected and design has a residential character. Buildings shall not use reflective or mirror glass externally. Shops, open-air display of goods and vehicles, service stations and the like are prohibited.	
R Code	R50, in accordance with Clauses 5.1, 5.2.	
Minimum Lot Area	As per R Codes.	
Maximum Plot Ratio (non-residential)	0.6.	
Minimum Front Setback	6 metres, as per R Codes.	
Minimum Side and Rear Setbacks	As per R Codes, subject to Clause 5.7.	
Minimum Landscaping (non-residential)	25% of site area and in accordance with Clause 5.9.	
Maximum Building Height	8 metres to eaves, 10.5 metres maximum, having regard to Council Policy.	
Minimum Car Parking	Residential	As per R Codes.
	Non-residential	One bay per 15 square metres gross leasable area, provided that a minimum of 33.3% of bays shall be covered, in accordance with Clause 5.8 and having regard to Council Policy.
Advertising Control	Flashing, animated, tower and roof signs are prohibited. At the discretion of the Council, one non-illuminated sign per lot may be permitted to indicate business operations, goods sold on premises and/or name of the property, building, owner or occupier, not exceeding 1.0 square metre in area, in accordance with Clause 5.10. No other signs are permitted unless approved subject to advertising, in accordance with Clause 7.5.	

Table 3: Residential – Canning Highway Living Area Precinct

Residential – Canning Highway Living Area Precinct (CH)		
Statement of Intent	Primarily medium density residential to take advantage of good public transport links but may include other activities such as home occupations, parks, religious, public recreational, educational and medical uses, provided they are designed in a residential style and are not developed to such an intensity that they disturb the Precinct. The residential character of Canning Highway shall be preserved. All non-residential uses shall be advertised in accordance with Clause 7.5 provided that home occupations shall be determined in accordance with Clause 5.6. Any Council Policy for Canning Highway also is to apply.	
R Code	R25/R40, in accordance with Clauses 5.1, 5.2, provided that densities may be increased to R40 on lots over 1600 square metres where there is no vehicular access to or from Canning Highway.	
Minimum Lot Area	As per R Codes.	
Maximum Plot Ratio (non-residential)	0.4.	
Minimum Front Setback	6 metres, as per R Codes.	
Minimum Side and Rear Setbacks	As per R Codes and subject to Clause 5.7.	
Minimum Landscaping (non-residential)	33.3% of site area and in accordance with Clause 5.9.	
Maximum Building Height	11 metres to eaves, 13.5 metres maximum, having regard to Council Policy.	
Minimum Car Parking	Residential	As per R Codes.
	Non-residential	One bay per 10 square metres gross leasable area, in accordance with Clause 5.8 and having regard to Council Policy.
Advertising Control	Flashing, animated, tower and roof signs are prohibited. At the discretion of the Council one non-illuminated sign per lot may be permitted to indicate business operations, goods sold on premises and/or name of the property, building, owner or occupier, not exceeding 1.0 square metre in area, in accordance with Clause 5.10. No other signs are permitted unless approved subject to advertising in accordance with Clause 7.5.	

Table 4: Residential – Living Area Precinct – Ardross

Residential – Living Area Precinct – Ardross (AR1)		
Statement of Intent	Primarily residential but may include home occupations, corner shops, parks, religious, recreational, and educational activities, provided they are designed in a residential style and are not developed to such an intensity that they disturb the Precinct. All non-residential uses shall be advertised in accordance with Clause 7.5 provided that home occupations shall be determined in accordance with Clause 5.6.	
R Code	R20, in accordance with Clauses 5.1, 5.2. R40 area bounded by Links Road, Leverburgh Street, Riseley Street and rear of lots facing Almondbury Road.	
Minimum Lot Area	As per R Codes.	
Maximum Plot Ratio (non-residential)	0.4.	
Minimum Front Setback	6 metres, as per R Codes.	
Minimum Side and Rear Setbacks	As per R Codes and subject to Clause 5.7.	
Minimum Landscaping (non-residential)	50% of site area and in accordance with Clause 5.9.	
Maximum Building Height	8 metres to eaves, 10.5 metres maximum, having regard to Council Policy.	
Minimum Car Parking	Residential	As per R Codes.
	Non-residential	One bay per 10 square metres gross leasable area, in accordance with Clause 5.8 and having regard to Council Policy.
Advertising Control	Flashing, animated, tower and roof signs are prohibited. At the discretion of the Council one non-illuminated sign per lot may be permitted to indicate business operations, goods sold on premises and/or name of the property, building, owner or occupier, not exceeding 1.0 square metre in area, in accordance with Clause 5.10. No other signs are permitted unless approved subject to advertising in accordance with Clause 7.5.	

Table 5: Residential – Living Area Precinct – Applecross

Residential – Living Area Precinct – Applecross (A1)		
Statement of Intent	Primarily low density residential but may include home occupations, corner shops, parks, religious, recreational and educational activities, provided they are not developed to such an intensity that they disturb the Precinct or are out of character with it. All non-residential uses shall be advertised in accordance with Clause 7.5, provided that home occupations shall be determined in accordance with Clause 5.6.	
R Code	R15, in accordance with Clauses 5.1, 5.2.	
Minimum Lot Area	As per R Codes.	
Maximum Plot Ratio (non-residential)	0.4.	
Minimum Front Setback	6 metres, as per R Codes.	
Minimum Side and Rear Setbacks	As per R Codes and subject to Clause 5.7.	
Minimum Landscaping (non-residential)	50% of site area and in accordance with Clause 5.9.	
Maximum Building Height	8 metres to eaves, 10.5 metres maximum, having regard to Council Policy.	
Minimum Car Parking	Residential	As per R Codes.
	Non-residential	One bay per 10 square metres gross leasable area, in accordance with Clause 5.8 and having regard to Council Policy.
Advertising Control	Flashing, animated, tower and roof signs are prohibited. At the discretion of the Council one non-illuminated sign per lot may be permitted to indicate business operations, goods sold on premises and/or name of the property, building, owner or occupier, not exceeding 1.0 square metre in area, in accordance with Clause 5.10. No other signs are permitted unless approved subject to advertising in accordance with Clause 7.5.	

2.2.1.3 RESOLUTION OF ORDINARY MEETING OF COUNCIL 19 JUNE 2012

At its 19 June 2012 Ordinary Meeting, Council considered submissions and feedback relating to the Draft Vision for the Riseley Centre and resolved to prepare an Activity Centre Structure Plan for the Riseley Centre.

Specifically, Council's resolution was that the Council:

"1. Notes the submissions received from the community on the Draft Vision for the Riseley Centre.

2. Notes the community's generally supportive responses to the Draft Vision for the Riseley Centre and that the further planning process should acknowledge and incorporate the feed back and comments contributed by the community in response to the Draft Vision for the Riseley Centre.

3. Notes the number of concerns raised from within the community related to built forms and building heights and accordingly supports a review of the heights, locations and distribution of built form illustrated in the Draft Vision for the Riseley Centre, as components of further detailed studies and the structure planning process.

4. Notes that the built form and building heights illustrated in the Draft Vision for the Riseley Centre are indicative only and are to be reviewed as part of the preparation of an Activity Centre Structure Plan for the Riseley District Centre.

5. Not adopt the Draft Vision for the Riseley Centre at this time, pending testing and review of the concepts contained within that document as part of the preparation of an Activity Centre Structure Plan for the Riseley District Centre.

6. In supporting the preparation of an Activity Centre Structure Plan for the Riseley District Centre, does not intend that any component of the Draft Vision for the Riseley Centre have any status as policy or be interpreted as implying guidance for decision-making on development applications but rather that the Draft Vision for the Riseley Centre is simply a stage in the process towards the preparation of an Activity Centre Structure Plan.

7. Supports the preparation of an Activity Centre Structure Plan for the Riseley District Centre as detailed in the Western Australian Planning Commission's State Planning Policy 4.2 – Activity Centres for Perth and Peel and including the general project components outlined in Report P12/3313 (Draft Vision For The Riseley Centre – Feedback From Community Forums And Centre Structure Plan) comprising but not limited to the following:

- Options for urban form, built form and building heights (e. g. utilizing an enquiry-by-design process)
- Options for urban form, built form and building heights
- Land uses and activities integrating commercial, retail and residential mixed uses
- Retail sustainability assessment
- Employment self-sustainability
- Housing diversity

- Pedestrian and vehicular access and circulation,
- Public spaces and streetscapes
- Public transport and traffic
- Parking
- Community safety issues
- Developer contributions
- Implementation guidelines and stages
- Interagency liaison
- Statutory instruments
- Governance and partnerships
- Management and administrative roles and responsibilities.

8. Note that the lead petitioner on the petition signed by City of Melville residents and non-residents, received by the Council at its meeting of 15 May 2012, is to be notified in writing of points 1-7 above.

9. That in considering any future development of the Riseley Street Centre that the Council does not support ten storey building heights in the Riseley Centre or along Canning Highway within the Riseley Precinct and the structure planning process should consider restricting building height to less than six storeys only for developments between the Kearns Crescent and Willcock Street areas provided the developments are on land larger than a minimum area and delivers public benefits on amenities."

Based on the above, this structure plan proposes heights to a maximum of six (6) storeys.

2.2.2 Regional and Sub-Regional Structure Plans

2.2.2.1 DRAFT CENTRAL METROPOLITAN PERTH SUB-REGIONAL STRATEGY

The Central Metropolitan Perth Sub-regional Strategy provides a broad framework for delivering the objectives of Directions 2031 and Beyond and identifies a strategic plan of actions, agency responsibilities and delivery timeframes. It links State and local government strategic planning to guide the preparation and review of local planning strategies by:

- Providing information about the level of expected growth in each local government area through the housing targets as identified in Directions 2031 and Beyond;
- Outlining the wide spread of development opportunities throughout the sub-region;
- Investigating the development potential of targeted locations in growth areas, activity centres, urban corridors and transit oriented developments;
- Prioritising actions to revitalise or create vibrant activity centres and facilitate the supply, affordability and choice of available housing in areas with easy access to public transport and other essential services;
- Supporting the planning and delivery of land for employment growth and economic development;
- identifying key public transport and service infrastructure projects to support growth; and
- Informing all levels of government decision-making on where and when to fund the most efficient roll out or upgrading of public infrastructure services.

The Strategy identifies the Riseley Centre as a Major Growth area with a residential yield of 400-999 dwellings. Whilst an apartment yield within this range may be achievable over time, land tenure constraints may result in lower yields unless a greater degree of land consolidation is achieved.

2.2.3 Planning Strategies

2.2.3.1 DIRECTIONS 2031 AND BEYOND

Directions 2031 and Beyond outlines the growth policy, targets and staging for each of the city's six sub-regions, and the new hierarchy of activity centres in the Perth and Peel Regions. This hierarchy nominates the role each centre should play within the network, and identifies which centres should assume a strategic role and which should perform population-driven functions.

The strategic roles are intended to be fulfilled primarily through the Perth CBD, Specialised Centres and Strategic Metropolitan Centres. These centres are based around infrastructure and are, or have the potential to be, large enough to produce productivity increases from agglomeration. These centres should provide an alternative strategic employment location to the CBD, maximise leverage from transport infrastructure and begin to address the economic, social and environmental costs associated with extensive commuting.

One of the primary objectives of Directions 2031 and Beyond is to achieve a more balanced distribution of population, dwellings and employment across the metropolitan area. This involves:

- Improving the employment self-sufficiency of the outer sub-regions; and
- Increasing distribution of new residents and dwellings to the central sub-region.

Smaller lower level centres, such as the Riseley District Centre, are intended to provide for daily and weekly shopping needs of their catchment. In terms of employment, they generally provide primarily population driven employment, but may include some Knowledge Intensive Consumer Services (KICS) along with a high proportion of Consumer Services and Producer Services employment.

2.2.3.2 PUBLIC TRANSPORT FOR PERTH 2031

The Public Transport for Perth 2031 plan, provides a strategy for improving Perth's current public transport system along to respond to current and future needs. The plan considers strengths and weaknesses of the system are then considered along with the opportunities to develop and enhance the network.

The plan sets out a vision for a public transport network to support a population of 3.5 million by 2031. It identifies short, medium and long-term initiatives.

Key focus areas and initiatives of the plan include:

- Moving people effectively and sustainably;
- Connecting a variety of destinations and activity nodes;
- Reducing and managing traffic congestion;
- Creating development opportunities and catalysing revitalisation and intensification of land uses in strategic locations; and
- Reducing reliance of the Perth CBD as the main public transport destination.

The plan advocates for higher residential densities around transit nodes providing more people with the opportunity to walk or cycle to public transport or to access employment within the core of the development.

The plan identifies Canning Highway to include rapid bus transit between Canning Bridge and Riseley Street by 2020 and from Riseley Street to Booragoon by 2031. The Public Transport Authority has indicated that draft plans for a dedicated bus way between Riseley Street and Kwinana Freeway have been prepared in line with this vision however timing for delivery has yet to be confirmed.

2.2.3.3 CITY OF MELVILLE LOCAL COMMERCIAL STRATEGY

The Local Commercial Strategy was produced in 2003 (and updated in 2006) under the guidance of the Metropolitan Centres Policy. The strategy provides retail floor space caps for all activity centres in the City of Melville. This floor space excludes other land uses, such as entertainment, offices, community and recreation facilities, and so on. The strategy also provides 'statements of intent' for the future of the major activity centres and discusses the relative need to provide additional centres or retail floor space.

The Strategy recommends that existing district centres retain their respective floor space limits, as outlined in the Community Planning Scheme, however, expansion from current levels (currently 11,300 square metres) should be assessed on merit. In its commentary on the Riseley Centre, the Strategy recommends that the centre be encouraged to gradually diversify.

State Planning Policy 4.2 Activity Centres for Perth and Peel (the Activity Centres Policy) removes the use of floor space caps in regulating shopping centre size. The new Local Commercial and Activity Centres Strategy (LCACS), currently under preparation, is expected to reflect this.

2.2.3.4 DRAFT LOCAL COMMERCIAL AND ACTIVITY CENTRES STRATEGY

A new Local Commercial and Activity Centres Strategy is currently being developed by the City of Melville. The Strategy will replace the existing Local Commercial Strategy, which does not comply with SPP 4.2. This structure plan is consistent with the City's objectives for the Local Commercial and Activity Centres Strategy.

2.2.3.5 STRATEGIC COMMUNITY PLAN – PEOPLE, PLACES AND PARTICIPATION 2012-2022

The City of Melville Strategic Community Plan is a long-term overarching document that sets out the community's vision and aspirations for the future. It also sets out the key strategies and high-level actions required to achieve these aspirations.

The plan provides the City and others with a clear understanding of what matters most to the communities within it and guides the way in which we, and others, plan for the future and deliver services. It is the community's plan but achieving the aspirations will rely on the collective commitment and combined actions of the City, government agencies, residents, the business community and community groups.

The plan provides a range of aspirations and objectives, which were considered in the development of this structure plan.

2.2.4 Policies

2.2.4.1 STATE PLANNING POLICY 4.2 ACTIVITY CENTRES FOR PERTH AND PEEL (THE ACTIVITY CENTRES POLICY)

Replacing the previous Metropolitan Centres Policy, the Activity Centres Policy specifies the requirements for the planning and development of new centres and the redevelopment and renewal of existing centres in the Perth and Peel Regions.

One of the greatest shortcomings of the Metropolitan Centres Policy was the over reliance on the control of retail floor space. While the retail floor space levels in the policy were intended as a guide, they were interpreted as retail floor space maxima for each level of the hierarchy of centres. Focusing on a single metric had the result of not addressing other outcomes sought.

There are four principles for sustainable activity centres that are broadly encompassed within the Activity Centres Policy. These include:

- Activity centres with diverse offerings and users are desirable for an economically, environmentally and socially sustainable city;
- Activity centres need to perform a role in providing both quantity and quality employment as appropriate for its position in the defined hierarchy;
- Activity centres should be vibrant and intense places of an appropriate scale; and
- Activity centres need to be accessible to a wide user mix utilising different modes of transport.

The features of a district centre are detailed in Table 6: Activity Centre Policy District Centre Targets.

Table 6: Activity Centre Policy District Centre Targets

Area of Focus	District Centre Targets
Service population	20,000 - 50,000 people
Walkable catchment	400 metres
Transport connectivity and accessibility	Focal point for bus network
Typical retail development	Discount department stores Supermarkets Convenience goods Small scale comparison shopping Personal services Some specialty shops
Typical office development	District level office development Local professional services
Residential density target (gross hectare)	20 (minimum) 30 (ideal)
Diversity performance target (mix of land uses floor-space as a proportion of the total centre floor-space)	Above 100,000 square metres – 50% 50,000 square metres – 100,000 square metres: 40% 20,000 square metres – 50,000 square metres: 30% 10,000 square metres – 20,000 square metres: 20% Less than 10,000 square metres: N/A

Source: State Planning Policy 4.2: Activity Centres for Perth and Peel, WAPC, 2010

2.2.4.2 RESIDENTIAL DESIGN CODES

The Residential Design Codes (R-Codes) were gazetted on 2 August 2013 and provide a comprehensive basis for the control of residential development throughout Western Australia. The R-Codes document aims to address emerging design trends, promote sustainability, improve clarity and highlight assessment pathways to facilitate better residential design outcomes throughout Western Australia.

All future residential development in the Riseley Activity Centre is required to accord with the requirements set out within the R-Codes. The structure plan sets out permissible variations to the R-Codes.

2.2.5 Other Relevant Planning Documents

2.2.5.1 REPORT FOR PLANNING ANALYSIS OF THE RISELEY CENTRE

The Report for Planning Analysis of the Riseley Centre (2010) sought to support Riseley Street as a District Centre within the context of Directions 2031 and surrounding activity centres. The report proposed an ultimate mix of:

- 21,000 square metres (additional 13,000 square metres) of retail space;
- 108,000 square metres (additional 100,000 square metres) of commercial space;
- 3,000 employees; and
- 2,700 residents in 1,200 dwellings.

The increase in retail floorspace described in the report relies on the capture of significantly higher demand from within existing catchments, most likely through the expansion of the local supermarket. Similarly, the rise in commercial office space is also reliant on increased market demand over time. These figures will be examined in greater detail through the commercial needs assessment.

2.2.5.2 DRAFT VISION FOR THE RISELEY CENTRE

The Draft Vision for the Riseley Centre (2011) is a non-statutory concept document that acknowledges Riseley Street's existing attributes while seeking to enhance its role as an inner metropolitan activity centre. The Draft Vision establishes a series of short, medium and long-term initiatives that make up a draft implementation framework for the activity centre. Initiatives range from further studies (e.g. traffic and parking) to identifying major infrastructure requirements within both the public and private domain.

Furthermore the Draft Vision illustrates the potential to enhance the Centre's role by updating and more effectively integrating urban design, built forms, mixed uses and urban sustainability principles with the high frequency public transit services. The Vision encompasses:

- Graduated building heights to transition towards existing residential;
- Central core 2-3 storeys adjacent to Canning Hwy to maintain village feel;
- Basement parking for all new developments – the question of viability needs to be considered;
- Traffic and landscape treatments to improve pedestrian safety and comfort; and
- Taller buildings up to 10 storeys along Kearns Crescent.

Council considered community feedback following advertising of the Draft Vision for the Riseley Centre. At its Ordinary Meeting 19 June 2012, Council considered community feedback further to the advertising approved 16 August 2011. The Vision was noted, but not adopted. Whilst the community were not opposed to improvement and development within the centre, there was strong opposition to proposed 10 storey building heights.

2.3 Site Conditions

2.3.1 Biodiversity and Natural Area Assets

The structure plan area is wholly contained within an existing urban area. Biodiversity and habitat is limited to street trees and private gardens, which contain a variety of introduced and native species.

2.3.2 Landform and Soils

The structure plan area has an undulating topography. The site slopes from approximately 19m Australian Height Datum (AHD) to the south of the structure plan area down to approximately 8m AHD at the corner of Riseley Street and Canning Highway.

2.3.3 Environmental Constraints and Site Contamination

A search of the Landgate's Shared Land Information Platform indicates that no reported contaminated sites exist within the structure plan area.

2.3.4 Heritage

A search of the State Heritage Register and City's Municipal Heritage Inventory indicates that there are no historic or heritage assets within the structure plan area.

A search of the Department of Aboriginal Affairs Heritage Enquiry System indicates that there are no sites of Aboriginal cultural significance within the structure plan area.

3. MOVEMENT

Fig 7. Regional Heriarchy

Photograph 1. Bus 106 (Esplanade Busport to Fremantle Station) stopped on Canning Highway

Photograph 2. Bus 881 (Wellington Bus Station to Asquith Street / Beckett Close).

3.1 Regional Connections

The Riseley Activity Centre is serviced by a variety of local and regional connections as illustrated in Figure 7: Regional Hierarchy.

Fig 8. Public Transport Services

3.2 Principal Public Transport Services

The Riseley Activity Centre is situated at a point where two major bus transit routes meet, providing excellent links Riseley Activity Centre, Perth CBD, Fremantle, Booragoon and also Canning Bridge Train Station. Access to public transport is available within the subject area as well as in the immediate surroundings as illustrated below and within Figure 7: Public Transport Services.

The following bus lines have stops on Canning Highway within the subject area:

- 106 (Esplanade Busport to Fremantle Station);
- 111 (Hay Street/Plain Street to Fremantle Station);
- 148 (Clydesdale Street/McDougall Street to Fremantle Station);
- 158 (Hay Street/Plain Street to Fremantle Station);
- 881 (Wellington Bus Station to Asquith Street/ Beckett Close); and
- 940 (Wellington Bus Station to Hamilton Hill Hall).

The following bus lines have stops on Riseley Activity Centre within the subject area:

- 148 (Clydesdale Street/McDougall Street to Fremantle Station);
- 158 (Hay Street/Plain Street to Fremantle Station);
- 881 (Wellington Bus Station to Asquith Street/ Beckett Close); and
- 940 (Wellington Bus Station to Hamilton Hill Hall).

The proposed development of the Canning Bridge Precinct is likely to further encourage usage of public transport and strengthen the links between the two precincts (Canning Bridge and Riseley Street). Main Roads Western Australia (MRWA) has provided preliminary design drawings for the upgrade of Canning Highway. These plans assume that the southern intersection of Kearns Crescent and Canning Highway will be reduced to left out only.

The Public Transport Authority (PTA) has indicated that it plans to upgrade the entire Canning Highway corridor, which would include dedicated bus lanes on Canning Highway. A timeframe has yet to be determined for delivery of this upgrade. The high level of public transport service is conducive to the higher density mixed use development forms proposed within this plan.

Photograph 3. Canning Highway and Riseley Street Intersection

Photograph 4. Curved Kearns Crescent

3.3 Local Road Network and Access

The local road network provides both regional and local level connections. Canning Highway and Riseley Street perform a regional role, resulting in high traffic levels in the centre and severance of the commercial and retail core, particularly between the east and west 'quadrants'.

The central commercial and retail core is characterised by crescent shaped streets. Riseley Street is currently limited to 60 kilometres an hour, whereas lower order streets are limited to 50 kilometres an hour. The community considers these limits incompatible within a highly pedestrianised centre. The basis of concern relates to the curved nature of the streets, which have a negative impact on sight lines, with the local community reporting safety issues and difficulties associated with crossing both local and regional roads with the centre.

The surrounding local road network is regular and grid-like in alignment and generally interconnected providing good linkages to the surrounding residential network. The community has also reported 'rat running' through the lower order roads by motorists attempting to avoid traffic queues at the intersection of Riseley Street and Canning Highway. The central core is serviced by laneways, however many of these are not formalised.

Fig 9. Key Local Roads

A comparison study of the legal speed limit and the recorded operative speeds obtained through the City found that drivers utilising the area generally adhere to the legal speed limit. Community feedback suggests that the legal limits on Riseley Street (between Simpson Street and Willcock Street) and Kearns Crescent should be reduced to 40 kilometres an hour and 30 kilometres an hour respectively, which is more compatible with pedestrian comfort and safety. No change is proposed for the speed limit on Canning Highway, which is determined by Main Roads WA.

Figure 9: Key Local Roads illustrates the impacts that high volume traffic has on the connectivity within the centre. Whilst the City has limited opportunity to influence outcomes along Canning Highway, this plan proposes design modifications to Riseley Street and lower order roads such as Kearns Crescent, Willcock Street and Simpson Street to reduce traffic speeds, optimise car parking and improve the pedestrian experience.

Vehicular traffic growth within the structure plan area is anticipated to comprise a small percentage of overall regional traffic. Key linkages such as Canning Highway and Riseley Street offer connectivity to a series of other activity centres and provide key linkages to Fremantle and the Perth Central Business District.

With regard to the major road networks within the structure plan area, the overall impact of future development on the levels of service at key intersections such as Riseley Street and Canning Highway is likely to be negligible.

However, it will be important to ensure that the growth of traffic along local streets within and adjacent to the structure plan area, such as Bombard Street on the southern side of Canning Highway and Macrae Street on the northern side, is appropriately managed. Bombard Street and Macrae Street both provide direct and clear connectivity to Reynolds Road and through to Kintail Road and Canning Beach Road on the northern side.

To minimise the impacts of regional traffic growth and commensurate decreased levels of service through the intersection of Riseley Street / Canning Highway, a clear strategy should be developed for the local access streets to limit permeability for through regional traffic. As one of the key reasons why road users choose other routes is travel time, increased traffic management devices will increase the times where deceleration is required during the journey, therefore increase travel times for regional through traffic.

Of notability, increased development intensity provide greater opportunities for alternative transportation modal growth, and therefore provide increased opportunities for strategic projects such as bus lanes in Riseley Street and to provide increased car parking in periods outside of morning peaks in Riseley Street. The importance of urban design in Riseley Street is highly important to the future success of the Structure Plan Area and the road cross section in Riseley Street near the intersection of Canning Highway is likely to be the key piece of road infrastructure in the overall development of the Structure Plan area.

3.3.1 Key Initiatives and Actions

Table 7: Local Road Network and Access Key Initiatives and Actions

Key Initiatives	Effects and Actions
Upgrades and/or modifications to the Canning Highway / Riseley Street intersection	The Melville City Centre Structure Plan recommends that the intersection be further investigated to improve regional traffic movements. Further detailed design investigations will be required for any such changes in consultation with MRWA, DoT and PTA. Upgrades and/or modifications to the intersection may assist regional traffic movements, but also should improve accessibility for public transport, pedestrians and cyclists
Further investigate traffic issues and intervention on local streets	The City of Melville to further investigate potential traffic issues on local streets which may include, but not be limited to: Matheson Road, Macleod Road, MacRae Road, Simpson Street, Bombard Street, Willcock Street, Mitchell Street Intervention may include: Providing left-in left-out intersection configurations at selected four-way intersections; Mid-block traffic management devices to limit vehicular speeds
Reduce the eastern carriageway (southbound) of Riseley Street from two (2) lanes to one (1) lane between Canning Highway and Willcock Street.	Further investigation and consultation with MRWA and PTA regarding design and impacts will be required. Providing additional parking adjacent to tenancies on the eastern side of Riseley Street will assist in activating business frontages along Riseley. Parked cars will provide a buffer between traffic and, enhancing comfort and safety for pedestrians.
Reduce traffic speed limit on Riseley Street to 40 kilometres an hour between Simpson Street, Willcock Streets and Canning Highway.	Greater pedestrian accessibility comfort and safety.
Reduce traffic speed limit on Kearns Crescent to 30 kilometres an hour.	Greater pedestrian accessibility comfort and safety.

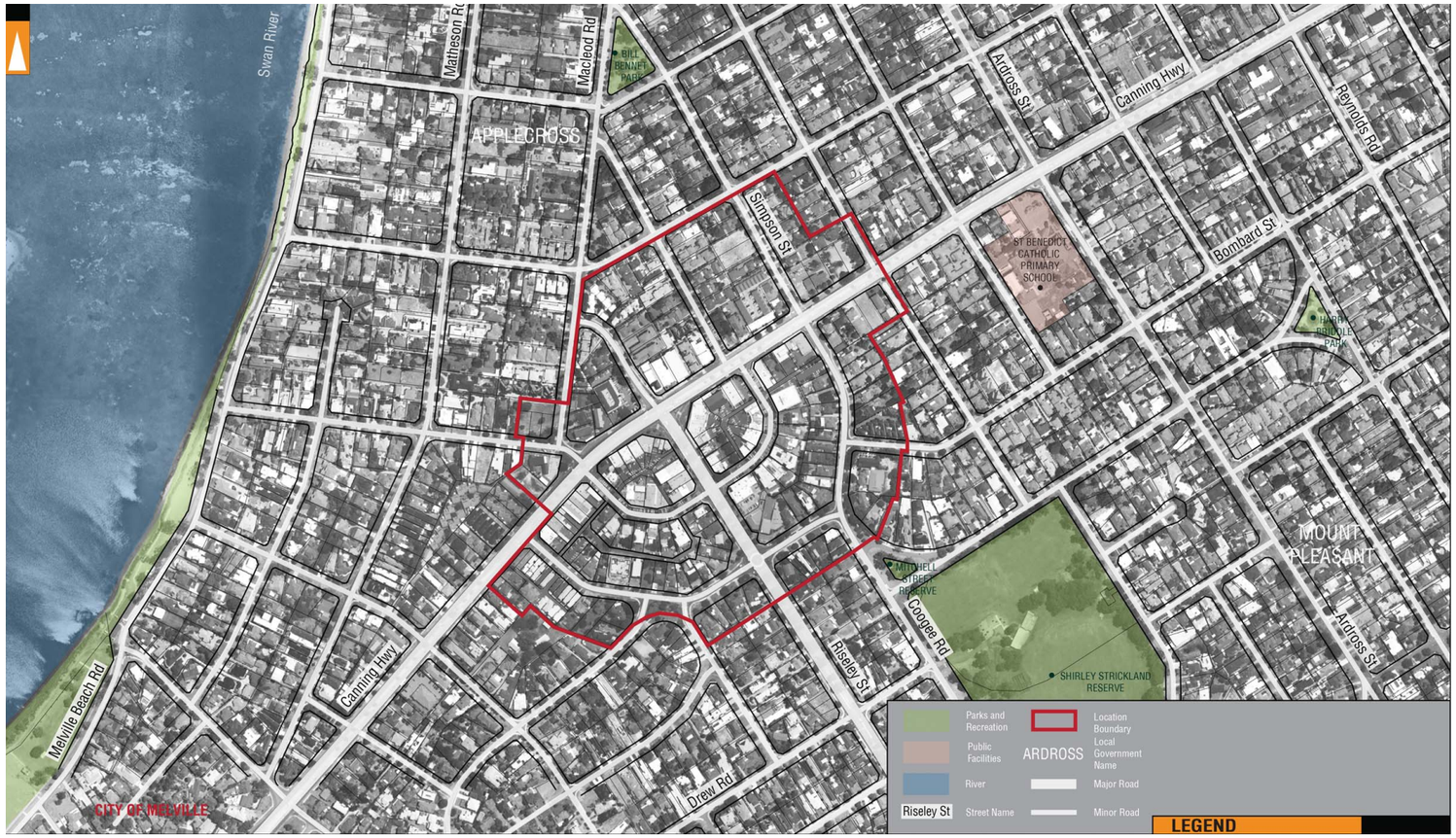

Fig 10. Local Road Networks

3.4 Pedestrian and Cycling Movement and Amenity

The local street network provides good pedestrian connections in the areas surrounding the centre although pedestrian access, safety and attractiveness require improvement within the centre. In particular, Canning Highway, Kearns Crescent, Riseley Street (section between Canning Highway and Willcock Street) and the existing access laneways all present relatively hostile environment for pedestrians.

Riseley Street includes bicycle lanes in both directions. In the vicinity of the subject site there are official Perth Bicycle Network (PBN) routes as well as roads marked as "good riding conditions". The majority of the roads within the subject site have not been classified with regards to the bicycle accessibility.

In general, pedestrian paths exist as a minimum on one side of the road within the centre south from Kearns Crescent and north from Canning Highway, however for an activity centre of this nature, accessibility to local business is dependent on easy access to all frontages.

Site analysis and engagement with the local community and stakeholders highlighted the following particular issues impacting on accessibility, safety and comfort of pedestrians and cyclists within the centre:

- 90 degree 'nose-in' parking restricts accessibility on the southern side of Kearns Crescent and limits pedestrian activity to the northern side of the street;
- Traffic speeds and volumes along Riseley Street contribute to a lack of safety and comfort, whilst also creating a barrier between areas of the centre either side of Riseley Street;
- The speed of traffic (as previously mentioned), conflicts with safety and accessibility within the precinct; and
- Limited provision of safe bicycle storage facilities and cycle friendly street design within the centre is a disincentive to cycling.

Photograph 5. Riseley Street Bicycle Lane (South)

Photograph 6. 'Nose-in' parking on the southern side of Kearns Crescent

Photograph 7. The large Riseley Street/Kearns Crescent intersection and constant flow of traffic makes it difficult for pedestrians to cross

3.4.1 Key Initiatives and Actions

Table 8: Pedestrian and Cycling Movement and Amenity Key Initiatives and Actions

Key Initiatives	Effects and Actions
Reconsider the design and paving treatments at intersection of Riseley Street and Kearns Crescent) to encourage slower movement and greater awareness of pedestrian activity.	Encouraging reduced operative speed on both roads. Enhancing pedestrian safety at the street crossing. Enhancing the visual amenity of the area. Determine visual cues such as paving materials to visually communicate to motorists that the precinct is a pedestrian area. Further investigation and consultation with MRWA and PTA regarding design and impacts may be required.
Replace 90 degree parking on Kearns Crescent with parallel and/or 30 degree parking in conjunction with development and implementation of parking management plan.	Increase overall traffic safety (drivers not reversing into the opposite lane). Enhance pedestrian amenity.
Provide footpaths on both sides of streets within 200 metres of the centre.	Greater pedestrian accessibility comfort and safety.
Enhancing pedestrian amenity along Canning Highway.	Landscaping works should consider appropriate footpaths widths and tree planting to provide shading for pedestrians. Further investigation and consultation with MRWA and PTA regarding design and impacts may be required.
Demarcate pedestrian movement areas within privately owned car parks bound by Kearns Crescent, Riseley Street and Canning Highway.	Clearer definition between the pedestrian and vehicle realm for improved accessibility. Further investigation and consultation with private landowners required.

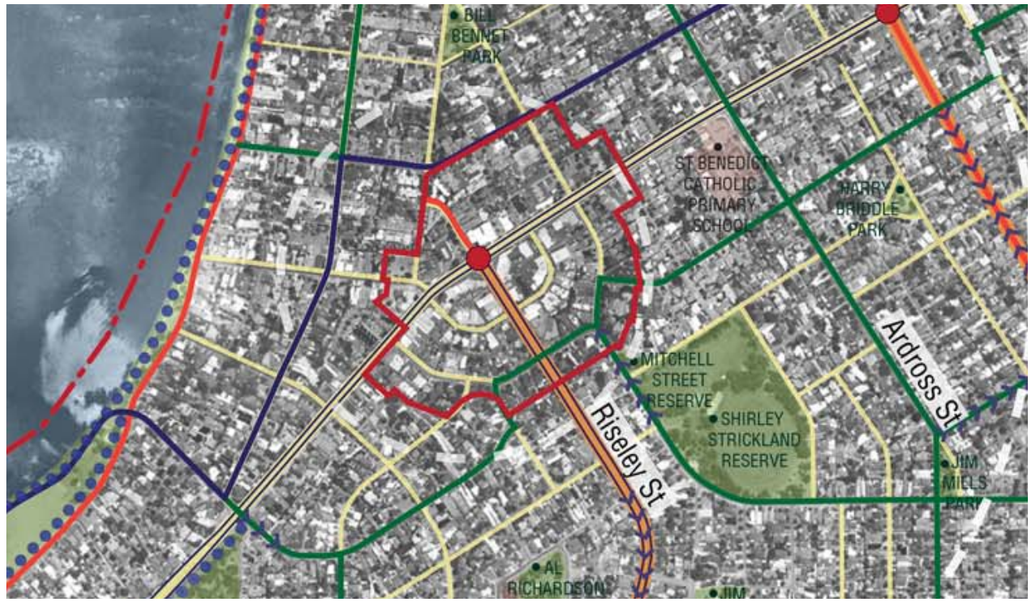

Fig 11. Bicycle Plan

Fig 12. Pedestrian Pathways

3.5 Parking Strategy and Travel Management

3.5.1 Existing City of Melville Parking Provisions

The City has current parking requirements for non-residential uses defined through its Council Policy CP-079. This policy allows parking requirement reduction of 10% in case of providing bicycle parking only. Similar policies in other councils (including City of Vincent, City of Stirling, and City of Bayswater) allow parking requirement reductions for a variety of situations where convenient alternative transportation options are provided. The policy allows for reciprocal parking where more than one non-residential use is located on one lot or propose joint parking arrangements within an easement or similar.

3.5.2 Existing Situation

The analysis of the existing parking provisions within the site area highlights the following matters in the Riseley Activity Centre:

- Car parking is generally provided throughout the centre as surface parking within carriageways or on private property. There is also a lack of decked and underground parking provisions and public car parks;
- At present there is no paid parking within the subject area and the majority of on-street and off-street parking that has been time-limited is two (2) hour parking (section of Willcock Street, Kearns Crescent, car parks on Simpson Street and Willcock Street); and
- Parking within the laneways has not been time limited and is often attracting long-stay/commuter parking user groups. Anecdotal reports indicate that workers within the centre are utilising prime car parking locations, limiting availability of parking for business customers.

Photograph 8. Eastern car park court

Photograph 10. Kearns Crescent on street parking

Photograph 9. 2 hour week day parking limit sign

Photograph 11. Private property surface parking

Table 9: Parking Assessment and Figures 12-15: Existing Parking Quadrants 1-4 illustrates the provision of car parking within the centre.

A comparison between the car parking standards included within the City's Community Planning Scheme No. 5 and what is currently provided within the structure plan boundary does not accurately reflect the number of car parking bays that should be ought to provided and made accessible to visitors, workers and residents. Whilst the demand for parking is high in activity centres, an appropriate balance between a level of car parking supply that supports the functionality of the centre by making accessible, without having a detrimental effect on the character and amenity of the centre is required. It is important to also consider that the centre i was built prior to the 1950's at which time it was a modest vehicle based neighbourhood centre. It has since evolved into a district centre and is now constrained in terms of land available for the allocation of car parking. Future parking provision should be considered within this context along with an understanding that the over provision of public parking can often incentivises visitors to drive instead of choosing alternative "less convenient" forms of transport and that it's provision comes at a high cost terms of land value, construction and maintenance.

Table 9: Parking Assessment

Assessed Area	Parking Provided
Quadrant 1	131
Quadrant 2	315
Quadrant 3	86
Quadrant 4	54
Total	586

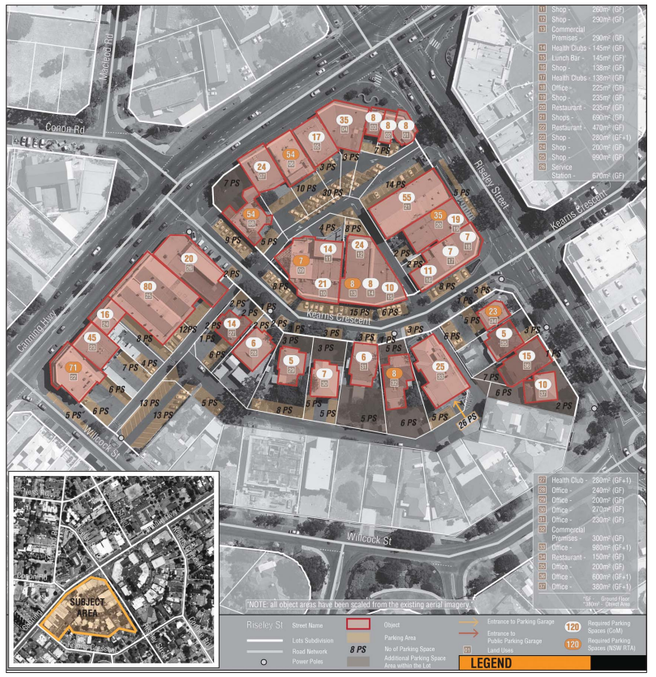

Fig 13. Existing Parking Quadrant 1

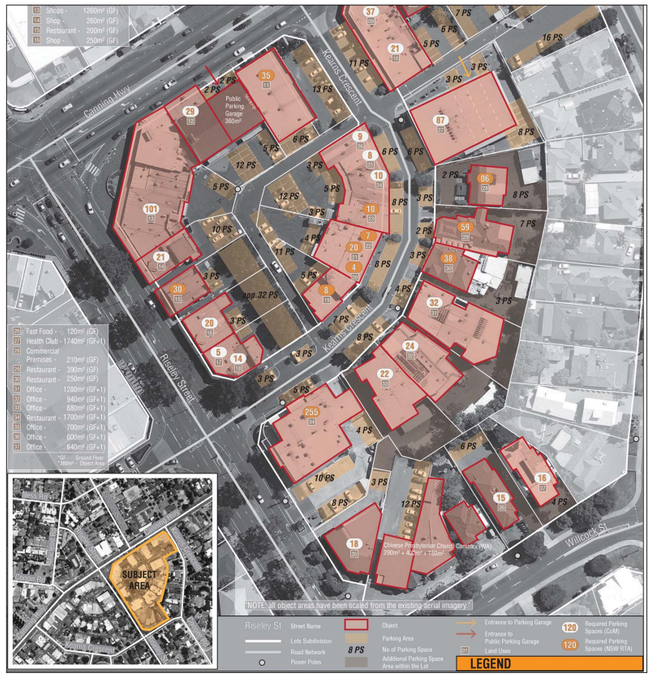

Fig 14. Existing Parking Quadrant 2

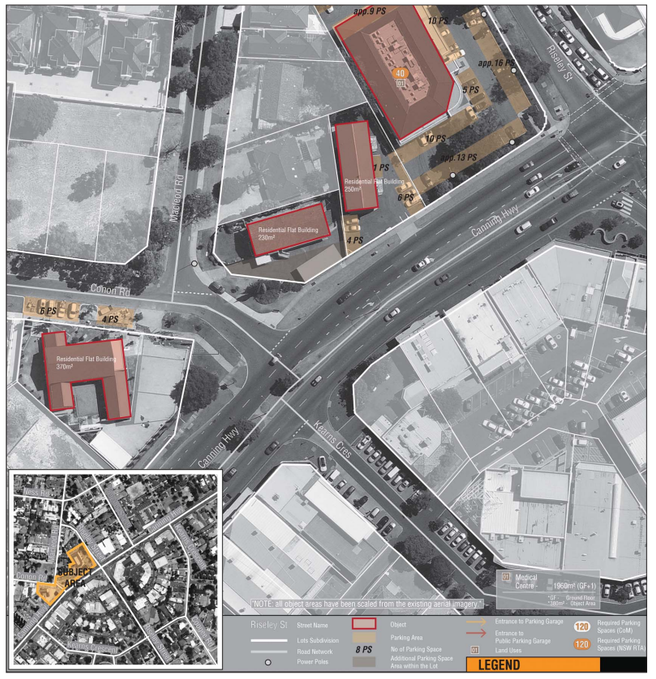

Fig 15. Existing Parking Quadrant 3

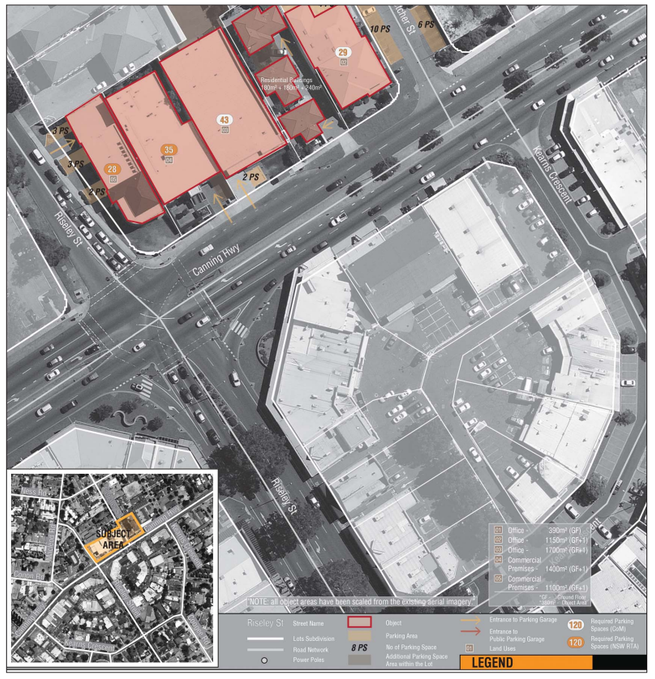

Fig 16. Existing Parking Quadrant 4

3.5.2.1 KEY INITIATIVES AND ACTIONS

The City of Melville is currently preparing a Parking Strategy, which promotes the shift from a parking supply approach to a parking management approach. Parking Management Plans will be required for each activity centre. It is recommended that Parking Management Plan be prepared for the Riseley Centre to further investigate the issues and provide a detailed management plan for the area.

Table 10: Parking Strategy and Travel Management Key Initiatives and Actions

Key Initiatives	Effects and Actions
Prepare a detailed Parking Management Plan for the Riseley Centre	A Parking Management Plan should be prepared for the Riseley Centre in accordance with the City's Parking Strategy to further investigate existing parking issues and provide a detailed management plan for the area. The Parking Management Plan should investigate matters such as: • Provision of shared public parking for the centre • Private car parking • Existing and recommended car parking ratios • Timed parking • Paid Parking • Short, medium and long term parking • Provision of more (or less) car parking for the centre • Options for providing car parking • Use of City of Melville land for parking and other activities • Motorcycle, scooter and bicycle parking • End of trip facilities
Revise the City's existing parking requirements (Policy CP-079)	Revise the requirements for parking in activity centres in order to encourage higher proportion of use of public transport and alternative transport modes.
Include standards into the parking policy for bicycle storage and post trip cycling facilities for mixed-use development.	Encourage higher use of alternative transportation modes.
Provide more on-street car parking wherever possible on Simpson Street and Willcock Street.	Facilitate the expansion of commercial activities on the properties facing Willcock Street and Simpson Street. Encourage slower movement of vehicles through 'edge friction'. Paint bays on streets where parking is permitted to encourage people to park on the street. This assists with encouraging slower movement on local roads.
Provide additional parking within the future developments as stacked or basement parking.	Cater for the individual parking needs of developments (employee and visitor parking).
Encouraging all-day staff car parking in existing car bays on Mitchell Street (north of Shirley Strickland Reserve).	Reduce pressure on prime car parking locations within the centre and provide greater access to customer parking. Introduce timed parking in prime locations to discourage long term or all day parking. Engage with local landowners to determine and encourage appropriate means of restricting/ timing car parking in private car parks.
Provide additional parking along the eastern (southbound) side of Riseley Street.	Further investigate and consult with MRWA and PTA regarding design.
Provide a new taxi bays in the centre.	Encourage higher use of alternative transportation modes.

3.5.3 Provision for Delivery and Service Vehicles

Given that it is a predominantly commercial precinct, provisions for delivery vehicles are an important component of the street layout. Delivery/loading zones have been denoted for a small portion of the existing businesses.

Provision for future needs of growing commercial centre will depend on the proposed physical structure (orientation of the buildings). Parking areas denoted for parking of delivery vehicles can be utilised by other parking users outside of delivery times. Prescribing standard delivery times for existing and any proposed commercial developments may be required.

3.6 Streetscape

Streetscapes throughout the Riseley Centre are reflective of a vehicle-dominated centre, where a focus on vehicle traffic detracts from the pedestrian experience.

Whilst the need to move regional traffic along Riseley Street and Canning Highway is acknowledged, improving streetscapes to provide greater benefits to pedestrians without adversely impacting on the regional function of these routes is essential to this structure plan.

This plan advocates for improvement to all streets within the centre to feature the following elements:

- Tree planting to all streets. Trees should be deciduous to allow sunshine in in winter and provide a good shade canopy in summer;
- High quality street furnishings such as: footpaths, seating, benches and drinking water fountains;
- Shade awnings attached to the building to be provided over footpaths for all commercial frontages;
- High quality buildings that provide a good relationship between the frontage and the street; and
- Public art in key locations to be provided in line the City of Melville's Provision of Public Art In Development Proposals Policy No. CP- 085.

It is expected that private investment in existing and new development over time will also contribute to the quality of streetscape through the introduction of improved architectural standards.

Photograph 12. Example of shade awning attached to commercial building

3.6.1 Key Initiatives and Actions

Table 11: Streetscape Key Initiatives and Actions

Key Initiatives	Effects and Actions
Redesign and reconstruct Kearns Crescent (realigning the carriage way, providing parking and pedestrian paths on both sides of the road, potentially introducing slow moving surface).	Enhance the traffic safety in the area. Enhance pedestrian and cyclist accessibility. Improve place making opportunities to the benefit of local business and current and future residents.
Reconstruct the intersection of Willcock Street, Coogee Road and Simpson Street.	Improve pedestrian crossing on corner of Simpson, Coogee and Willcock Streets.
Formalise (resurface) the existing laneway between Kearns Crescent and Simpson Street.	Provision of shared access laneway will improve permeability of the precinct and potentially create new business opportunities. Accommodate shared access to improve pedestrian and cycling opportunities.
Widen rear rights of way to at least six (6) metres through ceding of land at point of subdivision or development of lots (condition of planning approval).	Enhance accessibility.
Reduce movement at the intersection of Kearns Crescent and Canning Highway to 'left out' only (proposed by MRWA).	Discourage rat running via Willcock Street to avoid traffic lights.

Photograph 13. Example of high amenity street (Mends Street, South Perth)

3.6.2 Street Sections

A variety of main streets were studied around Perth to develop a greater understanding of the types of street sections that would be appropriate for traffic conditions and street widths in the Riseley Centre. The team also explored street sections within the local area, which the community indicated provided a higher level of amenity. These include:

- Ardross Street, Applecross;
- Mends Street, South Perth;
- Rokeby Road, Subiaco;
- Oxford Street, Leederville;
- Scarborough Beach Road, Mount Hawthorn;
- Albany Highway, Victoria Park; and
- Bayview Terrace, Claremont.

Photograph 14. Mends Street, South Perth

Photograph 15. Rokeby Road, Subiaco

Whilst each of the above centres varies in role, function and traffic volume, they provide a broad oversight on how the balance between vehicle traffic and pedestrian comfort is achieved. They were selected to enable the team to compare like traffic volumes and street widths for key streets within the centre.

The modifications to Kearns Crescent, as reflected in Figure 17: Kearns Crescent Proposed have been designed to improve the functionality and amenity within the centre by creating a people focus place that is conducing to place making and pedestrian comfort and safety. The proposed design seeks to achieve an improved balance between vehicle movement and the quality of the pedestrian environment and to accommodate future growth within the centre.

Photograph 16. Oxford Street, Leederville

Photograph 17. Albany Highway, Victoria Park

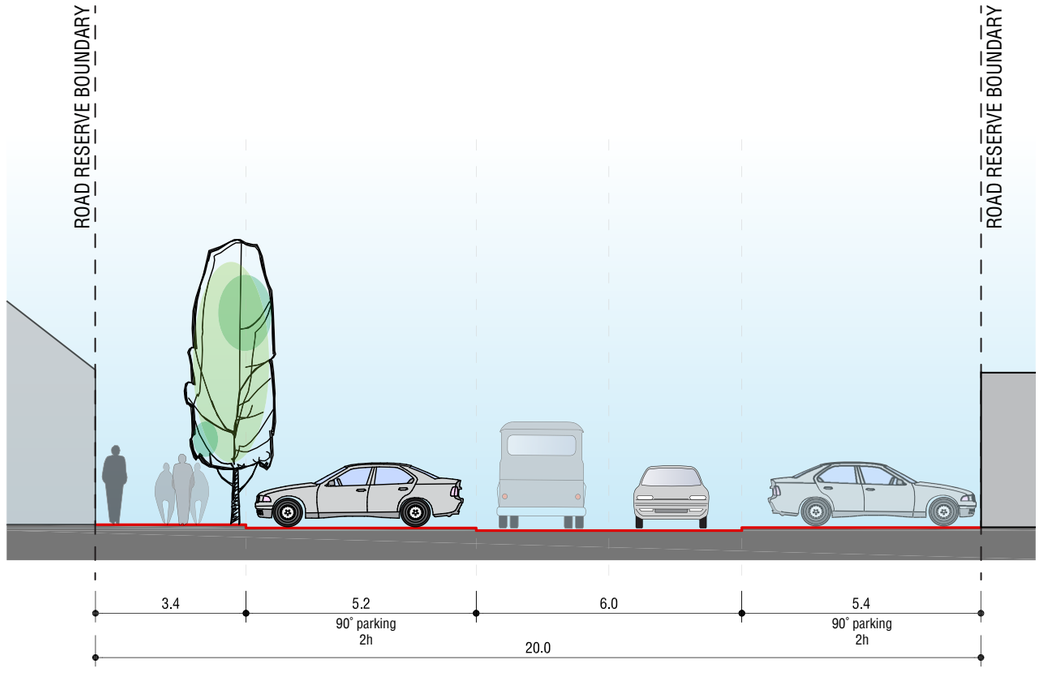

Fig 17. Kearns Crescent (East) Existing

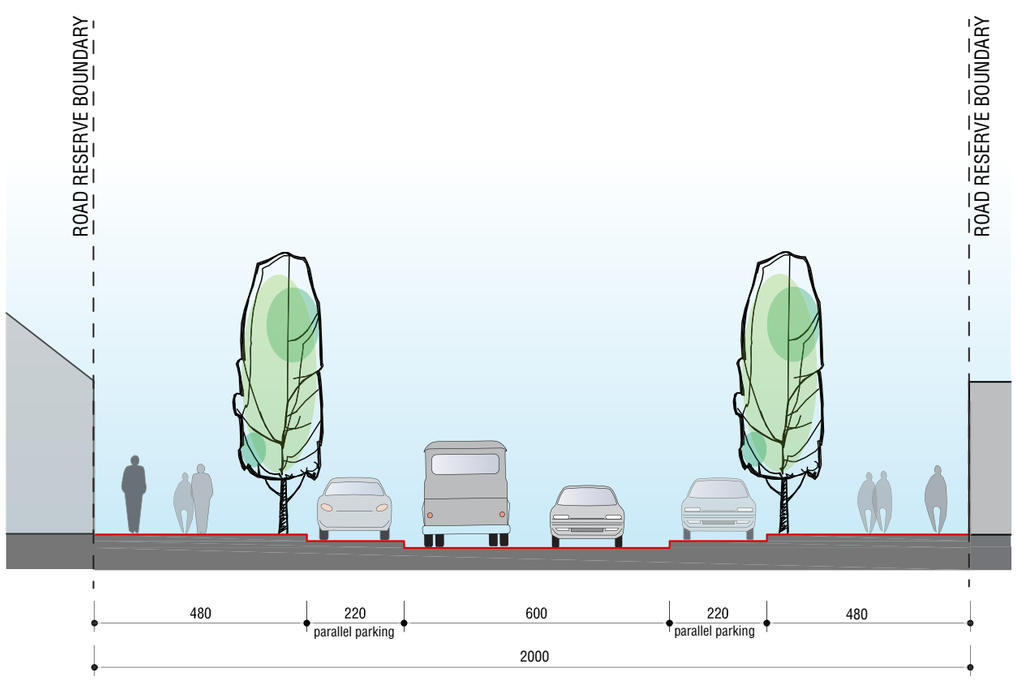

Fig 18. Kearns Crescent Proposed

4. ACTIVITY

4.1 Policy Goals

Two State government policy documents provide primary guidance on activity centre and employment planning in the Perth and Peel Regions. These are Directions 2031 and Beyond and State Planning Policy 4.2: Activity Centres for Perth and Peel (SPP 4.2). The section below sets out the implications of these for activity centre planning for Riseley Street District Centre.

4.1.1 Directions 2031

Directions 2031 is a State government planning strategy which outlines the growth policy, targets and staging for each of the city's six sub-regions across the Perth and Peel Regions. It also defines a hierarchy of activity centres. This hierarchy nominates the role each centre should play within the network, and identifies which centres should assume a strategic role and which should perform population-driven functions. The strategic roles are intended to be primarily fulfilled through the CBD, Specialised Centres and Strategic Metropolitan Centres. These centres are based around infrastructure and are, or have the potential to be, large enough to produce productivity increases from agglomeration. These centres should provide an alternative strategic employment location to the CBD, maximise leverage from transport infrastructure and begin to address the economic, social and environmental costs associated with extensive commuting.

One of the primary objectives of Directions 2031 is to achieve a more balanced distribution of population, dwellings and employment across the metropolitan area. This involves:

- Improving the employment self-sufficiency of the outer sub-regions; and
- Increasing distribution of new residents and dwellings to the central sub-region.

Smaller lower level centres, such as Riseley Street District Centre, are intended to provide primarily population-driven functions for the daily and weekly shopping needs of their catchment. Employment located at the centre is primarily population-driven employment, but may include some strategic employment.

4.1.2 State Planning Policy 4.2: Activity Centres for Perth and Peel

Replacing the previous Metropolitan Centres Policy (MCP), SPP 4.2 specifies the requirements for the planning and development of new activity centres, and the redevelopment and renewal of existing centres, in the Perth and Peel Regions. Unlike the MCP, SPP 4.2 addresses activity centre planning from a holistic understanding of activity rather than focusing on controlling retail development.

There are four principles for sustainable activity centres that are broadly encompassed within SPP 4.2. These include:

- Activity centres with diverse offerings and users are desirable for an economically, environmentally and socially sustainable city;
- Activity centres need to perform a role in providing both quantity and quality employment as appropriate for its position in the defined hierarchy;
- Activity centres should be vibrant and intense places of an appropriate scale; and
- Activity centres need to be accessible to a wide user mix utilising different modes of transport.

4.2 Land Uses and Diversity

4.2.1 4.2.1Position in Activity Centres Hierarchy

Riseley Street is designated a District Centre under the SPP 4.2 activity centres hierarchy. Placed fourth-highest in the hierarchy, this type of centre plays a significant role in servicing the daily and weekly needs of residents within the catchment. The smaller scale catchment relative to higher level centres enables them to have a greater local community focus and provide services, facilities and job opportunities that reflect the particular needs of their catchments. The expected features of a district centre are set out in Table 3: SPP 4.2 District Centre Targets.

Photograph 18. Riseley Street District Level Centre

Table 12: SPP 4.2 District Centre Targets

Area of Focus	District Centre Targets
Service population	20,000 - 50,000 people
Walkable catchment	400 metres
Transport connectivity and accessibility	Focal point for bus network
Typical retail development	Discount department stores Supermarkets Convenience goods Small scale comparison shopping Personal services Some specialty shops
Typical office development	District level office development Local professional services
Residential density target (gross ha)	20 (minimum) 30 (ideal)
Diversity performance target (mix of land uses floor-space as a proportion of the total centre floor-space)	Above 100,000 square metres: 50% 50,000 square metres – 100,000 square metres: 40% 20,000 square metres – 50,000 square metres: 30% 10,000 square metres – 20,000 square metres: 20% Less than 10,000 m square metres: N/A

Source: State Planning Policy 4.2: Activity Centres for Perth and Peel, WAPC, 2010

4.2.2 Riseley Street District Centre Function

Riseley Street District Centre is currently best characterised as a multi-function population-driven centre. The floorspace breakdown by Planning Land Use Category (PLUC) is shown in Figure 18: Current Riseley Street Floorspace (by PLUC). In addition to its convenience retail (e.g. supermarket, fast food) and entertainment functions, it has numerous knowledge-intensive consumer services firms, particularly various medical and related services. The centre is also home to at least one engineering firm, giving it the beginnings of a diversification away from a purely population-driven focus.

Community consultation during the preparation of this structure plan provided a snapshot of some of the reasons for visits to Riseley Street (refer to Figure 19: Purpose of Visits to Riseley Street), although the sample size was of insufficient size to provide definitive data. Participants surveyed visited Riseley Street most often for retail shopping, to go to a restaurant or cafe, and to use services and utilities. Some groups also visited the centre for the primary purpose of entertainment, or as a business owner/employee. There was some discussion of the relative attractiveness of the nearby Booragoon Secondary Centre as an alternative destination for goods and services. It is possible a significant proportion of residents within the Riseley Street catchment are choosing to visit Booragoon for their daily and weekly shopping needs due to the greater diversity of goods and services available

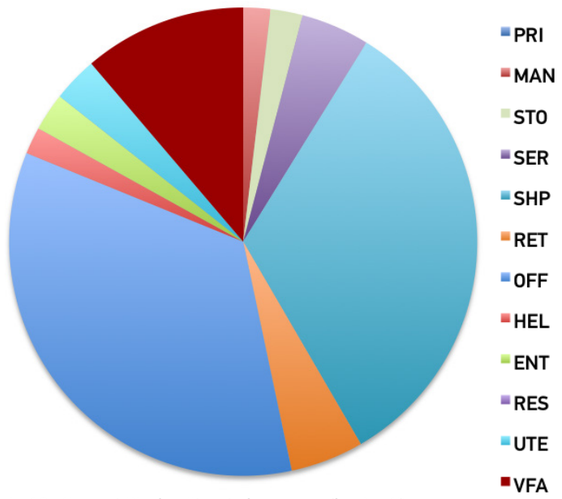

Fig 19. Current Riseley Street Floorspace (by PLUC)
Source: Pracsys 2013, WAPC 2008

at this location, and the comparative quality of the offer at Booragoon. It was also apparent that traffic management and parking were an issue that participants strongly felt impacted on their use of Riseley Street. It is interesting to note that Garden City Shopping Centre also has significant traffic and parking issues, and a large proportion of the traffic going along Riseley Street is likely to be going to Booragoon. In the future it is expected that Riseley Street will continue to perform largely population-driven function, however in order to compete the offer of goods and services may be to be improved and expanded to better align with the needs of the catchment.

4.2.3 Competition

There are three major activity centres near Riseley Street: Canning Bridge, Murdoch and Booragoon. These centres, due to their proximity and offer of land uses, have the potential to compete with Riseley Street.

4.2.3.1 CANNING BRIDGE DISTRICT CENTRE

Canning Bridge is a district centre located around 2 km east of Riseley Street on Canning Highway. Canning Bridge currently has a strong focus on office floorspace, with a significant number of entertainment offerings and supporting convenience retail. Structure planning for the centre is currently underway. It is expected there will be an expansion of office floorspace at Canning Bridge. The close proximity of the centre to Perth CBD, and the excellent access provided to the centre by the train station, bus services, Kwinana Freeway and shared paths has made the centre an attractive proposition for population-driven or strategic services industries to locate there.

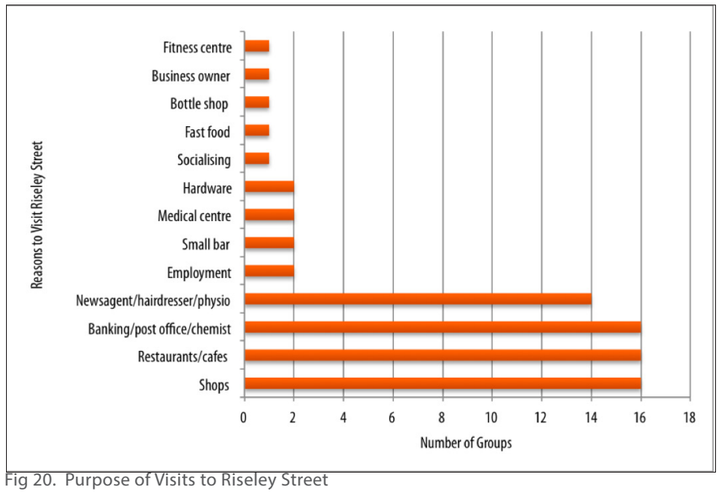

Fig 20. Purpose of Visits to Riseley Street

Source: TPG/City of Melville 2013, Pracsys 2013

4.2.3.2 MURDOCH SPECIALISED CENTRE

Murdoch Specialised Centre includes Murdoch University, Fiona Stanley Hospital, St John of God Hospital and allied health services, and Challenger TAFE. The recently released Murdoch Activity Centre Structure Plan indicates the focus of the centre is expected to remain on health, research and education uses, with the addition of significant office developments to complement the existing function, and supporting retail, entertainment and other commercial uses. The centre is not expected to compete significantly with Riseley Street for consumer catchment due to the different functions of the two centres and trip generating activities. However, a large and diversified consumer services offer at Murdoch has the potential to influence the location decisions of firms who are considering both Murdoch and Riseley Street as prospective locations for their business. The competitive advantage for Murdoch is potentially greater for some commercial uses due to the greater accessibility of the site by rail. This is expected to affect primarily strategic land uses rather population-driven land uses.

4.2.3.3 BOORAGOON SECONDARY CENTRE

Booragoon Secondary Centre is located less than 2 km south of Riseley Street. The centre is comprised primarily of AMP Garden City Shopping Centre and the City of Melville civic centre and administration offices. There are also some additional medical and office uses within the centre.

A draft activity centre structure plan for the centre has recently been released by AMP, showing intentions to expand the shopping centre retail floorspace significantly as well as diversify the activity centre with additional office, entertainment and other floorspace. It is expected that this expansion will have some impact on retail floorspace at Riseley Street, however the types of retail offered at Garden City are expected to continue focus on catering to the comparison retail market (e.g. fashion, homewares) rather than convenience retail. The primary trip generator to the centre is expected to be comparison retail with convenience retail performing a largely complementary function, as well as catering to the local catchment. As noted, Riseley Street's ability to effectively compete with Booragoon is likely to depend primarily on the quality of the offer at Riseley Street rather than the scale of the offer at Booragoon.

4.2.4 Diversity Target

Riseley Street has the land capacity for approximately 125,000 square metres additional commercial floorspace by 2031. However, the demand drivers to develop additional floorspace of this quantum are not believed to be present at this time. An expansion of this magnitude is also not considered to be in keeping with the vision for the activity centre, or compatible with community aspirations. A future floorspace scenario has been developed to fulfil the activity centre vision and improve the offer of goods and services to the local catchment. Table 13: Current and Future Riseley Street Floorspace shows the modelled current and future floorspace uses for the Riseley Street, along with the expected mixed use target required by SPP 4.2 and a comparison with the Pracsys Diversity Index.

Table 13: Current and Future Riseley Street Floorspace

PLUC Code	Planning Land Use Category (PLUC)	Current Floorspace (square metres NLA 2008)	Future Floorspace (square metres NLA 2022)
PRI	Primary/Rural	0	0
MAN	Manufacturing/ Processing/ Fabrication	410	410
STO	Storage/Distribution	485	485
SER	Service Industry	1,036	1,516
SHP	Shop/Retail	7,171	10,581
RET	Other Retail	1,106	1,106
OFF	Office/Business	7,547	8,947
HEL	Health/Welfare/ Community Services	407	1,857
ENT	Entertainment/ Recreation/Culture	573	3,823
RES	Residential	0	0
UTE	Utilities/ Communication	678	678
VFA	Vacant Floor Area	2,459	2,459
TOTAL		21,872	31,862
Mixed Use Target		N/A	20%
Achieved Mixed Use		63.06%	64.01%
Pracsys Diversity Index		0.62	0.72

Source: Land Use and Employment Survey 2008, Pracsys 2013

As shown in Table 4: Current and Future Riseley Street Floorspace the mixed use ratio is expected to increase slightly but remains very high for a population-driven activity centre and far above the 20% target required in the future. Due to the nature of current land uses at Riseley Street, and the identified drivers for expansion, it is not expected that floorspace expansions beyond the time modelled will result in the diversity target dropping below that required by SPP 4.2.

The Pracsys Diversity Index is an alternative method of measuring diversity that takes into account the overall spread of floorspace as opposed to simply the ratio of SHP retail to total floorspace. This provides a better understanding of the change in opportunities for people using the activity centre. Measured by the diversity index, diversity of the centre increases significantly from 0.62 to 0.72 based on the scenario modelled.

4.2.5 Retail Floorspace

As a district centre, Riseley Street is expected to service a population of up to 50,000 people and provide primarily convenience retail. The main trade area for Riseley Street (i.e. catchment generating 75% of the demand modelled) is shown in Figure 20: Riseley Street Main Trade Area. This illustrates where people who visit Riseley Street are most likely to reside. Residents living closer to Riseley Street are considered more likely to visit the activity centre. Increases in the population of the catchment increase demand for retail goods and services at Riseley Street.

As of the last floorspace survey in 2008, Riseley Street contained 8,277 square metres of retail floorspace, including 7,171 square metres of Shop Retail and 1,106 square metres of Other Retail. Modelling to estimate the future supportable retail floorspace to 2022 was undertaken using a conservative and an optimistic population scenario. Estimated retail market potential under both scenarios indicated that close to 15,000 square metres retail floorspace can be supported at the centre by 2022. This is a potential increase of around 6,000 square metres. This is partly due to the result that Riseley Street was modelled as trading below current capacity. However, in keeping with the vision and community aspirations for the activity centre a more conservative target of around 3,000 square metres additional retail floorspace has been identified. If additional retail floorspace 3,000 square metres is desired by developers, it is not expected this would jeopardise the future of the centre, but is likely to improve the competitiveness of Riseley Street with the surrounding activity centres.

Under both scenarios modelled, additional retail floorspace expected at Booragoon and Murdoch were considered.In terms of the type of retail offered, Riseley Street has an opportunity to maximise competition with surrounding centres by differentiating the offer provided. Similar small main street type centres across Perth have been shown to successfully compete with traditional shopping malls by providing unique consumer goods and services and a high amenity shopping environment.

4.2.6 Office Floorspace

Modelling was undertaken for population-driven office to determine the market potential for this type of land use. The potential for strategic offices to locate at Riseley Street is discussed.

4.2.6.1 POPULATION DRIVEN OFFICE

Population-driven offices accommodate industries or jobs directly related to servicing the needs of a specific catchment population. Examples of population-driven offices are real estate agents, accountants, dentists and general practitioners. Growth in population typically means growth in demand for population-driven office floorspace.

Riseley Street currently has a ratio of 36% strategic office to 64% population driven office. Population-driven office comprises around 5,000 square metres floorspace. Demand for population driven office under the conservative scenario modelled is expected to result in up to a total of 5,500 square metres population-driven office, while the higher population projections under the aspirational scenario area expected to result in a total of 6,000 square metres population-driven office. While the population driven office growth is derived from the whole City of Melville's catchment growth, the increase in dwellings specified in the Riseley Street Structure Plan is likely to drive some increase in demand for population driven office within Riseley Street.

Fig 21. Riseley Street Main Trade Area (Source: Pracsys 2013, ABS Census 2011)

4.2.6.2 STRATEGIC OFFICE

Unlike population driven office strategic economic activity results from economic activity focused on the creation and transfer of goods and services to an external market. This type of activity typically occurs in places through the development of agglomerations of economic activity. The location of strategic offices is not driven by population growth, rather it is influenced by a range factors contributing to the firm's competitive advantage.

The development of additional strategic office at Riseley Street in the short to medium term at Riseley Street Activity Centre is expected to be based upon the development of one or more competitive advantages for firms in strategic industries. Riseley Street currently has a relatively high concentration of strategic office for a district centre. This is expected to expand over time, but it is unlikely that Riseley Street will become a significant strategic office hub given the intended role of Murdoch and the locational advantages that are offered to Canning Bridge.

4.2.6.3 ENTERTAINMENT FLOORSPACE

Riseley Street is expected to provide a larger proportion of entertainment floorspace for its surrounding catchment and is in line with its role as an entertainment destination for the local catchment. Entertainment floorspace could contain uses such as a full service gym, small bars, community and functions centres and sporting facilities.

Entertainment floorspace has different locational characteristics to retail floorspace. These include:

- Demand is regional rather than local - so local demand may or may not be met locally;

- Productivity is highly dependent on the individual operator - supplying entertainment floorspace may not meet demand if the offer is not well aligned with catchment demand, or if the floorspace underperforms in terms of quality. Conversely entertainment floorspace of very high quality may overtrade and attract custom from a very large catchment; and
- Agglomerations of high quality entertainment floorspace can form an entertainment destination of regional significance.

Due to demand being regional a high quality entertainment agglomeration has the ability to support itself past what would traditionally thought possible. This has been considered in the land use scenario, and given Riseley Street's role as both a convenience retail and entertainment destination, approximately an additional 2,000 m2 of entertainment floorspace has been allocated to the centre for the future.

4.2.6.4 OTHER FLOORSPACE

The overall function of Riseley Street is unlikely to differ dramatically in the future from its current function as a diverse population-driven centre. Despite this, it is expected that other floorspace past entertainment, office and retail will increase over time. As the centre primarily serves its local catchment, land uses that will improve the amenity to this area are preferred in order to reduce the need of local residents to travel to other centres to meet their needs. Additional floorspace has been suggested for service industries and health land uses. These land use categories may be comprised of a range of uses, including community uses, child care, or education. Improving the quantum of other floorspace offered improves the diversity of the centre and provides additional opportunities for the local catchment to service their needs.

4.3 Employment

4.3.1 Employment Targets

In order to assist in more closely aligning the spatial location of place of residence and place of work for the population of Perth and Peel, Directions 2031 outlines employment self-sufficiency (ESS) targets for each of the six Perth and Peel sub-regions. The rationale behind this is that by increasing ESS, employment self-containment (ESC) will also increase. Directions 2031 addresses the challenge of aligning residents and employment from the employment end, by imposing ESS targets on existing residential areas.

The central sub-region of Perth, within which Riseley Street is located, currently has a dominant role in the metropolitan area in terms of employment economic, social, and cultural activity with a corresponding high ESS. The residents of the central sub-region enjoy good access to highly skilled jobs and to consumer services, relative to residents in the outer sub-regions. The Connected City scenario identified by Directions 2031 is expected to deliver improved levels of ESS across the outer sub-regional areas. While a sustained high ESS in the central sub-region trend is expected to continue in the immediate future due to the current high levels of investment in the sub-region, to support the achievement of the outer sub-region ESS targets, the ESS of the central sub-region is targeted to decline from 124% in 2008 to 121% by 2031.

SPP 4.2 requires evidence of overall activity centre performance be presented on a range of dimensions, including centre diversity, activity intensity, accessibility and employment. In particular, the policy requires that employment outcomes are achieved by centre developments to drive the 'suburbanisation' of jobs in line with the sub-regional self-sufficiency targets set out in Directions 2031.

4.3.2 Current Riseley Street Employment

Riseley Street Activity Centre currently contains 1,840 employment opportunities. Figure 22: Riseley Street Employment Profile shows the 2011 Riseley Street employment profile in terms of employment type. Population driven employment is comprised of the lower knowledge consumer and producer services and higher-level knowledge intensive consumer services, and strategic employment is comprised of knowledge intensive producer services and export oriented employment

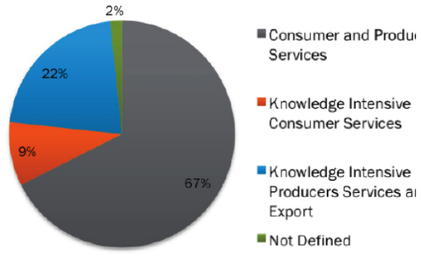

Fig 22. Riseley Street Employment Profile
(Source: Pracsys 2013, ABS Census of Population and Housing 2011)

Approximately 76% of employment at Riseley Street is population driven in nature, servicing a local residential catchment and local workers. 22% of centre employment is strategic in nature. This is attributable to a number of small agglomerations in the areas of Finance and Investment services, Architectural, Engineering and Technical Services, Legal and Accounting Services, Other Management and Related Consulting Services, and Allied Health.

Riseley Street plays a small but important role in providing employment opportunities for working residents of the outer southern sub-regions, as well as working residents in the central sub-region. The majority of employees working at Riseley Street (1,012) live within the City of Melville. The remainder are largely residents of the City of Cockburn, City of Canning, and City of South Perth

4.3.3 Future Riseley Street Employment

Riseley Street is expected to continue providing largely population-driven employment to meet the needs of the surrounding catchment. As a district centre with some agglomerations of higher quality employment, it is expected to continue maturing to provide a higher proportion of strategic employment (i.e. knowledge intensive export oriented employment). However, this should not be to the detriment of higher order centres. Where possible strategic employment should be accommodated in nearby specialised and strategic metropolitan centres such as Murdoch Specialised Centre and Fremantle Strategic Metropolitan Centre. Canning Bridge, with an already high percentage of strategic employment and significant public transport infrastructure, is expected to continue attracting strategic employment and has the potential to mature into a higher level centre in the future.

Based on the employment allocation analysis conducted, Riseley Street needs to generate a minimum of 232 additional jobs by 2026 to support the achievement of the Directions 2031 ESS target. This analysis has not specifically incorporated additional dwellings at Riseley Street, however given the low magnitude of the yields envisaged the impact on employment is likely to be insignificant. The additional employment should be primarily strategic or higher order consumer services, focused on the leveraging of existing agglomerations.

The centre can also tolerate a loss of up to 60 population-driven service jobs, as these are consolidated into surrounding centres at Booragoon and Canning Bridge. However, as there is additional demand for retail goods and services, entertainment and population-driven offices it is likely that some additional population-driven employment will be located at Riseley Street. However, given the floorspace yields proposed, it is expected Riseley Street will exceed the employment target.

In the context of the vision for the centre and the physical constraints, the strategic employment target is fairly high. This employment target does not need to be met at Riseley Street if this is considered inappropriate for the centre. The relatively high proportion of strategic employment already located within the centre indicates some attraction for strategic industries. However, Canning Bridge and Murdoch have better public transport links to higher-level activity centres and the surrounding area. They are more likely to be attractive to strategic industries.

It is important to note that this target is based on the assumption that the level of population driven employment per capita in the southern sub-regions will increase. If this does not occur, Riseley Street will experience greater pressure for growth and development of population driven activity and the population driven employment requirement for Riseley Street will increase accordingly.

4.4 Dwellings and Population

The table below provides an estimate of the possible growth in dwelling numbers over the next two decades. It assumes a gradual redevelopment of land within the centre, in a combination of mixed use developments and apartment buildings. The delivery of residential product to the market will depend on demand and within that demand equation, perception of value for money. Hence, when the various other recommended improvements are implemented, the general amenity of the centre will increase in so doing making the value for money equation lean towards improving the viability of the development of apartments in this location.

Table 14: Total Additional Dwellings

Total Additional Dwellings	
2013	0
2014	17
2015	33
2016	50
2017	67
2018	83
2019	100
2020	117
2021	133
2022	150
2023	167
2024	183
2025	200
2026	217
2027	233
2028	250
2029	267
2030	283
2031	300

5. URBAN FORM

5.1 Urban Form and Structure

5.1.1 Existing Urban Structure

The centre is formed around a series of interconnected street network. Its defining structural characteristics are its crescent shaped streets, which form quadrants to the south of Canning Highway.

The character and urban form of the centre has been highly influenced by its location at the intersection of Canning Highway and Riseley Street. Each of these regionally significant connections contributes to a sense of fragmentation between the north and south and east and west of the centre.

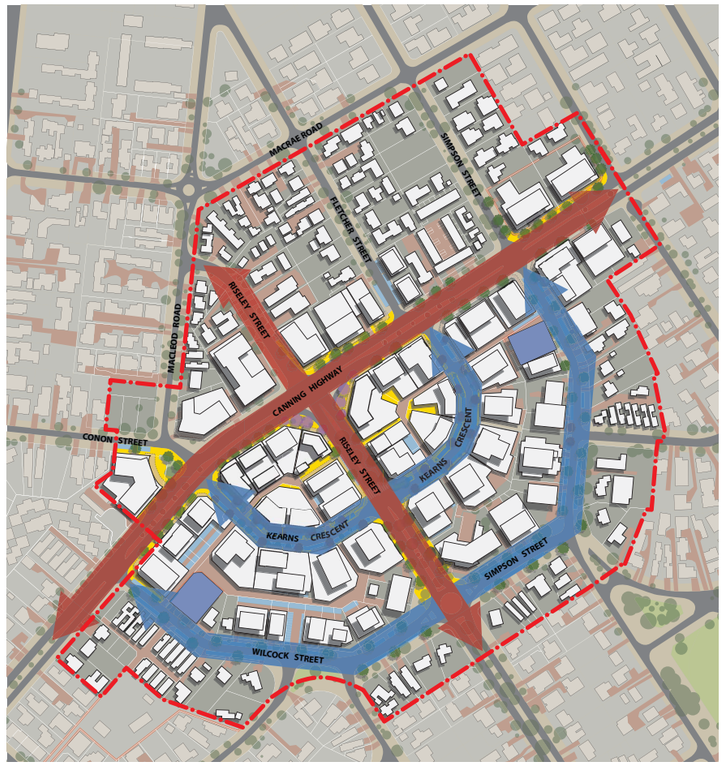

Fig 23. Existing Urban Structure of the Riseley Centre

Photograph 19. Simpson Street Office Development

5.1.2 Existing Land Uses

Commercial, retail and entertainment activities are generally contained within the central core bound by Kearns Crescent and Canning Highway. Non-residential activities on the north side of Canning Highway include a Medical Centre and various offices uses.

Simpson and Willcock Streets are "transitional areas" between the core of the centre and surrounding residential areas with some commercial, offices and cultural activities present among remnant residential activity. This is characteristic of the lack of appropriate floor space within the central core to meet existing and future needs.

The northernmost area of the structure plan boundary consists of low and medium density residential uses.

Photograph 20. Commercial (retail and beauty) tenancies south of Canning Highway

Photograph 21. Kearns Crescent commercial (retail and dining) tenancies

Photograph 22. Risely Street commercial (mixed) tenancies

5.1.3 Precincts

In order to build upon the Riseley Centre's existing strengths as well as addressing its weakness, a precinct or place based approach is required.

The precinct plan illustrated within Figure 24: Precinct Plan has determined a number of precincts based on the following attributes and commonalities:

- Types of existing land uses and activities and interface with neighbouring activities;
- Nature of development and its relationship to the street;
- Character and hierarchy of streets;
- Land tenure and potential to accommodate new mixed use development forms; and
- Impacts on existing land uses and residents.This plan promotes a diverse range of retail, dining, entertainment, office, residential and community offerings. Supported by an increased number of residents, workers and visitors, this will enhance the overall vibrancy of the centre.

Within the centres core, the centre will continue to build upon its detail offering with an improved range and variety of retail opportunities. Restaurants, cafes and bars will attract locals and visitors from afar creating a buzz of activity throughout the day and into the evening. Quality supermarkets, butchers, bakers and hairdressers will cater for the daily needs of residents. Increased forms of office developments along Canning Highway and within the Riseley Core and the Crescent will enable more residents to work locally, with improved social, economic and environmental outcomes. The transitional frame will largely comprise of residential uses with the opportunity for mixed use developments to the north of Willcock Street.

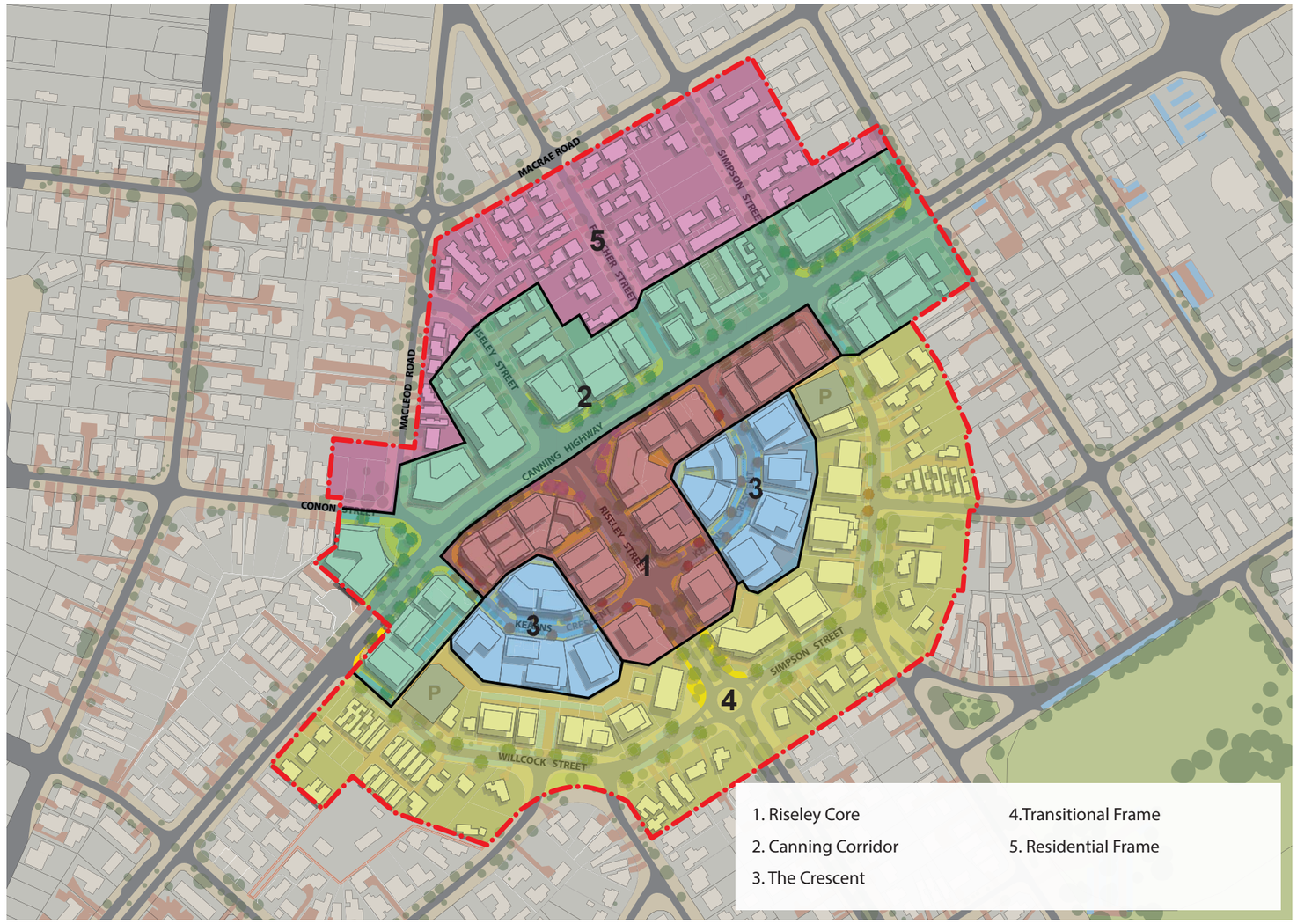

Fig 24. Precinct Plan

Table 15: Precinct Descriptions

Precinct	Character	Activities	
Precinct 1: Riseley Core	This precinct is intended to contain a variety of activities with a boulevard character.	***Ground Level:*** • Entertainment (Restaurants, cafés and bars). • Specialty/ convenience retail. • Commercial/ office.	***Upper Levels:*** • 1, 2 and 3 bedroom apartments. • Commercial/ offices.
Precinct 2: Canning Corridor	Due to its higher exposure to passing traffic and limited pedestrian quality, commercial/ office and larger format showroom activities are envisaged for this precinct.	***Ground Level:*** • Showroom. • Commercial/ office. • Medical/ consulting rooms. • Specialty retail.	***Upper Levels:*** • 1, 2 and 3 bedroom apartments. • Commercial/ offices.
Precinct 3: The Crescent	This precinct is the vibrant heart of the Riseley Centre, with a variety of fine-grained shops, entertainment activities. The street may also be used for festivals and other place making activities and events.	***Ground Level:*** • Entertainment (Restaurants, cafés and bars). • Alfresco dining. • Specialty/ convenience retail. • Commercial/ office.	***Upper Levels:*** • 1, 2 and 3 bedroom apartments. • Commercial/ offices.
Precinct 4: Transitional Frame	The Transitional Frame provides a mixed of residential and commercial uses compatible with residential activity. Residential activity is permitted at ground level. A key feature of this precinct is adaptability, where buildings that propose residential activities at ground level may be easily converted to commercial uses in time.	***Ground Level:*** • Commercial/ office. • Medical/ consulting rooms. • 1, 2 and 3 bedroom apartments.	***Upper Levels:*** • 1, 2 and 3 bedroom apartments. • Commercial/ offices.
Precinct 5: Residential Frame	This area is envisaged for minimal change, with up to 3 Storey town house style development considered appropriate.	Activities currently permitted within the existing Residential Zone.	

Photograph 23. High quality built form character example

5.2 Built Form Character

The existing character of the precinct is undefined, however the local community has expressed that higher architectural quality buildings within the precinct is desirable. A key characteristic of the centre is that many buildings have been adapted from their original residential uses to accommodate commercial uses. There is a prevalence of single and double storey bungalows on Kearns Crescent, Simpson and Willcock Streets that have been modified to accommodate commercial and restaurant uses.

Purpose built and adaptable mixed-use buildings will be a valuable addition to the Riseley Centre, resulting in a more efficient use of land and relieving the centre from its current pressures that have resulted in its incremental outwards expansion into neighbouring residential areas.

Therefore, the objectives for built form character in the precinct are to:

- Establish buildings with high visual appeal and a sense of permanence with high quality design, materials and finishes.
- Establish a diverse, lively and attractive mixed-use centre that promotes a high level of integration between buildings and the adjacent streets.
- Allowing for high quality contemporary architecture to establish a distinctive urban character.
- Establish purpose built typologies that respond to the centres specific offer and needs.
- Promote the use of materials that age well and are easy to maintain.

The following guidelines will assist in achieving intended outcomes.

5.3 Built Form Requirements

The following requirements have been prepared to promote high quality architectural and public realm outcomes envisaged by this plan.

5.3.1 Height

Building height has been distributed throughout the precinct to allow heights up to six storeys in areas of existing commercial and retail intensity, transitioning to lower heights adjacent to lower scale residential areas. Buildings of up to six storeys are focused along Canning Highway; the intersection of Canning Highway and Riseley Street and south to Kearns Crescent. Heights transition to 4 storeys to interface with residential areas along Simpson and Willcock Streets. Buildings heights in the northern and southern Frame areas are proposed for minimal change with up to three storeys possible, which is not a major change from current CPS 5 provisions.

Further articulation of building bulk is illustrated within Section 5.3.2 Building Typologies and Setbacks. It outlines upper level setbacks that aim to reduce the sense of closeness to the public realm and neighbouring properties. In instances where taller buildings abut lower scale residential properties of between 1-3 storeys, setbacks to upper levels have also have been proposed to reduce impact on those buildings (e.g. North of Canning Highway and Tain Street).

Height related guidelines are as follows:

- Maximum building heights shall be as per Figure 25: Maximum Building Height;
- Building heights are to be measured in storeys;
- Floor to floor heights on the ground floor commercial tenancies shall be a minimum of 4.0 metres. This may only be varied to meet site specific-level constraints;
- Where residential uses are permitted at ground level in precincts that permit four (4) storeys and above, the floor-to-floor height at the ground levels shall be of a sufficient height to allow for future conversion to commercial uses; and
- Lift machinery rooms and other plant areas are exempted from the prescribed maximum building heights but shall be designed or screened in an appropriate manner to ensure they contribute to the visual quality of the development.

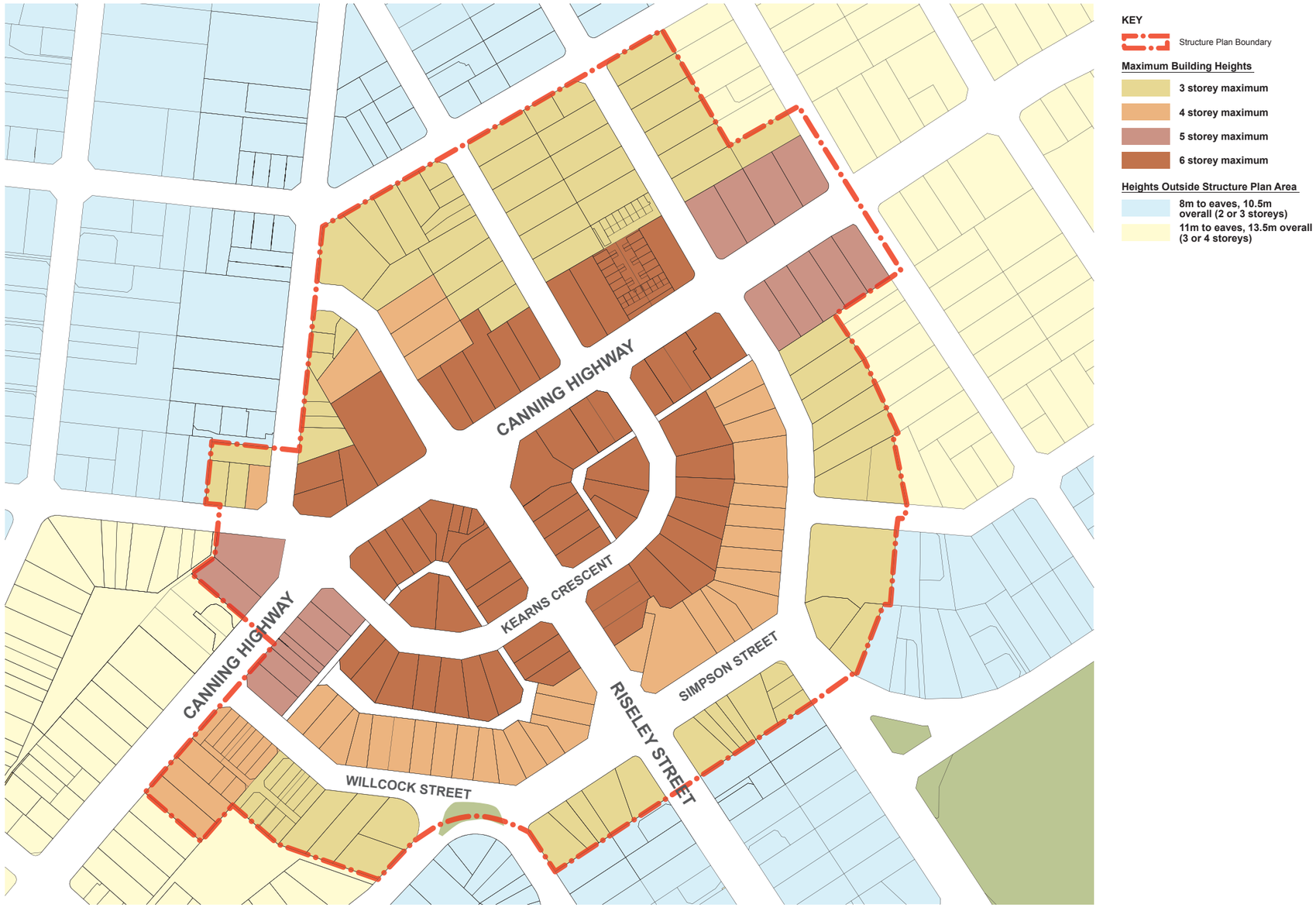

Fig 25. Maximum Building Height

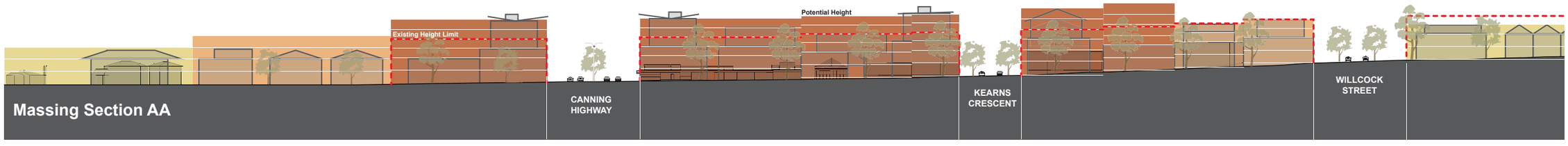

Fig 26. Section depicting proposed height envelopes and indicative building forms that may occur within them.

Photograph 24. Example of 5-6 storey corridor development (north of Canning Highway)

Photograph 25. Example mixed use, 6 storey corridor development

Photograph 26. Example 6 storey main street development

Photograph 27. Example mixed use 4 storey corridor development

Photograph 28. Example mixed use 4 storey development

5.3.2 Building Typologies and Setbacks

Setbacks within the centre have been determined to create a sense of urbanity and activation of the street edge, whilst also remaining sensitive to context throughout the centre. Each of these typologies, supported by design guidelines seeks to achieve the following outcomes:

- Activation of the street edge within areas of a commercial focus;
- Surveillance of the street;
- Articulation of building form to create interesting facades; and
- Providing parking in a format that maintains streetscape quality and accessibility.

Whilst nil setbacks are appropriate at the street level in the central commercial and retail core, greater setbacks can be more responsive to local context of transitional suburban style residential buildings that currently prevail on the outer edge of the structure plan boundary.

The following building typologies employ initiatives to reduce the impact of building bulk within the public realm along with allowing access to sunlight and breeze flow within the public realm and for neighbouring properties.

Fig 27. Indicative Height and Setback Section locations

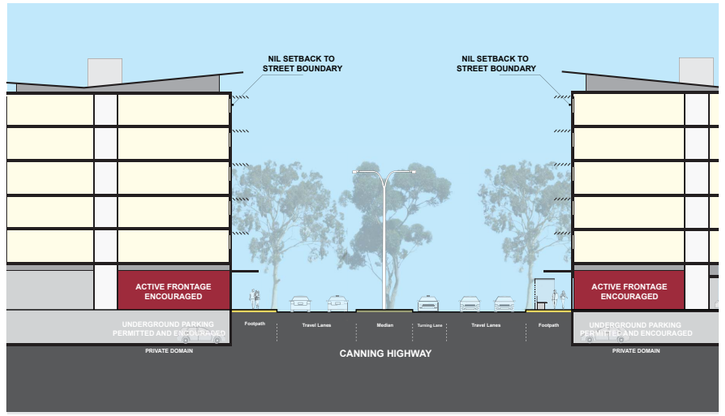

Fig 28. Canning Highway Section (1)

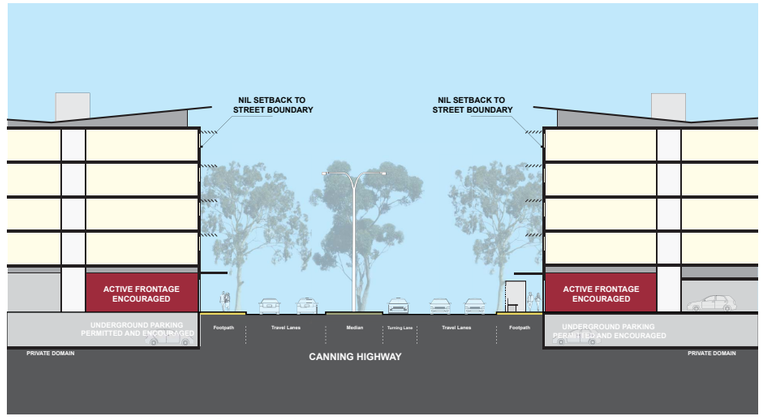

Fig 29. Canning Highway Section (2)

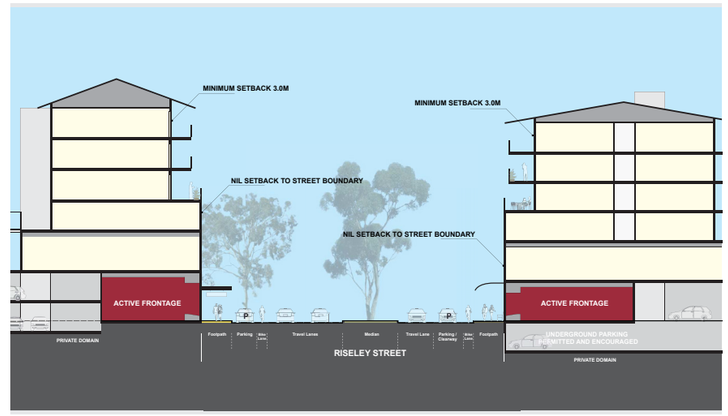

Fig 30. Riseley Street Section (3)

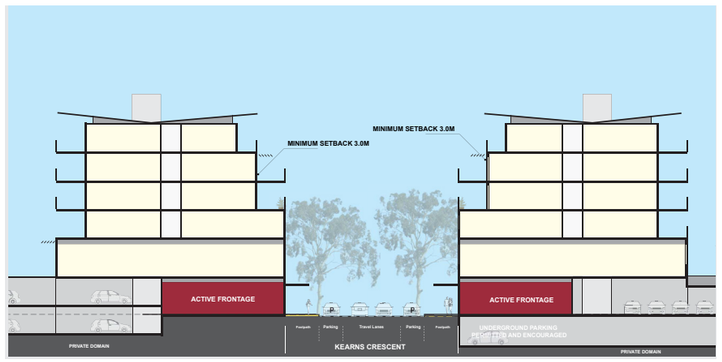

Fig 31. Kearns Crescent Section (4)

Fig 32. Willcock Street / Simpson Street Section (5)

Fig 33. Tain Street Section (6)

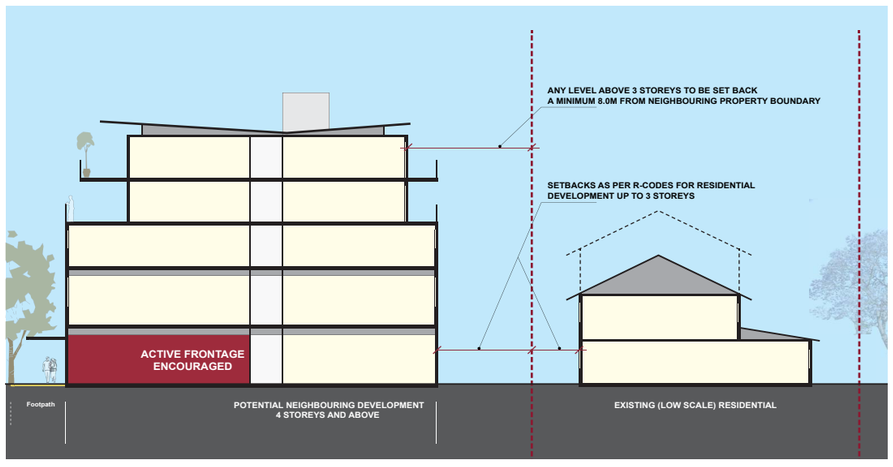

Fig 34. Adjacent Development Setbacks (7)

5.3.3 People Oriented Building Frontage

The impact of high vehicle traffic volumes and multiple access points (front and rear) have resulted in some confusion between the fronts and backs of existing buildings within the Riseley Centre. This has had a direct impact on the activation of Canning Highway and Riseley Street, with businesses choosing to face in the direction of customer arrival, which is predominantly via car parks rather than the public street. The current access arrangements also enables avoidance of hostile pedestrian conditions along Canning Highway and Riseley Street where cars dominate the street environment.

Figure 34: Building Frontage illustrates existing buildings with a strong frontage. Red depicts an active, primary frontage, where blue depicts secondary frontage. This demonstrates that to some degree, private car parks are taking on the function of public streets, whilst parts of Kearns Crescent demonstrate a more traditional main street frontage.

Public realm improvements will assist in improving the qualities of streets and public places, and provide comfort to pedestrians and confidence to businesses that the street is a valuable aspect for customer arrival and interaction. The intent is to catalyse investment through private landowners and businesses in response to public realm improvements.

New and renovated buildings will therefore be required to address the street and provide maximum active frontages at ground level, conducive to facilitating high levels of interaction between the interior of the shop and the street.

Fine grained commercial, retail and entertainment frontage, characterised by minimal, articulated setbacks and transparent openings that spill out onto the street, will be required for all ground floor tenancies in the central core. Residential uses at ground level may only be permitted within the Transitional Frame and Residential Precincts, provided that the floor to floor heights are conducive to adaptation to commercial uses at a later stage, should the need arise.

Continuous awnings along all commercially oriented streets are required to provide appropriate pedestrian shade and shelter. Within the Canning Highway Corridor where only semi-active edges are proposed, these shall consist of soft landscaped setback areas and large windows and building entrances overlooking and accessible from the street. A similar response within the Transitional Frame is also encouraged.

Guidelines to assist with the creation of active street frontages are as follows:

- To ensure building design in commercial and retail areas facilitates street level activity and visual connections between internal areas of buildings and the street, a minimum of 70% of the street frontage for a commercial or retail tenancy is required to be clear glazing;
- Buildings must include active uses (i.e. retail or residential pedestrian entrances and apertures) to a minimum of 80% of their ground level frontage to streets, with a corresponding maximum of 20% of that frontage occupied by appropriately detailed walls with no openings, screened car parking, car park entrances and service areas;
- Street level awnings with minimum width of 2.0 metres must be included at minimum 2.7 metres and maximum 3.5 metres above footpath for all buildings with commercial functions at ground level;
- Enhance the perceived sense of safety of public spaces through positive passive surveillance, by maximising the view across the public realm from residences;
- Orient the areas of greatest activity and interest such as commercial/ retail tenancies and residential living spaces toward the street front;
- Facades shall be designed with a variety of materials, textures and articulation to produce a contemporary architectural response that creates a greater sense of depth and visual diversity;
- Buildings on corners must address both frontages to the street and/or public realm with a strong architectural expression to create landmarks that assist in defining local character and helping people to navigate easily through the Centre; and
- Where long ramps are required to any public street frontage, they should be provided wholly or partially within the building rather than externally to reduce their visual impact and assist in achieving a strong built edge to the street boundary.

Photograph 29. Active frontage example

Photograph 30. Active frontage example

Fig 35. Building Frontage

Photograph 31. Active frontage example

5.3.4 Vehicle Access and Car Parking

Car parking currently dominates the visual landscaping of the centre and existing shortfalls in car parking warrant a rethink in how parking should be provided within the centre in the future. Whilst at-grade parking is a necessary feature of the Centre, at least in the short to medium term, the visual quality, comfort and safety of access and parking is a key consideration. Over time, in conjunction with a parking management plan and reviewed parking standards, it is envisaged that car parking will be contained on site for new development where possible, and either sleeved with commercial tenancies on the ground or upper levels, or contained wholly or partially below ground.

For existing car parks, consideration should be given to the following:

- Car parks should be of a high landscape quality, with appropriate levels of shading (tree canopies) and screening from the street.
- Clear demarcation between the pedestrian and vehicle realms should be provided.

Guidelines for the design of car parking within new developments is as follows:

- Where provided, vehicle access shall be from a laneway;
- Vehicle access is not permitted from Canning Highway where a rear laneway or secondary street abuts the property;
- Where on site vehicle parking is at grade or above ground appropriate screening is required to reduce visibility of vehicles from adjacent lots or the public realm;
- Service vehicle access shall be provided for commercial and retail tenancies should be designed to minimise visibility from the public realm;
- The maximum width of car parking and basement access is 6.5 metres;
- Underground car parking is the preferred means of providing car parking within the precinct. Enclosed at-grade or upper level decked parking may be acceptable as part of a mixed use development on confined sites, provided that the car park is sleeved with lettable floor space or otherwise, adequately screened; and
- Car park venting/service lids and other utility infrastructure shall be dressed, hidden or screened in an appropriate manner to ensure they do not detract from the visual quality of the development.

5.3.5 Environmental Performance and Management

The thermal and environmental performance of buildings within the Riseley Centre is important to reducing energy and water consumption over the course of its lifetime.

The following initiatives provide guidance to assist in achieving more sustainable outcomes in the centre:

- Ensure that the built form is designed in a way that permits good solar access to the public realm and adjacent buildings;
- Ensure that the design of buildings creates comfortable internal and external environments for its occupants;
- Incorporate passive solar design principles to optimise cross ventilation, solar gain in winter and protection from heat gain in summer;
- Reduce heat gain to all east and west facing walls through, for example, appropriate material and colour selections and shading to openings;
- Minimise barriers to breeze paths and airflow through dwellings;
- Take advantage of summer breezes to passively cool dwellings and reduce the need for mechanical cooling;
- Ensure the most water efficient facilities and fixtures are installed for maximum water conservation; and
- A Waste Management Strategy shall be prepared in consultation with the City of Melville.
- Development should be designed to appropriately consider impacts of adjacent or nearby noise sources. Noise sources may include Canning Highway, Riseley Street and commercial/ retail/ entertainment activities on ground levels (i.e. impacts on upper level residences).

Photograph 32. Carpark screened and consistent hardscape finish

5.3.6 End of Trip Facilities

Encouraging the uptake of alternative active modes of transport is an important means of reducing vehicle trips within the centre. The following standards reflect a contemporary approach to the design of mixed-use buildings to support reduction in vehicle trips:

- Secure bicycle storage is to be provided based on the following rates:
  - Residential: 1 cycle bay per apartment;
  - Commercial/ office tenant: 1 cycle bay per 200 square metres GFA;
  - Commercial/ office visitor: 1 cycle bay per 500 square metres GFA;
  - Retail: 1 cycle bay per 200 square metres GFA;
- For Commercial/ office and Retail floor space, there shall be an allocation of one locker per bicycle storage space and one shower for every 10 bicycle storage spaces; and
- For Commercial/ office and Retail floor space, facilities for cycling and other active forms of transport shall be provided for both staff and visitors and shall include showers, change rooms and storage areas.

Photograph 33. A combination of open, solid and adjustable elements facilitate optimised airflow

Photograph 34. High quality end of trip facilities to encourage cycling to work

Fig 36. Place Making Precincts

5.4 Public Spaces

Activity Centres are as much about meeting the social and emotional needs of the people who visit on a regular basis, as the quality of the public realm and the services they offer. The experience of an activity centre can include an inherent sense of community by offering numerous opportunities for interaction within the public realm. Providing a range of activities and public places that are mutually supportive will be a major step in facilitating this interaction and activation within the Centre. (Acknowledgements to Fred Kent, PPS).

As the population has grown, the Riseley Centre has evolved from a modest vehicle based neighbourhood centre into a district activity centre. Presently, the issues surrounding accessibility by car; regional traffic routes; the qualities of place; and the comfort and safety of pedestrians are significant factors influencing the centre's place making qualities and ambience.

Based on its level of service at present, the Riseley Centre provides well for the local community. However, the type of experiences that draw people further into the centre and encourage them to linger for longer, in addition to the original purpose of their visit, are limited (e.g. festivals, street markets, street performance, alfresco, comfortable public seating). As Riseley further evolves into a mixed-use centre, consideration needs to be given for the type of spaces that exists within the centre, their purpose and the activities that occur within it.

Unlike many traditional urban centres, the Riseley Centre has limited formal civic spaces such as a plaza or a public square but this does not mean that there are no public places within the Centre. As illustrated in Figure 35: Place Making Precincts, the highlighted spaces within the precinct are all in many ways public, or semi public, however many of these go unnoticed as they are primarily focused on vehicle movement and parking.

The dressing of the street in the form of street furnishing, public art, lighting, paving, defined parking, cohesive street tree planting and landscaping will contribute the visual enhancement of the centre and it's level of usability. Street furnishing and public art and should be located areas that are highly visible and subject to large volumes of pedestrian movement for maximum enjoyment. All materials, colours and landscaping species should be drawn from a consistent pallete specific to each of the identified precincts.

Photograph 35. Sheltered seating space

Photograph 36. Consistent street furniture

Photograph 37. Green feature spots

Photograph 38. Parklet

Table 7: Public Spaces Descriptions

Riseley Heart (Kearns Crescent)		Kearns Crescent is currently the heart of entertainment, café and retail activity. Enhancing this street as the premier destination and has great potential to create the 'people street' of the Riseley Centre. Redesign of the street with wider footpaths and less focus on vehicle traffic will provide respite from the high traffic volumes of Riseley Street and Canning Highway. Whilst serving the primary role for shopping and eats, festivals and street markets are envisaged for this space.
Gateway Plaza		The intent for this space is for landscaping to provide physical and visual separation between the carriageway and the building fronts, with shading places to sit and to encourage businesses to open up onto the plaza space with alfresco opportunities. As the only plaza spaces within the centre, enhancing functionality and ambience whilst reducing the influence of traffic within these of these spaces are limited by heavy traffic, a limited relationship between buildings and the spaces and the design of the gateway elements to be seen by cars, but not used by people.
Main Street		This street has the potential to become the 'boulevard' style main street of the centre. It is envisaged to incorporate street trees planter boxes and shade awnings to encourage alfresco and retail to spill out onto the street. Enhancing the urban character of this street through street trees planting will assist in creating a more comfortable pedestrian environment and slow moving traffic environment.
Parking Court		The parking courts are privately owned land but they serve as an important place in that they are the only large spaces with a degree of enclosure and are shielded from heavy traffic areas. Whist providing car parking is essential to the success of the adjacent businesses, there may be some scope for local business stakeholders to hold events in these spaces. In terms of the landscaping, as a short term initiative, land owners should be encouraged to undertake tree planting in these spaces to shade parked cars, whilst also create comfortable space for organised events. This arrangement should be embraced in the interim until such time that surrounding development begins to substantially change in nature.
Pedestrian Links		In the short term, formalising these lanes will enhance their functionality for both pedestrian and vehicle movement. In the long term, as development occurs, these lanes have the potential to include active uses in addition to their core function as an access way.
Leafy Street (Willcock and Simpson Streets)		This street is a transition zone between the urban character of the central core, and the suburban character of outlying residential areas. In response to the limited green and plaza space within the centre, enhancing the current character of Simpson and Willcock Street as a 'garden' street, will promote greater comfort and picturesque appeal. Lush street trees and quality street furnishings will give these streets a unified character and a green shady feel.

6. RESOURCE CONSERVATION

6.1 Energy Conservation

6.1.1 Alternative transport modes

The Riseley Centre is located at the convergence of two major bus routes, which the PTA intends to become rapid transit corridors in the medium to long term. This Structure Plan aims to enhance the Centre's role as a shopping, employment and residential node and therefore support public transport by strengthening the Centre's position and increasing ridership as a public transport origin and destination.

Improving the pedestrian qualities within the centre, provisions for cycling as well as pedestrian connections within a 200 metres radius of the centre will encourage those within proximity to the centre to undertake fewer vehicle based trips.

6.1.2 Materials and Waste Management

The City strongly supports sustainable construction and waste management practices. As future development is undertaken within the centre, consideration for the following strategies is encouraged:

- Recycling of materials from demolished structures within the centre;
- The use of recyclable or reusable materials of construction for new development;
- The use of materials with low embodied energy and high thermal performance for new development; and
- Consideration for day-to-day recycling facilities during the operational life of new buildings.

In addition to the above, for all new development in the centre, a waste management plan will be required to be submitted for approval by the City.

6.2 Water Resources and Management

Stormwater disposal for individual land parcels within the centre is not accurately known, however for all future development in the Centre, the City of Melville expects stormwater to be contained on site. Where stormwater cannot be contained on site, a Local Water Management Strategy is required to be prepared with the aim to reduce impacts on the City's existing storm water systems.

7. IMPLEMENTATION

7.1 Statutory Planning Context

This structure plan provides the statutory planning framework for the Riseley Activity Centre. However the structure plan does not automatically change the underlying zoning of the centre. The City will therefore need to prepare, publicly advertise and seek approval from the WAPC for any amendments to the current zonings of the area recommended by the structure plan. This should be done as a high priority following the approval of the structure plan.

7.2 Governance, Collaboration and Incentives

Urban revitalisation is an ongoing process that requires resourcing and investment from both government and private sources. The role of this structure plan is twofold. Firstly, it sets out acceptable development parameters within the centre. Secondly it is intended to act as a catalyst to the revitalisation of the Riseley, creating fresh opportunities for transformation and encouraging investment.

7.2.1 Encouraging Investment and Revitalisation

The likelihood for private investment to occur and the confidence of local landowners in market conditions are closely linked. Therefore, the following factors should be considered in encouraging private investment in the Centre:

Public Investment: Local and State government investment in the public realm provides a tangible signal to landowners that there is a strong level of commitment to facilitating, change not just planning alone. High quality development is often attracted to places following physical streetscape or infrastructure improvements.

A Clear Planning Framework: A clear planning framework assist in mitigating many of the risk factors associated with undertaking development, enabling landowners and/or developers to plan feasible development outcomes which the centre. This structure plan is intended to provide a clear vision for coordinated development to occur with the centre.

Demonstration Project: Council may consider a embarking on a demonstration project on suitably sized Council owned land parcels within the centre. Such projects provide the opportunity for the City to demonstrate outcomes it envisages within the centre and also to encourage further redevelopment in the centre.

7.2.2 Partnerships and Collaboration

Ongoing implementation will require strong communication and cooperation between both the City and local stakeholders. In addition to this, the City will also seek to identify potential public and private partners, which aim to deliver and potentially manage key initiatives and public infrastructure identified within this plan.

To facilitate ongoing revitalisation, the City may seek to:

- Identify private sector partnerships that can assist it in delivering necessary infrastructure (e.g. public car park);
- Collaborate with State government delivery agencies to ensure mutual needs of both the City, community, key stakeholders and agencies are addressed appropriately and fairly; and
- Establish joint ventures with the public or private sector to undertake key strategic development.

7.2.3 Land Consolidation

Overcoming fragmented land tenure issues is essential to achieving the coordinated development outcomes envisaged within this plan. Whilst development will generally rely on consolidation of land parcels to be market driven, there may be certain opportunities to for council to acquire strategic land parcels to accommodate essential services or infrastructure (e.g. car parking). Identification of specific land parcels will need to occur in line with the following considerations:

- Undertake investigations to determine the quantum of need for strategic infrastructure such as decked parking station.
- Site identification studies that determine impacts and benefits of particular site locations.
- Further consultation with key stakeholders and landowners within the Centre.

7.3 Further Studies and Investigations

7.3.1 Parking Management Plan

Parking is recognised as a key pressure point within the Riseley Centre and a Detailed Parking Management Plan, supported by policies that respond to contemporary needs, are essential to the efficient and functional provision and management of car parking within the centre.

As a minimum, the parking strategy should address the following:

- Reviewing current car parking requirements and ratios
- Establishing appropriate car parking ratios for future development (recognising that an appropriate balance needs to be found between providing too much and too little parking in the centre;
- Investigating and providing recommendations on cash-in-lieu of car parking contributions;
- Maximising on-street car parking whilst considering the amenity of local residents and universal access for pedestrians on both sides of the street;
- Potential for 'unbundling' (separate strata titling) of car parking to allow a portion of car bays to be sold or rented separately from residential dwellings;
- Timing and paid parking precincts to ensure appropriate turnover of bays in central location and encourage parking for longer duration in peripheral areas;
- Location and management of employee parking to increase the availability of bays for customers; and
- Long term strategies for consolidated public parking stations (i.e. decked or underground).

7.3.2 Planning for Place Activation

Revitalising the Riseley Centre as a vibrant and active 'people place' requires further consideration than just landscape and roadway improvements. What is required is a holistic process that considers:

- Design, function and role of places;
- Place management, maintenance and programming;
- Community and stakeholder involvement;
- Partnerships for delivery; and
- Place branding and identity.

Through Project Robin Hood, the City of Melville has made some significant steps to building visibility and momentum for place making in the centre. Importantly, it is not a set and forget process, but an ongoing management and communication

programme with the specific responsibility of creating a place that is open, friendly, inviting and fun for people from all walks of life. The City of Melville should support new place making activities to improve the centre as a place for people.

7.3.3 Naming and Identity

Community engagement during the development of this Structure Plan revealed a lack of clarity to whether Riseley Street Activity Centre is a village, town centre or activity centre. To some degree, its official title as 'Riseley Street District Activity Centre' reflects its location and regional economic hierarchy, but it is not necessarily reflective of the place and its people, especially given that Riseley Street is a busy traffic street and most activity occurs on Kearns Crescent.

Some members of the community suggested renaming the Centre to reflect the local community sees and understands their 'place'. To this effect, in conjunction with future community engagement activities, the City of Melville may consider consulting with the community on this matter to determine the level of appetite for renaming the center, which may occur as a naming competition. This could also be expanded to include unnamed local lanes to reflect local people, heritage, history or aspirations.

7.4 Monitoring and Review

This structure plan provides a framework for enhancing the activity, diversity and urban design quality within the Riseley Centre and includes a variety of base points and measurables, which may form the foundation of a regular review process. Monitoring and review should consider the key objectives outlined in Section 1.3. Each action arising from implemented this structure plan should be measured against each of these objectives to measure their successes.

Objective	Potential Measurables
Create an attractive and sustainable activity centre that is a vibrant, desirable and safe place to live, work and socialise.	Higher pedestrian numbers through daytime and evening hours. Incidence of crime reduced.
Facilitate viable, enduring and high quality development in the activity centre with an appropriate mix of land uses.	Increased economic diversity.
Enhance the character, streetscapes and public spaces in the activity centre.	Higher pedestrian numbers through daytime and evening hours. Increased number of events within public places. Increased stationary activity (e.g. alfresco dining, sitting/ gathering in public places). More active street frontages, particularly along Kearns Crescent
Appropriately manage traffic, parking and accessibility issues.	Decrease in accident occurrence for both pedestrians and vehicles.
Promote a mix of housing choices.	Increased number of 1, 2 and 3 bedroom apartments within the structure plan area. Increased housing diversity within 1 kilometres of the structure plan boundary.
Encourage local employment and business opportunities.	Increase in employment activity within the centre Increased range of diversity in employment opportunities.
Provide certainty to enable investment decisions to be made with reasonable confidence.	A clear planning framework (including this structure plan and a Parking Management Plan) adopted and implemented by the City.

The City should ensure that the structure plan is working well and is updated if/as required.

7.5 Priority Actions

The following tables assign a level of priority against each of the items based on the following:

- Short Term – 1-2 years
- Medium Term – 3-5 years
- Long Term – More than 5 years

Actions	Timing
Town Planning Scheme Amendment	
Rezone lots as recommended by this structure plan	Short Term
Traffic and Roadworks	
Reduce traffic speed limit on Riseley Street to 40 kilometres an hour between Simpson/ Willcock Streets and Canning Highway.	Short Term
Reduce traffic speed limits on Simpson and Willcock Streets to 40 kilometres an hour	Short Term
Reduce traffic speed limit on Kearns Crescent to 30 kilometres an hour.	Short Term
The City to further investigate: • Existing traffic issues on local streets in and around the centre • Further measures to improve the efficiency of the Canning Highway and Riseley Street intersection	Short Term
Investigate the introduction of bus lanes along Canning Highway (Department of Transport and Public Transport Authority)	Short Term
Reconsider the design and paving treatments at Riseley Street and Kearns Crescent) to encourage slower movement and greater awareness of pedestrian activity.	Short to Medium Term
Implement Local Traffic Management initiatives if/as required in and around the centre	Short to Medium Term
Encourage a shift towards alternative transport methods to access the centre	Ongoing
Introduce bus lanes along Canning Highway (Department of Transport and Public Transport Authority)	Medium to Long Term
Pedestrian	
Improve pedestrian amenity and safety in and around the centre	Ongoing
Improve the pedestrian link from the all-day car parking area on Mitchell Street (north of Shirley Strickland Reserve) to the centre	Short Term
Improve pedestrian crossings at the Willcock Street / Simpson Street / Coogee Road intersection	Short to Medium Term
Improve pedestrian crossings across Canning Highway and Riseley Street	Short to Medium Term
Demarcate pedestrian movement areas within privately owned car parks bound by Kearns Crescent, Riseley Street and Canning Highway. (landowner responsibility with assistance from the City)	Short Term
Provide footpaths on both sides of streets within 200 metres of the Centre.	Medium Term
Car Parking	
Prepare a Parking Management Plan for the centre	Short Term
Prepare a TravelSmart Plan for the centre	Short Term
Revise the existing CoM parking requirements to be more appropriate for a traditional town centre	Short Term
Replace 90 degree parking on Kearns Crescent with parallel and/or 30 degree parking in conjunction with upgrades to Kearns Crescent	Short Term
New developments to provide appropriate on-site car parking in accordance with the Parking Management Plan	Ongoing

Actions	Timing
City of Melville to investigate and implement as appropriate: • Providing more on-street car parking wherever possible • Providing more car parking at and/or redevelopment of 3 Willcock Street • Providing more car parking at and/or redevelopment of 15 Willcock Street • Providing more car parking in rights of way (laneways) if possible • Encourage and formalise all-day staff car parking in existing car bays on Mitchell Street (north of Shirley Strickland Reserve) • Provide additional parking along the eastern (southbound) side of Riseley Street (if/when that section is reduced from 2 lanes to 1 lane • Investigate other options for providing more car parking in or around the centre (e.g. multi-storey car park)	Short Term and Ongoing
Provide a new taxi bay in the centre.	Short Term
Streetscape	
Provide more seating, shade and greenery in the centre	Ongoing
Redesign and reconstruct Kearns Crescent (realigning the carriage way, providing parking and pedestrian paths on both sides of the road, potentially introducing slow moving surface).	Medium Term
Reconstruct the intersection of Willcock Street, Coogee Road and Simpson Street.	Medium Term
Formalise the existing laneway between Kearns Crescent and Simpson Street (parallel to Canning Highway)	Short Term
Widen rear rights of way to at least six (6) metres through ceding of land at point of subdivision or development of lots (condition of planning approval).	As development occurs
Reduce movement at the intersection of Kearns Crescent and Canning Hwy to 'left out' only (proposed by MRWA).	To be determined in consultation with MRAW and PTA.

Appendix 1 - Economic, Retail and Employment Report

pracsys.

CITY OF MELVILLE

RISELEY STREET ACTIVITY CENTRE STRUCTURE PLAN

ECONOMIC, RETAIL AND EMPLOYMENT REPORT

DECEMBER 2013

DISCLAIMER

This report has been prepared for **the City of Melville**. The information contained in this report has been prepared with care by the authors and includes information from apparently reliable secondary data sources which the authors have relied on for completeness and accuracy. However, the authors do not guarantee the information, nor is it intended to form part of any contract. Accordingly all interested parties should make their own inquiries to verify the information and it is the responsibility of interested parties to satisfy themselves in all respects.

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CONTENTS

1.0

1 EXECUTIVE SUMMARY

The following report has been prepared as an appendix to the Riseley Street Activity Centre Structure Plan, to provide information on the economic, retail and employment implications of the structure plan. The report provides analysis of:

- Activity centre context;
- Economic context analysis;
- Activity centre performance;
- Community consultation;
- Retail and commercial floorspace modelling;
- Employment analysis;
- Diversity target and performance; and
- SWOT analysis.

The following conclusions can be drawn from the economic, retail and employment analysis for Riseley Street District Centre:

The strengths of Riseley Street District Centre are:

- Relatively affluent catchment and high levels of home ownership, therefore relatively high levels of disposable income;
- High employment quality; and
- Relatively good access to existing public transport routes.

The weaknesses of Riseley Street District Centre are:

- High dependence on car trips and issues arising from related traffic congestion;
- Sub-optimal levels of retail floorspace currently provided.

Opportunities identified for Riseley Street District Centre are:

- Increased residential density;
- Build on the existing employment quality strength and industry agglomerations;
- Increased intensity of activity within the centre;
- Increased retail floorspace within the centre;
- Improve the quality of the urban environment within the centre to create a better user experience; and
- Align the offer of activity with the local demographic to optimise capture discretionary spend of local residents.

Threats identified for Riseley Street District Centre are:

- Expansions at Booragoon Secondary Centre and Canning Bridge District Centre, without appropriate action to further develop the competitiveness of the offer at Riseley Street District Centre, have the potential to threaten existing activities; and
- A lack of convenient parking, if not mediated by improvements in other transport options, may limit the future success of the centre.

Like all activity centres, future development at Riseley Street District Centre may face some challenges in competing effectively with other centres in the surrounding network. Currently there is significant unmet demand for goods and services within the local catchment and across the City of Melville. This is driving expansions of retail and other floorspace at

surrounding activity centres, which could be perceived as a threat to Riseley Street District Centre. However competition from other activity centres is likely to drive the offer at Riseley Street District Centre to become more competitive and improve their demand share rather than reduce their demand share. The challenge for Riseley Street is expected to be in improving and optimising the conditions for trade, given the noted deficiencies of the centre and the fragmented land ownership. However there is considered to be significant potential for the centre to continue to grow and mature given the scenarios presented.

2.0

2 INTRODUCTION

The following report has been prepared as an appendix to the Riseley Street Activity Centre Structure Plan, to provide information on the economic, retail and employment implications of the structure plan.

The report is structured follows:

- Activity centre context - outline of the policy drivers for change at Riseley Street District Centre and geographic location of the activity centre;
- Economic context analysis - scan of relevant of social, technological, economic, environmental and political factors expected to affect the future of the activity centre;
- Activity centre performance - measurements of the current performance of Riseley Street District Centre in terms of economic sustainability and urban form;
- Community consultation - outline of the results of a community workshop to develop ideas for preferred future development at Riseley Street District Centre;
- Retail and commercial floorspace modelling - retail needs assessment and projections for office and entertainment floorspace;
- Employment analysis - outline of future employment targets for Riseley Street District Centre required to meet the Directions 2031 employment self-sufficiency target;
- Diversity target and performance - outline of the likely future floorspace accommodated within Riseley Street District Centre and the expected diversity ratio; and
- SWOT analysis - summary of the strengths, weaknesses, opportunities and constraints.

3.0

3 ACTIVITY CENTRE CONTEXT

3.1 POLICY DRIVERS

Since the introduction of State planning strategy Directions 2031 and State Planning Policy 4.2: Activity Centres for Perth and Peel (SPP 4.2), activity centre structure plans have been required to be produced by local authorities and major developers. SPP 4.2 recognises activity centres as a focal point that concentrates different types and combinations of transactions, (including economic, social and environmental). This focus provides a more realistic understanding of the spectrum of transactions potentially taking place, and therefore can form the basis of a more adequate framework for the management of these transactions.

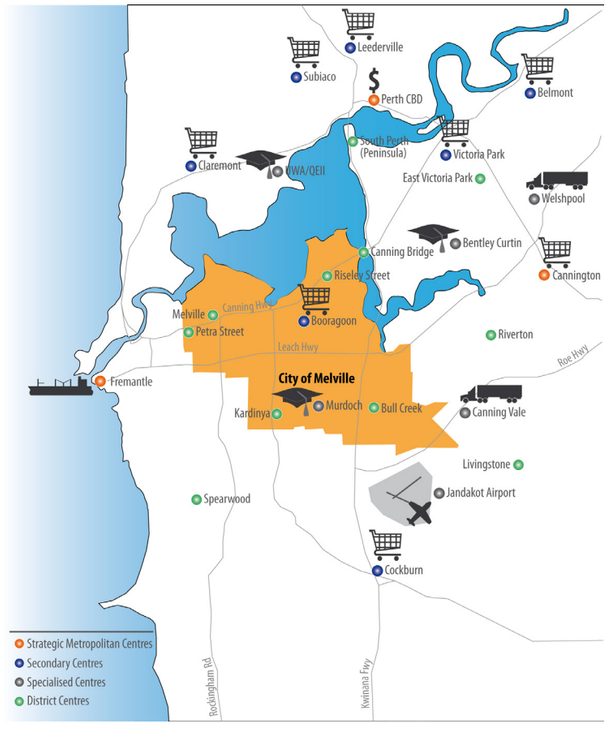
The rationale behind recognising activity, rather than just commerce, is related to prioritising the needs of end users, and the ways in which these residents, workers, visitors and enterprises engage with their physical environment. By doing this, focus has shifted from management of inputs (such as retail floorspace) to performance outcomes (such as activity intensity, diversity, accessibility and employment). This allows for greater flexibility in delivery of solutions, as well as decision-making frameworks more in alignment with community aspirations.

The Department of Planning's Structure Plan Preparation Guidelines describe a structure plan as providing the framework for the coordinated provision and arrangement of future land use, subdivision and development in new urban areas and in existing developed/ redevelopment areas in metropolitan and regional areas. Activity centre structure plans are therefore necessary to ensure a centre's development is integrated, cohesive and accessible in the context of the surrounding areas.

3.2 LOCATION

Riseley Street District Centre is located around 6 km south of the Perth CBD, within the City of Melville. Figure 1 shows the centre in the context of the surrounding activity centres network in the Perth Metropolitan Region. The centre is situated along Canning Highway, a primary regional road running between the Kwinana Freeway and Fremantle, and is around 2 km west of Canning Bridge District Centre and a similar distance north of Booragoon Secondary Centre.

Figure 1. Riseley Street context map



Source: Pracsys 2012

3.3 STATE GOVERNMENT PLANNING POLICY

3.3.1 Directions 2031

Directions 2031 and Beyond outlines the growth policy, targets and staging for each of the city's six sub-regions, and the new hierarchy of activity centres in the Perth and Peel Regions. This hierarchy nominates the role each centre should play within the network, and identifies which centres should assume a strategic role and which should perform population-driven functions. The strategic roles are intended to be fulfilled primarily through the CBD, Specialised Centres and Strategic Metropolitan Centres. These centres are based around infrastructure and are, or have the potential to be, large enough to produce productivity increases from agglomeration. These centres should provide an alternative strategic employment location to the CBD, maximise leverage from transport infrastructure and begin to address the economic, social and environmental costs associated with extensive commuting.

One of the primary objectives of Directions 2031 is to achieve a more balanced distribution of population, dwellings and employment across the metropolitan area. This involves:

- Improving the employment self-sufficiency of the outer sub-regions; and
- Increasing distribution of new residents and dwellings to the central sub-region.

Smaller lower level centres, such as Riseley Street District Centre, are intended to provide for daily and weekly shopping needs of their catchment. In terms of employment they generally provide primarily population-driven employment, but may include some Knowledge Intensive Consumer Services (KICS) along with a high proportion of Consumer Services and Producer Services employment.

3.3.2 State Planning Policy 4.2: Activity Centres for Perth and Peel

Riseley Street District Centre sits within the central metropolitan Perth sub-region of Directions 2031 and is classed as a district activity centre under the activity centres hierarchy set out in SPP 4.2. Placed fourth-highest in the hierarchy, this type of centre has a greater focus on servicing the daily and weekly needs of residents. Their relatively smaller scale catchment enables them to have a greater local community focus and provide services, facilities and job opportunities that reflect the particular needs of their catchments.

The features of a district centre are detailed in Figure 2.

Figure 2. SPP 4.2 District Centre Targets

Area of Focus	District Centre Targets
Service population	20,000 - 50,000 people
Walkable catchment	400 m
Transport connectivity and accessibility	Focal point for bus network
Typical retail development	Discount department stores Supermarkets Convenience goods Small scale comparison shopping Personal services Some specialty shops
Typical office development	District level office development Local professional services
Residential density target (gross ha)	20 (minimum) 30 (ideal)
Diversity performance target (mix of land uses floor-space as a proportion of the total centre floor-space)	Above 100,000 m2 – 50% 50,000 m2 – 100,000 m2: 40% 20,000 m2 – 50,000 m2: 30% 10,000 m2 – 20,000 m2: 20% Less than 10,000 m2: N/A

Source: State Planning Policy 4.2: Activity Centres for Perth and Peel, WAPC, 2010

3.4 CITY OF MELVILLE PLANNING POLICY

A number of City of Melville planning instruments and documents were reviewed to assess their influence on future planning for Riseley Street District Centre.

3.4.1 Local Commercial Strategy (2003)

The Local Commercial Strategy was produced in 2003 (and updated in 2006) under the guidance of the Metropolitan Centres Policy. The strategy provided retail floorspace caps for all activity centres in the City of Melville but did provide any measures to regulate other commercial land uses.

The Strategy recommends that existing district centres retain their respective floorspace limits, as outlined in the Community Planning Scheme, however, expansion from current levels (currently 11,300 m2) should be assessed on merit. In its commentary on Riseley Street District Centre, the Strategy recommends that the centre be encouraged to gradually diversify.

However, the introduction of SPP 4.2 removes the use of floorspace caps in regulating shopping centre size. The new Local Commercial and Activity Centres Strategy (LCACS), currently under preparation, is expected to reflect this and provide performance-based criteria to regulate commercial development by considering the full spectrum of activity within centres.

3.4.2 Planning Analysis for Riseley Centre (2010)

The Report for Planning Analysis of the Riseley Centre (2010) sought to support Riseley Street as a District Centre within the context of Directions 2031 and surrounding activity centres. The report proposed an ultimate mix of:

- 21,000 m2 (additional 13,000 m2) of retail space;
- 108,000 m2 (additional 100,000 m2) of commercial space;
- 3,000 employees; and
- 2,700 residents in 1,200 dwellings.

The increase in retail floorspace described in the report relies on the capture of significantly higher demand from within existing catchments, most likely through the expansion of the local supermarket. Similarly, the rise in commercial office space is also reliant on increased market demand over time.

3.4.3 Draft Vision for the Riseley Centre (2011)

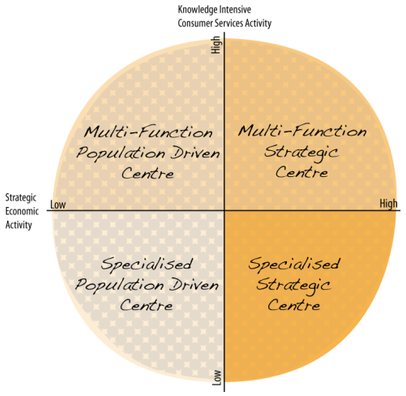
The Draft Vision for the Riseley Centre (2011) is a non-statutory concept document that acknowledges Riseley Street District Centre's existing attributes while seeking to enhance its role as an inner metropolitan activity centre. The Draft Vision establishes a series of short, medium and long-term initiatives that make up a draft implementation framework for the activity centre. Initiatives range from further studies (e.g. traffic and parking) to identifying major infrastructure requirements within both the public and private domain.

3.5 CENTRE MATURITY AND FUNCTIONS

In order to function at a high level an activity centre must have a high degree of economic maturity. Centre maturity is distinct from the position in the hierarchy. The hierarchy is useful for formal classification of centres and to indicate at a very high level the intended function of centres. Centre maturity provides a more in-depth classification of the commercial focus of a centre, and how a centre functions. The maturity of a centre is determined by the proportion of high quality employment located there (see Figure 3).

Riseley Street District Centre is best characterised as a multi-function population-driven centre. In addition to its retail and restaurant function, it has numerous knowledge-intensive consumer services firms, particularly various medical and related services. The centre is also home to at least one engineering firm, Scott & Associates, giving it the beginnings of a diversification away from a purely population-driven focus. It is also home to two churches. As the centre matures, more knowledge-intensive businesses such as this should locate in the centre, as its amenity makes it an attractive location and as rents continue to increase in the traditional professional services hubs in other parts of the metropolitan area.

Figure 3. Riseley Street District Centre Maturity Matrix



Source: Pracsys 2011

3.6 COMPETITION WITH NEARBY CENTRES

There are three major activity centres near Riseley Street District Centre:

- Canning Bridge District Centre;
- Murdoch Specialised Centre; and
- Booragoon Secondary Centre.

These centres, due to their proximity and offer of land uses, have the potential to compete with Riseley Street District Centre for tenants and consumers. The following section provides a discussion of the potential for competition.

3.6.1 Canning Bridge District Centre

Canning Bridge District Centre is located east of Riseley Street District Centre on Canning Highway. It crosses the Canning River near its confluence with the Swan River. There have been four structures at the site, with the first having been built in 1849. The current bridge was built in 1939. There are businesses on both sides of the bridge, but the Applecross side of the activity centre is far larger and more developed. The activity centre extends down Canning Highway to just past Sleat Road.

Key tenancies in Canning Bridge are the Raffles Hotel, and an IGA. The Raffles is a historic hotel/bar that was redeveloped in 2002 when a 17-storey apartment tower was built on the site.

Canning Bridge currently has a focus on office floorspace, with a significant number of entertainment offerings. Structure planning for the centre is currently underway. It is expected there will be an expansion of office floorspace at Canning Bridge, with additional retail and other commercial floorspace to play a support function. The close proximity of the centre to Perth CBD, and the excellent access provided to the centre by the train station, bus services, Kwinana Freeway and shared paths has made the centre an attractive proposition for population-driven or strategic services industries to locate there.

Despite the close proximity of Canning Bridge District Centre to Riseley Street District Centre, it is expected that future development at both centres will serve to further differentiate their functions rather than increase competition for tenants and consumers.

3.6.2 Murdoch Specialised Centre

Murdoch Specialised Centre includes Murdoch University, Fiona Stanley Hospital, St John of God Hospital and allied health services, and Challenger TAFE. Murdoch is classed as a Specialised Centre under SPP 4.2. The focus of the centre is expected to remain on health, research and education uses, with the addition of some complementary retail, entertainment and commercial uses. The recently released Murdoch Activity Centre Structure Plan indicates that major redevelopment is planned for Murdoch Specialised Centre on unused or underused university land and the surrounding area. This is not expected to compete with Riseley Street District Centre due to the relatively low level of planned retail and entertainment uses, which are intended to service only the local catchment. However, despite the specialised focus of the centre, a large and diversified consumer services offer has the potential to draw away businesses who might otherwise choose to locate at Riseley Street District Centre. The competitive advantage for Murdoch Specialised Centre is likely greater for some commercial uses due to the greater accessibility of the site by road and rail.

3.6.3 Booragoon Secondary Centre

Booragoon Secondary Centre is located further south down Riseley Street, and is comprised primarily of AMP Garden City Shopping Centre and the City of Melville civic centre and administration offices. There are also some additional medical and office uses within the centre.

This centre is currently undergoing structure planning, with the Garden City owner intending to expand the centre retail floorspace from around 60,000 m2 to a maximum of 120,000 m2 with additional non-retail floorspace proposed to complement the retail offer. Depending on the proposed tenant mix and additional non-retail floorspace developed within Booragoon Secondary Centre, this expansion has the potential to complement or compete with the current offer at Riseley Street District Centre. As a smaller activity centre, the future development of retail and non-retail floorspace at Riseley Street District Centre needs to respond to the development of Booragoon Secondary Centre as well as consider the competitiveness of the value proposition offered to the current and future user mix of Riseley Street District Centre. The ability of Riseley Street District Centre to compete with Booragoon Secondary Centre now and in the future is likely to depend on the further development of the unique character and offer of goods, services and experiences provided at Riseley Street District Centre.

3.7 ACTIVITY CENTRE CONTEXT IMPLICATIONS

The implications of the activity centre context analysis for Riseley Street District Centre are:

- The centre is expected to contribute to the Directions 2031 ESS target for the Central Sub-Region;
- The centre is required to meet the SPP 4.2 residential density and diversity targets;
- Several previous studies of the activity centre have identified further development of the centre as a priority, as well as actions to implement future development. The structure plan revisits the future development of the centre and updates these studies;
- The centre is expected to provide for the daily and weekly shopping needs of its catchment, as well as provide some higher quality employment and services; and
- The surrounding activity centres have the potential to compete or complement Riseley Street District Centre. The future competitive value proposition of Riseley Street District Centre to centre tenants and consumers, and the level to which the centre offers a unique place experience within the local activity centres network, is expected to determine the future success of commercial floorspace at the centre.

4.0

4 ECONOMIC CONTEXT ANALYSIS

4.1 STEEP ANALYSIS

The economic context analysis of Riseley Street District Centre has been undertaken using a STEEP analysis. A STEEP analysis is a method of assessing the macro-environmental characteristics of a given geographic area. A STEEP analysis categorises macro-environmental characteristics as one of five different factors:

- Social
- Technological
- Economic
- Environmental
- Political

Most of the characteristics categorised within the STEEP will have some overlap, or strong/weak relationship to the other elements. In this context it has been applied to Riseley Street District Centre to facilitate analysis of the economic issues relevant to the area, and to provide an understanding of the implications of each issue identified. Figure 4 sets out the different factors assessed in the STEEP analysis for Riseley Street District Centre.

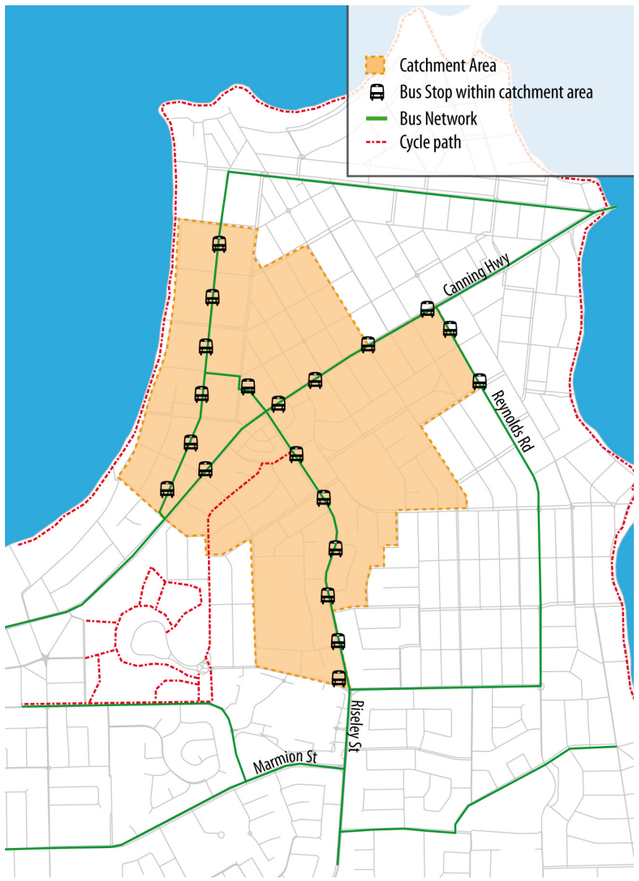
Figure 4. STEEP factors matrix

STEEP Factors	Elements
Social Factors	Resident population
	Age profile
	Household size and composition
	Dwelling types
Technological Factors	Online retail
	National Broadband Network
Economic Factors	Income and Education
	Expenditure
	Housing tenure
	Housing costs
	Deregulation of retail trading hours
	Competition from nearby centres
	Industry mix
	Employment self-containment
	Employment self-sufficiency
	Employment quality
Environmental Factors	Private vehicle ownership
	Parking
	Travel modes
	Heavy rail
	Light rail
Political Factors	Public Perception

Source: Pracsys analysis 2013

The area used for the STEEP assessment is shown in Figure 5. This area is comprised of the smallest ABS spatial units from the 2011 census, SA1 units, within 400 m of the activity centre. The previous census in 2006 used different spatial units, making comparisons between the two censuses impractical. Where trends over time are discussed, data is used for the whole City of Melville and discussed in the context of Riseley Street District Centre.

Figure 5. Riseley Street map



Source: Pracsys 2013

4.2 SOCIAL FACTORS

Social factors refer to social trends that describe the 'people' characteristics of the area assessed. These include aspects of demographics, education, age distribution, culture, health, career aspirations, perceptions of safety, social mobility and so on.

4.2.1 Resident Population

The City of Melville is one of the largest local government areas in the Perth Metropolitan Area and considered developmentally and demographically mature. As at Census 2011, there were nearly 96,000 people living in the City of Melville with just over 5,000 of those in Riseley Street District Centre (see Figure 6). Compared to Western Australia, the population growth experienced within the City of Melville was low, increasing by only 2.9% between 2006 and 2011. This is significantly lower than the population growth of Western Australia over the same period (14.3%). Given the highly developed land around Riseley Street, and the lack of any recent large developments, it is likely that population trends in this area were similar to those across the City.

Figure 6. Resident population and age

Population	Riseley Street District Centre	City of Melville	Western Australia	Australia
No. Of People (2006)	N/A	93,005	1,959,095	19,855,288
No. Of People (2011)	5,176	95,700	2,239,170	21,507,717
Growth Rate	N/A	2.9%	14.3%	8.3%
Median Age (2011)	41	40	36	37

Source: ABS 2011 Census of Population and Housing

4.2.2 Age Profile

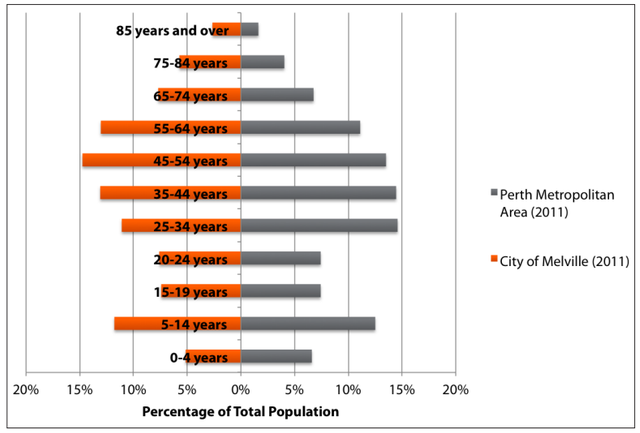
The median age in the City of Melville is 40, with the Riseley Street median age slightly higher at 41. The population of the City of Melville is older relative to State and national averages (WA 36; Australia 37), (see Figure 6). The City of Melville is relatively over represented in all age groups over 44 years, and under represented in all age groups below 44 years (See Figure 7). The exception to this trend is the 15-24 year cohort, which is likely a consequence of the presence of Murdoch University and associated student accommodation within the City of Melville. The most under-represented age cohort within the City of Melville is the 25 to 34 year group. This is consistent with that experienced in other inner metropolitan municipalities such as Cambridge, Claremont and Nedlands, where the very high cost of housing acts as a barrier to the attraction and retention of this segment of the population.

The high median age of residents is likely to have implications of the types of goods and services residents are likely to consume, as well as the relative levels of discretionary spending of residents.

4.2.3 Education

The level of educational attainment in the Riseley Street District Centre has changed dramatically over the last decade (Figure 8). Since 2001, the proportion of the population over 15 years who have completed year 12 has increased from 51% to 61%. This is most likely due to the introduction of new legislation governing the legal school leaving age, which came into effect in 2008, raising the compulsory school leaving age to 17.

Figure 7. Resident age profile comparison (2011)



Source: ABS 2011 Census of Population and Housing

Figure 8. Education attainment levels in 2011

Population Segment	Riseley Street District Centre	City of Melville	Perth Metropolitan Region	Western Australia
Percentage of Population (over 15 years) who have completed Year 12 or equivalent	66%	61%	53%	49%
Percentage of Population (over 15 years) with a post school qualification	56%	62%	58%	57%

Source: ABS 2011 Census of Population and Housing

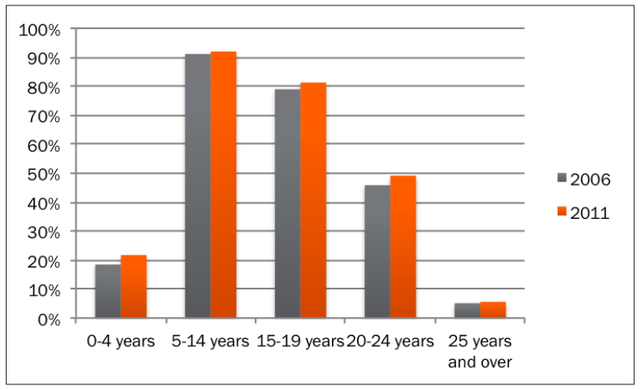
The proportion of the population over 15 years with a post school qualification is consistent with State level trends, but below the level of attainment for the City of Melville as a whole. This has the potential to affect the current and future discretionary spend of Riseley Street District Centre residents.

Similarly, levels of current education attendance have risen across all age cohorts. This may reflect:

- Changes in legislation governing the legal school leaving age and changes to the age of school commencement;
- The unique age profile of City of Melville residents. For example, a slight increase in the number of 3 and 4 years old in the 0 to 4 age cohort would reflect an increase in attendance; and
- A genuine increase in the number of residents attending education institutions. For example, the increase in the 20-24 age cohort, may reflect a decision of many tertiary students to continue studying as a response to the economic downturn.

Education attendance is strongly positively correlated with education attainment and higher levels of educational attainment are associated with increased employment opportunities and higher wages.

Figure 9. Riseley Street District Centre education attendance (2006-11)



Source: ABS 2006 and 2011 Census of Population and Housing

4.2.4 Household Size and Composition

The composition of households in Riseley Street District Centre were broadly consistent with the profiles across the City of Melville, Perth Metropolitan Region and at State level, with a slightly greater proportion of lone person dwellings and less family households (see Figure 10). This usually reflects of a difference in housing types offered within a centre, with fewer people occupying smaller dwellings.

Figure 10. Riseley Street District Centre household composition

Household Composition	Riseley Street District Centre	City of Melville	Perth Metropolitan Region	Western Australia
Family	70%	72%	72%	72%
Lone Person	26%	24%	24%	24%
Group	4%	4%	4%	4 %

Source: ABS 2011 Census of Population and Housing

4.2.5 Dwelling Types

Separate houses formed the majority of the occupied real estate in the Riseley Street District Centre (75%). This is below the proportion for the City of Melville and at State level. The number of occupied semi-detached, townhouses, flats, units or apartments in the Centre was proportionally higher than the City of Melville, Perth Metropolitan Region and State level trends. This is consistent with an intense, transit-oriented centre and reflective of the household composition data in Figure 11.

Figure 11. Dwelling types

Dwelling Structure	Riseley Street District Centre	City of Melville	Perth Metropolitan Region	Western Australia
Separate house	75.4%	80.6%	78.6%	80.4%
Semi-detached, row or terrace house, townhouse	15.3%	12.1%	11.9%	9.9%
Flat, unit or apartment	9.3%	7.3%	9.1%	7.9%
Other dwelling	0.0%	0.0%	0.4%	0.1%
Not stated	0.0%	0.1%	0.0%	1.7%

Source: ABS 2011 Census of Population and Housing

4.2.6 Social Factors Implications

The analysis of social factors shows a number of trends for Riseley Street District Centre:

- Aging population;
- Smaller households; and
- Higher density dwelling types.

4.3 TECHNOLOGICAL FACTORS

Technological factors encompass changes in technology that have resulted in new products or changes in the way services are provided. These usually have a strong relationship with economic and social factors. For example, the internet has changed the way many people do comparison shopping, gain information and interact within social networks.

4.3.1 Online Retail

Online sales in 2010 accounted for 6% of total retail spending equating to $12.6 billion. The Australian Productivity Commission has also projected that online sales in Australia are projected to grow by 10-15% per annum over the next three years[1]. The Australian Productivity Commission has estimated that the domestic online share of total retail sales is 4% and overseas online sales account for around 2% of total retail sales (2010).

Online retailing has faced increasing scrutiny and coverage from the media recently as major retailers have attempted to lobby the Australian government to apply GST to goods purchased online. This has since been rejected on the basis that the cost of implementation would outweigh any benefits. It has also been noted that most consumers of online retail choose the method for reasons other than just price, including the convenience of receiving goods by mail and the increased variety of goods offered by online retailers.

In parallel with the increasing level of online retail activity is the emergence of hybrid retailers, that is, firms that employ both electronic and physical channels for sales and exploit the synergies between them. This model typically combines the searchability, accessibility and flexibility of e-commerce with the proximity and efficiency of a traditional activity centre based store. While this model will not suit all retailers, the shift will help maintain the percentage of retail sales captured by domestic businesses by reducing the leakage to online retail expenditure.

Planning for expansion of commercial activity within Riseley Street District Centre needs to

1 http://www.pc.gov.au/__data/assets/pdf_file/0009/113769/07-retail-industry-chapter4.pdf (http://www.dbcde.gov.au/__data/assets/pdf_file/0020/131951/Household_e-commerce_activity_and_trends_in_Australia-25Nov2010-final.pdf)

be cognisant of the trend towards increased market share for online retailing. Responses to this trend may include appropriate feedback mechanisms to revise the supply of retail over time as the need for retail floorspace changes, or the introduction of new methods of distributing retail goods and services. This is still relevant at a local level as retailers and entertainment providers have the potential to provide a higher level of service to their local catchment through use of online retail. In terms of implications for floorspace demand, ideally new retail floorspace will be flexible enough to change over to other uses if market conditions dictate.

4.3.2 National Broadband Network

The National Broadband Network (NBN) rollout map indicates that the construction of the NBN in the City of Melville has already commenced in the central part of the municipality that includes the Riseley Street District Centre. Construction was previously scheduled in Murdoch to begin within a year, and within three years in Willagee and Kardinya. All services to these areas were intended to be fibre. However, the current federal government are reviewing the future of the NBN so it is unknown at this time whether Riseley Street District Centre will be provided with the NBN in the future, and if so, what type of network will be provided.

Many of the businesses in the Riseley Street District Centre are dominated by retail and entertainment uses, such as convenience stores and cafes, on which the NBN is unlikely to have significant impacts. Some commercial firms are expected to benefit from high-speed internet services and a large increase in commercial floorspace has been suggested in previous reports. However, given the current review of the NBN service, it is unclear if the service provided will increase internet speeds sufficiently to provide a tangible difference to firms and factor in their location decisions.

The provision and staging of the NBN has the potential to affect the location decisions of firms for which it presents a significant productivity benefit, if the NBN is provided in the centre prior to installation at other competing locations. The early installation of the NBN has the potential to influence the types of firms, which locate there and give these centres a relative competitive advantage over locations without the service.

4.3.3 Working from Home

The internet and mobile phone have largely enabled workers to work remotely from their office, potentially with little or no productivity decline. The federal government recently announced a target of increasing the percentage of the population who 'telework' from the current level of 4% to 12%[2]. Their rationale behind increasing the number of people who work from home was an assumption that this would lead to greater national productivity and job creation[3]. There is some evidence that companies that offer teleworking as an option have greater staff retention rates. Removing the requirement to commute has the potential to save a lot of time and reduce transport congestion. However, critics of the idea cite a number of challenges that come with teleworking, for the teleworker, other employees and the teleworker's manager[4]. Managers may have

2 (News Limited 2012)
3 (ComputerWorld: The Voice of IT Management)
4 (Sydney Morning Herald)

difficulty managing workers they don't see. Employees who are present in the workplace may be given tasks that need to be done immediately and the absent worker may not get the same recognition for their work. They may also not get the same opportunities to establish working relationships with new staff. Employees present in the office may also benefit from more mentoring and learning opportunities within the workplace.

The proportion of Riseley Street District Centre residents with internet connections was 90%, higher than the City of Melville average of 82%, the Perth region average of 80.3% and the national average at 76.8% (see Figure 12).

It is not considered likely that the NBN rollout will significantly increase the proportion of the Riseley Street District Centre labourforce who work from home. The current types of residential internet connections indicate that the area is well-provided with the type of service the majority of teleworkers will need. Additionally, a recent survey found a lack of suitable internet connection is rarely the reason why workers don't telework[5]. The NBN is likely to benefit businesses reliant on fast internet speeds, regardless of whether employees work in an office or at home.

4.3.4 Technological Factors Implications

The analysis of technological factors has the following implications for Riseley Street District Centre:

- The growth of online retailing, especially for comparison shopping, shows no signs of abating and is likely to continue to compete with existing retail. Local retailers need to explore new business models and products to compete;
- New retail floorspace should be designed to be flexible in order to respond to the rapid changes in online retailing; and
- The early installation of the NBN in the Riseley Centre District Centre has the potential to increase the desirability of the location for some firms in the short term. However the type of service provided, which is currently under review, will determine whether the NBN affects locations decisions of firms.

Figure 12. Internet connections

Area	No Internet Connection	Broadband	Dial-up	Other	Not Stated	Total
Riseley Street District Centre	11.6%	67.6%%	2.3%	2.6%	5.8%	89.9%
City of Melville	15.0%	76.3%	2.9%	2.9%	3.3%	82.1%
Perth Metropolitan Region	16.4%	73.1%	3.0%	4.1%	3.5%	80.3%

Source: ABS 2011 Census

Note: The 'not applicable' category from the census data has been excluded from this table.

5 (Deloitte Access Economics, Colmar Brunton, 2012)

City of Melville: Riseley Street Activity Centre Structure Plan

4.4 ECONOMIC FACTORS

Economic factors are those related to the capacity of individual to obtain goods and services. These include characteristics of the economy, the participation in the workforce, exchange rates, interest rates and the quality of employment offered. Economic factors are usually closely related to social and environmental factors, and may be strongly influenced by technological factors.

4.4.1 Income

Riseley Street District Centre is a relatively wealthy area by State and national standards (see Figure 13). In 2011 personal, family and household average income in the centre was higher than the averages for the City of Melville, State and nation.

Figure 13. Income of City of Melville residents

Median weekly incomes	Riseley Street District Centre (Average Median)	City of Melville	Western Australia	Australia
Personal	$786	$694	$662	$577
Family	$2,260	$1,619	$1,722	$1,481
Household	$1,778	$2,130	$1,415	$1,234

Source: ABS 2011 Census

The relatively high income of the resident population is likely a reflection of the high education levels observed amongst residents of the City, and the fact that people on higher incomes are likely to bid up the price of living near a sought-after location such as Riseley Street District Centre. The high income levels of local residents may translate to higher aggregate expenditure.

4.4.2 Housing Tenure

The residential area surrounding Riseley Street District Centre is an owner-occupied dominated real estate market, with over 65% of all occupied dwellings either owned outright or owned with a mortgage (see Figure 14). The lower number of owners with a mortgage, when compared to the figures for the City of Melville and State, indicates that residents are likely to be less sensitive to changes in the interest rate.

Figure 14. Housing tenure

Tenure	Riseley Street District Centre (% total dwellings)	City of Melville (% total dwellings)	Western Australia (% total dwellings)
Owned outright	41.0%	41.1%	29.5%
Owned with a mortgage	24.5%	32.6%	37.8%
Rented	26.4%	22.9%	29.2%
Other tenure type	2.3%	1.4%	1.1%
Tenure type not stated	5.8%	2.1%	2.3%

Source: ABS 2011 Census of Population and Housing

4.4.3 Housing Costs

It is evident that while housing costs in the Riseley Street District Centre are higher than the State and national averages, the proportion of households in housing stress, both in the rental and the mortgage markets, is lower (see Figure 15 and Figure 16). Housing stress refers to the financial burden for a household arising from high housing costs relative to their income. A household is classified as being in housing stress when housing costs are greater than 30% of household income. In

areas with lower levels of housing stress such as the Riseley Street District Centre, residents are likely to have greater levels of discretionary income to spend on non essential goods and services, thus creating above average demand in the area.

Figure 15. Rental costs

Rental Statistic	Riseley Street District Centre (Average Median)	City of Melville	Western Australia	Australia
Median weekly rent	$395	$350	$300	$285
Households where rent payments are less than 30% of household income	91.6%	92.8%	91.1%	89.6%
Households where rent payments are 30%, or greater, of household income	8.4%	7.2%	8.9%	10.4%

Source: ABS 2011 Census of Population and Housing

Figure 16. Mortgage costs

Mortgage Statistic	Riseley Street District Centre (Average Median)	City of Melville	Western Australia	Australia
Median monthly mortgage repayments	$2,734	$2,167	$1,950	$1,800
Households where mortgage payments are less than 30% of household income	91.8%	91.9%	89.8%	90.1%
Households where mortgage payments are 30%, or greater, of household income	8.2%	8.1%	10.2%	9.9%

Source: ABS 2011 Census of Population and Housing

4.4.4 Deregulation of Retail Trading Hours

Prior to 2010, under the Retail Trading Hours Act 1987, general retail shops were restricted to trading 8 am to 6 pm on weeknights other than designated late-night trading nights, between 8 am and 5 pm on Saturdays, and generally restricted to between 11 am and 4 pm on Sundays in designated special trading precincts. Trading on public holidays was heavily restricted. Under the Retail Trading Hours Amendment Act 2010 and additional amendments effected from 26 August 2012, general retail shops across the Perth Metropolitan Region were allowed to trade from 8 am to 9 pm all weekdays, from 8 am to 5 pm Saturdays, and from 11 am to 5 pm on Sundays and most public holidays. Deregulation of trading hours effectively means that general retailers currently regulated by general shop retail hours may, under a deregulated trading hours regime, have the option to trade under the same conditions as small shops and /or special retail shops.

There are early indications that the introduction of Sunday trading across Perth will most likely be successful for large shopping centres offering primarily comparison shopping, and less successful for smaller shopping centres focused on convenience shopping. The effect of Sunday trading at Booragoon Secondary Centre on the existing retail and entertainment uses at Riseley Street District Centre should be investigated and monitored.

4.4.5 Labourforce

As at Census 2011, there were 50,450 City of Melville residents in the labourforce. Since 2006 the labourforce in the City of Melville grew by 6.6%, more than twice the rate of population growth in the City of Melville over the same period. This may reflect one of a number of trends, including:

- Internal migration – analysis of migration in the City of Melville shows that 44% of residents in 2011 had relocated to the City of Melville since 2006, and the labourforce participation rate of these new workers was in general slightly higher.
- Changes in participation – there may also be some shifts in the economic participation of the retained population, reflecting not only the economic downturn and lack of job opportunities, but also the fact that more baby boomers are hitting retirement age.

In 2011, 48,375 City of Melville residents were employed, translating to an unemployment rate of 4.1%. The unemployment rate has increased since 2006 (previously 3.1%), however this trend is consistent with trends at a metropolitan, State and national level, and reflects the global the economic downturn.

4.4.6 Employment Self-Sufficiency

Given the relatively high level classification of Riseley Street as a district activity centre, it is expected to provide a meaningful contribution to the overall employment self-sufficiency[6] (ESS) of the Central Sub-Region. Under Directions 2031 the ESS target for Central Sub-Region is 121%. The additional dwellings target for the City of Melville is 11,000 new dwellings. As part of the structure plan, goals for the future employment capacity of the centre should be developed in line with an overall vision for the centre.

The City of Melville's employment self-sufficiency[7] has grown from 60% in 2006 to 63% in 2011. This increase is largely a result of the job creation within the City of Melville during this period, with jobs increasing from 28,598 in 2006 to 31,686 in 2011. As this has not been accompanied by a similar increase in local residents, this is likely to place additional strain on transport networks to accommodate the daily ingress and egress of workers to the City of Melville. However, the ESS of the City of Melville is relatively modest compared to other inner city local government areas. Essentially, only 60% of the local workforces have the potential to gain employment locally. Consequently, the City of Melville exports its resident labourforce to major centres in the central sub-region, such as the CBD.

6 The proportion of jobs located in a geographic area (region, corridor, local government) relative to the residents in that same area who are employed in the workforce. For example, if the area has 1,000 employed residents and 450 local jobs available, the employment self-sufficiency rate is 45%.

7 The number of jobs located in a geographic area (region, corridor, local government) as a proportion of the residents in that same area who are employed in the workforce.

4.4.7 Employment Self-Containment

The City of Melville has relatively high employment self-containment[8] (ESC) for an inner sub-region location at 23.8%. This means that almost 24% of residents work locally. This is particularly high in the context of the City of Melville's modest employment self-sufficiency. ESC has dropped slightly since 2006 from 24.4%. This is likely the result of the increase in local residents who are a part of the labourforce, relative to the increased the number of local residents working in the City of Melville. In essence, more people that live locally, work, but a higher proportion than previously travel outside of the area to access their place of work.

People working within several kilometres of their place of residence are more likely to walk or cycle to work, reducing the burden on transport networks. This has the potential for flow-on effects for traffic congestion and public transportation use, as an increased number of people need to travel further to work.

Figure 17 outlines the top ten employment destinations for Riseley Street District Centre residents in 2011.

The analysis shows that the majority of Riseley Street District Centre residents work within the broader City of Melville or in Perth CBD, with the remaining workers dispersed relatively evenly between other major metropolitan employment centres including the City of Canning, City of Fremantle and City of Stirling. With significant planned expansions at Booragoon Secondary Centre and Murdoch Specialised Centre, there is potential for the ESC to increase, especially as it is likely many industries located at Murdoch will be knowledge-intensive.

8 The proportion of jobs located in a geographic area that are occupied by residents of the same area, relative to the total number of working residents of that area.

Figure 17. 2011 Riseley Street District Centre residents employment destinations

Local Government Area	Where Residents of Riseley Street District Centre Work
Melville (C)	649
Perth (C)	515
Canning (C)	137
Fremantle (C)	116
Stirling (C)	94
Subiaco (C)	93
Victoria Park (T)	93
South Perth (C)	81
Cockburn (C)	79
Belmont (C)	71

Source: ABS 2011 Census

Figure 18 outlines the top ten places of residence for the people who worked in Riseley Street District Centre in 2011. As can be seen, the vast majority of workers in Riseley Street District Centre also live within the City of Melville.

Figure 18. 2011 Riseley Street District Centre worker places of residence

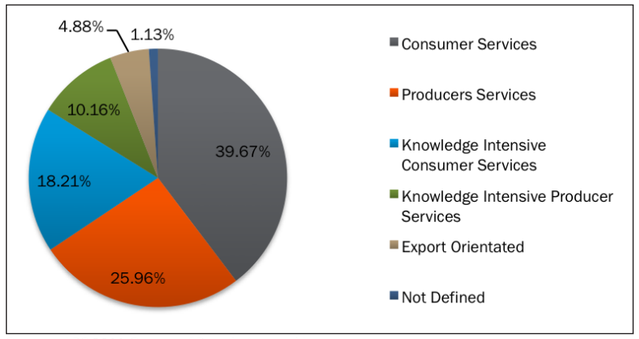
Local Government Area	Where workers of Riseley Street District Centre Live
Melville (C)	1,014
Cockburn (C)	180
Canning (C)	126
South Perth (C)	106
Stirling (C)	90
Gosnells (C)	76
Fremantle (C)	59
Joondalup (C)	51
Vincent (T)	32
Victoria Park (T)	31

Source: ABS 2011 Census

4.4.8 Employment Quality

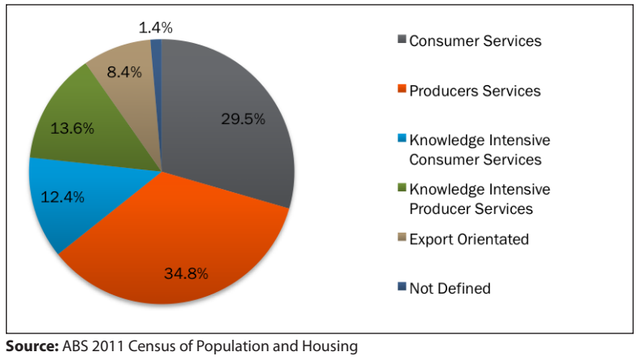
As the Perth Metropolitan Region economy becomes more knowledge-intensive, there will be an increase in demand for employees with appropriate skills. In contrast, the employment profile of many of the Perth's outer sub-regions is proving to be dominated by retail and consumer services (transactional based, low knowledge intensity) activity. This is a result of the relative immaturity of these economies, with a mono-cultural retail and consumer services employment base in the middle and outer sub-regions. In the meantime, knowledge intensive employment continues to be centralised around the central sub-region and major pieces of transport infrastructure. Consequently, residents seeking high quality employment opportunities are forced to commute outside their sub-region to access employment.

Figure 19. City of Melville Employment Quality (2011)



Source: ABS 2011 Census of Population and Housing

Figure 20. Western Australia Employment Quality (2011)



Source: ABS 2011 Census of Population and Housing

The Pracsys employment hierarchy classifies employment on two characteristics, final use and knowledge intensity. While there are a number of measures for knowledge intensity, this methodology focuses on the percentage of an industries labour force that are engaged in 'knowledge-intensive' occupations. Figure 19 and Figure 20 summarise the employment profiles of the City of Melville compared to Western Australia in 2011.

The City of Melville economy has a strong consumer services focus. The above average level of consumer services employment is associated with major shopping centres within its bounds, and the agglomeration of knowledge intensive consumer services associated with health and education institutions, including Murdoch University and St John of God hospital.

4.4.9 Industry Mix

An examination of the top five industries of employment in 2011 shows that alongside the significant consumer services workforce, there is a significant concentration of knowledge-intensive employment in the centre, with all but the top industry of employment classed as knowledge-intensive industries (see Figure 21). While this is within the overall trend for the City

of Melville, it is relatively high for a district level activity centre.

Note that in calculating the industry mix figures, due to the nature of the data available from the ABS, and configuration of the destination zone spatial units used, it is likely the analysis has captured employment from outside Riseley Street District Centre as well. For example, school education was actually the top industry, but was as such because of the nearby school in the same destination zone not necessarily because of the employment within the activity centre. The figures have been adjusted to exclude education for this reason. No other industry categories were excluded or adjusted.

Figure 21. Top five industries of employment – Riseley Street District Centre Destination Zones (2011)

Top five Industries 2011	Jobs 2011	% of total
Cafes, Restaurants and Takeaway Food Services	221	12.1%
Architectural, Engineering and Technical Services	117	6.4%
Real Estate Services	101	5.5%
Legal and Accounting Services	92	5.0%
Allied Health Services	91	5.0%

Source: ABS 2011 Census of Population and Housing

4.4.10 Comparative Advantage

The concept of comparative advantage was originally developed by David Ricardo in the early 19th century. Essentially, a location has a comparative advantage over another if, in producing a good or service, it can do so at a relatively lower opportunity cost in terms of the forgone alternatives that could be produced.

The purpose of analysing comparative advantage is to:

- Identify industries in which a location has created and sustained a comparative advantage, so that the advantage may be leveraged further; and
- Identify industries in which a location does not currently have a comparative advantage, but whose structure is such that if an advantage was developed it would have an increased likelihood of being sustained.

By calculating the employment concentration factors (ECF) of industries it is possible to identify the existing concentrations of specific industries within the study area. This is an indicator of existing or emerging agglomerations, and can be used to identify areas where economic development initiatives may strengthen agglomerations and ultimately facilitate the development of knowledge intensive export oriented clusters. ECFs are determined by the quantity of employment by ANZSIC industry category within a specified area, as a percentage of total employment. This ratio is then compared to the percentage of total State employment in the same industry category, divided by total State employment.

If an industry's ECF is greater than 1, the State average, it can be assumed that some portion of that industry's production is exported out of the area. For example, an ECF of 3.0 would indicate that employment in this particular industry is three times more concentrated in the region than for the State as a whole.

Figure 22 shows the top five industries in Riseley Street District Centre by employment concentration factors, at the 3 digit ANZSIC level in 2011. The ECF analysis reinforces that Riseley Street District Centre has an emerging health and professional service node. Real estate is also very highly represented at the centre.

Figure 22. Top five industries by ECF (with at least 20 workers) (2011)

Industry	ECF 2011	Employment (no. jobs)
Real Estate Services	5.41	101
Auxiliary Finance and Investment Services	5.12	65
Personal Care Services	3.91	63
Allied Health Services	3.47	91
Non-Residential Building Construction	3.02	33

Source: ABS 2006 and 2011 Census of Population and Housing

4.4.11 Economic Factors Implications

The analysis of economic factors affecting Riseley Street District Centre has the following implications:

- The relatively high income and high level of home ownership means it is likely Riseley Street District Centre residents have corresponding high levels of discretionary expenditure. The offer at Riseley Street District Centre has the potential to capitalise on this by alignment with the types of goods and services sought by residents;
- The 2012 deregulation of retail trading hours has the potential to negatively impact trade at Riseley Street District Centre. This should be monitored;
- A relatively high proportion of Riseley Street District Centre catchment residents work within the City of Melville. A high proportion commute to Perth CBD for work. Significant development of knowledge-intensive industries at Murdoch has the potential to increase the number of Riseley Street District Centre residents working within the City of Melville, as it may be alternative location to the Perth CBD; and
- Riseley Street District Centre hosts a small but significant agglomeration of knowledge-intensive industries.

4.5 ENVIRONMENTAL FACTORS

Environmental factors are all aspects of the physical environment, whether natural or built. This includes the natural environment, parks, streets, buildings, transport networks, services networks, climate, and so on. These often have a strong influence on the other factors as the environment is used to facilitate changes in the other factors, or as the other factors respond to the physical environment.

4.5.1 Motor Vehicle Ownership

In 2011 the majority of households in Riseley Street District Centre owned one or two motor vehicles (35% and 37% respectively (see Figure 24). This is line with the trends across the Perth Metropolitan Region (see Figure 24). The high levels of motor vehicle ownership are likely to lead to high use of roads for transport and high demand for car parking. This may be a result of a lack of convenient alternatives for local residents in commuting to work, or accessing goods and services within and outside of activity centres. These levels are typically seen in suburban areas dominated by low density single houses.

Figure 23. Households with registered motor vehicles in Riseley Street District Centre

Number of Registered Motor Vehicles	Number of Households with Registered Motor Vehicles (2011)	% Registered Motor Vehicles (2011)
None	106	5%
1 motor vehicle	745	35%
2 motor vehicles	790	37%
3 motor vehicles	236	11%
4 or more motor vehicles	117	6%
Number of motor vehicles not stated	113	5%

Source: 2006 and 2011 ABS Census of Population and Housing

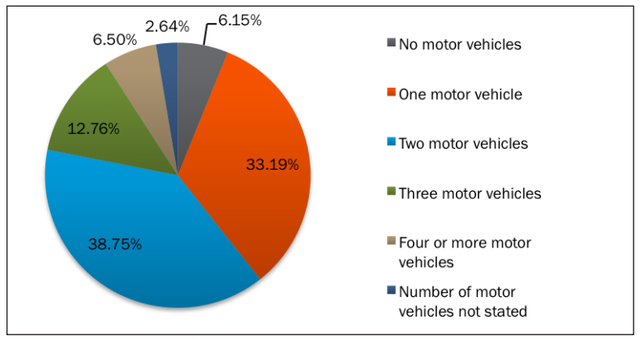
4.5.2 Parking

The Planning Analysis of the Riseley Centre produced in 2010 to support the Draft Vision for the Riseley Centre showed that parking is viewed as a significant issue for activity centre users. Of residents surveyed, a very high percentage viewed a lack of parking as the biggest problem for the centre. Interestingly, the issue of controlling traffic on local streets was also viewed as an important issue. The traffic issue may be related to the already high numbers of people driving to the centre.

4.5.3 Travel modes

In the Perth Metropolitan Region the last decade saw a 67% increase in public transport patronage. This can be attributed to both an increase in population and an increase in proportion of the population using public transport. Figure 25 shows a breakdown of the mode of travel for people working or living in Riseley Street District Centre.

Figure 24. Perth Metropolitan Region Motor Vehicle Ownership (2011)



Source: ABS 2011 Census of Population and Housing

Figure 25. Method of travel to work for Riseley Street District Centre residents and workers

Type of Transport	Mode of Travel	Place of Work		Place of Usual Residence	
		No. Workers	% Workers	No. Residents	% Residents
Uses private vehicle	Car as driver	1,353	65.8%	1,528	60%
	Car as passenger	70	3.4%	102	4.0%
Public transport only	Train	8	0.4%	11	0.4%
	Bus	50	2.4%	242	15.8%
	Train, Bus	28	1.4%	46	1.8%
Active transport only	Bicycle	23	1.1%	59	2.3%
	Walked	44	2.1%	77	3.0%

Source: ABS 2011 Census of Population and Housing

The Planning Analysis of the Riseley Centre noted that many of residents surveyed felt the waiting time at the Canning Highway traffic lights was too long, and that pedestrian access to the centre could be improved. This may be one of the reasons the proportion of workers commuting to the centre via walking is so low. Given that a large proportion of Riseley Street District Centre workers live in the City of Melville, and the traffic and car parking issues that appear to be experienced by the centre, facilitating a greater focus on non-car transport methods should be addressed.

4.5.4 Integrating the Natural Environment into Activity Centres

Integrating appropriate elements of the natural environment can contribute significantly to the overall urban quality and comfort of activity centres. It is important that these elements are valued as part of the environmental sustainability dimension, and balanced with the other four dimensions. Natural environmental elements appropriate to activity centres include street trees, other soft landscaping, water bodies, remnant bushland and access to natural sunlight. These elements have the potential to:

- Improve the urban quality of the activity centre by providing attractive features;
- Increase pedestrian comfort in hot weather through shade and amelioration of the heat island effect; and
- Contribute towards physical and mental health outcomes through the provision of space for physical recreation, and a place of mental relief.

Improving the 'streetscape character' around Riseley Street District Centre was identified as a goal in the Draft Vision for the Riseley Centre.

4.5.5 Environmental Factors Implications

The analysis of environmental factors affecting Riseley Street District Centre has the following implications:

- Given the relatively large proportion of City of Melville residents who work at Riseley Street District Centre, there appears to be a disproportionate number of workers commuting by car. The use of alternative forms of transport should be facilitated; and
- Improving the streetscape character of the centre has the potential to increase use by providing a higher quality pedestrian experience.

4.6 POLITICAL FACTORS

Political factors consist of the government policy environment of the area assessed. These include the degree of government intervention in the economy, the goods and services provided or subsidised by the government, trade restrictions, tax policy, government type and political change. These factors can have a strong influence all other factors, especially economic factors.

4.6.1 Public Perception of Density

The topic of development density and bulk is often a contentious one between planners and the community being planned for. To understand the reasons for this, the definition of 'density' and the drivers for high and low density must be understood.

Residential density can be defined as the ratio of land area to number of dwellings. This is distinct from population density, which is the ratio of land area to number of residents[9]. Depending on the number of people inhabiting each dwelling, residential density and population density can vary significantly between cities, neighbourhoods and buildings.

The concepts of perceived density and crowding are distinct from population density and residential density. Perceived density can be defined as an individual's perception and estimate of the number of people within a space. Crowding can be defined as the subjective evaluation that a given density and perceived density is negative, and the accompanying psychological stress felt when density is evaluated as too high[10]. Negative community reactions to increased residential density are effectively reactions to increased perceived density and crowding. Other research has indicates that the design of the urban environment, especially the presence of commercial developments, and the design of individual buildings has a large impact of perceived density, and therefore crowding[11]. This suggests that the negative impacts of population density can be managed through urban design controls.

Planners often advocate for greater population density in appropriate low density locations due to the significant environment, economic and even social benefits that can be attained. Examples of this are:

- Energy savings;
- Protecting natural resources;
- Lower transport costs;
- Passive surveillance of the public realm;
- Locate services close to residential areas;
- Improve a city's economic efficiency; and
- Support retail and other commercial businesses[12].

While there are also negative impacts that may occur from increased density besides crowding, in Australia it is generally accepted that in most areas our urban form is too sprawling, and the ability to provide the benefits listed above, is limited. An understanding of the potential positive and negative impacts of density is necessary to enable design of urban areas to meet planners' objectives, while accommodating the needs of those who live in these areas.

Surveys of Riseley Street District Centre residents and business owners, undertaken as part of the Planning Analysis of the Riseley Centre, indicated that residents had low levels of support for increased density in the centre, while business owners had significant levels of support for increased density. However, 'higher density' was generally considered to be three storey development which is typically classed as medium density development. This indicates that there may be some opposition to genuine high density development around Riseley Street District Centre.

9 (Churchman 1999)
10 (Churchman 1999)
11 (Churchman 1999)(Day 2008)(Fleming, Baum and Weiss 1987)
12 (Churchman 1999)

City of Melville: Riseley Street Activity Centre Structure Plan

4.6.2 Political Factors Implications

The analysis of political factors affecting Riseley Street District Centre has the following implication:

- High density development is likely to be perceived by current residents as inappropriate for the location. Design of higher density residential buildings should respond to the need for residents to feel 'uncrowded' while meeting, as far as is appropriate, the objectives of SPP 4.2 relating to residential density around activity centres.

5.0

5 ACTIVITY CENTRE PERFORMANCE

Without gathering data and measuring performance, it is impossible to identify problems and introduce improvements. Developing appropriate metrics is a method for measuring and quantifying information, enabling centres and developments to be analysed, scored and compared with relevant benchmarks.

When metrics are used in planning, the measurement of centre characteristics produces a compelling centre performance framework that can be used as a basis for making decisions about where and when to prioritise resources. Metrics provide data useful to developers and government alike, and applying a clear and objective measurement framework throughout the planning process will take much of the subjectivity and guesswork out of planning decisions.

SPP 4.2 identifies only a few very high-level measures of activity centre performance. In order to assess activity centre performance in greater detail, and to provide reliable, replicable measures of performance, metrics have been developed to assess the economic sustainability and urban form performance.

The economic sustainability metrics are:

- Activity diversity - mixed use threshold and equitability index
- Activity intensity - residential density and job density
- Employment quality - employment quantum and employment quality index
- Centre accessibility - transport infrastructure and distance from CBD

The urban form metrics are:

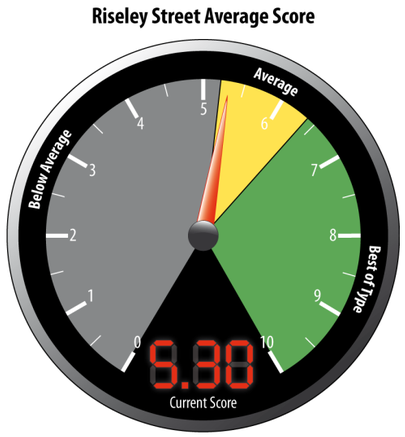
- Urban quality - attractive and unattractive features
- Urban amenity - comfort, noise levels, recreational and social infrastructure
- Centre mobility - infrastructure facilitating pedestrian movement, cycling, public transport and private vehicle movement
- Centre safety - traffic safety indicators, safety perception indicators and crime statistics.

5.1 CURRENT ECONOMIC SUSTAINABILITY

The following section sets out the economic sustainability performance of Riseley Street District Centre.

Compared to other district centres across Perth, Riseley Street District Centre currently performs well across a range of different categories (see Figure 26 and Figure 27). With an overall score of 5.3 out of 10, Riseley Street District Centre can currently be considered to fall into the average range of benchmarked district centres, with it's biggest strength being employment quality. By contrast, Riseley Street District Centre is currently under-performing regarding intensity. Its performance is roughly average under the other two measures.

Figure 26. Riseley Street District Centre economic sustainability overall performance



Source: Pracsys 2013

Figure 27. Riseley Street District Centre economic sustainability score

Economic Measure	Riseley Street District Centre	Average Inner Urban	Best Inner Urban
Diversity	7.3	7.4	8.3
Intensity	2.0	2.6	4.7
Employment Quality	6.3	5.1	6.8
Accessibility	5.5	5.3	8.0
Overall score	5.3	5.1	6.4

Source: Pracsys 2013

5.1.1 Intensity

Co-locating activity within a vibrant, intense space ensures walkability, social interaction and economic activation. Intense agglomerations of activity have been shown to increase industry productivity.

Figure 28 shows the current performance of Riseley Street District Centre in the intensity category. This is compared to benchmarked district centres in Figure 29. As shown, Riseley Street District Centre performs similar in terms of intensity to most of the benchmarked centres. However the centre falls far below the best performing centre, Noranda District Centre. While the score may appear somewhat lower due to the data available for the intensity calculation, the intensity score of the centre has potential to be increased. The clear policy implications of this analysis are therefore to re-develop available sites at the centre to a higher density. Given the economic health of the centre, additional commercial tenants (and therefore jobs) should be easy to attract to the centre. Similarly, the high land values and strong local amenity (including the activity centre itself) should make it easy to attract additional residents if the surrounding areas were redeveloped.

Riseley Street is classed as a district centre under SPP 4.2. This implies a walkable catchment of 400 metres. Increasing the permitted residential density within 400 metres of the centre would provide a significant boost to the local population-driven businesses and providing more options for those working in the area (or somewhere else along Canning Highway or Riseley Street) to also live nearby. Further, the increased amenity that this would entail in the centre, and larger local labour pool, would make the centre more attractive to firms in knowledge-intensive producer services and export oriented industries.

Figure 28. Current intensity

Principle	Metric	Metric Score	Total Score
Intensity	Residential Density	3.0	2.0
	Jobs per Hectare	1.0	

Source: Pracsys 2013

Note: Due to the large ABS census spatial units available for this analysis the intensity score appears very low.

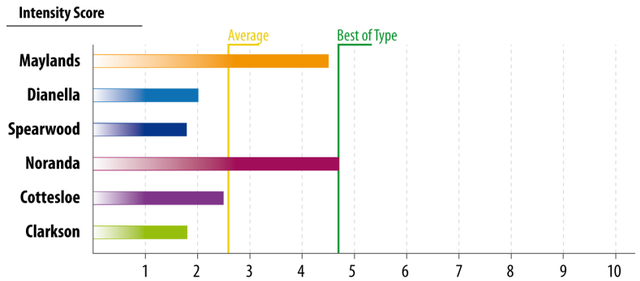
5.1.2 Diversity

A diverse mix of users and activity are desirable for an economically, environmentally and socially sustainable city, enabling users to access multiple needs with fewer trips and contributing to higher rates of employment self-sufficiency.

Figure 30 shows the current performance of Riseley Street District Centre in the diversity category, with comparisons to benchmarked district centres shown in Figure 31.

Diversity in Riseley Street District Centre is excellent and comparable to the best of type for the comparison centres, The high mixed use score of 8.5 indicating that the retail component does not overpower the rest of the centre's amenity. The high mixed use score, along with the relatively high equitability index of 7.5, shows a reasonable distribution of employment across a range of activities. This is evident from the broad mix of retail located in the centre, including a grocer, supplement store, hair dressing services, pharmacist, and a number of entertainment uses as well as commercial activity. Maintaining high levels of diversity should be considered in the structure plan, while considering the unique value proposition of the centre in the context of competing with Canning Bridge District Centre and Booragoon Secondary Centre.

Figure 29. District centre intensity comparisons



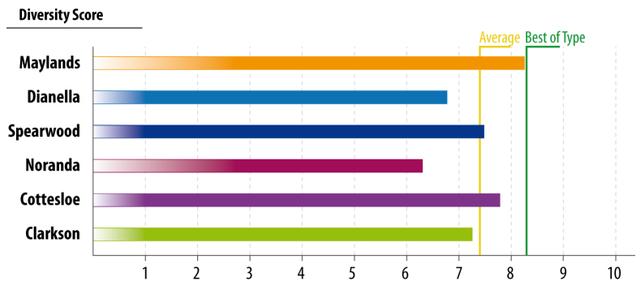
Source: Pracsys 2013

Figure 30. Current diversity

Principle	Metric	Metric Score	Total Score
Diversity	Mixed Use	8.5	8.0
	Equitability Index	7.5	

Source: Pracsys 2013

Figure 31. District centre diversity comparisons



Source: Pracsys 2013

5.1.3 Employment Quality

Activity centres require both a quantity and quality of employment, as befits their position within the centres hierarchy. High quality employment (knowledge or export-based) drives economic development and facilitates higher levels of employment self-sufficiency.

Figure 32 shows the current performance of Riseley Street District Centre in the employment quality category, with comparisons to benchmarked centres shown in Figure 33.

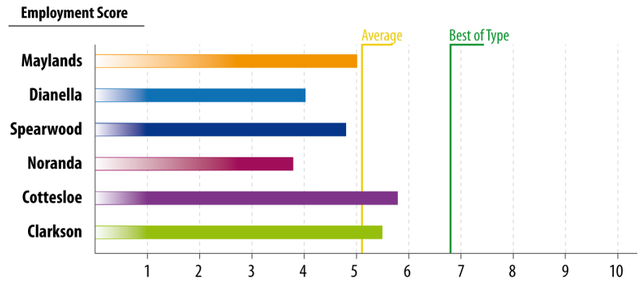
Riseley Street District Centre performs exceptionally well in terms of its strategic employment, with a score of 9.0. Compared to City of Melville district centres this score was second only to Canning Bridge District Centre. Compared to the benchmarked centres this is comparable to the best of type. This result can be largely attributed to the commercial activity component, with professional services comprising a significant proportion of the employment distribution. Improving the employment quantum while maintaining high levels of employment quality should be considered in the structure plan.

Figure 32. Current employment quality

Principle	Metric	Metric Score	Total Score
Employment	Quantum	3.5	6.3
	Quality	9.0	

Source: Pracsys 2013

Figure 33. District centre employment comparisons



Source: Pracsys 2013

5.1.4 Accessibility

Activity centres must be accessible to a wide mix of user groups utilising different modes of transport. This reduces the impact of petrol price shocks, increases sustainable centre catchments and facilitates movement between employment nodes.

Figure 34 shows the current performance of Riseley Street District Centre in the accessibility category, with comparisons to benchmarked centres shown in Figure 35.

Accessibility is an issue for Riseley Street District Centre, with the score of 5.5 falling just within the average range. Like many of the activity centres along Canning Highway it is only serviced by buses and has no bus interchange or rail station. It does have an added advantage as it is along a major route to service the Booragoon Secondary Centre, so more bus routes service it than the other activity centres along Canning Highway. Depending on how Booragoon Secondary Centre evolves and it's accessibility along with it, it is possible accessibility to Riseley Street District Centre will improve as a secondary effect to an expansion

at Booragoon Secondary Centre. Improving the accessibility will be very important to any expansion of the activity centre.

Figure 34. Current accessibility

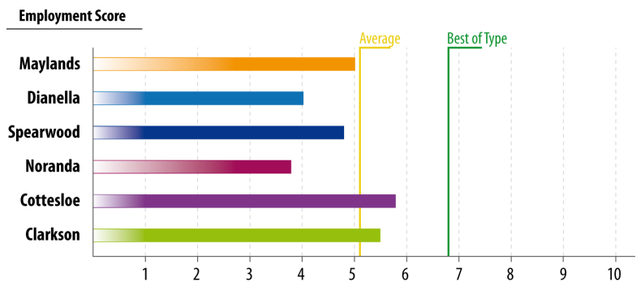
Principle	Metric	Metric Score	Total Score
Accessibility	Distance from CBD (km)	6.5	5.5
	Transport infrastructure	4.5	

Source: Pracsys 2013

5.2 CURRENT URBAN FORM

The urban form performance of Riseley Street District Centre is set out in the following section. Riseley Street District Centre attained an overall urban form performance score of 5.2. Compared to the other City of Melville district centres this was second only to the overall score attained for Canning Bridge District Centre (see Figure 37).

Figure 35. District centre accessibility comparisons



Source: Pracsys 2013

Figure 36. Riseley Street District Centre urban form performance

Source: Pracsys 2013

Figure 37. City of Melville district centres current performance comparisons

Metric	Bull Creek District Centre	Kardinya District Centre	Petra Street District Centre	Melville District Centre	Riseley Street District Centre	Canning Bridge District Centre	Best of Type
Urban quality	3.7	2.5	1.9	3.3	4.1	4.9	4.9
Amenity	2.9	4.8	3.5	4.0	3.3	3.9	4.8
Mobility	5.7	5.0	2.6	5.0	5.5	7.4	7.4
Safety	5.4	4.7	4.4	5.5	7.8	7.1	7.8
Overall scores	4.4	4.8	3.1	4.5	5.2	5.8	5.8

Source: Pracsys 2013

5.2.1 Urban Quality

Figure 38 shows the current performance of Riseley Street District Centre in the urban quality category.

Compared to other centres, Riseley Street District Centre performed relatively well in the category of urban quality. Urban quality could be improved with more attractive features, such as advanced trees and public art, and fewer visible car parks and vacant lots. It is likely as the centre matures and intensifies these aspects of the public realm will addressed.

Figure 38. Current urban quality

Principle	Metric	Metric Score	Total Score
Urban Quality	Attractive features	3.0	4.1
	Unattractive features	5.1	

Source: Pracsys 2013

5.2.2 Urban Amenity

Figure 39 shows the current performance of Riseley Street District Centre in the urban amenity category.

Riseley Street District Centre performed lowest in the amenity category. This was largely due to the lack of facilities, such as publicly accessible toilets and seats, and lack of social features, such as public realm meeting spaces. The majority of the centre away from Canning Highway was well-buffered from road noise, and a formal recreation venue was present in the centre.

Figure 39. Current urban amenity

Principle	Metric	Metric Score	Total Score
Amenity	Comfort	6.2	3.3
	Facilities	1.0	
	Social features	1.1	
	Recreation	3.3	
	Noise	5.0	

Source: Pracsys 2013

5.2.3 Mobility

Figure 40 shows the current performance of Riseley Street District Centre in the mobility category. With a score of 5.5 the performance of Riseley Street District Centre can be compared to most of the other district centres assessed, however the performance is still well below the best of type. There is potential for significant improvement for cyclists as there was very little cycling infrastructure present in the centre. There is also potential for some improvement in terms of public transport, although centres that performed better had access to a train station meaning without a substantial increase in public transport infrastructure increasing the public transport score will be difficult.

Figure 40. Current mobility

Principle	Metric	Metric Score	Total Score
Mobility	Pedestrians	7.8	5.5
	Cyclists	1.4	
	Cars	7.8	
	Public transport	5.0	

Source: Pracsys 2013

5.2.4 Safety

Figure 41 shows the current performance of Riseley Street District Centre in the safety category.

Riseley Street District Centre performed very highly in the category of safety, with the score for safety the highest out of all district centres measured. This was due to the majority of the centre being designed to allow pedestrians to cross the internal roads safely, the separation of many footpaths from roads, the relatively high level of public realm passive surveillance, the lack of evidence of crime and the low statistical crime rate of the suburb.

Figure 41. Current safety

Principle	Metric	Metric Score	Total Score
Safety	Perception of safety	9.2	7.8
	Traffic safety and crime	6.4	

Source: Pracsys 2013

5.3 ACTIVITY CENTRE PERFORMANCE IMPLICATIONS

The activity centre performance assessment for Riseley Street District Centre has the following implications for future development:

- The intensity of the centre is currently very low. There is significant potential to improve the concentration of activity within the centre;
- The current mix of land uses are highly diverse for a relatively small activity centre;
- Employment quality at the centre is very high. Improvements could be made in the amount of employment hosted at the centre;
- Accessibility to the centre could be improved with better public transport infrastructure. The relatively close proximity of the centre to Perth CBD is favourable for the attraction of non-population driven activity;
- The urban quality of the activity centre could be improved with the introduction of more attractive features;
- The activity centre performed relatively poorly in urban amenity. Amenity should be improved to encourage activity centre users to stay for longer within the centre;
- There is potential for substantial improvements for cycling access to the centre; and
- Additional infrastructure to protect pedestrians from traffic within the activity centre should be considered, especially if pedestrian movement is to be prioritised within the centre.

City of Melville: Riseley Street Activity Centre Structure Plan

6.0

6 COMMUNITY CONSULTATION

A community workshop was undertaken by the project team to:

- Gather information on the activity centre users;
- Understand how and why the centre is being used/not used;
- Understand the constraints currently faced by activity centre users; and
- Provide an opportunity for the community to develop ideas for the future of the centre.

The majority of workshop participants were residents living within 1 km of Riseley Street District Centre.

6.1 PURPOSE OF ACTIVITY CENTRE VISITS

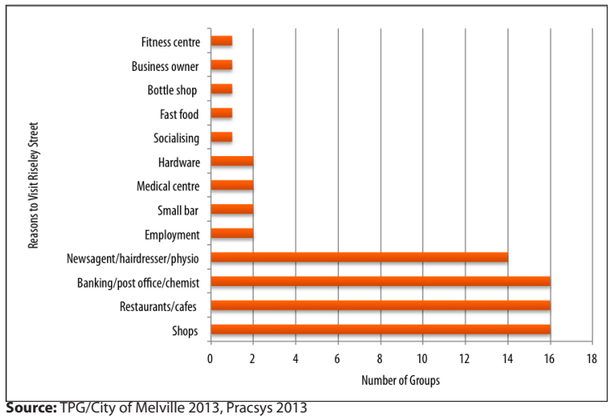
Workshop participants were surveyed in groups to determine the top three reasons for visiting Riseley Street District Centre. The results are shown in Figure 42. Participants visited Riseley Street District Centre most often for retail shopping, to go to a restaurant or cafe, and to use services and utilities. Some groups also visited the centre for the primary purpose of entertainment, or as a business owner/ employee.

There was some discussion of the relative attractiveness of the nearby Booragoon Secondary Centre as an alternative destination for goods and services. It is possible a significant proportion of residents are choosing to visit Booragoon Secondary Centre for their daily and weekly shopping needs rather than Riseley Street District Centre, due to the greater diversity of goods and services available at this location.

It was also apparent that traffic management and parking were an issue that participants strongly felt impacted on their use of Riseley Street District Centre. It is interesting to note that Garden City Shopping Centre also has significant traffic and parking issues, and a large proportion of the traffic going along Riseley Street is likely to be going to Booragoon Secondary Centre.

Given the current purposes of visits to Riseley Street District Centre, it is apparent that future development can further develop the offer around common trip generation criteria and/ or develop additional offers in areas of current deficiency.

Figure 42. Purpose of visits to Riseley Street District Centre



Source: TPG/City of Melville 2013, Pracsys 2013

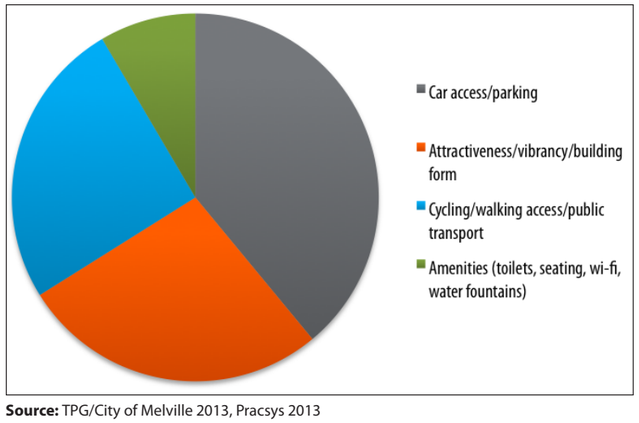
6.2 POTENTIAL IMPROVEMENTS

Workshop participants were also surveyed in groups for potential improvements to Riseley Street District Centre that would increase the relative utility of the centre for visitors. Suggestions fell into four categories:

- Improving car access and parking;
- Improving cycling and pedestrian access;
- Improving the visual attractiveness of buildings, the feeling of 'vibrancy', and removing the unattractive features of the centre; and
- Improving the amenity of the centre, in terms of providing infrastructure to encourage visitors to stay longer.

The proportions of groups that viewed each improvement category as most important is shown in Figure 42. Car access and parking were considered the most important issue, and appeared to affect the general amenity of the centre and of the surrounding residences.

Figure 43. Potential improvements



Source: TPG/City of Melville 2013, Pracsys 2013

The degree to which a lack of parking and poor traffic management, or the perception of these, is actively influencing people's decision to visit Riseley Street District Centre is unknown. It is apparent that the centre is not optimised for visits by any particular mode of transport - the traffic appears to be a barrier to pedestrian movement within the centre, the parking is considered inadequate (although this may be only at peak periods), and additional cycling infrastructure is desired. The centre also appears to be lacking in amenities typically present in shopping malls, such as toilets and seating. In addition, amenities not typically present at a shopping mall were suggested for Riseley Street District Centre. These included wi-fi, water fountains and green spaces. Accommodating these types of amenities at Riseley Street District Centre may assist in providing points of difference for the activity centre. The visual attractiveness of buildings within the centre was also an area identified for improvement.

6.3 COMMUNITY CONSULTATION IMPLICATIONS

From the community consultation, the following conclusions can be drawn:

- The trip generation to Riseley Street District Centre could be increased by improving the offer in areas where the centre has a current advantage, and in areas currently not contributing significantly to trip generation;
- The most significant issue for the community is currently car access/ parking, with potential improvements in this area the highest priority;

- Non-private vehicle access (i.e. cycling, walking and public transport) and the general attractiveness of the centre were also relatively high priorities for improvement; and
- Improvements to amenities provided within the centre were considered important but secondary to access and attractiveness.

7.0

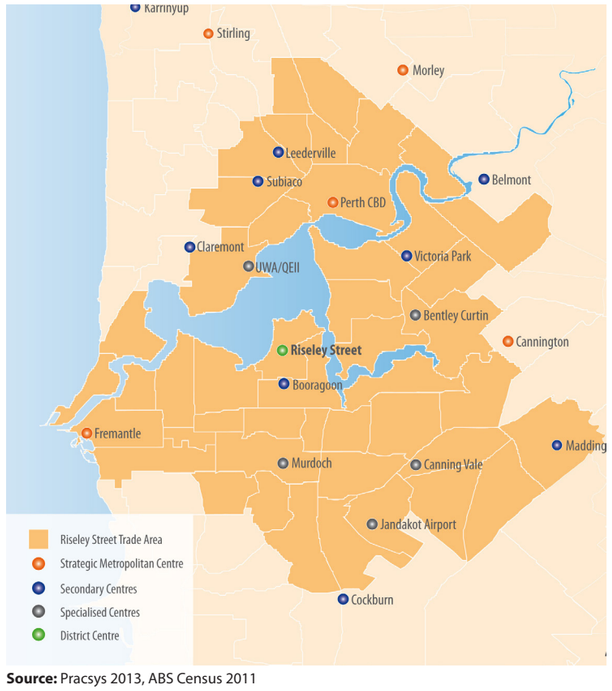
7 RETAIL AND COMMERCIAL FLOORSPACE MODELLING

The following section sets out the demand and supply analysis undertaken for Riseley Street District Centre, and the two future scenarios that have been modelled.

7.1 MAIN TRADE AREA

The catchment generating 75% of the demand modelled for Riseley Street District Centre is shown in Figure 44. This is considered to be the main trade area for this analysis. The main trade area illustrates where people who visit Riseley Street District Centre are likely to reside. Residents living closer to Riseley Street District Centre are considered more likely to visit the activity centre.

Figure 44. Riseley Street District Centre trade area

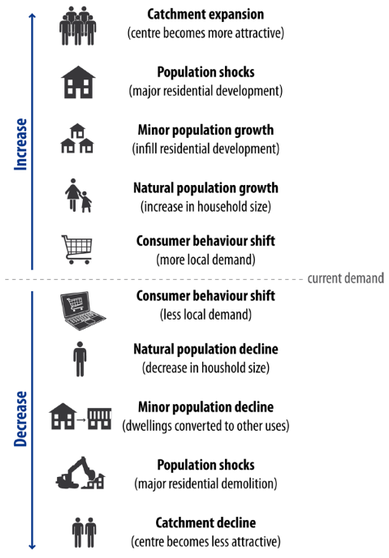


Source: Pracsys 2013, ABS Census 2011

7.2 DEMAND DRIVERS

As demand is a function of population and associated expenditure, it is shown in terms of additional population. The drivers of changes in demand are shown in Figure 45. This shows ways demand growth can be achieved as well as factors that can cause demand to decline.

Figure 45. Future demand changes



Source: Pracsys 2013

The catchment of Riseley Street District Centre has the potential to grow in the following ways over the five-year modelling period:

- Consumer behaviour shift - where changes in consumer behaviour results in higher local consumption of goods and services. This may include lower leakage to other activity centres/online retail, more convenient access to local goods and services compared to offerings further away, and increases in the amount of income spent on goods and services.
- Natural population growth - where the household size increases as children are born, or as group households form. The high proportion of residents aged 20-39 is likely to result in a birthrate higher than the death rate, although the effect may be dampened by the high workforce participation rate, or if residents choose to move elsewhere once they have a family.
- Minor residential development - where existing large blocks in developed areas are subdivided and there is a net increase in dwellings through infill development.
- Major development - where significant greenfields lots are released, or grouped dwellings or offices are developed.
- Catchment expansion - where an increased offer of retail or entertainment result in the centre becoming more attractive to prospective users. Users are typically prepared to travel further to access a better range of goods and services, so a larger range of these has the potential to result in an expanded catchment.

The catchment of Riseley Street District Centre also has the potential to contract. The ways this may happen are:

- Consumer behaviour shift - where changes in consumer behaviour results in lower local consumption of goods and services. This may include higher leakage to other activity centres/online retail, less convenient access to local goods and services compared to offerings further away, and decreases in the amount of income spent on goods and services.
- Natural population decline - where the deathrate exceeds the birthrate.
- Minor population decline - where existing dwellings are converted to other uses, such as commercial, due to the pressure for additional commercial floorspace at the location.
- Major demolition - where development host to large amounts of demand-generating activities are demolished to make way for other uses, resulting in a net decrease in dwelling yields or office floorspace.
- Catchment decline - where the activity centre becomes less attractive due to fewer goods and services being available.

7.3 SUPPLY CHANGES

Supply is expressed in terms of floorspace. The causes of changes in supply are shown in Figure 46. This shows ways supply growth can be achieved as well as factors that can cause supply to decline.

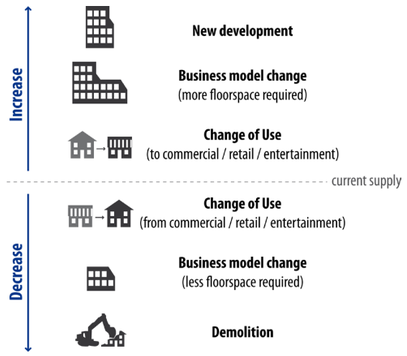
The supply of floorspace within Riseley Street District Centre may potentially grow in the following ways over the five-year modelling period:

- Changes of use - where existing floorspace currently used for purposes other than commercial, retail or entertainment is converted to commercial, retail or entertainment uses.
- Business model change - where the business model for an existing activity becomes more floorspace-intensive. For example, a retailer might need to carry higher levels of stock, or an office tenant diversifies their core business and requires space for additional workers.
- New development - where retail tenancies and offices are developed.

Riseley Street District Centre also has the potential for contractions in floorspace supply. The ways this may happen are:

- Change of use - where existing floorspace currently used for commercial, retail or entertainment is converted to other uses.

Figure 46. Future supply changes



Source: Pracsys 2013

This may be due to a drop in demand, changes in the landowner's intentions for the site or an increase in demand for other uses at the location.

- Business model change - where the business model for an existing activity becomes less floorspace-intensive.
- Major demolition - where development host to large amounts of floorspace are demolished to make way for other uses, resulting in a net decrease in retail or office floorspace.

7.4 CURRENT AND FUTURE DEMAND AND SUPPLY

To understand the potential spectrum of future development affecting Riseley Street District Centre, two separate scenarios were modelled, a conservative growth scenario and an optimistic growth scenario.

7.4.1 Scenario 1: Conservative Growth

The conservative growth scenario has been developed to provide an indication of the lowest likely population growth and floorspace supply growth over the modelling period, both in the City of Melville and the trade area. The following data sources have been used to inform the scenario:

- WA Tomorrow Band A - estimates of natural population growth across Western Australia;
- WA Land Use Survey (1997) - current floorspace supply by Planning Land Use Code (PLUC);
- City of Melville building licence approvals - update Land Use Survey with developments built since publishing;

- DAP development approvals - new floorspace expected to be trading within the next 5 years; and
- MRA development projects - new floorspace expected to be trading within the next 10 years.

The demand and supply assumptions for Scenario 1 are shown in Figure 47. Current significant projects planned for the surrounding area are shown in Figure 48.

Figure 47. Scenario 1 assumptions - main trade area

Time	Dwellings	Retail Floorspace	Entertainment Floorspace	Office Floorspace
2012 (Current)	370,000	1,666,000 m2	661,506 m2	3,504,515 m2
2017 (5 years)	393,000	1,723,000 m2	661,506 m2	3,973,515 m2
2022 (10 years)	426,000	1,820,000 m2	661,506 m2	4,253,515 m2

Source: WA Tomorrow; Land Use Survey; City of Melville; Pracsys 2013

Figure 48. Current projects and known developments (2022 build-out)

Location	Dwellings	Retail Floorspace	Office Floorspace
Murdoch Specialised Centre	1,200	29,000 m2	191,000 m2
Booragoon Secondary Centre	1,370	46,000 m2	14,000 m2
Elizabeth Quay	800	25,000 m2	200,000 m2
Riverside	4,000	10,000 m2	80,000 m2
Perth City Link	1,650	27,000 m2	217,000 m2
The Springs	1,000	Unknown	Unknown
Belmont Park	1,500	31,000 m2	61,000 m2
Cockburn Central Secondary Centre	Unknown	20,000 m2	Unknown
Total	11,520	188,000 m2	763,000 m2

Source: MRA 2012, Landcorp 2013; Golden Group 2013, Pracsys 2013

7.4.2 Scenario 2: Aspirational Growth

The aspirational growth scenario has been developed to provide an indication of the highest likely population growth and floorspace supply growth over the modelling period, both in the City of Melville and the trade area. In addition to the data sources used in scenario 1, the following data sources have been used to inform scenario 2:

- WA Tomorrow Band C - estimates of population growth across Western Australia; and
- Activity centre structure plans and master plans - aspirations for future growth at Murdoch Specialised Centre, Canning Bridge District Centre and Riseley Street District Centre.

Figure 49. Scenario 2 assumptions - main trade area

Time	Dwellings	Retail Floorspace	Entertainment Floorspace	Office Floorspace
2012 (Current)	370,000	1,666,000 m2	661,506 m2	3,504,515 m2
2017 (5 years)	399,000	1,735,000 m2	661,506 m2	4,038,515 m2
2022 (10 years)	451,000	1,834,000 m2	661,506 m2	4,530,015 m2

Source: WA Tomorrow; Land Use Survey; City of Melville; Pracsys 2013

Figure 50. Future development aspirations (2022 build-out)

Location	Dwellings	Retail Floorspace	Office Floorspace
Murdoch Specialised Centre	4,500	33,700 m2	402,500 m2
Booragoon Secondary Centre	1,370	46,000 m2	14,000 m2
Elizabeth Quay	800	25,000 m2	200,000 m2
Riverside	4,000	10,000 m2	80,000 m2
Perth City Link	1,650	27,000 m2	217,000 m2
The Springs	1,000	Unknown	Unknown
Belmont Park	1,500	31,000 m2	61,000 m2
Cockburn Central Secondary Centre	Unknown	20,000 m2	Unknown
Curtin/Bentley Specialised Centre	3,150	Unknown	65,000 m2
Jandakot Specialised Centre	5,027	Unknown	Unknown
Canning Bridge District Centre	1,840	11,200 m2	Unknown
Riseley Street District Centre	750	Unknown	Unknown
Total	25,587	203,900 m2	1,039,500 m2

Source: Pracsys 2013, Murdoch Activity Centre Structure Plan 2012; City of Melville 2013.

7.5 MARKET POTENTIAL

The following section presents the estimated market potential for Riseley Street District Centre. This modelling demonstrates the amount of additional retail, entertainment and office floorspace expected to be supportable at Riseley Street District Centre for the period from 2013 – 2022. The results for the first five years, from 2013 – 2017, are reported with a relatively high degree of confidence as assumptions for the near future have a higher degree of certainty. Results for the second five-year period should be considered in the context of the greater likelihood for changing future supply and demand scenarios. This means that while the projections for future supply and demand made under assumptions of current expenditure, trading conditions and other economic conditions may be accurate, changes to these will result in changes to the market potential for Riseley Street District Centre.

7.5.1 Retail Market Potential

The following section sets out the expected market potential for retail within the Riseley Street District Centre over the next ten years. Results are presented in terms of future retail floorspace minimum and maximum levels for each scenario. The minimum and maximum levels of floorspace are set based on a productivity range that occurs when the floorspace has enough demand to be financially viable, but not more that there is capacity to support.

- Minimum floorspace productivity (retail centres) - $7,500/m2
- Maximum floorspace productivity (retail centres) - $4,500/m2

Riseley Street District Centre

Estimated supportable retail floorspace under both aspirational and conservative scenarios are shown in Figure 51 and Figure 52. Under both the aspirational and conservative scenario no additional floorspace supply has been assumed for Riseley Street District Centre.

The results for both scenarios indicate that the current supply of floorspace is below an optimal level, and demand at the centre is currently supply constrained (see Figure 51 and Figure 52). This means there is potential for

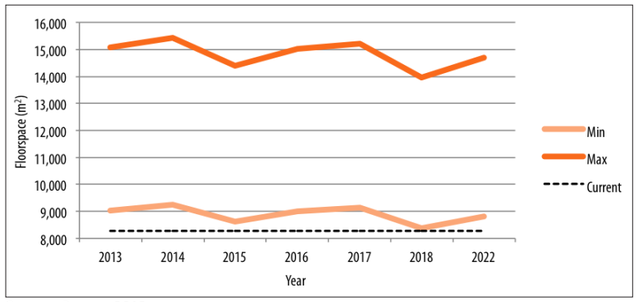
increased retail floorspace to be supported at the centre under current conditions without an increase in demand.

Due to the effects of known floorspace expansions at Booragoon Secondary Centre and Murdoch Specialised Centre (the Landcorp 'Murdoch Mix' development only), and a potential expansion at Canning Bridge District Centre, demand is quite volatile and numerous swings can be observed in the demand curve. Despite a small overall contraction in supportable floorspace in later years under both scenarios there is expected to be significant capacity for expansion at productive levels, given the latent demand of the catchment.

Under the conservative scenario modelled and shown in Figure 51 the volatility in the forecast has been slightly smoothed compared to the aspirational scenario, with structure planned development (dwellings and retail floorspace supply) at Canning Bridge District Centre and Murdoch Specialised Centre not considered in the modelled scenario. The less volatile forecast results in a slightly reduced contraction of floorspace.

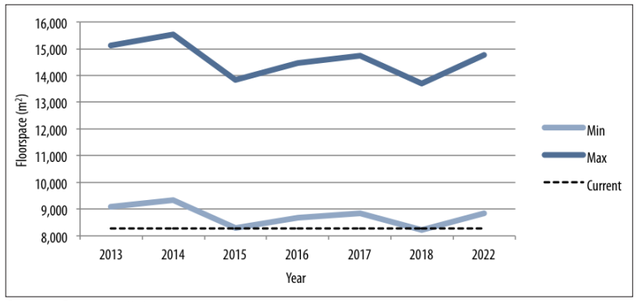
In the aspirational scenario demand is more slightly more variable, and greater swings can be observed in the demand curve (see Figure 52). Shocks to demand can be explained by the expansions in retail floorspace supply that have been modelled at Canning Bridge District Centre, Booragoon Secondary Centre and Murdoch Specialised Centre. Assumed underlying demand growth in the form of population growth has underpinned all the results. Taking the demand and supply growth into account there is expected to be a very small contraction in supportable floorspace at Riseley Street District Centre over the modelling

Figure 51. Riseley Street District Centre floorspace potential - conservative scenario



Source: Pracsys 2013

Figure 52. Riseley Street floorspace - aspirational scenario



Source: Pracsys 2013

period, given the other supply expansions occurring nearby in the network. Despite this, there is still significant scope to expand the retail floorspace at Riseley Street District Centre as under the conservative scenario. Under both scenarios there is expected to remain scope to expand the current retail floorspace at Riseley Street District Centre by up to an additional 7,000 m2 over the next ten years. An expansion of retail floorspace is likely to

better meet the retail needs of the current and future catchment, however the offer should be aligned with the catchment needs and consider the alternative offers at small and large activity centres nearby.

7.5.2 Entertainment Market Potential

The following section sets out the expected market potential for entertainment within Riseley Street District Centre over the next ten years. This has been prepared bearing in mind that the proposed expansion of Garden City Shopping Centre at Booragoon will likely include some additional entertainment floorspace.

Entertainment floorspace is comprised of a range of different land uses, including but not limited to taverns, cinemas, small bars, bowling alleys, art exhibition space and betting venues. Entertainment floorspace does not include restaurants and cafes, as these are considered retail floorspace. Restaurants and cafes often share similar locational characteristics to entertainment floorspace, such as the success of the floorspace depending significantly on the operator rather than proximity to their catchment. It should be noted that the classification of these are based on the WAPC Planning Land Use Categories, which have not been revised since 1997 although relevant legislation, such as liquor licensing legislation, has since changed.

Entertainment floorspace has different locational characteristics to retail floorspace. These include:

- Demand is regional rather than local - so local demand may or may not be met locally;
- Productivity is highly dependent on the individual operator - supplying entertainment floorspace may not meet demand if the offer is not well aligned with catchment demand, or if the floorspace underperforms in terms of quality. Conversely entertainment floorspace of very high quality may overtrade and attract custom from a very large catchment; and
- Agglomerations of high quality entertainment floorspace can form an entertainment destination of regional significance.

With these characteristics in mind, the gravity modelling methodology used for retail floorspace demand can be misleading when applied to entertainment floorspace. The approach taken to model entertainment floorspace was to extrapolate demand from current levels in line with additional population. This approach assumes that:

- The floorspace that currently exists is productive, profitable and sustainable;
- The future population spends the same amount on floorspace; and
- The relative value proposition of entertainment offered at Riseley Street District Centre stays the same relative all other floorspace.

7.5.3 Entertainment Performance

In 2008 Riseley Street District Centre had 573 m2 of entertainment floorspace13. Since this time, at least one additional entertainment venue has been developed, a small bar that replaced a cafe. Estimated supportable

13 WAPC Land Use and Employment Survey, 2008

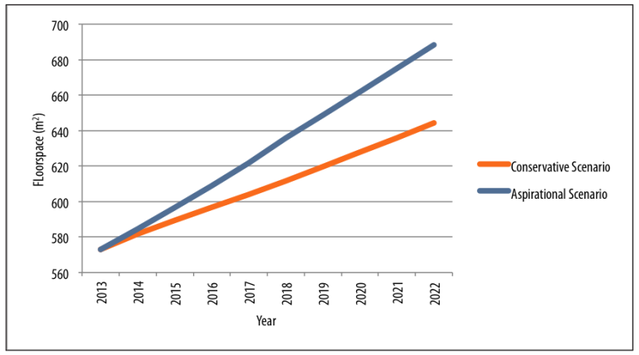
entertainment floorspace for both the conservative and aspirational scenario is shown in Figure 53. As previously noted, the quality of an entertainment offering is one of the most important aspects of whether or not entertainment floorspace is productive. If the quality of an entertainment offering is superior to others offered at alternative destinations, people will be more likely to travel further to utilise it and hence the supportable floorspace may be higher than currently indicated. Likewise, if the offering of entertainment floorspace is poor it will have a much lower pulling power and will likely decrease how much floorspace can be supported by the available catchment. If the operators of additional entertainment floorspace at Riseley Street District Centre provide a high quality offering the floorspace may be very productive. Additionally, demand for entertainment is more elastic than other floorspace types as it tends to be a luxury item with a highly substitutable nature.

There is potential for small to large increases in entertainment floorspace at Riseley Street District Centre. The amount of additional floorspace that can be supported depends largely on the vision for the activity centre, the quality of the offer and the alignment of the offer with the catchment. A very high quality offer or a significant increase in the amount of entertainment venues provided have the potential to draw demand from a larger catchment than currently exists for entertainment floorspace at Riseley Street District Centre.

7.5.4 Office Market Potential

The following section sets out the expected market potential for offices within Riseley Street District Centre over the next ten years, in terms of population-driven and strategic offices.

Figure 53. Supportable entertainment floorspace



Source: Pracsys 2013, WAPC Land Use and Employment Survey 2008

Population-Driven Office Potential

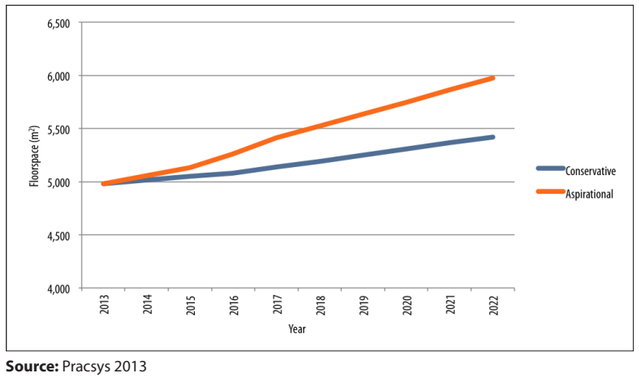
Population-drive offices accommodate industries or jobs directly related to servicing the needs of a specific catchment population. Examples of population-driven offices are real estate agents, accountants, dentists and general practitioners. Growth in population typically means growth in demand for population-driven office floorspace.

Riseley Street District Centre currently has a ratio of 36% strategic office to 64% population driven office. Under the aspirational scenario there is expected to be higher population growth over the modelling period than under the conservative scenario, resulting in higher total population in the Riseley Street District Centre catchment. As a result it is expected that the demand for population driven offices will be higher under the aspirational scenario. In particular, the increase in dwellings specified in the Riseley Street Structure Plan is likely to drive some increase in demand for population driven office within the Riseley Street District Centre, or even nearby at Booragoon Secondary Centre.

Figure 54 shows the estimated demand for population driven office at Riseley Street District Centre under the two scenarios. Under the aspirational scenario demand for population driven office is expected to approach approximately 6,000 m2 of floorspace. Under the conservative scenario demand for population driven office is expected to be approximately 500 m2 less, with a level of approximately 5,500 m2.

The population driven office growth is derived from the whole City of Melville's catchment growth. It is possible that Riseley Street District Centre could need more or less additional floorspace if the area serviced by Riseley Street District Centre has higher or lower population growth than the rest of the City of Melville. It is expected that if the 1,200 dwellings suggested for the structure plan area are developed, the majority of population driven offices resulting from these dwellings should be located at Riseley Street District Centre to ensure the centre is diversified into a genuine multi-function activity centre.

Figure 54. Population-driven office demand



Source: Pracsys 2013

Strategic Office Potential

Strategic economic activity results from economic activity focused on the creation and transfer of goods and services to an external market. This type of activity typically occurs in places through the development of agglomerations of economic activity. These agglomerations result from the development of localization and/or urbanisation economies.

Urbanisation agglomerations of activity result from the general benefits that a firm will gain from locating in a particular urban environment. This includes access to general labour pools, access to financial and commercial services, and proximity to transport and communications networks. Urbanisation economies can develop as a result of population growth and the sheer scale of an activity centre. An example is the development of agglomerations of retail activity that naturally develop as a response to the consumption demands of a population.

Localisation economies are the result of a number of firms and enterprises (including research institutions, not-for-profits and government departments) in complementary industries and supply chains locating in the same area. Localisation economies are the result one or more of three factors.

These are:

- Availability of specific skilled and specialised labour;
- Availability of specialised/essential inputs at a more competitive value due to economies of scale; and
- Increased efficiency in knowledge transfer/technology spillovers/

collaborations and partnerships due to proximity of partners.

The development of localisation economies in the short-medium term at Riseley Street District Centre will need to be based upon the development of one or more competitive advantages for firms in strategic industries. Riseley Street District Centre has a relatively high concentration of strategic office at present.

The presence of significant levels of strategic employment within a local economy is critical to the long-term prosperity and resilience of the economy as:

- There is no 'saturation point' to strategic employment (whereas there is only so much population-driven activity that a particular population needs/can afford);
- A diverse range of economic activity servicing external markets diversifies the risk associated with downturns in a single market;
- Strategic economic activity tends to include higher 'value-add' activities that are more likely to result in greater flow-on benefits to the local economy; and
- Strategic economic activity tends to result in high wage-productivity for employees and significant business opportunities for small to medium enterprise.

The location of strategic offices is not driven by population growth, rather it is influenced by a range factors contributing to the firm's competitive advantage, including:

- Proximity of infrastructure specific to the firm, e.g. a harbour proximate to a ship-building firm;
- Proximity to the CBD of the region, in this case, Perth CBD;
- Proximity to other firms in the supply chain, e.g. proximity of lawyers and accountants used by an IT firm;
- The presence of suitable infrastructure, e.g. heavy rail stations and other high frequency public transport, high traffic road networks, retail and other floorspace useful to employees;
- Agglomeration of similar firms at the location;
- Personal choice of the firm owner or CEO.

As a result of this range of different location drivers, it is not possible to model demand for strategic offices in Riseley Street District Centre. The vision set for Riseley Street District Centre will need to include consideration of the potential for other activity centres in the City of Melville to host localisation economies. Specifically, Canning Bridge District Centre and Murdoch Specialised Centre are likely to have a significant capacity for localisation economies as they both have a number of the characteristics required to host strategic industries, including close proximity to the Perth CBD and heavy rail infrastructure. Structure planning for these centres indicates that high levels of new office development, beyond that required to host population-driven offices, are desirable at these locations. Given the intentions for Canning Bridge District Centre and Murdoch Specialised Centre, and the current characteristics of Riseley Street District Centre, it is not considered ideal to locate high levels of offices at Riseley Street

District Centre to cater for strategic industries. Rather, additional office development at Riseley Street District Centre should focus on population-driven office, as well as servicing and maintaining its current strategic office floorspace. If additional strategic industries choose to locate at Riseley Street District Centre this may be desirable for the continuing evolution of the activity centre but not necessary for the centre to function as a district centre.

7.6 MARKET POTENTIAL IMPLICATIONS

It is apparent that there is significant demand within the City of Melville for more retail goods and services, and growth in entertainment and office floorspace is expected over the next ten years. The degree to which Riseley Street District Centre is able to capture additional market share is likely to depend on:

- The offer of goods and services at the centre, relative to alternative destinations within and outside of the City of Melville;
- The real and perceived barriers to visiting Riseley Street District Centre;
- The increase in population (and therefore demand) in the immediate catchment of Riseley Street District Centre;
- The real and perceived barriers to future investment in Riseley Street District Centre.

The analysis showed Riseley Street District Centre has some advantages as an activity centre, including high expenditure in the catchment, but will likely need to deal with some of the barriers to use and investment to improve the function of the centre.

8.0

8 EMPLOYMENT ANALYSIS

The following section addresses the State planning policy requirements for providing employment in the Perth Metropolitan Region.

8.1 EMPLOYMENT TARGETS

Directions 2031 outlines the new hierarchy of activity centres in the Perth and Peel regions. This hierarchy nominates the role each centre should play within the network, and identifies which centres should assume a strategic role and which should perform a purely population driven function. The hierarchy nominates a limited number of Strategic Metropolitan Centres, based around infrastructure, and of a scale large enough to produce productivity increases from agglomeration. The role of these centres is not only to provide a full range of population driven amenity but also to play a greater role in the provision of high-order Knowledge Intensive Export Oriented (KIEO) jobs, services and facilities to the sub-region to reduce the growing pressure and congestion in the Perth Central Sub-Region. These centres should provide an alternative strategic employment location to the CBD, maximise leverage from transport infrastructure and begin to address the economic, social and environmental costs associated with extensive commuting.

SPP 4.2 requires evidence of overall centre performance be presented on a range of dimensions, including centre diversity, activity intensity, accessibility and employment. In particular, the policy requires that employment outcomes be achieved by centre developments to drive the 'suburbanisation' of jobs in line with the sub-regional self-sufficiency targets set out in Directions 2031. This link between sub-regional outcomes and individual centre planning is a new and important feature of the planning environment.

Giving consideration to the strategic objectives of both Directions 2031 and SPP 4.2, Pracsys has undertaken extensive economic modelling to translate high-level sub-region population and employment targets into a specific employment generation target for Riseley Street District Centre.

8.2 CENTRAL SUB REGION EMPLOYMENT

Figure 55 illustrates the extent of the central sub-region of metropolitan Perth. The central sub-region covers an area of 45,290 hectares and encompasses the following local governments:

- City of Bayswater
- City of Belmont
- City of Canning
- City of Fremantle
- City of Melville
- City of Nedlands
- City of Perth
- City of South Perth
- City of Stirling
- City of Subiaco
- Shire of Peppermint Grove
- Town of Bassendean
- Town of Cambridge
- Town of Claremont
- Town of Cottesloe
- Town of East Fremantle
- Town of Mosman Park
- Town of Victoria Park
- City of Vincent

The central sub-region has a dominant role in the metropolitan area in terms of employment economic, social, and cultural activity. It includes the Perth capital city area, the highest order activity centre, and focus for the metropolitan region as a whole. It also contains three of the city's four universities, major hospitals, major sporting infrastructure and the State's preeminent culture and arts facilities. Consequently, the residents of the central sub-region enjoy good access to highly skilled jobs and access to consumer services, relative to residents in the outer sub-regions.

Figure 55. Central sub-region local government boundaries

Source: Pracsys 2013

8.2.1 Population Projections

In 2011, the resident population of the sub-region was estimated by the ABS Census to be 732,828 people. There are numerous population forecasts prepared for the central sub-region, and the timing and magnitude of growth varies considerably between them. WA Tomorrow is the State demographer's spatial projections of future population growth for Western Australia. The forecasts represent the best estimate of future population size if trends in fertility, mortality and migration continue. The most recent release is consistent with Directions 2031 forecast, and as such is considered to be the most appropriate projection for this analysis. According to Band C of WA Tomorrow (2012) the population of the central sub-region is expected to reach 898,500 people by 2026.

8.2.2 Employment Targets

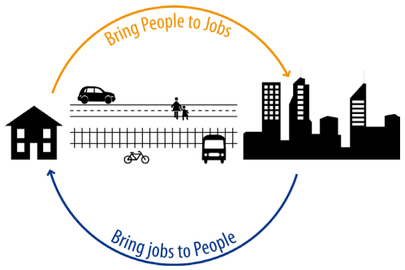
One of the primary concerns of Directions 2031 is to more closely align the spatial location of people's place of residence and place of work by ensuring employment opportunities are made available close to residential areas. The rationale behind this is that by increasing employment self-sufficiency (ESS)[14], employment self-containment (ESC)[15] will also increase. Directions 2031 addresses

14 The proportion of jobs located in a geographic area (region, corridor, local government area) relative to the residents in that same area who are employed in the workforce.

15 The proportion of jobs located in a geographic area that are occupied by residents of the same area, relative to the total number of working residents of that area.

the challenge of aligning residents and employment from the employment end, by imposing ESS targets on existing residential areas. This challenge is illustrated in Figure 56.

Figure 56. Aligning residents and jobs



Source: Pracsys 2013

Directions 2031 identifies the 'Connected City' model as the preferred medium-density future growth scenario for the Perth and Peel regions. The Connected City scenario is expected to deliver improved levels of ESS across the outer sub-regional areas. Due to the concentration of existing commercial and employment centres, the central sub-region has a high level of ESS. While this trend is expected to continue due to the current levels of investment in the sub-region, to support the achievement of the outer sub-region ESS targets, the ESS of the central sub-region is expected to decline.

Figure 57 summarises the employment requirement for the central sub-region in 2026, based on the Band C population projections contained in WA Tomorrow (2012). Under this scenario, approximately 85,000 additional employment opportunities will be required in the central sub-region by 2026 to maintain the existing ESS of 122%. Of this additional employment, approximately 36,000 jobs will need to be population driven. This reflects an overall fall in the level of population driven employment per resident in the central sub-region, as it is assumed by both Directions 2031 and the employment allocation modelling that this activity will continued to be increasingly decentralised to the outer sub-regions to support the achievement of their ESS targets. The central sub-region will therefore need to attract or generate strategic employment to meet its own ESS target. An estimated 51,500 strategic employment opportunities will be required by 2026.

Figure 57. Central sub-region employment requirements

Characteristic	2011	2026	Difference
Residents	732,828	898,500	+165,672
Labour Force	391,013	463,073	+72,080
Total Jobs	475,141	562,797	+84,131
Population-Driven Jobs	368,244	404,431	+36,187
Strategic Jobs	106,897	158,365	+51,468
Employment Self Sufficiency	122%	122%	0%
Population-Driven Jobs Per Resident	0.50	0.45	-0.05

Source: ABS Census of Population and Housing 2011, Directions 2031 Spatial Framework for Perth and Peel, and Pracsys Analysis 2013

Some recent trends are consistent with these objectives. Between 2006 and 2011 the ESS of the central sub-region fell slightly, from 124% to 122%. This decline was a consequence of higher than expected population growth, and lower than anticipated corresponding increase in the central sub-region employment opportunities. This coincided with an increase in ESS in some outer metropolitan sub-regions and a fall in metropolitan employment self sufficiency as FIFO employment in regional Western Australia increases.

Other recent trends are inconsistent with these objectives. While the levels of population-driven employment per capita in the northern outer sub-regions are on the rise, the levels in the southern sub-region remained static or fell from 2006 to 2011, pushing up the levels of population-driven employment in the central sub-region. This coincided with a slight increase in the level of population driven employment per capita across the metropolitan area.

Central to both Directions 2031 and SPP 4.2 is the objective that employment in Perth and Peel is increasingly located in activity centres dispersed across the populated area. Different employment types have different locational requirements and therefore some employment types are more likely than others to develop within activity centres. Based on the employment allocation analysis conducted for this study, an estimated 82% of total central sub-region employment, or 93% of all net new employment will be located in activity centres at 2026. Figure 58 outlines the activity centre based employment targets for the central sub-region at 2026.

Figure 58. Central sub-region activity centre based employment

Employment Type	2011 Centre Based	Future Centre Based	Gap
Consumer and Producer Services	244,000	272,276	+28,276
Knowledge intensive Consumer Services	48,866	54,290	+5,424
Strategic (KIEO) Employment	91,900	135,876	+43,976
Total	384,766	462,443	+77,677

Source: ABS Census of Population and Housing and Pracsys Analysis 2013

8.2.3 Challenges

Beyond current trends, centre growth in the central sub-region is likely to diverge from the Directions 2031 targets due to the prioritisation of major projects by the State Government, as well as market demand for natural increases in activity in many other centres across the sub-region. Figure 59 outlines the key projects planned for the central sub-region and the anticipated employment outcomes. If all of these projects reach their employment potential by 2026, the central sub-region will have well exceeded its employment target. Without additional population growth above what is currently projected in WA Tomorrow, these projects will potentially compromise the ability of the outer sub-regions to achieve their ESS targets[16]. This highlights the potential future competition for employment both within the central sub-region and between sub-regions. This trend does not necessarily represent a failure of the policy. Currently Directions 2031 seeks to influence the employment side of bringing people and jobs together. The policy objectives can also be met by influencing the residential side. If public and private investment is required or most viable in the central sub-region, facilitating additional population in this area, rather than expanding the outer sub-region population is a valid means of meeting the policy objectives. This means the residential density targets set out in SPP 4.2 for activity centres will become even more important in the central sub-region and for centres exceeding their ESS targets, such as Riseley Street. District Centre.

16 Note that these projects also provide for significant residential development. However, this is not accounted for in WA Tomorrow.

Figure 59. Planned central sub-region projects

Centre	Additional Jobs
Murdoch Specialised Centre	30,000
Curtin/Bentley Specialised Centre	TBA
Perth Airport Specialised Centre	6,000
Ashfield District Centre	12,000
Morley Strategic Metropolitan Centre	6,000
Stirling Strategic Metropolitan Centre Centre	20,000
Perth City Link	13,500
Elizabeth Quay	11,000
China Green (Subiaco Secondary Centre)	2,300
Waterbank	TBA
Total	100,800

Source: MRA 2012, Murdoch Activity Centre Structure Plan 2012, Morley Activity Centre Structure Plan 2010, Perth Airport Master Plan, Ashfield Precinct Plan 2010, Stirling City Centre Economic Analysis (Pracsys) 2010

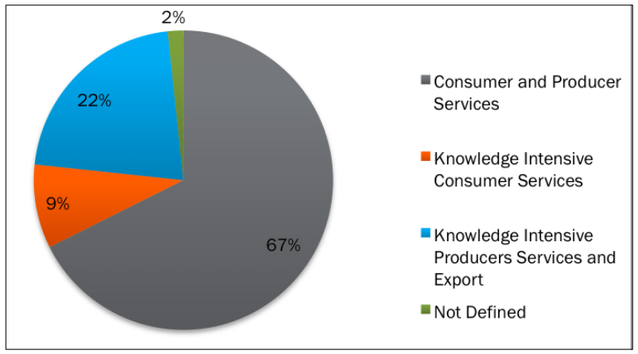
8.3 RISELEY STREET DISTRICT CENTRE EMPLOYMENT

8.3.1 Current Employment

Riseley Street District Centre currently contains 1,840 employment opportunities. Figure 60 shows the 2011 Riseley Street District Centre employment profile in terms of employment type. Population driven employment is comprised of the lower knowledge consumer and producer services and higher-level knowledge intensive consumer services, and strategic employment is comprised of knowledge intensive producer services and export oriented employment.

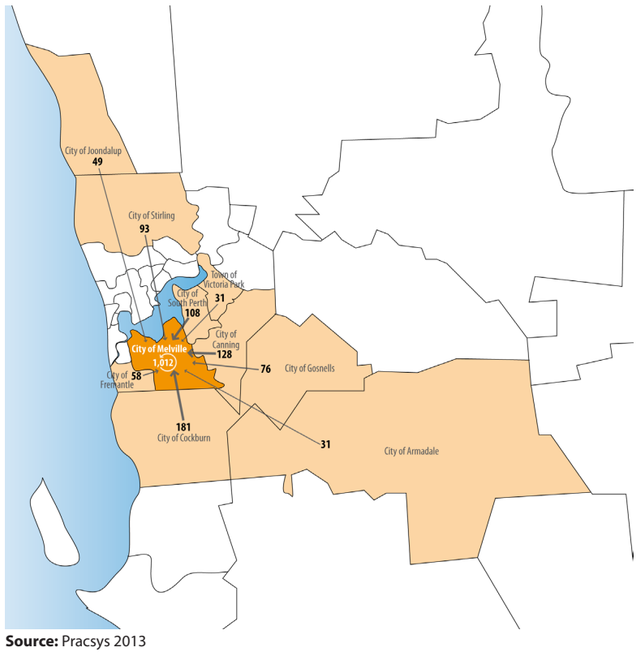
Approximately 76% of employment at Riseley Street District Centre is population driven in nature, servicing a local residential catchment

Figure 60. Riseley Street District Centre employment profile (2011)



Source: Pracsys 2013 and ABS Census of Population and Housing 2011

Figure 61. Riseley Street employees place of residence



Source: Pracsys 2013

and local workers. 22% of centre employment is strategic in nature. This is attributable to a number of small agglomerations in the areas of Finance and Investment services, Architectural, Engineering and Technical Services, Legal and Accounting Services, Other Management and Related Consulting Services, and Allied Health.

Riseley Street District Centre plays a small but important role in providing employment opportunities for working residents of the outer southern sub-regions, as well as working residents in the central sub-region. Figure 61 illustrates the locations of residence for Riseley Street District Centre employees.

8.3.2 Future Employment

Riseley Street District Centre is one of numerous designated district activity centres in the central sub-region. With this designation comes the requirement to provide to provide a range of population driven amenity to catchment residents. District Centres may mature to provide higher order knowledge intensive export oriented (strategic) employment. Such maturation has already been experienced in inner metropolitan district centre such as West Leederville, Beaufort Street and Fitzgerald Street. Given the existing agglomerations within Riseley Street District Centre it is likely that it will continue to mature in a similar manner, developing its strategic and higher order consumer employment. However, this should not be to the detriment of higher order centres. Where possible strategic employment should be accommodated in specialised and strategic metropolitan centres such as Murdoch Specialised Centre and Fremantle Strategic Metropolitan Centre.

Based on the employment allocation analysis conducted, Riseley Street District Centre needs to generate a minimum of 232 additional jobs by 2026 to support the achievement of the Directions 2031 ESS target (see Figure 62). This analysis has not incorporated additional dwellings at Riseley Street District Centre. The additional employment should be primarily strategic or higher order consumer services, focused on the leveraging of existing agglomerations. The centre can also tolerate a loss of up to 60 population-driven service jobs, as these are consolidated into surrounding centres at Booragoon and Canning Bridge District Centre. However, as there is additional demand for retail goods and services, entertainment and population-driven offices it is likely that some additional employment in these areas will be located at Riseley Street District Centre.

In the context of the vision for the centre and the physical constraints, the strategic employment target is fairly high. This employment target does not need to be met at Riseley Street District Centre if this is considered inappropriate for the centre. The relatively high proportion of strategic employment already located within the centre indicates some attraction for strategic industries. However, Canning Bridge District Centre and Murdoch Specialised Centre have better public transport links to higher-level activity centres and the surrounding area. They are more likely to be attractive to strategic industries.

It is important to note that this target is based on the assumption that the level of population driven employment per capita in the southern sub-regions will increase. If this does not occur, Riseley Street District Centre will experience greater pressure for growth and development

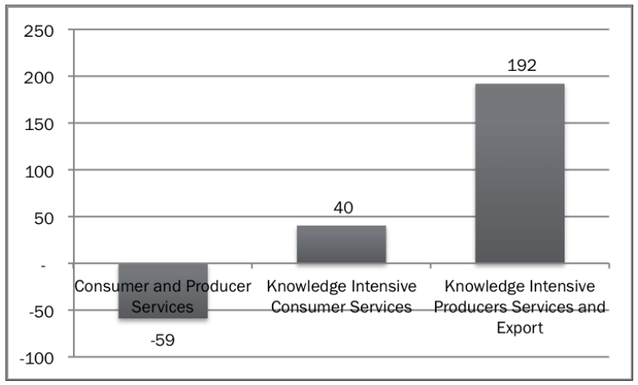
of population driven activity and the population driven employment requirement for Riseley Street District Centre will increase accordingly.

8.4 EMPLOYMENT ANALYSIS IMPLICATIONS

The following conclusions can be drawn from the analysis of employment for Riseley Street District Centre:

- To assist in meeting the ESS target for the Central Sub-Region, Riseley Street District Centre should contribute an additional 232 jobs by 2026; and
- An additional 232 jobs equates to around 4,500 m2 retail floorspace or 7,000 m2 office floorspace. Given the expected capacity and demand for retail and other land uses within the centre, it is expected that this target will be easily met.

Figure 62. Riseley Street District Centre potential employment changes (2026)



Source: Pracsys 2013

9.0

9 DIVERSITY TARGET AND PERFORMANCE

9.1 LAND USE AND DIVERSITY

Under SPP 4.2 activity centres of district level and above are required to move towards meeting a land use diversity target based on the scale of the centre and proportion of retail to non-retail land uses accommodated within the centre. In this context 'retail' is defined under the WAPC Land Use and Employment Survey as 'any activity which involves the sale of goods from a shop located separate and/or in a shopping centre other than those included in category 6 - Other Retail'. This includes land uses such as shops, fast food, cafes and most restaurants. Note that the split of land uses included in the retail needs assessment excludes some of the land uses considered 'shop retail' and includes others considered non-retail under the WAPC Land Use and Employment Survey. The retail floorspace supply figures reported on for the diversity calculation will therefore vary from those modelled for the retail needs assessment.

Figure 63. Riseley Street District Centre land use spatial area

Source: Pracsys 2013; WAPC 2007-08

9.1.1 Existing land and potential future land uses

Land uses for activity centres are collected using spatial areas set by the WAPC. The relevant spatial area for Riseley Street District Centre is shown in Figure 63. This area will differ from the boundary set for the structure plan, however it the most accurate form of data available.

The existing and potential future land uses accommodated within Riseley Street District Centre are shown in Figure 64. The potential land uses are a hypothetical scenario based on:

- The current function of the activity centre;
- The estimated future capacity of the activity centre;
- Known developer intentions for sites within the activity centre;
- The current and expected future drivers for activity within the centre; and
- The vision set for the activity centre in this structure plan.

This scenario is used only as a guide to estimate the future diversity ratio for the activity centre.

Riseley Street District Centre has the land capacity for approximately 125,000 m2 additional commercial floorspace by 2031. However, the demand drivers to develop additional floorspace of this quantum are not believed to be present at this time. An expansion of this magnitude is also not considered to be in keeping with the vision for the activity centre, or compatible with community aspirations. A future floorspace scenario has been developed to fulfill the activity centre vision and improve the offer of goods and services to the local catchment.

Figure 64. Riseley Street District Centre land uses

Floorspace Type (WAPC PLUC)	Current Floorspace (2008) (m2 NLA)	Potential Floorspace (2022) (m2 NLA)
Primary/Rural	0 m2	0 m2
Manufacturing/Processing/ Fabrication	410 m2	410 m2
Storage/Distribution	485 m2	485 m2
Service Industry	1,036 m2	1,516 m2
Shop/Retail	7,171 m2	10,581 m2
Other Retail	1,106 m2	1,106 m2
Office/Business	7,547 m2	8,947 m2
Health/Welfare/Community Services	407 m2	1,857 m2
Entertainment/Recreation/ Culture	573 m2	3,823 m2
Residential (non-private)	0 m2	0 m2
Utilities/Communications	678 m2	678 m2
Total	19,413 m2	29,403 m2
SPP 4.2 Diversity Ratio	37% Shop/ Retail : 63% Other	36% Shop/ Retail : 64% Other
Pracsys Diversity Index	0.62	0.72

Source: Pracsys 2013; WAPC 2007-08

As shown, the mixed use ratio is expected to increase slightly but remains very high for a population-driven activity centre and far above the 20% target required in the future. Due to the nature of current land uses at Riseley Street District Centre, and the identified drivers for expansion, it is not expected that floorspace expansions beyond the time modelled will result in the diversity target dropping below that required by SPP 4.2.

The Pracsys Diversity Index is an alternative method of measuring diversity that takes into account the overall spread of floorspace as opposed to simply the ratio of shop/retail to total floorspace. This provides a better understanding of the change in opportunities for people using the activity centre. Measured by the diversity index, diversity of the centre increases significantly from 0.62 to 0.72 based on the scenario modelled.

9.1.2 Diversity Target Implications

The future land use scenario for Riseley Street District Centre indicates that over the next ten years there is potential for a significant increase in shop/retail, health/welfare/community services and entertainment/recreation/ culture floorspace, as well as some increase in office/business floorspace. Increases in other categories of floorspace are possible given change in the current trends assessed, however, the drivers for increases in other floorspace categories are not considered to be currently present.

There is also potential for contractions in some floorspace categories. It is expected any contractions will be primarily due to changes in land value or shifts in consumer behaviour and expectations.

10.0

10 SWOT ANALYSIS

Based on the above analysis, the following SWOT analysis was developed.

10.1 STRENGTHS

The strengths of Riseley Street District Centre are:

- Relatively affluent catchment and high levels of home ownership, therefore relatively high levels of disposable income;
- High employment quality; and
- Relatively good access to existing public transport routes.

10.2 WEAKNESSES

The weaknesses of Riseley Street District Centre are:

- High dependence on car trips and issues arising from related traffic congestion;
- Sub-optimal levels of retail floorspace currently provided.

10.3 OPPORTUNITIES

Opportunities identified for Riseley Street District Centre are:

- Increased residential density;
- Build on the existing employment quality strength and industry agglomerations;
- Increased intensity of activity within the centre;
- Increased retail floorspace within the centre;
- Improve the quality of the urban environment within the centre to create a better user experience; and
- Align the offer of activity with the local demographic to optimise capture discretionary spend of local residents.

10.4 THREATS

Threats identified for Riseley Street District Centre are:

- Expansions at Booragoon Secondary Centre and Canning Bridge District Centre, without appropriate action to further develop the competitiveness of the offer at Riseley Street District Centre, have the potential to threaten existing activities; and
- A lack of convenient parking, if not mediated by improvements in other transport options, may limit the future success of the centre.

Like all activity centres, future development at Riseley Street District Centre may face some challenges in competing effectively with other centres in the surrounding network. Currently there is significant unmet demand for goods and services within the local catchment and across the City of Melville. This is driving expansions of retail and other floorspace at surrounding activity centres, which could be perceived as a threat to Riseley Street District Centre. However competition from other activity centres is likely to drive the offer at Riseley Street District Centre to become more competitive and improve their demand share rather than reduce their demand share. The challenge for Riseley Street is expected to be in improving and optimising the conditions for trade, given the noted deficiencies of the centre and the fragmented land ownership. However there is considered to be significant potential for the centre to continue to grow and mature given the scenarios presented.

A1

APPENDIX 1: PERFORMANCE MEASUREMENT METHODOLOGY

The economic sustainability and urban form principles have been identified as relevant to activity centre performance, based on their impact on a centre's ability to attract and retain sustainable user catchments.

Each principle contains two or more metrics, which combine to measure a centre's performance. The metrics used have been chosen based on availability of data and consistency of data across Australian states. As a result of inconsistent land use surveying by planning departments, the economic sustainability metrics are derived primarily from the ABS Census, using employment rather than floor space as part of the indicator for intensity and diversity. Figure 65 shows the metrics used to measure centre performance.

Figure 65. Centre performance metrics

Principle	Impact on Centre Success	Metrics
Activity Diversity	A diverse mix of users and activity are desirable for an economically, environmentally and socially sustainable city, enabling users to access multiple needs with fewer trips and contributing to higher rates of employment self-sufficiency.	Mixed Use Threshold, Equitability Index
Activity Intensity	Co-locating activity within a vibrant, intense space ensures walkability, social interaction and economic activation. Intense agglomerations of activity have been shown to increase industry productivity.	Residential Density, Job Density
Employment Quality	Centres require both a quantity and quality of employment, as befits their position within the centres hierarchy. High quality employment (knowledge or export-based) drives economic development and facilitates higher levels of employment self-sufficiency.	Employment Quantum, Employment Quality
Centre Accessibility	Centres must be accessible to a wide mix of user groups utilising different modes of transport. This reduces the impact of petrol price shocks, increases sustainable centre catchments and facilitates movement between employment nodes.	Transport Infrastructure, Distance from CBD
Urban Quality	Improving the aesthetics, attractiveness and pleasantness of the physical environment makes an urban area more conducive to frequent and prolonged use.	Attractive and Unattractive Features
Urban Amenity	Offering opportunities for recreation and leisure within the centre and ensuring the comfortable use of the centre by pedestrians increases centre attractiveness and activation and is conducive to more frequent and prolonged use.	Public Realm, Comfort, Continuing Noise Emissions, Street Furniture, Leisure/Recreation Facilities
Mobility	Facilitating easy movement around the centre for all users and ensuring a variety of well linked and positioned transport options means the potential for the centre to be equitably accessed by a range of user groups will be maximized, and use of the centre may be induced.	Walkability, Bicycle Access, Vehicle Access, Public Transport
Safety	Improving infrastructure directed at enabling safe movement throughout the centre and improving the perception of safety in the centre will increase the attractiveness of using the centre over a greater daily time period and for a greater range of user groups.	Perception of Safety, Personal and Traffic Safety

Source: Pracsys 2011

The majority of urban form metrics have been measured using aerial photography. Each activity centre is divided into street/pedestrian way/mall sections and metrics are taken for each section. This approach allows for medium-grain features such as street trees and footpaths to be taken into account with a high degree of accuracy.

Centre performance is measured against the set of metrics, scored on a scale of one to ten and inputted into a model covering Sydney, Perth and Adelaide benchmarks to enable comparison with other centres, centre averages and best-of-types.

The three broad typologies identified are:

- 'Retail-centric' referring to centres that have developed primarily around a large shopping mall, usually surrounded by car parking and located in suburban residential areas. These are often referred to as 'Shopping Centres' or 'Shopping Malls'.
- 'Inner urban' including centres found within 10km of the city CBD that have often developed along a transport corridor. Their location means that they are generally more mature than outer lying centres, impacting upon diversity and intensity. These are also referred to as 'Main Streets'.
- 'Regional' centres are those that are expected to provide a diverse range of goods and services to a regional catchment. They often begin as retail malls but their level of maturity (and geographical location) means that they have evolved to include a greater scale and variety of employment, services and entertainment.

A benefit of the toolkit methodology is that it enables centres to be assessed in many different ways. For example, centres within the Perth and Peel activity centres network can be compared with others at the same level of the hierarchy or with centres at a different hierarchical level. Alternatively, they can be assessed against more established centres in other cities, or against the average and best of a particular typology.

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APPENDIX 2: RETAIL MODELLING METHODOLOGY

12.1 METHODOLOGY

Gravity models allow for the measurement of spatial interaction as a function of distance to determine the probability of a given customer patronising a centre and provide an approximation of trade area and sales potential for a development. This modelling technique uses the distance between a household and each centre, and a measure of 'attractiveness' to define the probability model. The 'attractiveness' of a centre has been defined by total floor space and the distance has been calculated by measuring straight-line distances between each centre and population. The gravity model probability formula is shown in Figure 66.

Figure 66. Gravity model probability formula

$$P_{ij} = \frac{\frac{A_{jk}^{a}}{D_{ij}^{ß}}}{\sum_{j=1}^{m} \frac{A_{jk}^{a}}{D_{ij}^{ß}}}$$

P_{ij}	=	Probability of customer living/working in statistical area i shopping at complex j.
A_i	=	Area of floorspace in centre, j in square metres, according to the type of supply, k.
D_{ij}	=	Distance between statistical area of households, i and complex j.
a	=	Area exponent
ß	=	Distance exponent
k	=	Type of supply or expenditure, either Convenience or Comparison
i	=	Statistical area (i=1,...,n)
j	=	Complexes (j=1,...,m)

Source: Carter, C (1993) 'Assumptions Underlying the Retail Gravity Model', Appraisal Journal, Vol 61, No 4, pp510; Pracsys (2012)

Figure 67. Gravity model demand formula

$$D_{kj} = \sum_{i=1}^{n} (P_{ij} * E_i)$$

D_{kj}	=	Demand for retail category k, at centre j.
E_i	=	Expenditure pool of statistical area i.

Source: Carter, C (1993) 'Assumptions Underlying the Retail Gravity Model', Appraisal Journal, Vol 61, No 4, pp510; Pracsys (2012)

Figure 67 shows that the demand for retail category k, at centre j, is equal to the sum of the probabilities of customers living in statistical areas i to n, multiplied by the expenditure pool of statistical area i. In other words the demand for retail is a function of the probability of customer from particular statistical area attending the centre multiplied by the expenditure pool of that statistical area. The expenditure is pool is derived through the population multiplied by its income distribution.

In its core form gravity modelling provides a clearer, reproducible outcome that can be easily assessed. However it does not consider local factors, including:

- The comparative value proposition of centres (e.g. the presence of an 'anchor' attractor that draws significant market share);
- The brand preference of users; or
- The efficiency of transport networks, as well as geographical barriers (e.g. in some cases it may be easier for customers to access a centre that lies physically further away).

For the purposes of this model we have used the leakage and escalation rates shown in Figure 68.

Figure 68. Leakage and escalation rates

Leakage (Comparison)	15%
Leakage (Convenience)	5%
Expenditure Escalation	0.89% per annum

Source: ABS (cat 8501.0), Pracsys (2013)

12.2 ENTERTAINMENT MODELLING

Entertainment retail demand is more difficult to model as the consumer behavior associated with this type of floorspace is less dependent on distance travelled and size of the floorspace. To model the growth in entertainment demand Pracsys has assumed that current floorspace is productive and sustainable at current levels. Floorspace has then been forecast by modeling the increase in demand and turnover of existing floorspace expected as a result of population growth in the catchment. This growth in turnover and demand forecast by the model is then used to extrapolate forward the amount of productive and sustainable floorspace that could be accommodated.

12.3 POPULATION DRIVEN OFFICE DEMAND

Office demand is estimated using a ratio of population to floorspace. It is assumed that there is a certain requirement of office space to facilitate the needs of the local population. The ratio of population driven office is derived from the combination of the Employment Quality Model and place of work ABS data that provides the ratio of population driven office jobs to strategic jobs. This ratio is then extrapolated forward to estimate a minimum requirement of office space over the next five years. This methodology estimates only population-driven employment office demand, not strategic employment office demand[17].

12.4 DWELLINGS GROWTH

Dwellings growth has been approached in two ways. Baseline population growth for non City of Melville localities have been calculated using Band A and Band C WA Tomorrow population forecasts for the conservative and optimistic scenarios respectively. Dwelling growth in City of Melville localities has been calculated in more detail with dwellings being forecast on a suburb basis using .id forecasts. In addition, baseline dwelling growth rates have been supplemented with known public aspirational and known structure plans where dwellings targets have been specified.

12.5 RETAIL GROWTH

Retail growth forecasts have been used to enhance gravity modeling by including extra planned supply in the future. As with dwellings growth this extra supply has been ascertained through known public aspirational and structure plans and implemented into the gravity model.

17 Population-driven employment - develops in direct response to population growth. As such its location will be largely determined by the location of population growth, as well as activity centre hierarchy and maturity. Strategic employment - results from economic activity focused on the creation and transfer of goods and services to an external market. The location of strategic employment is not driven by population growth, but rather by a range of other factors, including agglomeration economies.

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APPENDIX 3: PERTH EMPLOYMENT ALLOCATION MODELLING (PEAM)

13.1 PRINCIPLES

There are a number of principles, which are central to the development of the methodology for the employment allocation modelling. These are:

- Employment self sufficiency and self containment
- Employment quality
- Activity centre maturity
- Employment gravity
- Strategic employment
- Population-driven employment

13.1.1 Employment Self Sufficiency

Employment self sufficiency (ESS) and employment self containment (ESC) are important measures of economic sustainability because they show how a location can generate sufficient jobs to cater for the employment needs of the residential population – in industries that earn sufficient export income to sustain the local retail/consumer-services economy for the benefit of residents.

13.1.2 Employment Quality

The two main drivers of our collective standard of living are how and where we work and reside. Of the principles put forward in Directions 2031, a priority must be strategies that deliver local jobs. A fundamental challenge as we enter into an information-based economy is that a greater proportion of the population is moving into knowledge-intensive occupations that are less transactional in nature. By contrast the employment profiles of many of Perth's activity centres (particularly those in the middle and outer sub-regions) are proving to be dominated by retail and consumer services (transactional based) activity. The result is an erosion of the variety of industry types and occupations, resulting in a mono-cultural retail and consumer services employment base in the middle and outer sub-regions, with knowledge intensive export oriented employment centralised within the inner sub-region. Consequently, residents are forced to commute outside their sub-region to access high quality employment.

Improving the employment quality of the outer sub-regions is necessary to lift the employment self-sufficiency and self-containment of each sub-region to a sustainable level (economically, environmentally and socially).

In defining employment quality it is necessary to distinguish between activities (and their resulting employment) that are population-driven; and those that are KIEO in nature. Population driven employment includes areas such as retail, consumer services and basic producer services. These can be found in various configurations in commercial/retail centres (e.g. regional shopping centres), institutional centres (e.g. acute care hospitals, teaching universities); and so-called industrial centres (e.g. regional industrial centres).

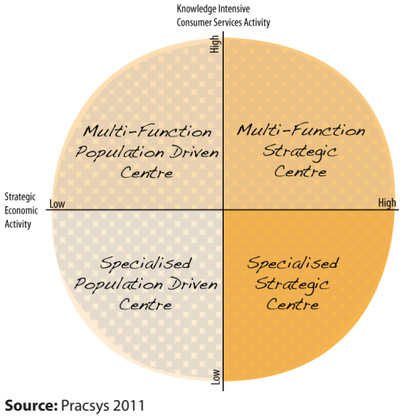
In essence, population driven activity will exist to a large extent with the introduction of a population. This type of employment can be maximised through economic activation, but for the large part requires little planning beyond basic spatial allocation.

KIEO employment refers to high-quality knowledge-intensive jobs where the application or creation of knowledge opens up global markets for local outputs (e.g. 'driver' export industries, legal and financial services, technology research and development). A lack of attention to the development of this type of employment outside the Perth Central Area has manifested itself in the current disparity of employment within the sub-regions. Low employment self-sufficiency and self-containment are symptoms of such trends.

13.1.3 Activity Centre Maturity

The economic maturity of a centre is defined by the quality, not quantity, of activity. Immature centres are those typified by low productivity population-driven activity whilst mature centres are characterised by high productivity activity, 'creating' wealth through the export of goods or services. Figure 68 shows the matrix outlining the four degrees of activity centre maturity.

Figure 69. Activity centre maturity matrix



Source: Pracsys 2011

An immature population driven centre, services the basic consumer/producer needs of its catchment. Characterised by low concentrations of KICS and strategic employment, these centres require either an increasing catchment or increasing expenditure levels to drive growth. Eventually growth will be constrained as either market forces limit growth or statutory controls limit specific land-uses (in particular retail).

A diverse population driven centre services both the basic consumer/producer needs and the high level consumer needs of its catchment. Characterised by high concentrations of KICS and low concentrations of strategic employment, maturation to a diverse population driven level occurs as a result of a combination of consumption–based growth and a shift in focus to intensity, diversity, employment and connectivity.

A diverse strategic centre services the high-level consumer/producer needs of its catchment. Through the creation and export of goods and services, these centres provide economic leadership for the urban environment, attracting wealth and providing resilient support to the city. Some centres achieve this level of maturity through the benefit of natural competitive advantages. Others need to develop it through targeted initiatives that support knowledge creation, innovation systems, technology and commercial development and efficient supply chains.

Specialised strategic centres are characterised by high levels of strategic employment and low levels of KICS employment. Like diverse strategic centres, some achieve this level of maturity through the benefit of natural

competitive advantages. Others need to develop it through targeted initiatives that support knowledge creation, innovation systems, technology and commercial development and efficient supply chains.

The target maturity level for a centre must be considered in the context of the Activity Centres Policy. Not all centres are required to reach the highest level of maturity. For secondary centres and below, maturation beyond a diverse population driven level is unnecessary and in most cases undesirable as it would detract from the growth and maturation of higher order centres. Furthermore, different types of centres will follow different maturation paths. Industrial centres will typically mature from an immature population driven centre to a specialised strategic centre, as it is not the function of industrial centres to provide knowledge intensive consumer services. In contrast, commercial centres will typically mature from immature population driven to diverse population driven and ultimately diverse strategic centres.

The Perth activity centres in the outer sub-regions are most often immature population driven centres. More mature and diverse centres lie within the central sub-region, having matured over decades and benefiting from the effective density of a city's centralised employment characteristics. In order to achieve the employment self sufficiency targets set for the outer sub-regions, activity centres in these sub-regions will have to mature faster than the natural rate which will require a targeted effort from both the private and public sector.

13.1.4 Employment Gravity

Gravity modelling is a modified version of Issac Newton's Law of Gravitation that can be used to predict the movement of people, information and commodities between geographic locations. The theory holds that the attraction between two objects is proportional to their mass (i.e. larger, denser places are more attractive to people, ideas and commodities than smaller places) and inversely proportional to their respective distance (i.e. places in close proximity have a greater attraction).

Applied to the employment challenge of the northwest sub-region, gravity modelling has been used to predict the distribution of employment to the activity centres network. As different types of employment have different drivers and different location requirements, two different variations of the gravity model have been adopted.

13.1.5 Population Driven Employment

Population driven employment develops in direct response to population growth, as such its location will be largely determined by the location of population growth, as well as centre hierarchy levels and maturity. The attractiveness of a centre (i) to the jobs required for a population (j) is determined by the formula shown in Figure 69.

Once applied to all centres and all units of population, the probability of the population driven jobs required for a local population, being located at each centre can be determined.

Figure 70. Population-driven employment gravity

$$P_{ij} = \frac{\frac{A_i}{D_{ij}^{ß}}}{\sum_{j=1}^{n} \frac{A_i}{D_{ij}^{ß}}}$$

P_{ij}	=	Probability of customer living/working in collection district i shopping at centre j.
A_i	=	Size of the store/in square feet.
D_{ij}	=	Distance from collection district i to shopping centre j.
ß	=	Parameter reflecting sensitivity of customers to distance.
i	=	Collection districts (i=1,...,m)
j	=	Centres (j=1,...,n)

Source: Huff 1963

13.1.6 Strategic Employment

The location decisions of strategic industries are more complex. Rather than being driven by population growth, they are determined by a range of other factors such as agglomeration economies. Agglomeration economies are powerful forces that help explain the positive externalities that are generated from the "clustering" of economic activity. Agglomeration economies can cause a location with some small comparative advantage to become a place with a large concentration of diverse activity. While some small comparative advantage (such as population driven amenity, availability of land or proximity to value chains) initially attracts businesses and households to the location, this original group then becomes the factor that attracts other businesses and households to that location. There are three main reasons why firms would choose to locate in close proximity to other firms in the same industry:

- Forward and backward linkages - geographic proximity of customers (forward linkages) and of suppliers (backward linkages);
- Knowledge spillover – geographic proximity facilitates the transfer of knowledge; and
- Labour market pooling - concentration of related firms generates a pool of specialised labour.

The effect of agglomeration economies is reflected in the gravity model, with strategic employment more likely to develop or relocate

Figure 71. Strategic employment gravity

$$G_{ik} = \frac{\frac{STRAT_i \times STRAT_k}{(D_{ik} + t)^{\wedge}d}}{\sum_{c=1}^{n} \frac{STRAT_i \times STRAT_c}{(D_{ic} + t)^{\wedge}d}}$$

G_{ik}	=	Attractiveness of centre i to strategic jobs from centre k.
$STRAT_i$	=	Strategic importance of centre i, which reflects number of forecoast strategic jobs based on existing size and level in hierarchy.
D_{ik}	=	Straight line distance between centre i and k.
t	=	Strategic travel time constant.
d	=	Strategic distance exponent.
c	=	All centres within sub-region

Source: Pracsys 2011

to areas with existing strategic agglomerations. The attractiveness of strategic jobs to a centre (i) from centre (k) is determined by the formula shown in Figure 70. Once applied to all centres, the probability of strategic employment located at each centre can be determined.

13.2 METHODOLOGY

The new activity centre policy (SPP 4.2) requires that evidence of overall centre performance be presented on a range of dimensions including centre diversity, activity intensity, accessibility and employment. In particular, the SPP 4.2 requires that employment outcomes are achieved by centre developments to drive the 'suburbanisation' of jobs in line with the sub-regional self-sufficiency targets set out in Directions 2031. This link between sub-regional outcomes and individual centre planning is a new and important feature of the planning environment.

The approach adopted consisted of four stages, which were as follows.

13.2.1 Stage 1: Sub-Region Targets

Based on the expressed population, housing and employment profile in Directions 2031, the population driven and strategic employment growth required to achieve the employment self sufficiency targets were determined.

13.2.2 Stage 2: Activity Centres Network Target

The quantity of population driven and strategic employment to be developed within the sub-region's activity centre network was determined, with consideration for trends.

13.2.3 Stage 3: Model Development

Applying the principles of employment gravity, an employment allocation model was developed for the central sub-region.

13.2.4 Stage 4: Scenario Development

Using the employment allocation model, scenarios were developed for the future development of the activity centres network in the central sub-region in the context of the identified opportunities and constraints.

13.3 ASSUMPTIONS

Quantitative economic analysis relies upon certain assumptions about the variables used in the analysis. The extent to which these assumptions hold true in the market, will affect the validity of the results. The following general assumptions underpin the employment allocation analysis for the central sub-region.

13.3.1 Employment Quality

An indicator of the adequacy of a sub-region's ability to service its catchment population is the calculation of the ratio of population-driven employment to sub-region population. In the case of the central sub-region the ratio is 0.50 population-driven jobs per resident. Given objectives of Directions 2031 performance of the sub-region, it was assumed that the level of population driven employment per resident would decrease to 0.45 jobs per resident by 2026.

13.3.2 Centre-based Employment

Centre based employment refers to employment in both retail activity centres and industrial centres. Currently an estimated 80% of the employment in the central sub-region is located within Activity Centres. The balance is comprised of:

- Home-based business
- Other decentralised employment such as schools

Different employment types have different locational requirements and therefore some employment types are more likely than others to develop within activity centres. For the purposes of this analysis it was assumed that the proportion of strategic employment located in activity centres will remain constant. However the proportion of knowledge intensive consumer services employment located in centres is assumed to increase to 75 per cent. Similarly, the proportion of consumer and producer services located in centres will increase to 82 per cent. Overall the proportion of employment located in centres is assumed to increase to 82 per cent in the period to 2026, consistent with the objectives of Directions 2031 and SPP 4.2.

13.3.3 Centre Types

For the purpose of this analysis it has been assumed that employment is not transferrable between centres of different types. For example employment allocated to a commercial centre cannot be reallocated to an industrial centre and vice versa. While there are some employment types that could locate in either type of centre, these are the exception rather than the norm. The implications of this are that the employment profile of the sub-region will remain skewed toward the development of commercial type activity centres.

13.3.4 Other

In addition to the above, many assumptions have been made throughout the analytical process regarding the maturity and scale of individual centres. As such, it is important to note that employment allocations detailed within this report represent only a few of many alternatives for how the employment targets for the sub-region may be achieved in the network of activity centres, and, given a different set of assumptions the resulting allocation may be quite different. The purpose of this modelling is to provide an insight into the implications and consequences of alternative interventions and therefore it is important that modelling is regularly reviewed and updated and the stakeholders continue to provide up to date information to ensure the assumptions hold true.

14.0

14 GLOSSARY

Comparison retail - refers to retail goods for which the volume of goods and the number of transactions are generally lower, occur less frequently and have a higher cost both in terms of the value of goods purchased and the search costs involved. Examples of comparison retail goods include electronics and furniture.

Convenience retail - refers to retail goods for which the volume of goods and number of transactions are generally higher, occur more frequently and have lower costs both in terms of the value of goods purchased and the search costs involved. Examples of convenience retail goods include fuel and groceries.

Employment self-containment (ESC) – is the proportion of jobs located in a geographic area that are occupied by residents of the same area, relative to the total number of working residents of that area.

Employment self-sufficiency (ESS) – is the proportion of jobs located in a geographic area (region, corridor, local government) relative to the residents in that same area who are employed in the workforce. For example, if the area has 1,000 employed residents and 450 local jobs available, the employment self-sufficiency rate is 45%.

Entertainment – refers to a range of entertainment, recreation and cultural products that are sold directly to consumers. Central to the definition of entertainment is not only the purpose of the product but also how it is consumed. Entertainment refers to entertaining goods and services consumed in the public realm. Entertainment goods that are purchased and consumed in the private realm fall under the definition of retail. For example the purchase of a computer game would be considered a comparison retail purchase. The purchase of tokens to play a computer game at Timezone would be considered entertainment. Other examples of entertainment products include, bars and clubs, cinemas, museums and art galleries.

Localisation Economy – The result of a number of firms and enterprises in complementary industries and supply chains locating in the same area. They are the result of one or more of three factors: Availability of specific skilled and specialised labour; Availability of specialised/ essential inputs at a more competitive value due to economies of scale; and Increased efficiency in knowledge transfer/technology spill-overs/collaborations and partnerships due to proximity of partners.

Population-driven employment - develops in direct response to population growth. As such its location will be largely determined by the location of population growth, as well as activity centre hierarchy and maturity.

Strategic employment - results from economic activity focused on the creation and transfer of goods and services to an external market. The location of strategic employment is not driven by population growth, but rather by a range of other factors, including agglomeration economies.

Urbanisation Economy - Can develop as a result of population growth and the sheer scale of an activity centre. Urbanisation economies result from the general benefits that a firm will gain from locating in a particular urban environment. This includes access to general labour pools, access to financial and commercial services, and proximity to transport and communications networks.

Appendix 2 – Parking and Access Strategy

RISELEY ACTIVITY CENTRE

PARKING AND ACCESS STRATEGY

April 2014

Rev E

HISTORY AND STATUS OF THE DOCUMENT

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1. Introduction

1.1 Report Layout

This report is provided as an appendix to TPG Town Planning, Urban Design and Heritage's Riseley Activity Centre Structure Plan. The purpose of this report is to review the following items: -

- The location of existing infrastructure and how this may impact on the Structure Plan area.
- To collate vehicular volume data in the Structure Plan area.
- To provide commentary on potential improvements to the road network in terms of road geometry, parking allowances, pedestrian amenity and intersection design requirements.
- To review other local government authority parking plans and to provide recommendations to the City of Melville with regards to potential improvements to their parking policies.

1.2 Available Information and Technical Literature

This section provides a brief description of the inputs used in the compilation of this report: -

- WAPC Transport Impact Assessment Guidelines – Volume 5 (referenced for PM peak hour and traffic splits).
- State Planning Policy 4.2 – Activity Centres for Perth and Peel, WA Government Gazette, 31 August 2010.
- RTA NSW Guide to Traffic Generating Developments Version 2.2 October 2002 (referenced to determine trip generation / attraction rates for various land uses).
- Guide to Traffic Management – Part 3: Traffic Studies and Analysis, Austroads, 2008
- Guide to Traffic Management – Part 7: Traffic Management in Activity Centres, Austroads, 2009.
- Guide to Traffic Management – Part 11: Parking, Austroads, 2008
- Guide to Traffic Management – Part 12: Traffic Impacts of Developments, Austroads, 2008
- Liveable Neighbourhoods Element 2: Movement Network, October 2007 (referenced to discuss road reservation and carriageway requirements for the proposed road network within the structure plan area).
- Report for planning analysis of the Riseley Centre, Precinct Plan, GHD, 2010
- City of Melville, Activity Centre Parking Management and Strategy (Draft), Luxmoore Parking and Safety, November 2012

We have also undertaken a site visit to familiarise ourselves with the general project area.

1.3 Location

1.3.1 General

- The City of Melville is located on the southern bank of Swan River comprising of 18 suburbs.
- According to the .id Community Profile a population growth of 0.56% per annum is expected. The comparison of the estimated population for 2011 (101,929) and the actual population counted during the Census in 2011 (95,699) show that the expected population growth rate more likely to be 0.526% pa.
- Within the City of Melville are contained one secondary activity centre (Booragoon) and several district centres (Bull Creek, Canning Bridge, Kardinya, Melville and Riseley Street), identified by State Planning Policy 4.2.

1.3.2 The Subject Area

- The subject area is located on the boundary of suburbs Applecross and Ardross.
- Riseley Activity Centre has been identified as a District Centre according State Planning Policy 4.2.

2. Traffic and Transport / Access

2.1 Existing Situation and Traffic Networks

- The subject site is bound by the rear line of properties facing following streets: Collier Street, Matheson Street, Conon Road, Macleod Road, Fletcher Street, Macrae Road, Simpson Street, Coogee Road, Hope Road and McCallum Crescent.
- Traffic network within the subject site is permeable for vehicular, cyclist and pedestrian traffic in both directions.
- All roads except Canning Highway are under jurisdiction of the City of Melville. Canning Highway is under jurisdiction of Main Roads WA.
- The main vehicular transit axis are Canning Highway (providing connectivity to Fremantle to the southwest and Canning Bridge Precinct, Kwinana Freeway, Albany Highway and Great Eastern Highway to the northeast) and Riseley Street (providing connectivity between Canning Highway to the north and Booragoon centre and Leach Highway to the south).
- Traffic counts and road classification data were obtained from the City of Melville and Main Roads WA.

Visual representation of the existing traffic counts is provided in Appendix 2.

Table 1 - Existing Road Network in the Vicinity of the Subject Site

LOCALITY NAME	LOCATION	FUNCTIONAL CLASSIFICATION	ROAD HIERARCHY	COUNT DATE	ADT
Alness Street	15m North of Canning Highway	Urban Local Road	Access Road	1/01/2002	221
	30m South of Canning Highway	Urban Local Road	Access Road	1/01/2002	96
	30m South of MacDonald Road	Urban Local Road	Access Road	1/01/2002	135
Ardross Street	100m North of Canning Highway	Significant Urban Local Road	Local Distributor	18.12.2012.	2854
	100m South of Klem Road	Urban Local Road	Access Road	25.11.2012.	1925
	30m South of Kintail Road	Significant Urban Local Road	Local Distributor	2.11.2012.	3219
	30m South of Tweeddale Road	Significant Urban Local Road	Local Distributor	2.11.2012.	934
	40m South of Bombard Street	Urban Local Road	Access Road	25.11.2012.	2542
	50m North of Bombard Street	Urban Local Road	Access Road	1.11.1996.	1435
	50m North of David Street	Urban Local Road	Access Road	1.11.1999.	1297
	60m North of MacDonald Road	Significant Urban Local Road	Local Distributor	2.11.2012.	3116
	60m South of Canning	Urban Local	Access	11.11.2012.	2360

	Highway	Road	Road		
	80m North of Kinross Road	Significant Urban Local Road	Local Distributor	2.11.2012.	2606
Bombard Street	20m West of Alness Street	Urban Local Road	Access Road	19.11.2010.	2123
	50m East of Reynolds Road	Urban Local Road	Access Road	19.11.2010.	1640
	50m West of Ardross Street	Urban Local Road	Access Road	25.5.2008.	1667
Canning Highway	West of Douglas Avenue	Primary Distributor	Urban Highway	02.06.2008	25183
	West of Reynolds Road	Primary Distributor	Urban Highway	02.06.2008	43616
	West of Riseley Street	Primary Distributor	Urban Highway	10.06.2010	35697
	West of Carrington	Primary Distributor	Urban Highway	09.06.2010	20589
Collier Street	30m North of Canning Highway	Urban Local Road	Access Road	1.12.1998.	200
	30m South of Melville Beach Road	Urban Local Road	Access Road	1.12.1998.	126
	40m North of Drew Road	Urban Local Road	Access Road	23.9.2004.	311
	50m West of Matheson Road	Urban Local Road	Access Road	1.9.1995.	166
Conon Road	20m North of Canning Highway	Urban Local Road	Access Road	1.12.1998.	526
	30m East of Melville Beach Road	Urban Local Road	Access Road	1.12.1998.	185
	60m South of Matheson Road	Urban Local Road	Access Road	1.9.1995.	391
Coogee Road	30m East of Blaven Way	Significant Urban Local Road	Local Distributor	29.9.2008.	1274
	30m East of Henley Road	Significant Urban Local Road	Local Distributor	29.9.2008.	1379
	30m West of Henley Road	Significant Urban Local Road	Local Distributor	29.9.2008.	1761
	40m East of Bateman Road	Significant Urban Local Road	Local Distributor	10.2.2003.	1107
	40m East of Reynolds Road	Significant Urban Local Road	Local Distributor	13.2.2001.	2675
	40m East of Ullapool Road	Significant Urban Local Road	Local Distributor	1.9.1995.	1833
	40m South of Willcock Street	Significant Urban Local Road	Local Distributor	27.9.2006.	2037
	40m West of Bateman Road	Significant Urban Local Road	Local Distributor	10.2.2003.	2268
	50m West of Reynolds	Significant Urban	Local	28.9.2008.	1835

	Road	Local Road	Distributor		
	60m South of Drew Road	Significant Urban Local Road	Local Distributor	29.9.2008.	1422
	60m West of Reynolds Road	Significant Urban Local Road	Local Distributor	27.9.2006.	2304
	70m South of Drew Road	Significant Urban Local Road	Local Distributor	27.09.2006.	1718
Fletcher Street	20m South of Macleod Road	Urban Local Road	Access Road	7.1.2002.	116
	50m North of Canning Highway	Urban Local Road	Access Road	18.8.2008.	345
	80m North of Canning Highway	Urban Local Road	Access Road	18.8.2008.	372
Hope Road	100m North of Drew Road	Urban Local Road	Access Road	8.8.2012.	356
	60m South of Boyd Street	Urban Local Road	Access Road	1.12.2000.	165
Kearns Crescent	30m East of Riseley Street	Urban Local Road	Access Road	30.8.2006.	3058
	30m West of Riseley Street	Urban Local Road	Access Road	10.6.1998.	2568
	40m South of Canning Highway	Urban Local Road	Access Road	10.6.1998.	1968
	40m West of Riseley Street	Urban Local Road	Access Road	1.9.2006.	2453
	50m South of Canning Highway	Urban Local Road	Access Road	10.6.1998.	1604
Kintail Road	110m West of Ardross Street	Urban Local Road	Access Road	23.9.2007.	2756
	20m West of Canning Beach Road	Significant Urban Local Road	Distributor B	18.8.1999.	8618
	30m East of Glenelg Street	Significant Urban Local Road	Distributor B	6.7.2012.	5201
	30m East of Sixth Avenue	Significant Urban Local Road	Distributor B	30.06.2008.	5023
	30m West of Glenelg Street	Significant Urban Local Road	Distributor B	17.5.2005.	5062
	40m East of First Avenue	Significant Urban Local Road	Distributor B	6.6.2012.	7902
	50m East of Fraser Road	Urban Local Road	Access Road	4.6.2010.	1378
	50m East of Glenelg Street	Significant Urban Local Road	Distributor B	6.8.1998.	5399
	60m East of Moreau Mews	Significant Urban Local Road	Distributor B	1.8.2012.	8663
	80m East of Ardross	Significant Urban	Distributor	6.6.2012.	5034

	Street	Local Road	B		
Macleod Road	100m South of Riseley Street	Urban Local Road	Access Road	30.11.2010.	1233
	25m South of Fletcher Street	Significant Urban Local Road	Local Distributor	7.12.2012.	2370
	30m North of Riseley Street	Significant Urban Local Road	Local Distributor	7.12.2012.	1368
	40m South of Spey Road	Significant Urban Local Road	Local Distributor	1.8.1995.	2059
	50m South of Kintail Road	Significant Urban Local Road	Local Distributor	7.12.2012.	2020
Macrae Road	40m West of Simpson Street	Urban Local Road	Access Road	22.1.2004.	1724
	50m West of Allness Street	Urban Local Road	Access Road	6.12.2011.	2492
	50m West of Gairloch Street	Urban Local Road	Access Road	28.11.2011.	3013
	50m West of Glenelg Street	Urban Local Road	Access Road	24.2.2011.	3255
	50m West of Jane Road	Urban Local Road	Access Road	28.11.2011.	2317
	50m West of Simpson Street	Urban Local Road	Access Road	23.6.2003.	1880
	70m East of Ullapool Road	Urban Local Road	Access Road	28.10.2011.	2354
	70m West of Glenelg Street	Urban Local Road	Access Road	1.9.2008.	2221
	80m West of Ardross Street	Urban Local Road	Access Road	6.12.2011.	2723
	Reference Street	Urban Local Road	Access Road	29.11.2011.	2606
Matheson Road	100m South of Kintail Road	Urban Local Road	Access Road	28.11.2011.	2102
	100m South of Spey Road	Urban Local Road	Access Road	25.6.2001.	1873
	40m North of Kintail Road	Urban Local Road	Access Road	28.11.2011.	365
	40m South of Spey Road	Urban Local Road	Access Road	17.11.2011.	2267
	50m North of Cunningham Street	Urban Local Road	Access Road	28.11.2011.	2052
	50m South of Collier Street	Urban Local Road	Access Road	10.10.2011.	1641
	60m North of Dee Road	Urban Local Road	Access Road	17.11.2011.	2102
	60m South of Ness Road	Urban Local Road	Access Road	10.10.2011.	1728
	Between Collier Street	Urban Local	Access	3.11.2011.	929

	and Cunningham Street	Road	Road		
McCallum Crescent	120m North of Collier Street	Urban Local Road	Access Road	7.10.2002.	605
	120m West of Willcock Street	Urban Local Road	Access Road	1.12.2000.	639
	130m North of Almondbury Road	Urban Local Road	Access Road	1.11.2000.	1122
	140m South of Alexander Road	Urban Local Road	Access Road	10.12.2009.	1116
	30m North of Alexander Road	Urban Local Road	Access Road	10.12.2009.	1197
	40m East of Collier Street	Urban Local Road	Access Road	21.6.2001.	610
	40m South of Cunningham Street	Urban Local Road	Access Road	10.12.2009.	1825
	40m West of Collier Street	Urban Local Road	Access Road	1.11.1998.	489
	50m North of Drew Road	Urban Local Road	Access Road	1.12.2000.	1668
	70m East of Collier Street	Urban Local Road	Access Road	12.8.2005.	598
Melville Beach Road	120m South of Ness Road	Significant Urban Local Road	Local Distributor	6.10.2010.	1342
	150m North of Nairn Road	Significant Urban Local Road	Local Distributor	6.10.2010.	1047
	150m South of Dee Road	Significant Urban Local Road	Local Distributor	6.10.2010.	1082
	50m South of Collier Street	Significant Urban Local Road	Local Distributor	19.11.2001.	1940
	90m North of Cunningham Street	Significant Urban Local Road	Local Distributor	8.6.2011.	1670
Millington Street	120m East of McCallum Crescent	Urban Local Road	Access Road	1.11.1998.	286
Mitchell Street	120m East of Ardross Street	Urban Local Road	Access Road	11.9.2012.	266
	160m East of Coogee Road	Urban Local Road	Access Road	18.9.2012.	1302
	30m East of Sweetman Street	Urban Local Road	Access Road	11.9.2012.	1203
	50m East of Coogee Road	Urban Local Road	Access Road	1.8.2012.	1323
	50m East of Sweetman Street	Urban Local Road	Access Road	7.10.2006.	854
Nairn Road	50m East of Melville Beach Road	Urban Local Road	Access Road	24.4.2001.	134
	70m East of Melville Beach Road	Urban Local Road	Access Road	6.9.2006.	118
	80m West of Macleod	Urban Local	Access	24.4.2001.	238

	Road	Road	Road		
	80m West of Macleod Road	Urban Local Road	Access Road	6.9.2006.	199
	West of Matheson Road	Urban Local Road	Access Road	1.8.1995.	162
Ness Road	100m West of Matheson Road	Urban Local Road	Access Road	13.5.2002.	466
	70m East of Melville Beach Road	Urban Local Road	Access Road	1.12.1998.	366
	70m West of Macleod Road	Urban Local Road	Access Road	1.12.1998.	1185
	90m West of Macleod Road	Urban Local Road	Access Road	31.8.2008.	1390
	West of Matheson Road	Urban Local Road	Access Road	1.8.1995.	313
Riseley Street	100m North of Coomoora Road	Significant Urban Local Road	Distributor A	12.8.2002.	18240
	100m North of Marmion Street	Significant Urban Local Road	Distributor A	1.7.1999.	18966
	100m South of Willcock Street	Significant Urban Local Road	Distributor A	3.7.2001.	17808
	140m North of Leach Highway	Significant Urban Local Road	Distributor A	12.8.2002.	21515
	50m North of Willcock Street	Significant Urban Local Road	Distributor A	30.8.2006.	16883
	50m South of Griffin Street	Significant Urban Local Road	Distributor A	17.5.2002.	23380
	60m North of Canning Highway	Significant Urban Local Road	Local Distributor	25.8.2008.	4444
Simpson Street	50m South of Canning Highway	Significant Urban Local Road	Local Distributor	29.4.2002.	2374
	60m North of Willcock Street	Significant Urban Local Road	Local Distributor	29.9.2008.	2452
	70m South of Canning Highway	Significant Urban Local Road	Local Distributor	3.7.2006.	2451
	South of Canning Highway	Significant Urban Local Road	Local Distributor	1.1.1999.	229
Tain Street	100m North of Canning Highway	Urban Local Road	Access Road	1.10.1997.	211
	15m North of Bombard Street	Urban Local Road	Access Road	29.4.2002.	226
	30m North of Canning Highway	Urban Local Road	Access Road	29.4.2002.	191
	30m South of Macleod Road	Urban Local Road	Access Road	29.4.2002.	163

	80m North of Kinross Street	Urban Local Road	Access Road	1.10.1997.	204
Willcock Street	30m East of Riseley Street	Urban Local Road	Access Road	4.11.2011.	3798
	40m East of McCallum Crescent	Urban Local Road	Access Road	4.11.2011.	2462
	50m South of Canning Highway	Urban Local Road	Access Road	4.11.2011.	2486
	50m West of McCallum Crescent	Urban Local Road	Access Road	4.11.2011.	2482
	50m West of Riseley Street	Urban Local Road	Access Road	4.11.2011.	3107

*Shaded traffic counts are 10 or more years old.

2.2 Existing Intersection Controls and Legal Speed Limits

- The existing traffic counts generally correspond with the expected traffic volumes for the current road classification. Given the large number of access streets it is expected that majority of the intersections are controlled via give-way and stop sign or as a Right-of-Way.

Table 2 - Existing intersection controls within the subject area

Method of intersection controls	Traffic Lights	Roundabout	Give-way sign; Give-way yield	Stop Sign	Right-of-Way	Left-in Left-out
Intersection	• Canning Hwy /Riseley St	• Ness Rd/ Macrae Rd/ Macleod Rd • Riseley St / Willcock St	• Willcock St/ Coogee Rd/ Simpson St • Riseley St/ Macleod Rd; • Conon Rd/ Macleod Rd; • Willcock St/ Cannning Hwy; • Hope Rd/ Willcock St; • Fletcher St/ Macleod Rd.	• Canning Hwy/ Simpson St; • Simpson St/ Macrae Rd; • Macrae Rd/ Fletcher St; • Conon Rd/ Matheson Rd; • Collier St/ Matheson Rd; • Collier St/ McCallum Cres; • Kearns Cr/ Riseley St.	• Simpson St/ Bombard St • McCallum Cr/ Willcock St; • Hope Rd/ Millington St;	• Tain St/ Canning Hwy; • Conon Rd/ Canning Hwy; • Collier St/ Canning Hwy; • Kearns Cr/ Canning Hwy; • Fletcher St/ Canning Hwy.

Table 3 - Comparison of the legal speed limit and the recorded operative speed in the subject area

LOCALITY NAME	LOCATION	LEGAL SPEED	OPERATIVE SPEED		COUNT DATE
			85TH%	MEAN SPEED	
Alness Street	15m North of Canning Highway	50 kph	38	/	1/01/2002
	30m South of Canning Highway	50 kph	42	/	1/01/2002
	30m South of MacDonald Road	50 kph	40	/	1/01/2002
Ardross Street	100m North of Canning Highway	50 kph	50	44	18.12.2012.
	100m South of Klem Road	50 kph	58	50	25.11.2012.
	30m South of Kintail Road	50 kph	25	21	2.11.2012.
	30m South of Tweeddale Road	50 kph	51	42	2.11.2012.
	40m South of Bombard Street	50 kph	57	48	25.11.2012.
	50m North of Bombard Street	50 kph	58	/	1.11.1996.
	50m North of David Street	50 kph	61	/	1.11.1999.
	60m North of MacDonald Road	50 kph	27	21	2.11.2012.
	60m South of Canning Highway	50 kph	48	42	11.11.2012.
	80m North of Kinross Road	50 kph	59	51	2.11.2012.
Bombard Street	20m West of Allness Street	50 kph	54	47	19.11.2010.
	50m East of Reynolds Road	50 kph	44	38	19.11.2010.
	50m West of Ardross Street	50 kph	47	41	25.5.2008.
Canning Highway	West of Douglas Avenue	60 kph	/	/	02.06.2008
	West of Reynolds Road	60 kph	/	/	02.06.2008
	West of Riseley Street	60 kph	/	/	10.06.2010
	West of Carrington	60 kph	/	/	09.06.2010
Collier Street	30m North of Canning Highway	50 kph	39	/	1.12.1998.
	30m South of Melville Beach Road	50 kph	36	/	1.12.1998.
	40m North of Drew Road	50 kph	39	32	23.9.2004.
	50m West of Matheson Road	50 kph	45	/	1.9.1995.
Conon Road	20m North of Canning Highway	50 kph	28	/	1.12.1998.
	30m East of Melville Beach Road	50 kph	40	/	1.12.1998.
	60m South of Matheson Road	50 kph	25	/	1.9.1995.

Coogee Road	30m East of Blaven Way	50 kph	54	46	29.9.2008.
	30m East of Henley Road	50 kph	38	29	29.9.2008.
	30m West of Henley Road	50 kph	50	42	29.9.2008.
	40m East of Bateman Road	50 kph	52	/	10.2.2003.
	40m East of Reynolds Road	50 kph	48	/	13.2.2001.
	40m East of Ullapool Road	50 kph	39	/	1.9.1995.
	40m South of Willcock Street	50 kph	44	38	27.9.2006.
	40m West of Bateman Road	50 kph	48	/	10.2.2003.
	50m West of Reynolds Road	50 kph	46	38	28.9.2008.
	60m South of Drew Road	50 kph	59	51	29.9.2008.
	60m West of Reynolds Road	50 kph	46	/	27.9.2006.
	70m South of Drew Road	50 kph	59	/	27.09.2006.
Fletcher Street	20m South of Macleod Road	50 kph	44	/	7.1.2002.
	50m North of Canning Highway	50 kph	49	38	18.8.2008.
	80m North of Canning Highway	50 kph	49	39	18.8.2008.
Hope Road	100m North of Drew Road	50 kph	48	38	8.8.2012.
	60m South of Boyd Street	50 kph	55	/	1.12.2000.
Kearns Crescent	30m East of Riseley Street	50 kph	28	21	30.8.2006.
	30m West of Riseley Street	50 kph	24	/	10.6.1998.
	40m South of Canning Highway	50 kph	30	/	10.6.1998.
	40m West of Riseley Street	50 kph	26	20	1.9.2006.
	50m South of Canning Highway	50 kph	26	/	10.6.1998.
Kintail Road	110m West of Ardross Street	50 kph	55	48	23.9.2007.
	20m West of Canning Beach Road	50 kph	36	/	18.8.1999.
	30m East of Glenelg Street	50 kph	60	51	6.7.2012.
	30m East of Sixth Avenue	50 kph	58	50	30.06.2008.
	30m West of Glenelg Street	50 kph	59	/	17.5.2005.
	40m East of First Avenue	50 kph	59	51	6.6.2012.
	50m East of Fraser Road	50 kph	46	40	4.6.2010.
	50m East of Glenelg Street	50 kph	64	/	6.8.1998.
	60m East of Moreau Mews	50 kph	54	45	1.8.2012.
	80m East of Ardross Street	50 kph	54	45	6.6.2012.
Macleod Road	100m South of Riseley Street	50 kph	50	43	30.11.2010.
	25m South of Fletcher Street	50 kph	54	47	7.12.2012.

	30m North of Riseley Street	50 kph	48	38	7.12.2012.
	40m South of Spey Road	50 kph	45	/	1.8.1995.
	50m South of Kintail Road	50 kph	41	36	7.12.2012.
Macrae Road	40m West of Simpson Street	50 kph	58	/	22.1.2004.
	50m West of Allness Street	50 kph	52	46	6.12.2011.
	50m West of Gairloch Street	50 kph	51	44	28.11.2011.
	50m West of Glenelg Street	50 kph	44	38	24.2.2011.
	50m West of Jane Road	50 kph	37	33	28.11.2011.
	50m West of Simson Street	50 kph	56	/	23.6.2003.
	70m East of Ullapool Road	50 kph	59	51	28.10.2011.
	70m West of Glenelg Street	50 kph	44	38	1.9.2008.
	80m West of Ardross Street	50 kph	55	47	6.12.2011.
	Reference Street	50 kph	49	42	29.11.2011.
Matheson Road	100m South of Kintail Road	50 kph	59	50	28.11.2011.
	100m South of Spey Road	50 kph	64	/	25.6.2001.
	40m North of Kintail Road	50 kph	45	35	28.11.2011.
	40m South of Spey Road	50 kph	57	48	17.11.2011.
	50m North of Cunningham Street	50 kph	50	41	28.11.2011.
	50m South of Collier Street	50 kph	61	52	10.10.2011.
	60m North of Dee Road	50 kph	59	50	17.11.2011.
	60m South of Ness Road	50 kph	58	49	10.10.2011.
	Between Collier Street and Cunningham Street	50 kph	61	53	3.11.2011.
McCallum Crescent	120m North of Collier Street	50 kph	56	/	7.10.2002.
	120m West of Willcock Street	50 kph	57	/	1.12.2000.
	130m North of Almondbury Road	50 kph	56	/	1.11.2000.
	140m South of Alexander Road	50 kph	49	42	10.12.2009.
	30m North of Alexander Road	50 kph	53	44	10.12.2009.
	40m East of Collier Street	50 kph	57	/	21.6.2001.
	40m South of Cunningham Street	50 kph	39	33	10.12.2009.
	40m West of Collier Street	50 kph	58	/	1.11.1998.
	50m North of Drew Road	50 kph	51	/	1.12.2000.
	70m East of Collier Street	50 kph	58	/	12.8.2005.
Melville Beach Road	120m South of Ness Road	50 kph	51	41	6.10.2010.
	150m North of Nairn Road	50 kph	40	29	6.10.2010.
	150m South of Dee Road	50 kph	40	30	6.10.2010.
	50m South of Collier Street	50 kph	59	/	19.11.2001.
	90m North of Cunningham Street	50 kph	44	34	8.6.2011.
Millington Street	120m East of McCallum	50 kph	55	/	1.11.1998.

	Crescent				
Mitchell Street	120m East of Ardross Street	50 kph	49	39	11.9.2012.
	160m East of Coogee Road	50 kph	61	52	18.9.2012.
	30m East of Sweetman Street	50 kph	57	48	11.9.2012.
	50m East of Coogee Road	50 kph	55	47	1.8.2012.
	50m East of Sweetman Street	50 kph	61	/	7.10.2006.
Nairn Road	50m East of Melville Beach Road	50 kph	45	/	24.4.2001.
	70m East of Melville Beach Road	50 kph	44	/	6.9.2006.
	80m West of Macleod Road	50 kph	48	/	24.4.2001.
	80m West of Macleod Road	50 kph	47	/	6.9.2006.
	West of Matheson Road	50 kph	48	/	1.8.1995.
Ness Road	100m West of Matheson Road	50 kph	51	/	13.5.2002.
	70m East of Melville Beach Road	50 kph	52	/	1.12.1998.
	70m West of Macleod Road	50 kph	50	/	1.12.1998.
	90m West of Macleod Road	50 kph	48	42	31.8.2008.
	West of Matheson Road	50 kph	49	/	1.8.1995.
Riseley Street	100m North of Coomoora Road	60 kph	65	/	12.8.2002.
	100m North of Marmion Street	60 kph	/	/	1.7.1999.
	100m South of Willcock Street	60 kph	64	/	3.7.2001.
	140m North of Leach Highway	60 kph	62	/	12.8.2002.
	50m North of Willcock Street	60 kph	49	42	30.8.2006.
	50m South of Griffin Street	60 kph	65	/	17.5.2002.
	60m North of Canning Highway	60 kph	47	39	25.8.2008.
Simpson Street	50m South of Canning Highway	50 kph	45	/	29.4.2002.
	60m North of Willcock Street	50 kph	51	41	29.9.2008.
	70m South of Canning Highway	50 kph	47	38	3.7.2006.
	South of Canning Highway	50 kph	45	/	1.1.1999.
Tain Street	100m North of Canning Highway	50 kph	60	/	1.10.1997.
	15m North of Bombard Street	50 kph	31	/	29.4.2002.
	30m North of Canning Highway	50 kph	42	/	29.4.2002.

	30m South of Macleod Road	50 kph	44	/	29.4.2002.
	80m North of Kinross Street	50 kph	55	/	1.10.1997.
Willcock Street	30m East of Riseley Street	50 kph	45	39	4.11.2011.
	40m East of McCallum Crescent	50 kph	51	43	4.11.2011.
	50m South of Canning Highway	50 kph	30	25	4.11.2011.
	50m West of McCallum Crescent	50 kph	51	44	4.11.2011.
	50m West of Riseley Street	50 kph	47	41	4.11.2011.

- Through comparison of the legal speed limit (obtained through MRWA portal) and the recorded operative speeds (obtained through City of Melville) it can be concluded that the drivers utilising area are predominantly adhering to the legal speed limit (in most recorded cases 85% percentile speed does not surpass the legal speed limit for more than 10%).

2.3 Crash Data on the Existing Road Network (January 2008 – December 2012)

Table 4 - Crash Data (Existing Road Network)

Road Name	Road Hierarchy	Speed Limit	Crash Statistics
Canning Hwy /Riseley St	Canning Hwy - Urban Highway Riseley St -Distributor A	60 kph/60 kph	94 incidents between 1 Jan 2008 and 31 December 2012 • 45 PDO Major • 21 PDO Minor • 26 requiring medical attention • 2 requiring hospital care
Ness Rd/ Macrae Rd/ Macleod Rd	Ness Rd - Access Road Macrae Rd - Access Road Macleod Rd -Local Distributor	50 kph/50 kph/50 kph	4 incidents between 1 Jan 2008 and 31 December 2012 • 4 requiring medical attention
Riseley St / Willcock St	Riseley St - Distributor A Willcock St - Access Road	60 kph/50 kph	29 incidents between 1 Jan 2008 and 31 December 2012 • 16 PDO Major • 9 PDO Minor • 4 requiring medical attention
Willcock St/ Coogee Rd/ Simpson St	Willcock St - Access Road Coogee Rd - Local Distributor Simpson St - Local Distributor	50 kph/50 kph/50 kph	No data.
Riseley St/ Macleod Rd	Riseley St - Local Distributor Macleod Rd - Access Road	60 kph/50 kph	3 incidents between 1 Jan 2008 and 31 December 2012 • 3 PDO Major
Conon Rd/	Conon Rd - Access Road	50	No data.

Macleod Rd	Macleod Rd - Access Road	kph/50 kph	
Willcock St/ Canning Hwy	Willcock St - Access Road Canning Hwy - Urban Highway	50 kph/60 kph	7 incidents between 1 Jan 2008 and 31 December 2012 • 3 PDO Major • 1 PDO Minor • 3 requiring medical attention
Hope Rd/ Willcock St	Hope Rd - Access Road Willcock St - Access Road	50 kph/50 kph	1 incident between 1 Jan 2008 and 31 December 2012 • 1 PDO Minor
Fletcher St/ Macleod Rd	Fletcher St - Access Road Macleod Rd -Local Distributor	50 kph/50 kph	No data.
Canning Hwy/ Simpson St	Canning Hwy - Urban Highway Simpson St - Local Distributor	60 kph/50 kph	15 incidents between 1 Jan 2008 and 31 December 2012 • 9 PDO Major • 4 PDO Minor • 2 requiring hospital care
Simpson St/ Macrae Rd	Simpson St - Local Distributor Macrae Rd - Access Road	50 kph/50 kph	2 incidents between 1 Jan 2008 and 31 December 2012 • 2 PDO Major
Macrae Rd/ Fletcher St	Macrae Rd - Access Road Fletcher St - Access Road	50 kph/50 kph	1 incident between 1 Jan 2008 and 31 December 2012 • 1 PDO Major
Conon Rd/ Matheson Rd	Conon Rd - Access Road Matheson Rd - Access Road	50 kph/50 kph	2 incidents between 1 Jan 2008 and 31 December 2012 • 1 PDO Major • 1 PDO Minor
Collier St/ Matheson Rd	Collier St - Access Road Matheson Rd - Access Road	50 kph/50 kph	No data.
Collier St/ McCallum Cres	Collier St - Access Road McCallum Cres - Access Road	50 kph/50 kph	No data.
Kearns Cr/ Riseley St	Kearns Cr - Access Road Riseley St – Distributor A	50 kph/60 kph	23 incidents between 1 Jan 2008 and 31 December 2012 • 13 PDO Major • 8 PDO Minor • 2 requiring medical attention
Simpson St/ Bombard St	Simpson St - Local Distributor Bombard St - Access Road	50 kph/50 kph	1 incident between 1 Jan 2008 and 31 December 2012 • 1 requiring medical attention
McCallum Cr/ Willcock St	McCallum Cr - Access Road Willcock St - Access Road	50 kph/50 kph	2 incidents between 1 Jan 2008 and 31 December 2012 • 1 PDO Major • 1 requiring medical attention

Hope Rd/ Millington St	Hope Rd - Access Road Millington St - Access Road	50 kph/50 kph	No data.
Tain St/ Canning Hwy	Tain St - Access Road Canning Hwy - Urban Highway	50 kph/60 kph	1 incident between 1 Jan 2008 and 31 December 2012 • 1 PDO Minor
Conon Rd/ Canning Hwy	Conon Rd - Access Road Canning Hwy - Urban Highway	50 kph/60 kph	1 incident between 1 Jan 2008 and 31 December 2012 • 1 PDO Major
Collier St/ Canning Hwy	Collier St - Access Road Canning Hwy - Urban Highway	50 kph/60 kph	3 incidents between 1 Jan 2008 and 31 December 2012 • 2 PDO Major • 1 PDO Minor
Kearns Cr/ Canning Hwy	Kearns Cr - Access Road Canning Hwy - Urban Highway	50 kph/60 kph	5 incidents between 1 Jan 2008 and 31 December 2012 • 1 PDO Major • 2 PDO Minor • 2 requiring medical attention
Fletcher St/ Canning Hwy	Fletcher St - Access Road Canning Hwy - Urban Highway	50 kph/60 kph	1 incident between 1 Jan 2008 and 31 December 2012 • 1 PDO Major

2.4 Provision for Delivery and Service Vehicles

- Given that it is a predominantly commercial precinct, provisions for delivery vehicles are an important component of this precinct.
- Delivery/loading zones have been denoted for a small portion of the existing businesses.
- Provision for future needs of growing commercial centre will depend on the proposed physical structure (orientation of the buildings).
- Parking areas denoted for parking of delivery vehicles can be utilised by other parking users outside of delivery times. It might be required to define the standard delivery times for the existing and any proposed commercial developments.

2.5 Pedestrian and Cyclist Access

- Riseley Street has bicycle lanes in both directions.
- In the vicinity of the subject site there are official PBN routes as well as roads marked as “good riding conditions”.
- The majority of the roads within the subject site have not been classified with regards to the bicycle accessibility.
- Pedestrian paths exist on minimum one side of the road within the precinct south from Kearns Crescent and north from Canning Highway
- Pedestrian access and safety require improvement throughout the subject site, in particular along Canning Highway, Kearns Crescent, Riseley Street (section between Canning Highway and Willcock Street) and the existing access laneways.

2.6 Public Transport Access

- Access to public transport is available within the subject area as well as in the immediate surroundings.
- Following bus lines have stops on Canning Highway within the subject area:-
  - 106 (Esplanade Busport to Fremantle Station)
  - 111 (Hay St/Plain St to Fremantle Station)
  - 148 (Clydesdale St / Mcdougall St to Fremantle Station)
  - 158 (Hay St/Plain St to Fremantle Station)
  - 881 (Wellington Bus Station to Asquith St/ Beckett Cl)
  - 940 (Wellington Bus Station to Hamilton Hill Hall)
- Following bus lines have stops on Riseley Street within the subject area:-
  - 148 (Clydesdale St / Mcdougall St to Fremantle Station)
  - 158 (Hay St/Plain St to Fremantle Station)
  - 881 (Wellington Bus Station to Asquith St/ Beckett Cl)
  - 940 (Wellington Bus Station to Hamilton Hill Hall)

2.7 Future Transport Network Planning in the Surrounding Area

- The proposed development of Canning Bridge precinct is likely to further encourage usage of public transport and strengthen the links between the two precincts (Canning Bridge and Riseley Street);
- MRWA has provided us with preliminary design drawings for the upgrade of Canning Highway. These plans assume that the southern intersection of Kearns Crescent and Canning Highway will be reduced to left out only.
- The PTA has plans for upgrading the entire Canning Highway corridor which would include dedicated bus lanes on Canning Highway. No timeframe has been determined for this upgrade.

3. Parking

3.1 Comparison of the Parking Policies

3.1.1 City of Melville – Current Parking Policy for Non-Residential Uses – CP-079

The City of Melville has current parking requirements for non-residential uses defined through a Council Policy CP-079. The parking requirements are defined through an average number of parking bays required per Gross Leasable Area (GLA) of the premises (depending on the use of the premises), number of staff and/or clients.

This policy allows parking requirement reduction of 10% where bicycle parking is provided. The reduction in car parking can be allowed but only up to 10 parking bays for a District Centre such as Riseley Street Activity Centre. The current parking policy does not acknowledge or encourage the use of other alternative transportation modes.

The policy allows for reciprocal parking up to 100% of the parking requirement where more than one non-residential use is located on one lot or joint parking arrangements within easement or similar are proposed. There are no formal definitions of the groups of compatible uses eligible for reciprocal parking therefore the eligibility must be supported by a comprehensive independent assessment and accordingly any proposals.

Cash-in-lieu of parking is accepted for the developments which cannot meet the car parking requirements within the development site. The policy does not stipulate the maximum number of parking bays that can be forgone by the payment of cash-in-lieu.

3.1.2 Comparison of Parking Requirements in Other Metro Local Governments

Luxmoore Parking and Safety have comprised a table showing a comparison of the parking requirements across the various local governments. This table can be found in Appendix 2 of the draft report *Activity Centre Parking Management and* Strategy. This table shows that the current parking requirements of the City of Melville are within the standard range of requirements within the metro area.

Some of the similar parking requirement policies for non-residential uses in other inner-city councils (such as City of Vincent, City of Stirling, City of Bayswater etc) allow parking requirement reductions for a variety of situations where convenient alternative transportation options are provided.

The table below shows comparison between different options for parking requirement reduction offered by various Local Governments.

Table 5 - Comparison of Parking Requirement Reduction for Various Local Governments in Perth Metro Area

Criteria / LG	City of Vincent (Policy 3.7.1)	City of South Perth (Policy P315)	City of Stirling (Policy Manual 6.7)	Town of Cambridge (Policy 51)	Town of Bayswater (Policy 1-9)
The proposed development is within 400 metres[1] of a rail station	0.80 (20%)	0.80 (20%)	0.80 (20%)		0.9 (10%) – Community Uses 0.25 (25%) – Food and Entertainment Uses 0.9 (10%) – Health Uses 0.8 (20%) – Office Uses 0.75 (25%) – Retail Uses (GFA =<300m^2) 0.9 (10%) – Retail Uses (GFA >300m^2)[2]
The proposed development is within 800 metres[1] of a rail station.	0.85 (15%)	0.85 (15%)	0.90 (10%)		
The proposed development is within 100 metres[1] of a high frequency bus stop/station.					0.9 (10%) – Community Uses 0.25 (25%) – Food and Entertainment Uses 0.9 (10%) – Health Uses 0.8 (20%) – Office Uses 0.75 (25%) – Retail Uses (GFA =<300m^2) 0.9 (10%) – Retail Uses (GFA >300m^2)[3]
The proposed development is within 200 metres[1] of a high frequency bus stop/station.			0.85 (15%)		
The proposed development is within 400 metres[1] of a bus stop/station.	0.85 (15%)	0.85 (15%)	0.90 (10%)		
The proposed development is within 400 metres[1] of a ferry terminal.		0.90 (15%)			
The proposed development contains a mix of uses, where at least 45 percent of the gross floor area is residential.	0.80 (20%)	0.80 (20%)			
The proposed development is within 50 metres[1] of one or more existing public car	0.80 (20%)	0.80 (20%)	0.80 (20%)		

[1] The distance refers to the most direct ped-shed (pedestrian route via gazetted footpath).

[2] Town of Bayswater refers to any other train station but Maylands and Bayswater Town Centre Stations.

[3]Town of Bayswater refers to the bus route operating along Beaufort Street/Broun Avenue between Nelson Street, Bedford and Russell Street, Morley.

parking place(s) with in excess of 50 car parking spaces					
The proposed development is within 400 metres[1] of one or more existing public car parking place(s) with in excess of a total of 75 car parking spaces	0.85 (15%)	0.85 (15%)	0.90 (10%)		
The proposed development is within 400 metres* of one or more existing public car parking place(s) with in excess of a total of 50 car parking spaces	0.90 (10%)	0.90 (10%)	0.90 (10%)		
The proposed development is within 400 metres[1] of one or more existing public car parking place(s) with in excess of a total of 25 car parking spaces.	0.95 (5%)	0.95 (5%)	0.90 (10%)		
The proposed development provides 'end-of-trip' facilities for bicycle users, in addition to the facilities specified in the Bicycle Parking Requirements Table	0.90 (10%)	0.90 (10%)	0.90 (10%)		
The proposed development is to provided 5 bicycle bays greater than required (as per specifications in Bicycle Parking);			0.95 (5%)		
Provision of parking spaces for motorcycles, scooters and gophers				0.95 (5%)	
Secure on-site and/or adjacent street bicycle parking (complying with the standards identified in Bikewest guidelines)[4].	0.95 (5%)	0.95 (5%)			
The proposed development is within a	0.90 (10%)		0.90 (10%)[5]	Up to 0.80 (20%)[6]	0.75 (25%) – Community Uses
District Centre zone.					0.5 (50%) – Food and Entertainment Uses 0.75 (25%) – Health Uses 0.6 (40%) – Office Uses 0.5 (50%) – Retail Uses (GFA =<300m^2) 0.75 (25%) – Retail Uses (GFA >300m^2)[7]
Where the building/place is listed on the City's Heritage List, Municipal Inventory or the State Register of Heritage Places (subject to the building being appropriately conserved).			0.90 (10%)		
Maximum allowed reduction factor	0.35 (65%)	0.39 (61%)	0.35 (65%)	0.20 (80%)	

[4] Referring to uses which are not required to provide bicycle parking according to parking policy
[5] City of Stirling allow for the same reduction if the proposed development is within a Local Centre, District Centre, Regional Centre, Mixed Use or Business Zone
[6]Town of Cambridge refers to centres who offer availability and attractiveness of alternative transport modes (convenient cycling, walking and usage of public transport)

3.2 Existing Parking Situation within the Subject Area (Riseley Street Precinct)

Parking in the Riseley Street precinct is predominantly at grade with some of the newly redeveloped office spaces providing underground parking. All council owned on-street and off-street parking in the precinct is free of charge however some sections of parking are time-limited.

The analysis of the existing parking provided on site has shown that the precinct has significant parking shortfalls when assessed in accordance with the existing CoM parking policies (as shown in Appendix 2).

On-site assessment indicates that the current parking in Kearns Crescent functions satisfactorily on the principles of shared parking when basic parking management mechanisms are implemented.

3.2.1 Parking within the Retail Precinct ("doughnuts"), South from Canning Highway, North from Kearns Crescent

The western portion of the precinct features 88 car parking bays at-grade. The parking has been designed as 90 and 60 degree parking and the numbers are inclusive of ACROD parking and delivery bays. Although the parking is located on private property it is publicly accessible and it is not time limited. The parking is intended as a shared parking for the local non-residential uses which are directly facing the parking area. The lack of the definition of ownership and the parking management mechanisms on the central section of the parking area attracts commuters and other long-term parking users.

[7] Town of Bayswater refers specifically to the Maylands Activity Centre and Bayswater Town Centres.

Figure 1 – Photo of the Parking Area in the Western Retail Precinct (photo taken on 15.02.2013, 14.15)

When assessed through the provisions of the City of Melville's Parking Policy CP-079, the cumulative parking requirement for the non-residential uses surrounding the parking area is 336 standard car parking bays. Therefore the current number of parking bays represents 26% of the estimated requirement.

The eastern portion of the precinct features 119 parking bays predominantly designed as 90 degree bays. These numbers are inclusive of ACROD and delivery bays. Although the majority of the parking is located on the private property, the parking is publically accessible. The parking is not time limited except 32 parking bays in the western portion of the precinct.

The parking is designed on the similar premises as the parking in the western precinct – with the intention of servicing non-residential uses that are directly surrounding the parking area. When assessed against the same requirements, cumulative parking requirement for the surrounding non-residential uses is 293 standard car parking bays which implies that currently there is 40% of the required bays.

Figure 2 - Photo of the Parking Area in the Eastern Retail Precinct (photo taken on 15.02.2013, 14.35)

SUMMARY

Although the standard assessment of parking requirements and provisions leads to the conclusion that there is a significant shortfall of the parking in these retail precincts, on-site observation revealed that the current number of parking bays would be sufficient to cater for the current configuration and volume of retail with successful implementation of the basic parking management mechanisms such as timed parking.

The lack of the "way-finding" strategy (lack of clear definition of entry and exit points and parking management) reduces legibility and navigability of the car park (in particular for occasional and the first-time users). It is presumed that the most of the surfaces designed for internal traffic are intended as a shared space (between the pedestrians and the drivers) however there is a significant lack of pedestrian amenity.

Therefore the functioning of the parking in these retail precincts can be easily improved through resurfacing some of the areas with deteriorated asphalt, refreshing linemarking, implementing basic parking management mechanisms and improving way-finding strategies which would contribute to enhancement of pedestrian amenity.

3.2.2 Parking on Kearns Crescent

On-street parking facilities on the western portion of the Kearns Crescent (west from the Riseley Street) are designed as 90 degree parking bays. There are 66 on-street parking bays and they are predominantly marked as 2 hour parking. The majority of the non-residential uses on southern side of Kearns Crescent provide additional parking on the premises (at grade to the rear of the lot or as underground parking) therefore when parking requirements for non-residential uses are assessed through standards presented in the CoM parking policy there is a cumulative requirement of 89 parking bays (in addition to the parking bays provided within the lot boundaries for the particular uses).

Figure 3 - Parking on Kearns Crescent (West from Riseley Street)

In the eastern portion of Kearns Crescent (east from Riseley Street) there are currently 75 on-street parking bays. The parking bays are designed as 90 degree parking with a time limit of 2 hrs. The majority of the non-residential uses on the southern side of Kearns Crescent provide additional parking on the premises (at grade to the rear of the lot or as underground parking) leaving 465 parking bays as a surplus cumulative requirement.

Figure 4 - Parking in Kearns Crescent (east from Riseley Street)

SUMMARY

Although the traditional assessment of parking requirements denotes that there is a significant parking shortfall on Kearns Crescent on-site observations revealed that on-street parking is utilised to an approximate ratio of 75% in peak times. This implies that the existing capacities are capable of catering for the existing parking demand. The parking is limited to 2 hours with limited pockets of 1/4h parking (in the proximity of the intersection with Canning Highway, in front of 9 Kearns Crescent, etc.).

It is noted that recent developments have provided garaged parking which has sufficient capacity (in the most cases even surplus) to cater for the parking requirements calculated in accordance to the existing City of Melville policy CP-079. This should be further supported as the precinct re-develops.

Current configuration of Kearns Crescent (6 metre wide dual carriage-way with 90 degree parking on each side) does not leave room for a pedestrian path on the southern side of Kearns Crescent which significantly reduces pedestrian amenity in the area. In Appendix 2 of this report we have provided the existing cross-section of Kearns Crescent and the potential re-configurations of the profile, particularly referring to the re-configuration of the on-street parking.

Given the width of the carriage-way and the horizontal geometry of the Kearns Crescent we believe that 30 degree parking and parallel parking would be a safer option for drivers, than 90 degree parking (currently driver leaving on-street bay on Kearns Crescent has to reverse into the opposite lane with limited sight distance due to the horizontal geometry of the street). Although the replacement of 90 degree parking will reduce the number of on-street parking bays to 30-50% of the existing capacity this can effectively cater for the parking requirements in the area with an effective parking management.

4. Action Plan

Table 6 - Action Plan

No.	Action	Benefit	Cost estimate (provisional sum)	Status
ROADWORKS				
SHORT TERM – Proposed modifications do not require land acquisition, demolition of the existing objects or significant earthworks				
001	Formalise vehicular access between Kearns Crescent and Willcock Street	• Provision of shared access laneway will improve permeability of the precinct and possibly open new business opportunities		
002	Formalise the existing laneway between Kearns Crescent and Willcock Street	• Provision of shared access laneway will improve permeability of the precinct and possibly open new business opportunities		
003	Formalise vehicular access between Kearns Crescent and Simpson Street	• Provision of shared access laneway will improve permeability of the precinct and possibly open new business opportunities		
MEDIUM TERM - Proposed modifications might require land acquisition and/or significant earthworks, do not require demolition of the existing objects				
004	Extend McCallum Crescent to intersect with the laneway between Kearns Crescent and Willcock Street	Consider alternative pavement treatment at Intersection of Riseley Street and Kearns Crescent		
005	Reconstruction of the intersection of Willcock Street, Coogee Road and Simpson Street	Enhance the traffic safety in the area, acknowledging the terrain. Improve pedestrian crossing safety		
006	Redesign and reconstruct Kearns Crescent (realigning the carriage way, providing parking and pedestrian	Enhance the traffic safety in the area; Enhance pedestrian and cyclist accessibility.		

	paths on both sides of the road, potentially introducing slow moving surface)			
	Formalise internal movement network in the blocks bound by Kearns Crescent and Riseley Street. (depending on the proposed development)	Enhance the traffic safety in the area; Enhance pedestrian and cyclist accessibility. Increase options for business exposure.		
LONG TERM - Proposed modifications will require land acquisition and/or significant earthworks and demolition of the existing objects				
INTERSECTION CONTROLS				
SHORT TERM – Improvements are highly recommended regardless of additional changes to road network.				
009	Consider alternative pavement treatment on Intersection of Riseley Street and Kearns Crescent.	Reducing the operative speed on both roads; Enhancing pedestrian safety on street crossing; Enhancing the visual amenity of the area		
MEDIUM TO LONG TERM – Improvements are highly recommended if other modifications to the road network are completed; otherwise can be considered as a suggestion for further improvement of overall traffic safety.				
010	Reducing movement at the intersection of Kearns Crescent and Canning Hwy to left-out only (proposed by MRWA)			
011	Changing the intersection of McCallum Crescent and Willcock Street into Giveway yield if McCallum Crescent is extended to intersect laneway.	Enhanced traffic safety		

PEDESTRIAN, CYCLISTS AND SHARED PATHS				
SHORT TERM – Projects which can be completed regardless from other planned projects in relatively short period of time.				
012	Formalise shared access between Kearns Crescent and Willcock Street			
013	Formalise the existing laneway between Kearns Crescent and Willcock Street as a shared access			
014	Formalise shared access between Kearns Crescent and Simpson Street			
MEDIUM TO LONG TERM – Projects which can be completed regardless from other projects planned in a medium term or projects which become increasingly important upon completion of other projects				
	Define internal pedestrian movement within the commercial precinct bound by Kearns Crescent			
LONG TERM – Projects which should be completed in conjunction with other projects.				
016	Enhance pedestrian amenity along Canning Highway			
017	Enhance pedestrian access and amenity along Kearns Crescent			
PEDESTRIAN CROSSINGS				
SHORT TERM – Project which should be completed regardless of further interventions on the road network.				
MEDIUM TO LONG TERM – Projects which should be completed in conjunction with other project.				
PARKING				
SHORT TERM – Project which should be completed regardless of further interventions on the road network.				

000	Revise the existing CoM parking requirements (Policy CP-079	Revise the requirements for the parking in order to encourage higher proportion of use of public transport and alternative transport modes.		
000	Implement efficient scheme for reduction of parking requirements reciprocal to availability of the alternative transportation modes	Encourage higher proportion of use of alternative transportation modes.		
000	Implement parking management plan within the precinct with consideration to shared parking	Determine time limits for the parking and/or charge in order to discourage the long-term parking. Increase parking turnover and enhance accessibility to the precinct.		
018	Replace 90 degree parking on Kearns Crescent with parallel and/or 30 degree parking.	Increase overall traffic safety (drivers not reversing into the opposite lane); Increase pedestrian amenity; In conjunction with implementation of parking management plan		
019	Provide on-street parking options on Simpson Street and Willcock Street	Facilitate the expansion of commercial activities on the properties facing Willcock Street and Simpson Street.		
MEDIUM TO LONG TERM – Projects which should be completed in conjunction with other project.				
020	Provide multistorey carpark within the Kearns Crescent precinct	Increase parking capacity for increasing commercial activity. The additional storeys can be provided as the requirements in the area significantly increase. The upper floors of the building can be utilised for attractive community activities (eg. community facilities, meeting spaces,		

		open-air cinema, Sunday markets etc)		
021	Provide carpark link on extension of McCallum Crescent to laneway between Kearns Crescent and Willcock Street	Catering for parking needs of the particular development (employees' and visitors' parking)		
022	Provide multistorey carpark on the corner of Simpson Street and Canning Highway.	Increase parking capacity to cater for the increasing commercial activity		
023	Provide on-street parking options on Riseley Street	Increase parking capacity to cater for the increasing commercial activity		

Parks and Recreation	Public Facilities	River
Location Boundary	Local Government Authority Boundary	Major Road
Distance from Location	ARDROSS Local Government Name	Minor Road
Railway	Riseley St Street Name	

LEGEND

D	03-04-2014	SUBJECT AREA BOUNDARY AMENDED
C	17-10-2013	PRECINCT BOUNDARIES REMOVED
B	15-10-2013	SUBJECT AREA BOUNDARY AMENDED
A	20-02-2013	ISSUED FOR REVIEW
No	DATE	AMENDMENT

PROJECT: Riseley Street Activity Centre SP Proposal

TITLE: Locality Plan - 2km Radius

DRAWING NUMBER: KC00115.000_S01

DRAWN BY: K.P.

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Parks and Recreation
Public Facilities
River
NE14 PBN - Continuous Signed Routes
Bicycle Lanes or Sealed Shoulder Either Side
Bicycle Locker
Location Boundary
Local Government Authority Boundary
Major Road
PSP Principal Shared Path
Shared Path (Shared by Pedestrians & Cyclists)
Bicycle Shop
Minor Road
Good Road Riding Environment
Steep Incline
Distance from Location
ARDROSS Local Government Name
Riseley St Street Name
Medium Road Riding Environment
Road Traffic Light
Railway
Poor Road Riding Environment

LEGEND

No	DATE	AMENDMENT
D	03-04-2014	SUBJECT AREA BOUNDARY AMENDED
C	17-10-2013	PRECINCT BOUNDARIES REMOVED
B	15-10-2013	SUBJECT AREA BOUNDARY AMENDED
A	20-02-2013	ISSUED FOR REVIEW

PROJECT: Riseley Street Activity Centre SP Proposal

TITLE: PBN Bicycle Plan - 2km Radius

DRAWING NUMBER: KC00115.000_S02

DRAWN BY: K.P.

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Parks and Recreation
Public Facilities
River
Location Boundary
Local Government Authority Boundary
Major Road
Minor Road
Distance from Location
ARDROSS Local Government Name
Riseley St Street Name
Railway
Bus Stn / Train Stn with Bus Connection
Bus Terminus

42 Bus Route Number

Bus Routes / Stops
Maximum Frequency of Bus Service / Peak Interval
min*

30	10*	Wellington St Bus Station to Curtin University Bus Station	101	5*	Canning Bridge Station to Curtin University Bus Station	148	55*	Clydesdale St / Mcdougall St to Fremantle Station	500	26*	Bull Creek Station to Booragoon Bus Station
32	15*	Esplanade Busport to Melville Pde / Thelma St	104	15*	Esplanade Busport to Canning Hwy / Henley St	150	27*	Terrace Rd / Bennett St to Booragoon Bus Station	501	10*	Fremantle Station to Bull Creek Station
100	4*	Canning Bridge Station to Curtin University Bus Station	105	13*	Esplanade Busport to Kintail Rd / Moreau Mews	158	16*	Hay St / Plain St to Fremantle Station	510	11*	Booragoon Bus Station to Murdoch Station
			106	15*	Esplanade Busport to Fremantle Station	160	13*	Terrace Rd / Bennett St to Fremantle Station	881	10*	Wellington St Bus Station to Asquith St / Beckett Cl
			111	7*	Hay St / Plain St to Fremantle Station	205	90*	Cannington Station to Booragoon Bus Station	940	15*	Wellington St Bus Station to Hamilton Hill Hall
			140	15*	Booragoon St to Fremantle St						

LEGEND

No	DATE	AMENDMENT
D	03-04-2014	SUBJECT AREA BOUNDARY AMENDED
C	17-10-2013	PRECINCT BOUNDARIES REMOVED
B	15-10-2013	SUBJECT AREA BOUNDARY AMENDED
A	20-02-2013	ISSUED FOR REVIEW

PROJECT: Riseley Street Activity Centre SP Proposal

TITLE: Public Transport Plan - 2km Radius

DRAWING NUMBER: KC00115.000_S03

DRAWN BY: K.P.

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Parks and Recreation
Public Facilities
River
Pedestrian Paths
Shared Path (Shared by Pedestrians & Cyclists)
Location Boundary
Local Government Authority Boundary
Major Road
400m Ped Sheds
Distance from Location
ARDROSS Local Government Name
Minor Road
Walk Trail
Railway
Riseley St Street Name
Pedestrian Access Way

LEGEND

No	DATE	AMENDMENT
D	03-04-2014	SUBJECT AREA BOUNDARY AMENDED
C	17-10-2013	PRECINCT BOUNDARIES REMOVED
B	15-10-2013	SUBJECT AREA BOUNDARY AMENDED
A	20-02-2013	ISSUED FOR REVIEW

PROJECT: Riseley Street Activity Centre SP Proposal

TITLE: Pedestrian Paths Plan - 2km Radius

DRAWING NUMBER: KC00115.000_S04

DRAWN BY: K.P.

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Parks and Recreation
Public Facilities
River
7,418 Number of Vehicles per Day
Location Boundary
Local Government Authority Boundary
Major Road
Distance from Location
ARDROSS Local Government Name
Minor Road
Railway
Riseley St Street Name

LEGEND

No	DATE	AMENDMENT
D	03-04-2014	SUBJECT AREA BOUNDARY AMENDED
C	17-10-2013	PRECINCT BOUNDARIES REMOVED
B	15-10-2013	SUBJECT AREA BOUNDARY AMENDED
A	20-02-2013	ISSUED FOR REVIEW

PROJECT: Riseley Street Activity Centre SP Proposal

TITLE: Existing Traffic Counts - 2km Radius

DRAWING NUMBER: KC00115.000_S05

DRAWN BY: K.P.

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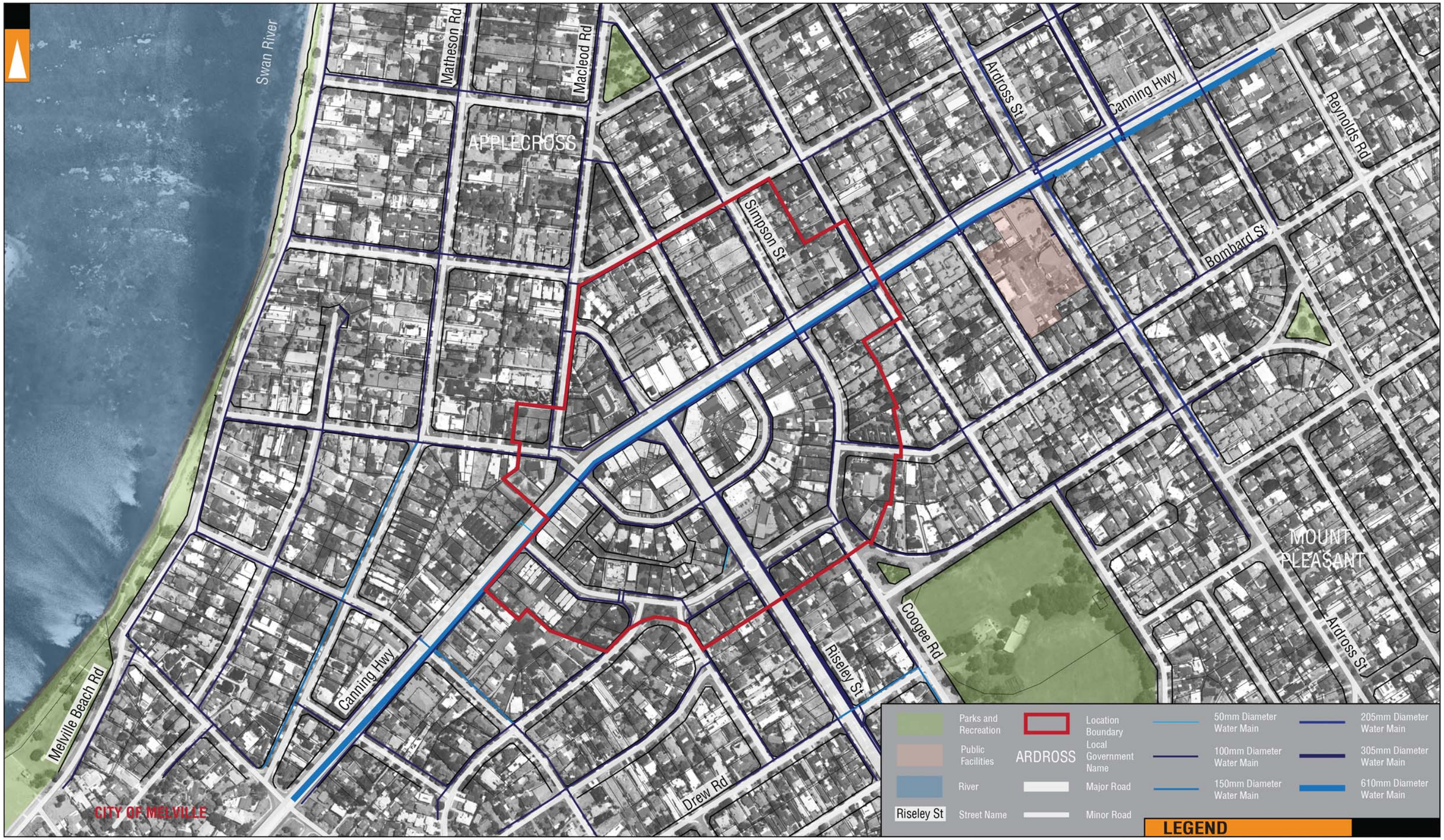
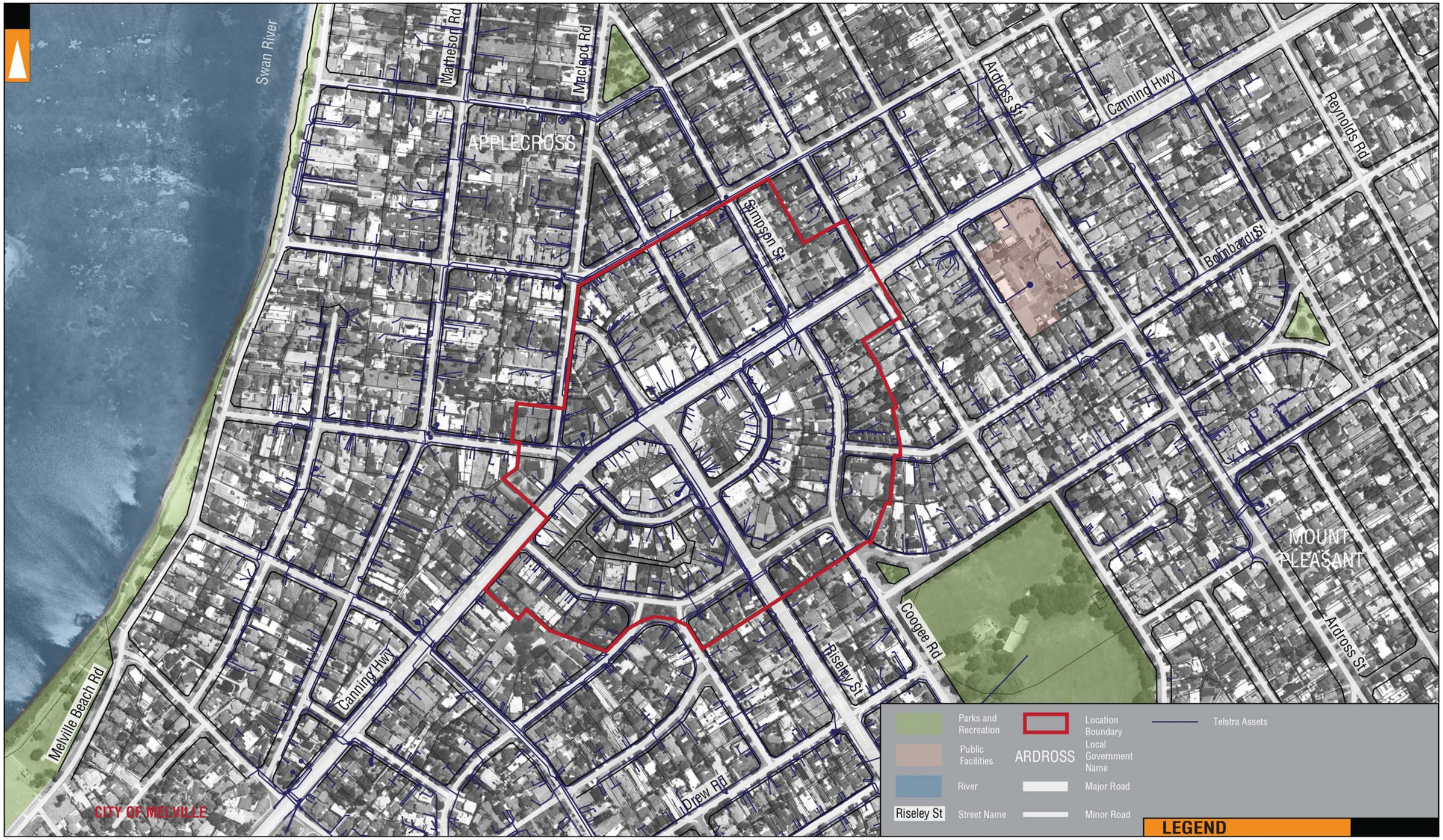

Swan River
Matheson Rd
Macleod Rd
APPLECROSS
Simpson St
Ardross St
Canning Hwy
Bombard St
Reynolds Rd
MOUNT PLEASANT
Coogee Rd
Ardross St
Riseley St
Drew Rd
Canning Hwy
Melville Beach Rd
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
50mm Diameter Water Main
100mm Diameter Water Main
150mm Diameter Water Main
205mm Diameter Water Main
305mm Diameter Water Main
610mm Diameter Water Main
LEGEND


Swan River
Matheson Rd
Macleod Rd
APPLECROSS
Simpson St
Ardross St
Canning Hwy
Reynolds Rd
Bombard St
MOUNT PLEASANT
Ardross St
Coogee Rd
Riseley St
Drew Rd
Canning Hwy
Melville Beach Rd
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
150mm Diameter Sewer Main
230mm Diameter Sewer Main
305mm Diameter Sewer Main
380mm Diameter Sewer Main
460mm Diameter Sewer Main
Not in Use
LEGEND


Swan River
Matheson Rd
Macleod Rd
APPLECROSS
Simpson St
Ardross St
Canning Hwy
Reynolds Rd
Bombard St
Melville Beach Rd
Canning Hwy
Drew Rd
Riseley St
Coogee Rd
MOUNT PLEASANT
Ardross St
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
High Voltage Underground Cable
Low Voltage Underground Cable
Perth Fibre Network Cable
Pillar
Metal Pole
Overhead Assets
LEGEND


Swan River
Matheson Rd
Macleod Rd
APPLECROSS
Simpson St
Ardross St
Canning Hwy
Bolton St
Reynolds Rd
MOUNT PLEASANT
Ardross St
Coogee Rd
Riseley St
Drew Rd
Canning Hwy
Melville Beach Rd
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
Telstra Assets
LEGEND

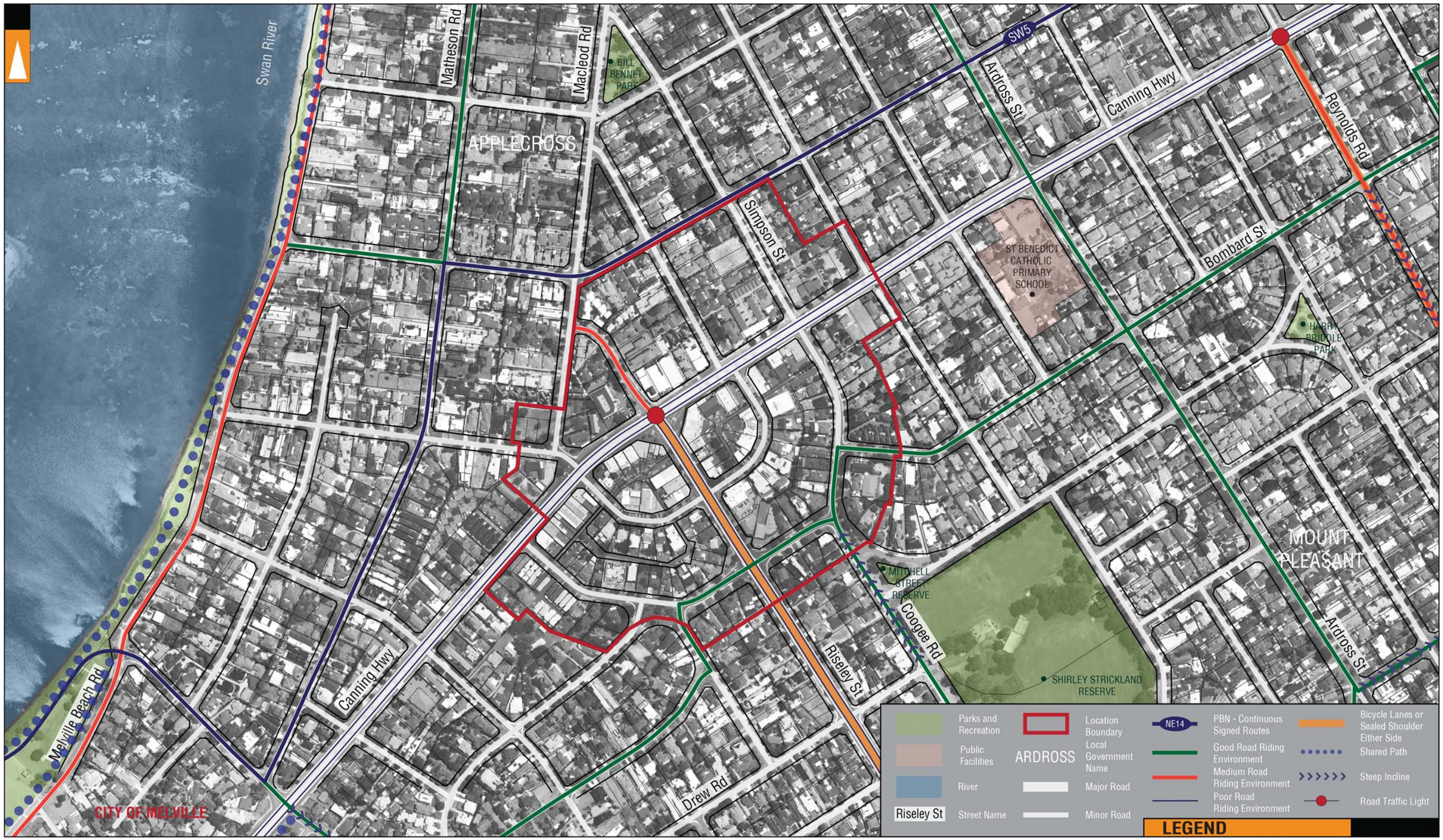

Swan River
Matheson Rd
Macleod Rd
BILL BENNET PARK
APPLECROSS
Ardross St
Canning Hwy
Reynolds Rd
Simpson St
ST BENEDICT CATHOLIC PRIMARY SCHOOL
Bombard St
HARRY BRIDGE PARK
MOUNT PLEASANT
MITCHELL STREET RESERVE
Coogee Rd
SHIRLEY STRICKLAND RESERVE
Riseley St
Melville Beach Rd
Canning Hwy
Drew Rd
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
Optus fibre in Other Utility conduit
Optus Underground Cable
Optus manhole / pit
Other Utility manhole / pit
LEGEND

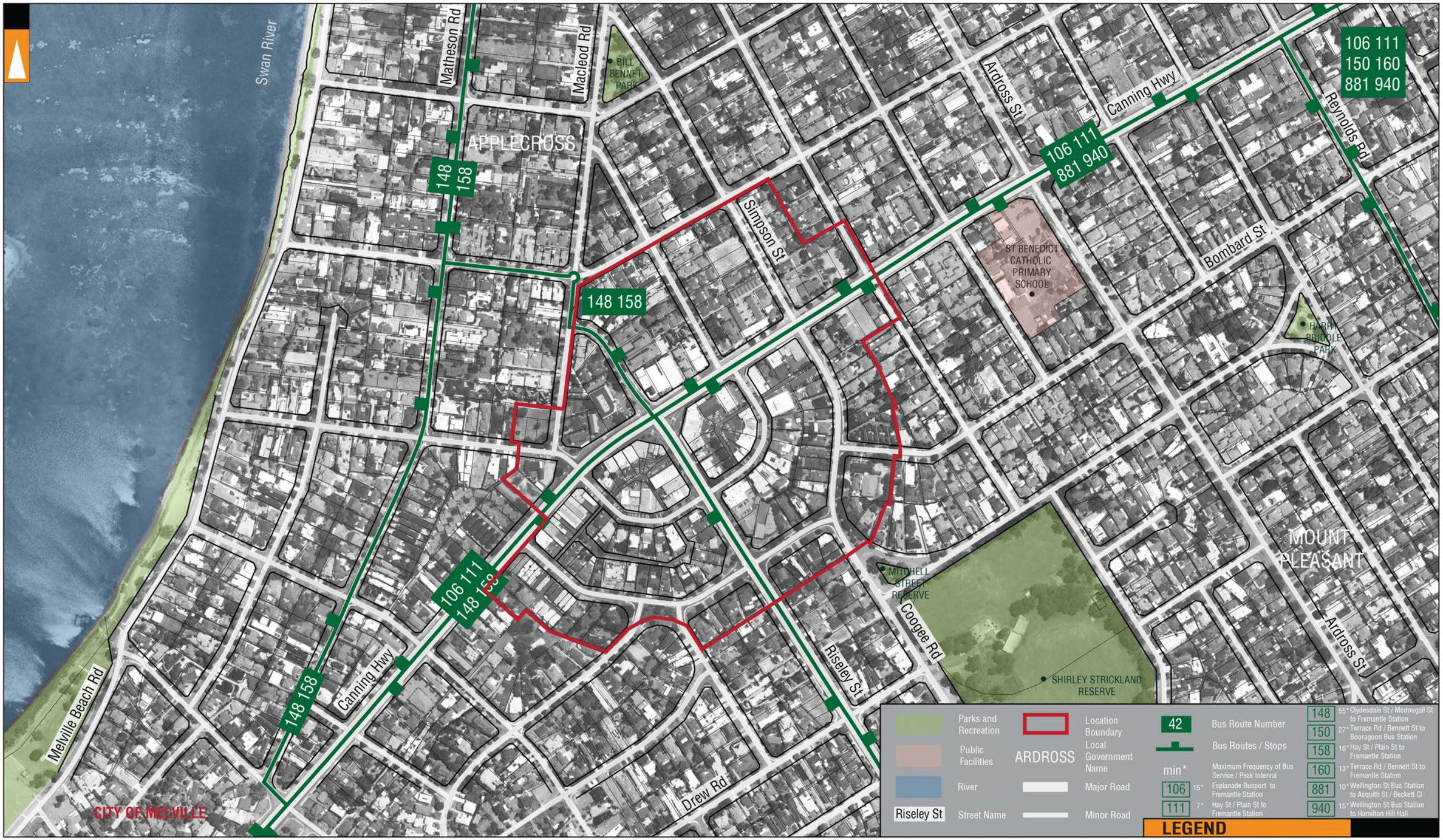

Swan River
Matheson Rd
Macleod Rd
BILL BENNETT PARK
APPLECROSS
Simpson St
Ardross St
Canning Hwy
Reynolds Rd
ST BENEDICT CATHOLIC PRIMARY SCHOOL
Bombard St
HARRY BRIDDLE PARK
MOUNT PLEASANT
MITCHELL STREET RESERVE
Coogee Rd
SHIRLEY STRICKLAND RESERVE
Riseley St
Drew Rd
Melville Beach Rd
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
Nextgen 3rd Party Duct
LEGEND

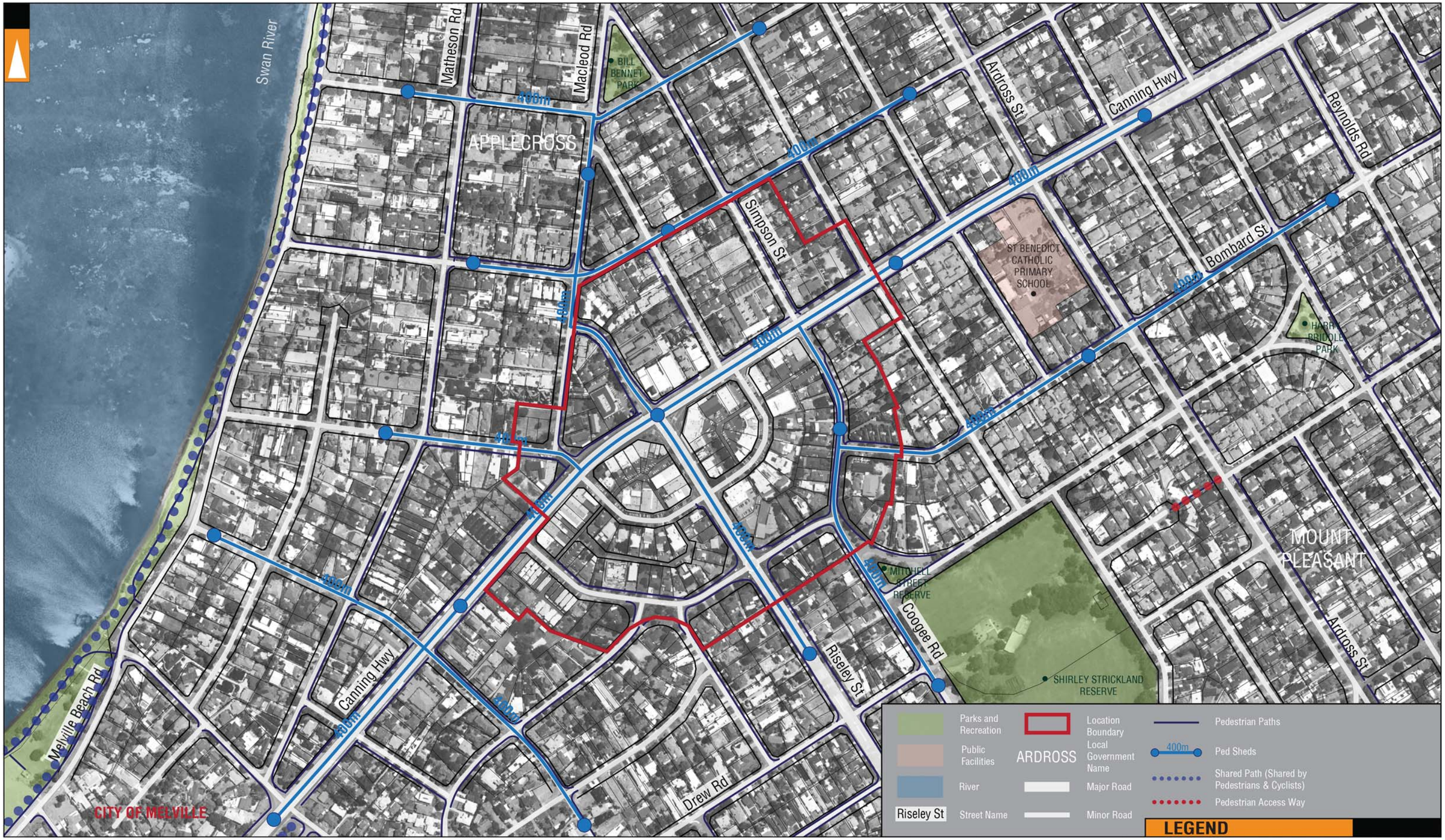

Swan River
Matheson Rd
Macleod Rd
BILL BENNETT PARK
APPLECROSS
Simpson St
Ardross St
Canning Hwy
Reynolds Rd
ST BENEDICT CATHOLIC PRIMARY SCHOOL
Bombard St
HARRY BRIDGE PARK
MITCHELL STREET RESERVE
Coogee Rd
SHIRLEY STRICKLAND RESERVE
MOUNT PLEASANT
Ardross St
Riseley St
Melville Beach Rd
Canning Hwy
Drew Rd
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
Amcom Conduit
Amcom Pit
LEGEND

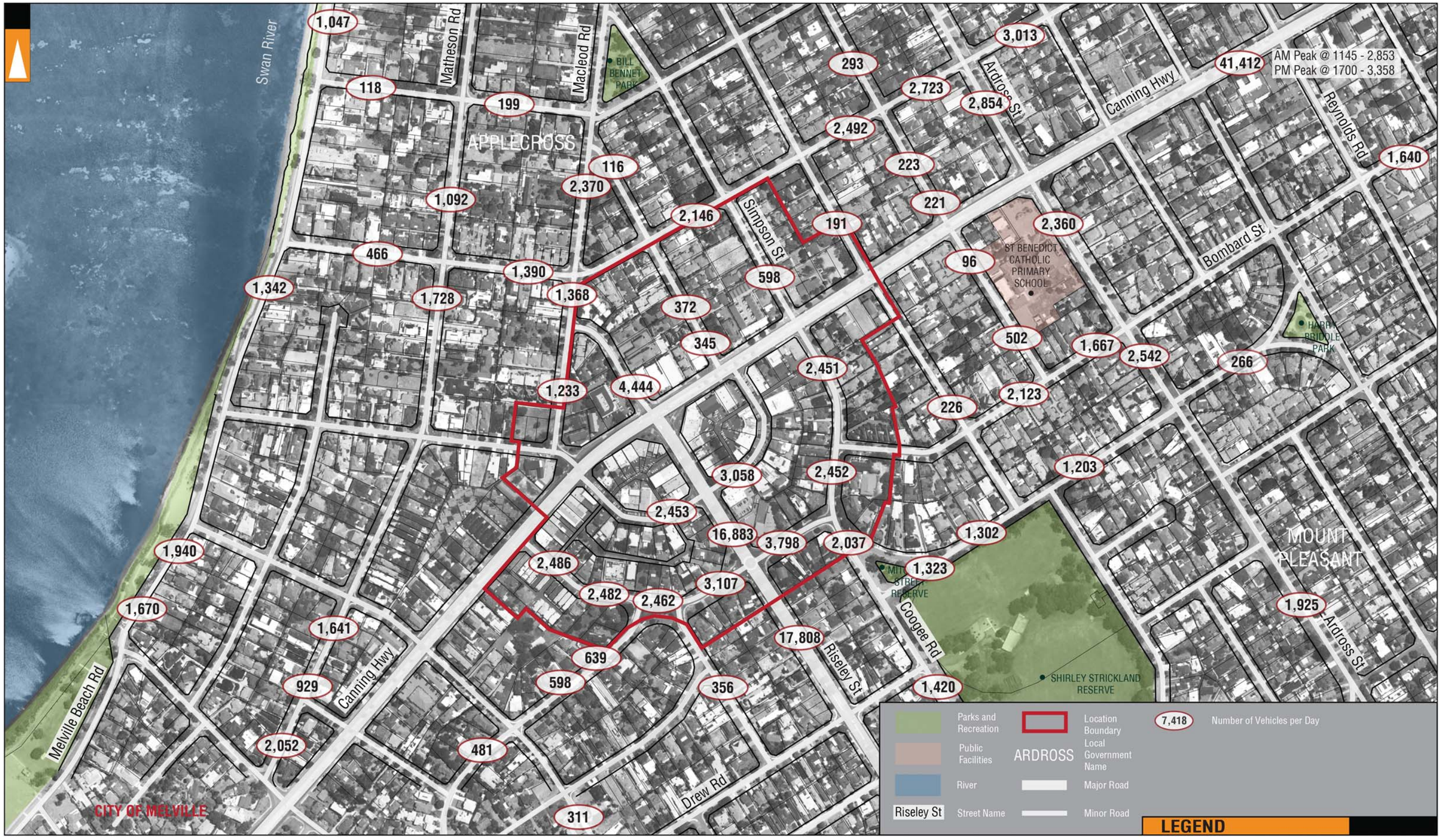

Swan River
Matheson Rd
Macleod Rd
BILL BENNETT PARK
APPLECROSS
Ardross St
Canning Hwy
Reynolds Rd
Simpson St
ST BENEDICT CATHOLIC PRIMARY SCHOOL
Bombard St
HARRY BRIDGE PARK
MOUNT PLEASANT
MITCHELL STREET RESERVE
Coogee Rd
Riseley St
SHIRLEY STRICKLAND RESERVE
Ardross St
Melville Beach Rd
Canning Hwy
Drew Rd
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
High Pressure Gas Main
Medium Pressure Gas Main
Medium - Low Pressure Gas Main
Abandoned Pipes
LEGEND


Swan River
Matheson Rd
Macleod Rd
BILL BENNET PARK
APPLECROSS
Simpson St
Ardross St
Canning Hwy
Reynolds Rd
ST BENEDICT CATHOLIC PRIMARY SCHOOL
Bombard St
HARRY BRIDDLE PARK
MITCHELL STREET RESERVE
Coogee Rd
SHIRLEY STRICKLAND RESERVE
MOUNT PLEASANT
Ardross St
Melville Beach Rd
Canning Hwy
Riseley St
Drew Rd
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
LEGEND


Swan River
Matheson Rd
Macleod Rd
BILL BENNET PARK
APPLECROSS
SW5
Ardross St
Canning Hwy
Reynolds Rd
Simpson St
ST BENEDICT CATHOLIC PRIMARY SCHOOL
Bombard St
HARRY BRIDDLE PARK
MITCHELL STREET RESERVE
Coogee Rd
MOUNT PLEASANT
Riseley St
SHIRLEY STRICKLAND RESERVE
Melville Beach Rd
Canning Hwy
Drew Rd
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
NE14
PBN - Continuous Signed Routes
Good Road Riding Environment
Medium Road Riding Environment
Poor Road Riding Environment
Bicycle Lanes or Sealed Shoulder Either Side
Shared Path
Steep Incline
Road Traffic Light
LEGEND

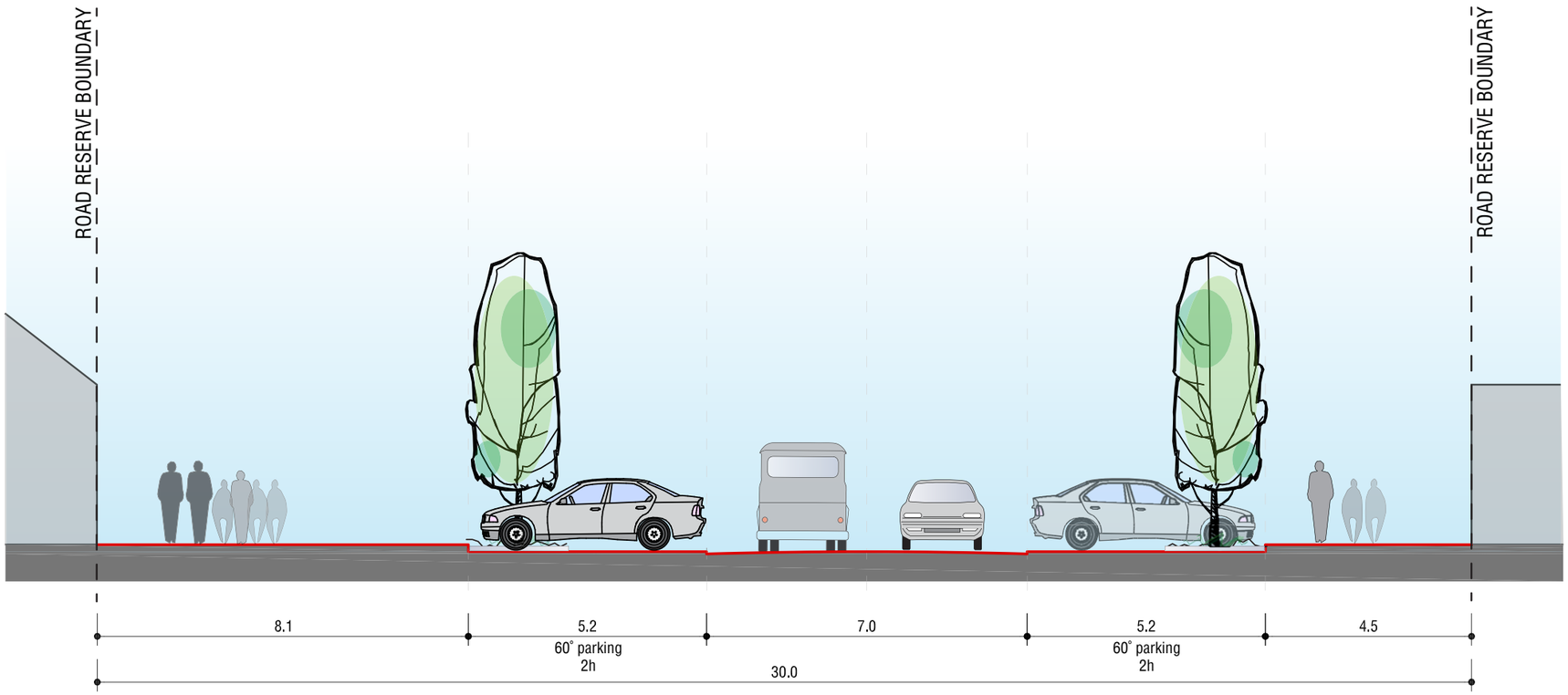

Swan River
Matheson Rd
Macleod Rd
BILL BENNETT PARK
APPLECROSS
148 158
Simpson St
148 158
Ardross St
Canning Hwy
106 111 881 940
106 111 150 160 881 940
Reynolds Rd
ST BENEDICT CATHOLIC PRIMARY SCHOOL
Bombard St
HARRY BRIDGLE PARK
MOUNT PLEASANT
Ardross St
MITCHELL STREET RESERVE
Coogee Rd
SHIRLEY STRICKLAND RESERVE
Riseley St
Drew Rd
106 111
148 158
148 158
Canning Hwy
Melville Beach Rd
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
42
Bus Route Number
Bus Routes / Stops
min*
Maximum Frequency of Bus Service / Peak Interval
106 15* Esplanade Busport to Fremantle Station
111 7* Hay St / Plain St to Fremantle Station
148 55* Clydesdale St / Mcdougall St to Fremantle Station
150 27* Terrace Rd / Bennett St to Booragoon Bus Station
158 16* Hay St / Plain St to Fremantle Station
160 13* Terrace Rd / Bennett St to Fremantle Station
881 10* Wellington St Bus Station to Asquith St / Beckett Cl
940 15* Wellington St Bus Station to Hamilton Hill Hall
LEGEND


Swan River
Matheson Rd
Macleod Rd
BILL BENNETT PARK
APPLECROSS
Ardross St
Canning Hwy
Reynolds Rd
Simpson St
ST BENEDICT CATHOLIC PRIMARY SCHOOL
Bombard St
HARRY BRIDGE PARK
400m
MITCHELL STREET RESERVE
Coogee Rd
Riseley St
SHIRLEY STRICKLAND RESERVE
MOUNT PLEASANT
Melville Beach Rd
Canning Hwy
Drew Rd
CITY OF MELVILLE
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
Pedestrian Paths
400m
Ped Sheds
Shared Path (Shared by Pedestrians & Cyclists)
Pedestrian Access Way
LEGEND


Swan River
Matheson Rd
Macleod Rd
BILL BENNET PARK
APPLECROSS
Simpson St
Ardross St
Canning Hwy
Reynolds Rd
Bombard St
ST BENEDICT CATHOLIC PRIMARY SCHOOL
HARRY BRIDGE PARK
MOUNT PLEASANT
MITCHELL STREET RESERVE
SHIRLEY STRICKLAND RESERVE
Coogee Rd
Riseley St
Drew Rd
Melville Beach Rd
CITY OF MELVILLE
AM Peak @ 1145 - 2,853
PM Peak @ 1700 - 3,358
1,047
118
199
116
2,370
1,092
2,146
466
1,390
1,342
1,728
1,368
372
345
598
191
293
2,723
2,854
2,492
223
221
3,013
41,412
1,640
2,360
96
502
1,667
2,542
266
1,203
2,451
4,444
1,233
226
2,123
3,058
2,452
2,453
16,883
3,798
2,037
1,302
1,323
1,925
1,940
2,486
2,482
2,462
3,107
1,670
1,641
639
598
929
356
17,808
1,420
2,052
481
311
Parks and Recreation
Public Facilities
River
Riseley St
Street Name
Location Boundary
ARDROSS
Local Government Name
Major Road
Minor Road
7,418
Number of Vehicles per Day
LEGEND

Appendix 2

KC00115.000_S70a - Cross Section, Example 01
KC00115.000_S70b - Cross Section, Example 02
KC00115.000_S70c - Cross Section, Example 03
KC00115.000_S70d - Cross Section, Example 04
KC00115.000_S70e - Cross Section, Example 05
KC00115.000_S70f - Cross Section, Example 06
KC00115.000_S70g - Cross Section, Example 07
KC00115.000_S71a - Cross Section, Kearns Crescent – Existing
KC00115.000_S71b - Cross Section, Kearns Crescent - Proposed A
KC00115.000_S71c - Cross Section, Kearns Crescent - Proposed B



- ARDROSS STREET, APPLECROSS, WESTERN AUSTRALIA
/ Between Kintail Road and MacDonald Road /

No	DATE	AMENDMENT
B	15-10-2013	PROJECT CODE CHANGED
A	29-04-2013	ISSUED FOR REVIEW

PROJECT: Riseley Street Activity Centre SP Proposal

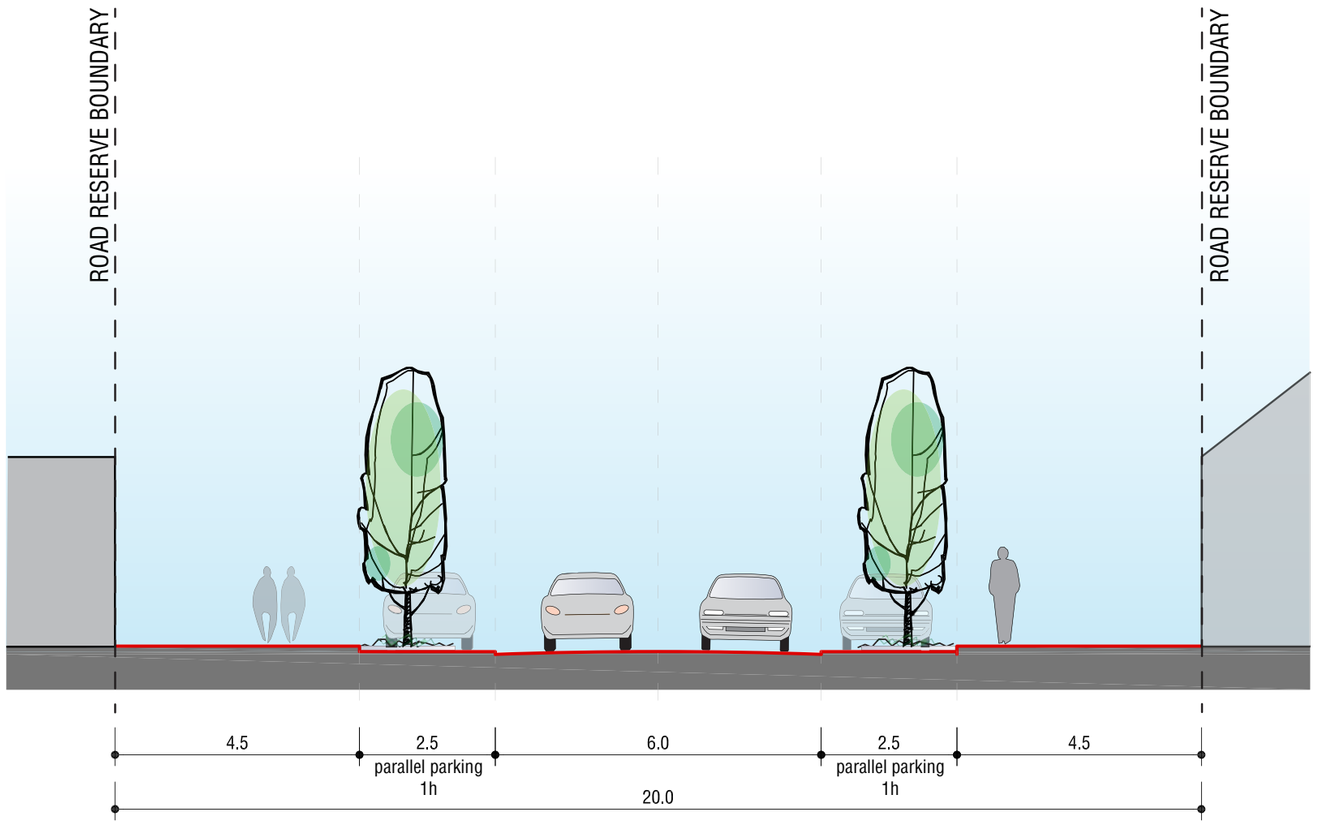
TITLE: Cross Section - Example 1

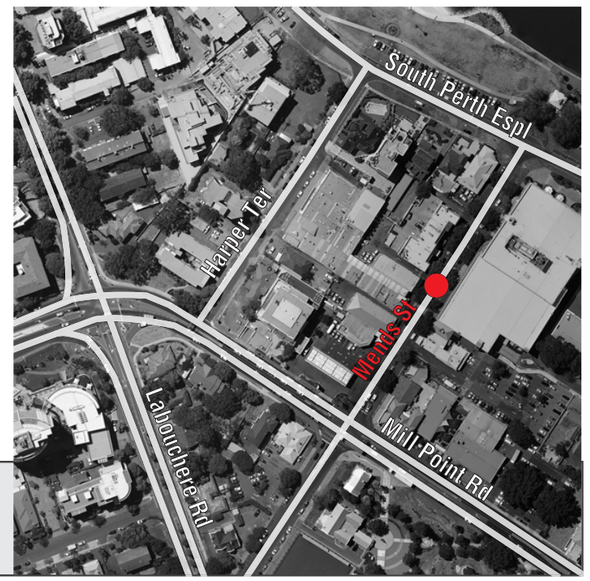
DRAWING NUMBER: KC00115.000_S70a

DRAWN BY: J.I.

Traffic Engineering Consultants
PO Box 331 Guildford LPO WA 6935

PH: 08 9250 4550
WEB: www.kleywegconsulting.com.au
FTP: www.kleywegconsulting.wetransfer.com





- MENDS STREET, PERTH, WESTERN AUSTRALIA
/ Between South Perth Espl and Mill Point Road /

No	DATE	AMENDMENT
B	15-10-2013	PROJECT CODE CHANGED
A	29-04-2013	ISSUED FOR REVIEW

PROJECT:
Riseley Street Activity Centre SP Proposal

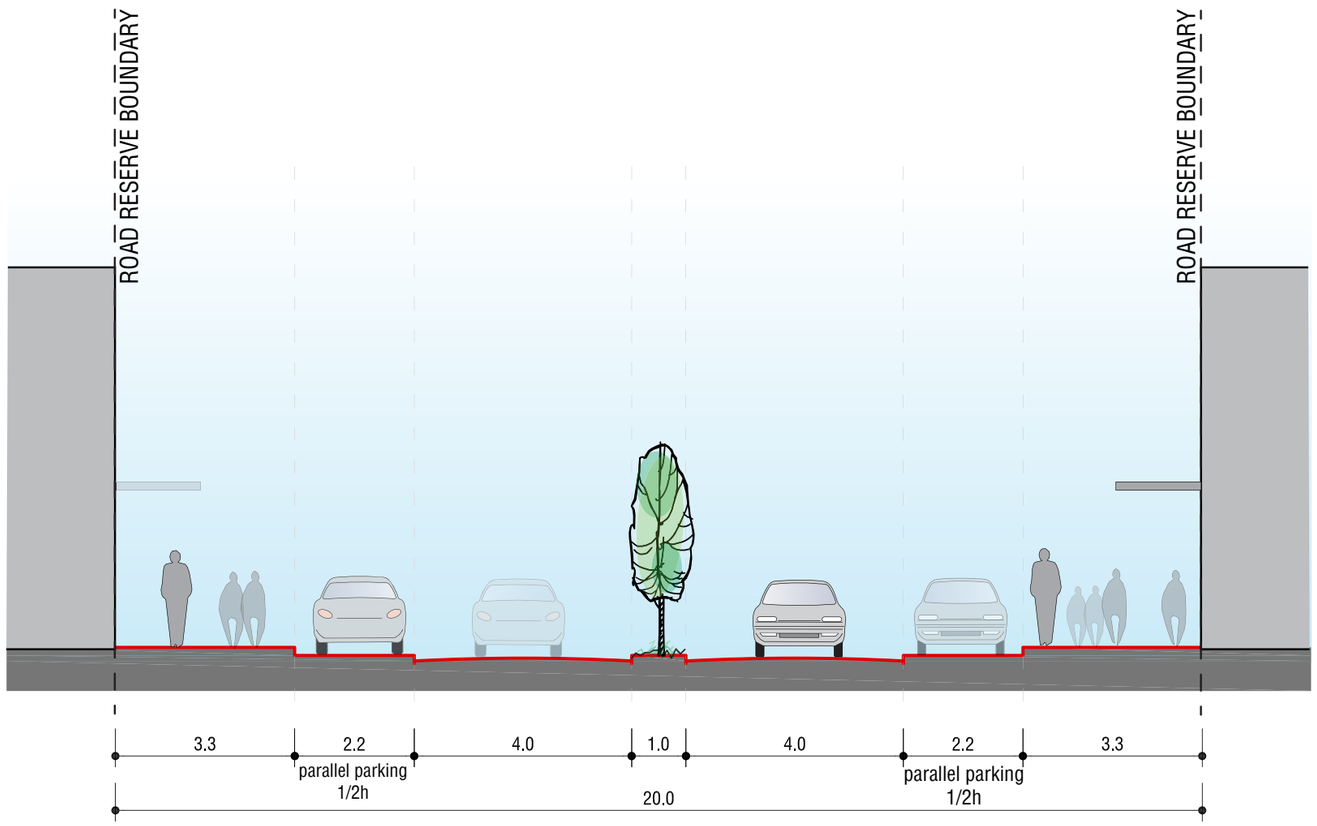
TITLE:
Cross Section - Example 2

DRAWING NUMBER:
KC00115.000_S70b

DRAWN BY:
J.I.

Traffic Engineering Consultants
PO Box 331 Guildford LPO WA 6935

PH: 08 9250 4550
WEB: www.kleywegconsulting.com.au
FTP: www.kleywegconsulting.wetransfer.com



- ROKEBY ROAD, SUBIACO, WESTERN AUSTRALIA
/ Between Roberts Road and Hay Street /

No	DATE	AMENDMENT
B	15-10-2013	PROJECT CODE CHANGED
A	29-04-2013	ISSUED FOR REVIEW

PROJECT: Riseley Street Activity Centre SP Proposal

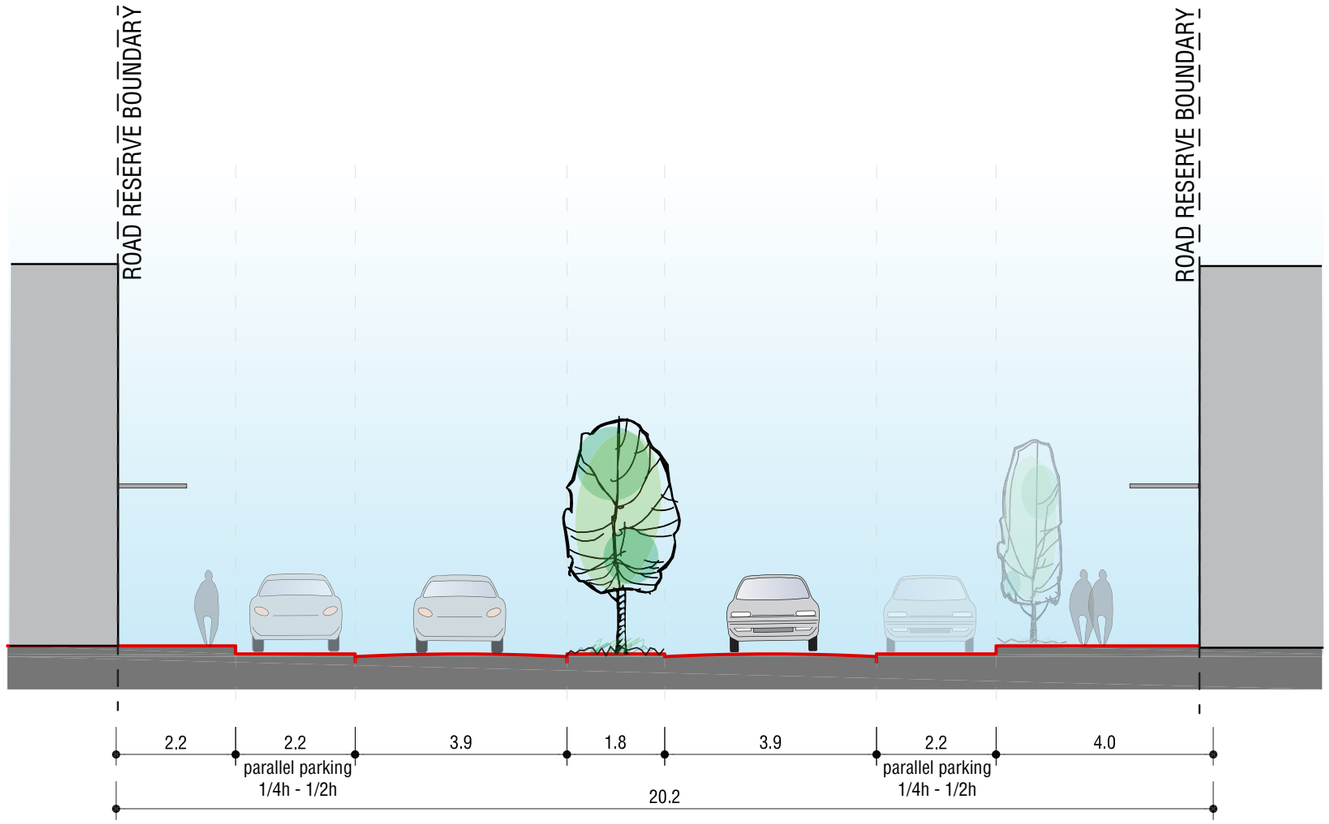
TITLE: Cross Section - Example 3

DRAWING NUMBER: KC00115.000_S70c

DRAWN BY: J.I.

Traffic Engineering Consultants
PO Box 331 Guildford LPO WA 6935

PH: 08 9250 4550
WEB: www.kleywegconsulting.com.au
FTP: www.kleywegconsulting.wetransfer.com



- OXFORD STREET, LEEDERVILLE, WESTERN AUSTRALIA
/ Between Newcastle Street and Vincent Street /

No	DATE	AMENDMENT
B	15-10-2013	PROJECT CODE CHANGED
A	29-04-2013	ISSUED FOR REVIEW

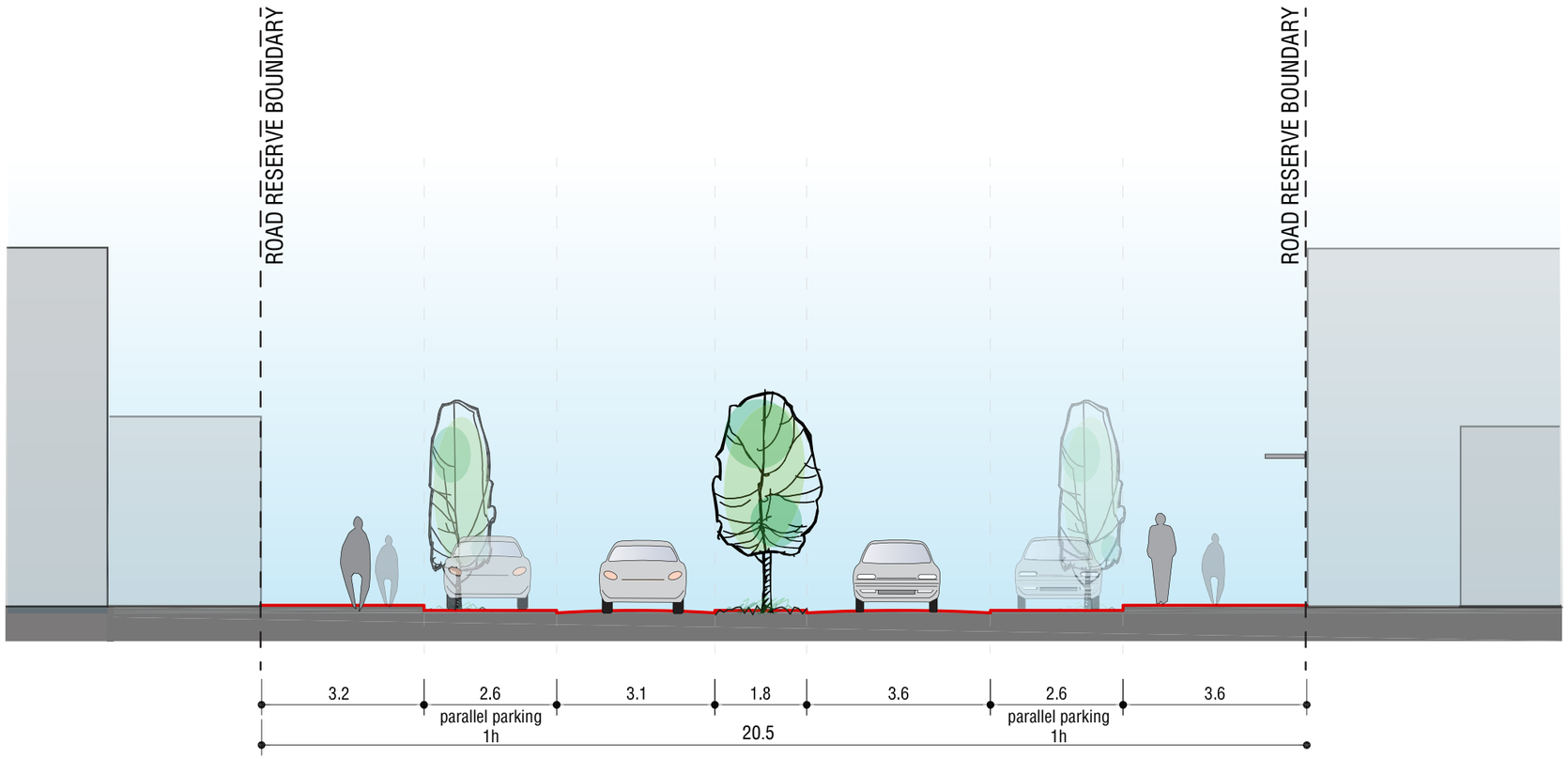
PROJECT: Riseley Street Activity Centre SP Proposal

TITLE: Cross Section - Example 4

DRAWING NUMBER: KC00115.000_S70d

DRAWN BY: J.I.

Traffic Engineering Consultants
PO Box 331 Guildford LPO WA 6935
PH: 08 9250 4550
WEB: www.kleywegconsulting.com.au
FTP: www.kleywegconsulting.wetransfer.com



- SCARBOROUGH BEACH ROAD, MOUNT HAWTHORN, WESTERN AUSTRALIA
/ Between Matlock Street and Coogee Street /

No	DATE	AMENDMENT
B	15-10-2013	PROJECT CODE CHANGED
A	29-04-2013	ISSUED FOR REVIEW

PROJECT: Riseley Street Activity Centre SP Proposal

TITLE: Cross Section - Example 5

DRAWING NUMBER: KC00115.000_S70e

DRAWN BY: J.I.

Traffic Engineering Consultants
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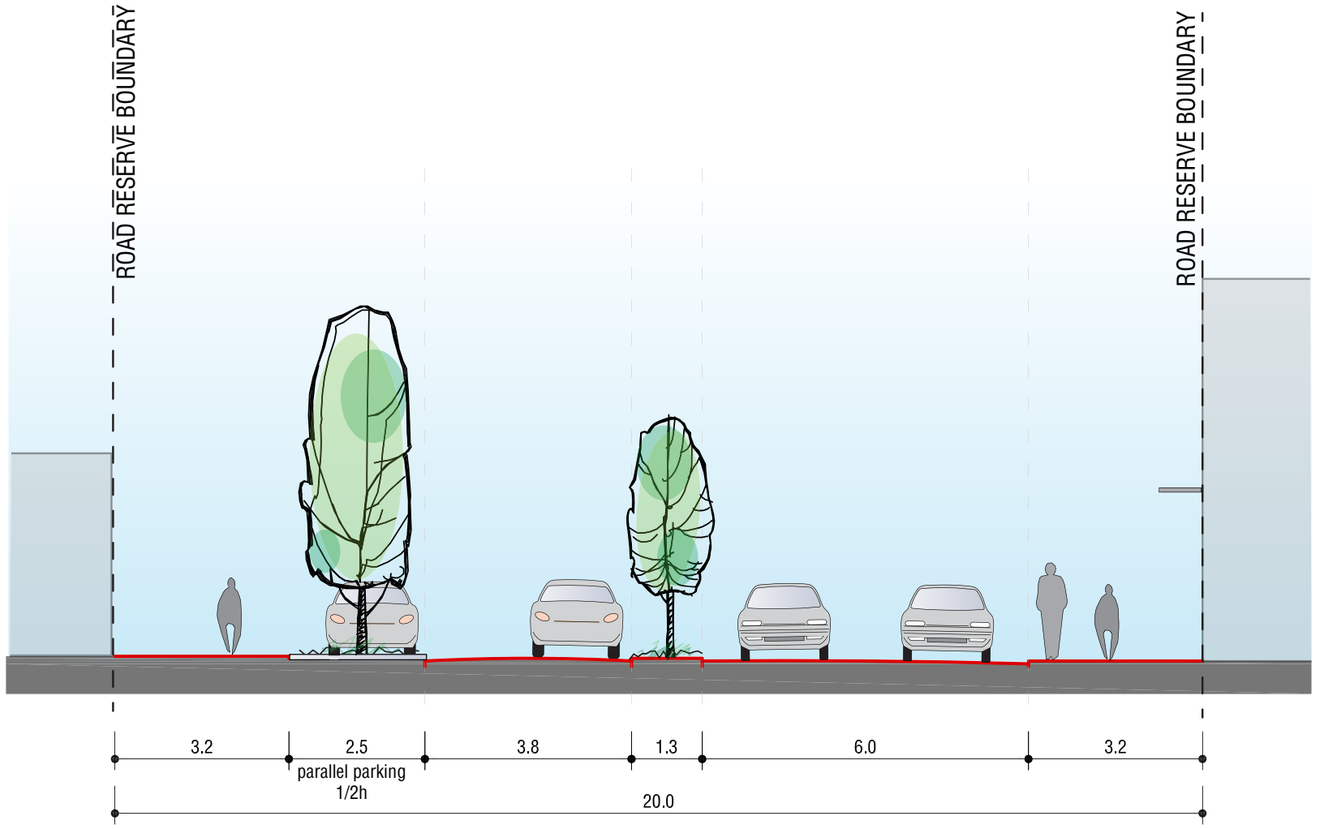
PH: 08 9250 4550
WEB: www.kleywegconsulting.com.au
FTP: www.kleywegconsulting.wetransfer.com



- ALBANY HWY, VICTORIA PARK, WESTERN AUSTRALIA
/ Between Duncan Street and Leonard Street /

No	DATE	AMENDMENT
B	15-10-2013	PROJECT CODE CHANGED
A	29-04-2013	ISSUED FOR REVIEW

PROJECT: Riseley Street Activity Centre SP Proposal

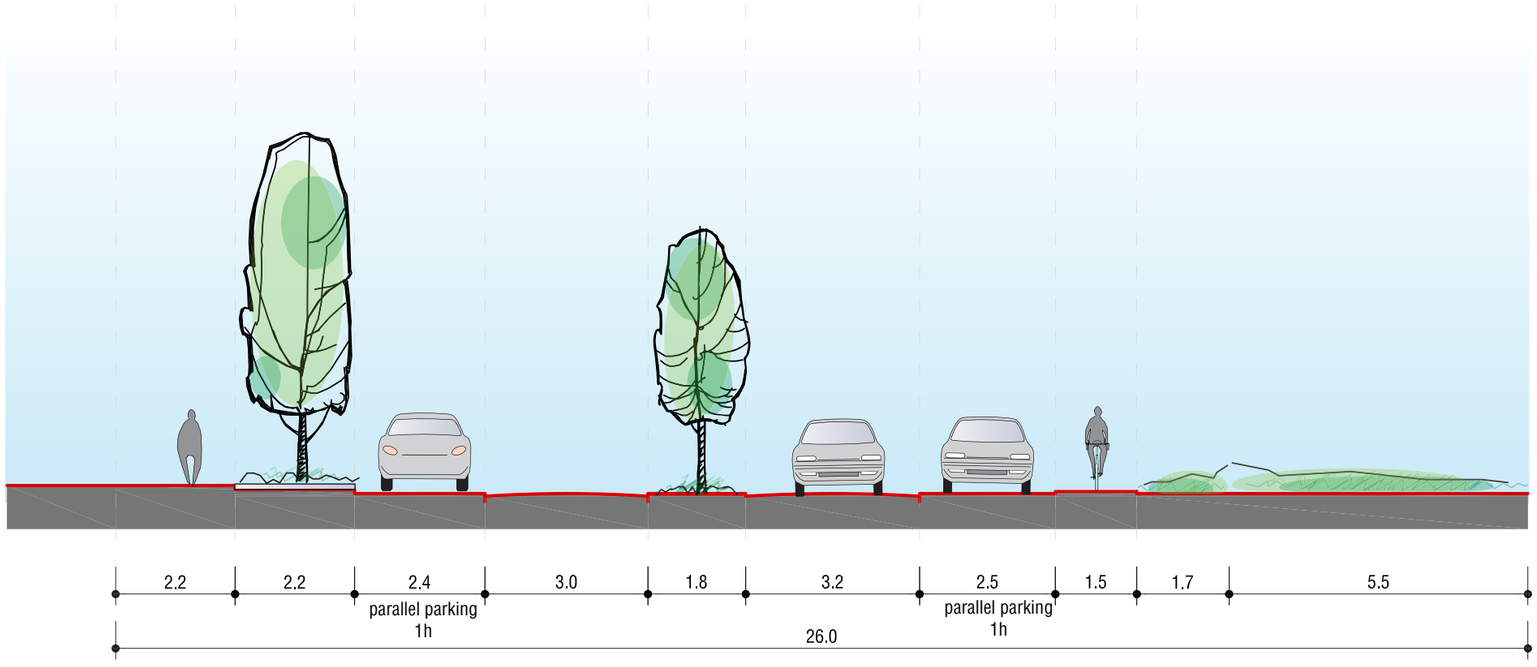
TITLE: Cross Section - Example 6

DRAWING NUMBER: KC00115.000_S70f

DRAWN BY: J.I.

Traffic Engineering Consultants
PO Box 331 Guildford LPO WA 6935

PH: 08 9250 4550
WEB: www.kleywegconsulting.com.au
FTP: www.kleywegconsulting.wetransfer.com



- BAYVIEW TERRACE, CLAREMONT, WESTERN AUSTRALIA
/ Between Paric Ln and Stirling Hwy /

B	15-10-2013	PROJECT CODE CHANGED
A	29-04-2013	ISSUED FOR REVIEW
No	DATE	AMENDMENT

PROJECT:
Riseley Street Activity Centre SP Proposal

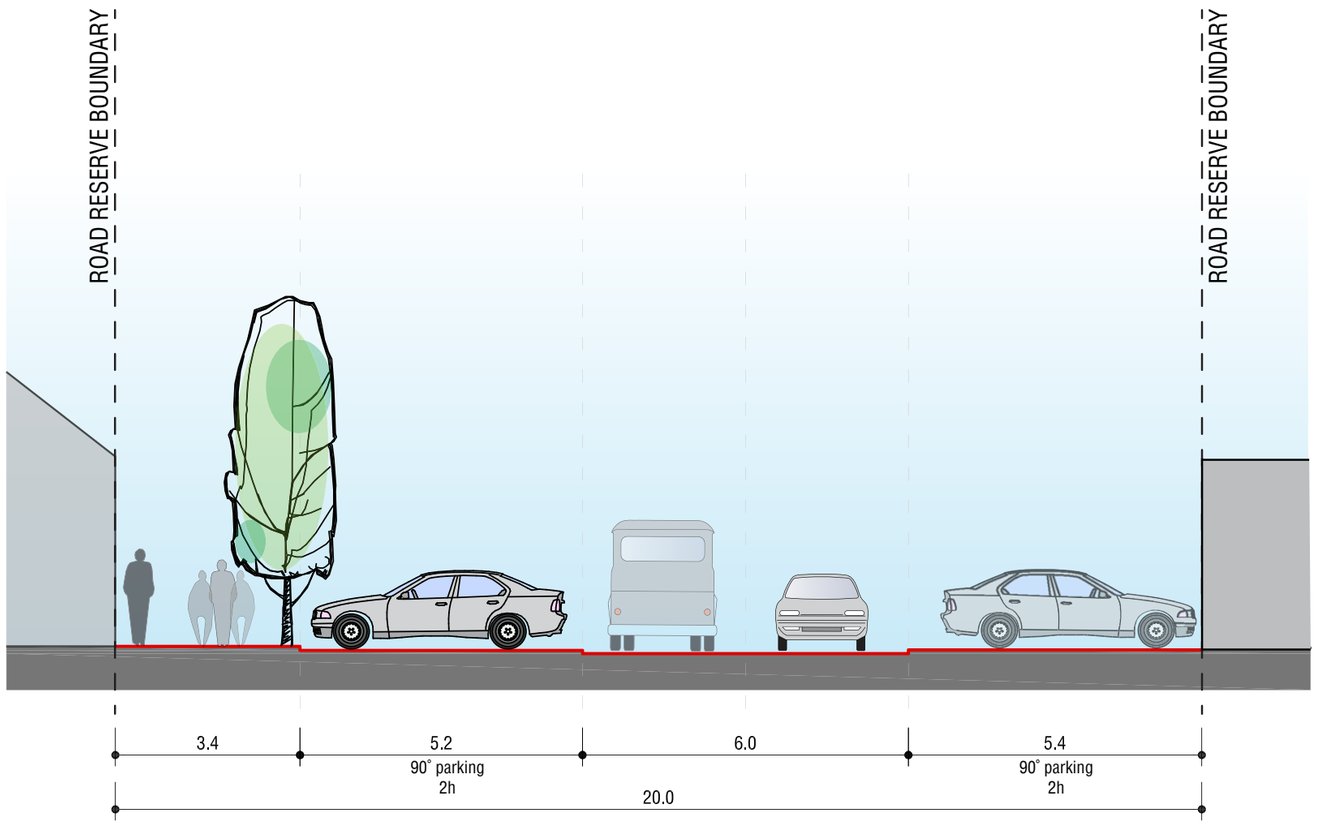
TITLE:
Cross Section - Example 7

DRAWING NUMBER:
KC00115.000_S70g

DRAWN BY:
J.I.

Traffic Engineering Consultants
PO Box 331 Guildford LPO WA 6935

PH: 08 9250 4550
WEB: www.kleywegconsulting.com.au
FTP: www.kleywegconsulting.wetransfer.com



- KEARNS CRESCENT, ARDROSS, WESTERN AUSTRALIA
/ East from Riseley Street /

No	DATE	AMENDMENT
B	15-10-2013	PROJECT CODE CHANGED
A	29-04-2013	ISSUED FOR REVIEW

PROJECT:
Riseley Street Activity Centre SP Proposal

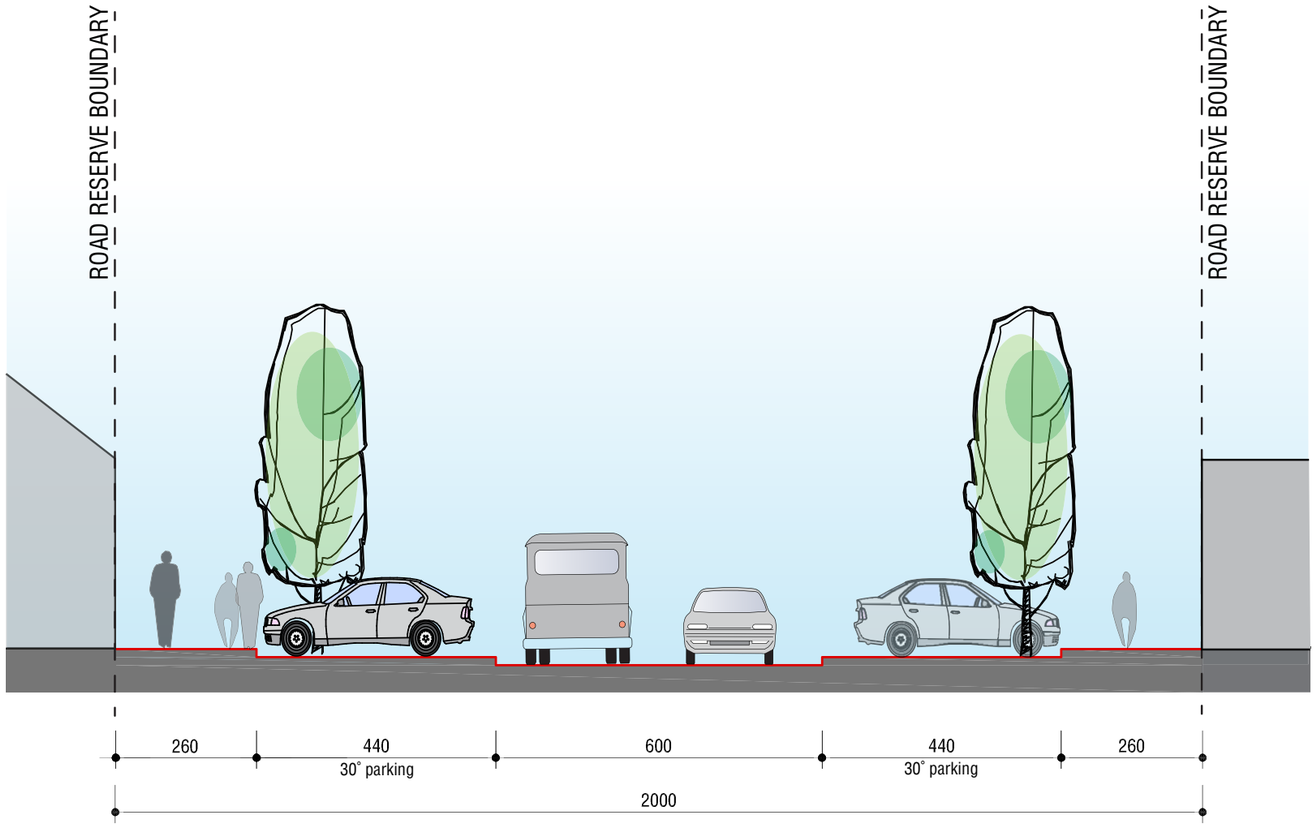
TITLE:
Cross Section - Existing

DRAWING NUMBER:
KC00115.000_S71a

DRAWN BY:
J.I.

Traffic Engineering Consultants
PO Box 331 Guildford LPO WA 6935

PH: 08 9250 4550
WEB: www.kleywegconsulting.com.au
FTP: www.kleywegconsulting.wetransfer.com



- KEARNS CRESCENT, ARDROSS, WESTERN AUSTRALIA
/ East from Riseley Street /

No	DATE	AMENDMENT
B	15-10-2013	PROJECT CODE CHANGED
A	29-04-2013	ISSUED FOR REVIEW

PROJECT:
Riseley Street Activity Centre SP Proposal

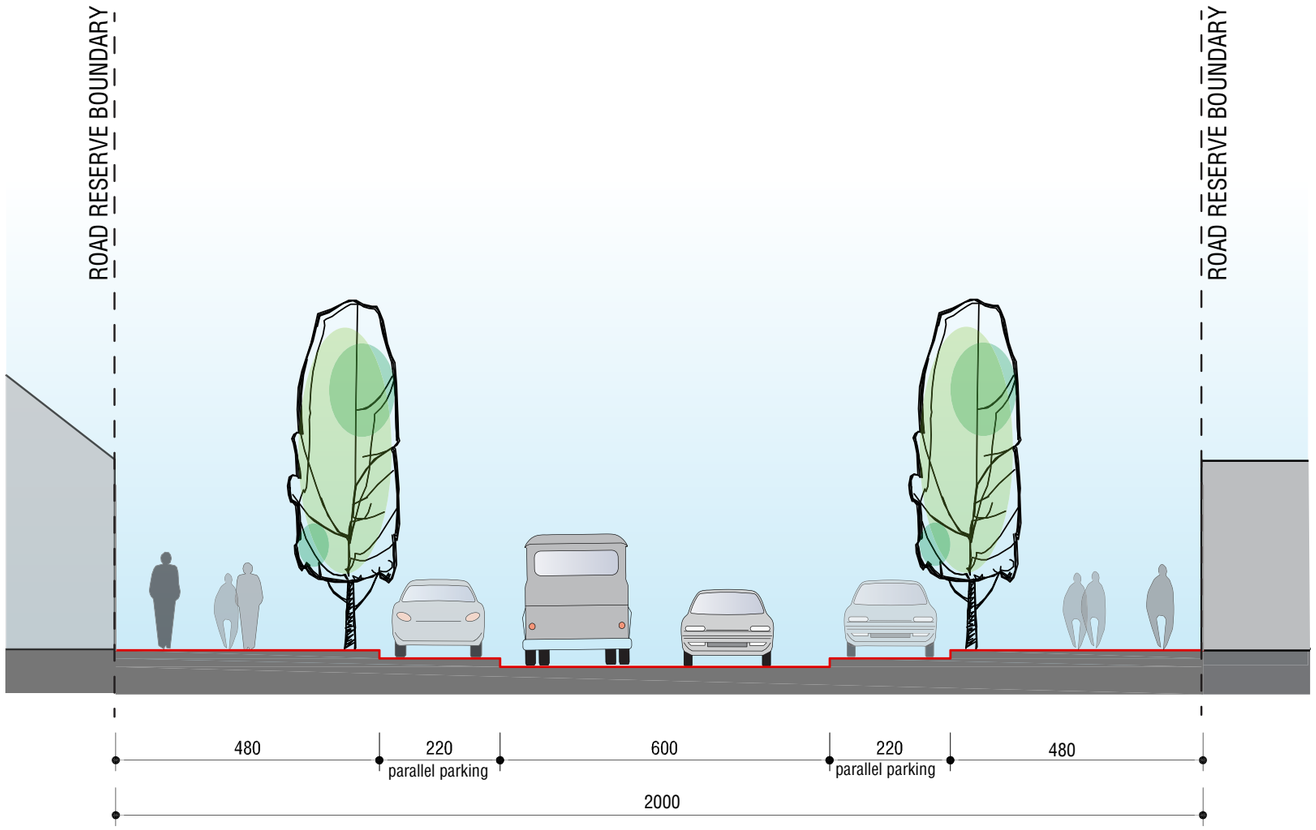
TITLE:
Cross Section - Proposed / Variation A /

DRAWING NUMBER:
KC00115.000_S71b

DRAWN BY:
J.I.

Traffic Engineering Consultants
PO Box 331 Guildford LPO WA 6935

PH: 08 9250 4550
WEB: www.kleywegconsulting.com.au
FTP: www.kleywegconsulting.wetransfer.com



- KEARNS CRESCENT, ARDROSS, WESTERN AUSTRALIA
  / East from Riseley Street /

No	DATE	AMENDMENT
B	15-10-2013	PROJECT CODE CHANGED
A	29-04-2013	ISSUED FOR REVIEW

PROJECT:
Riseley Street Activity Centre SP Proposal

TITLE:
Cross Section - Proposed / Variation B /

DRAWING NUMBER:
KC00115.000_S71c

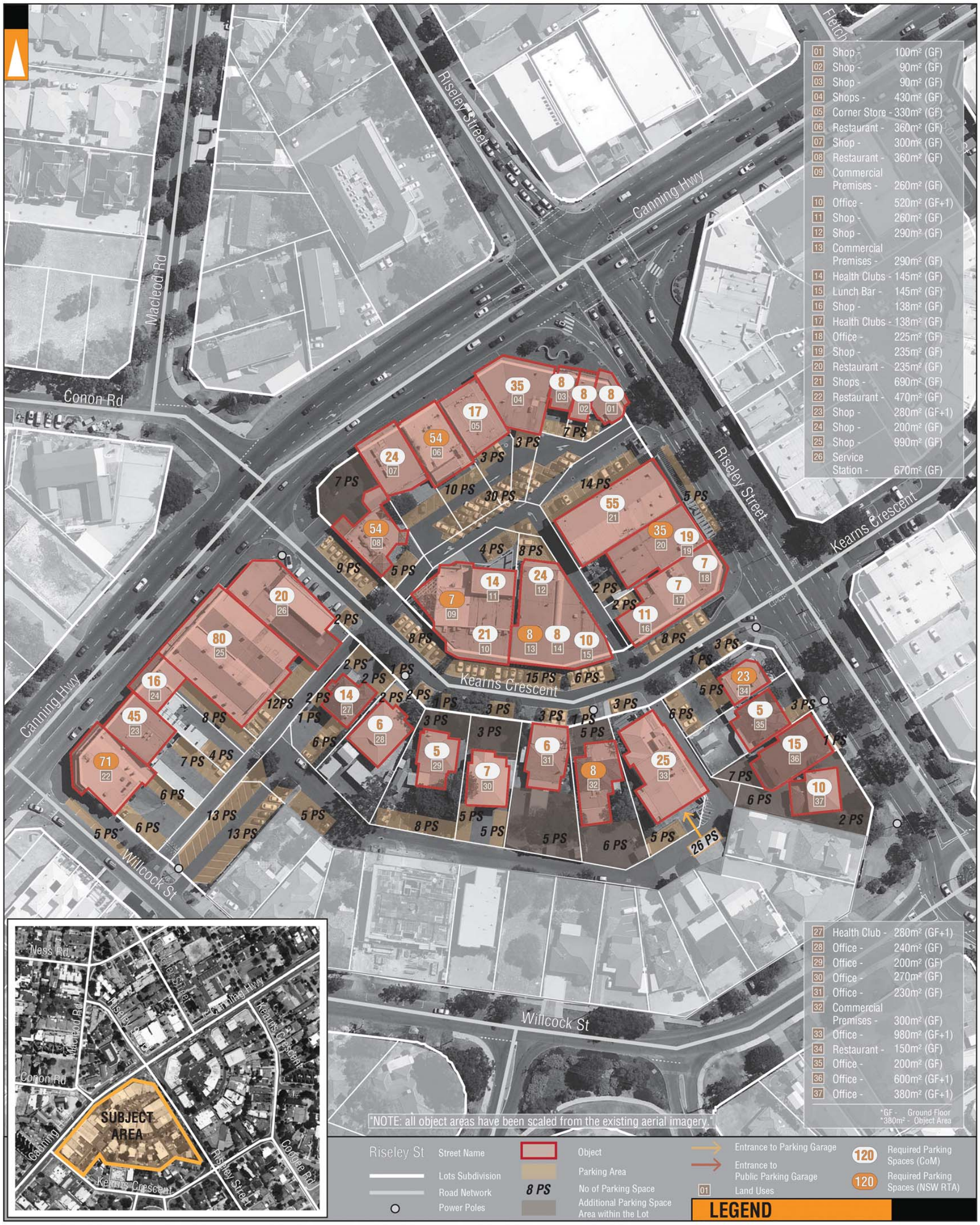
DRAWN BY:
J.I.

Traffic Engineering Consultants
PO Box 331 Guildford LPO WA 6935

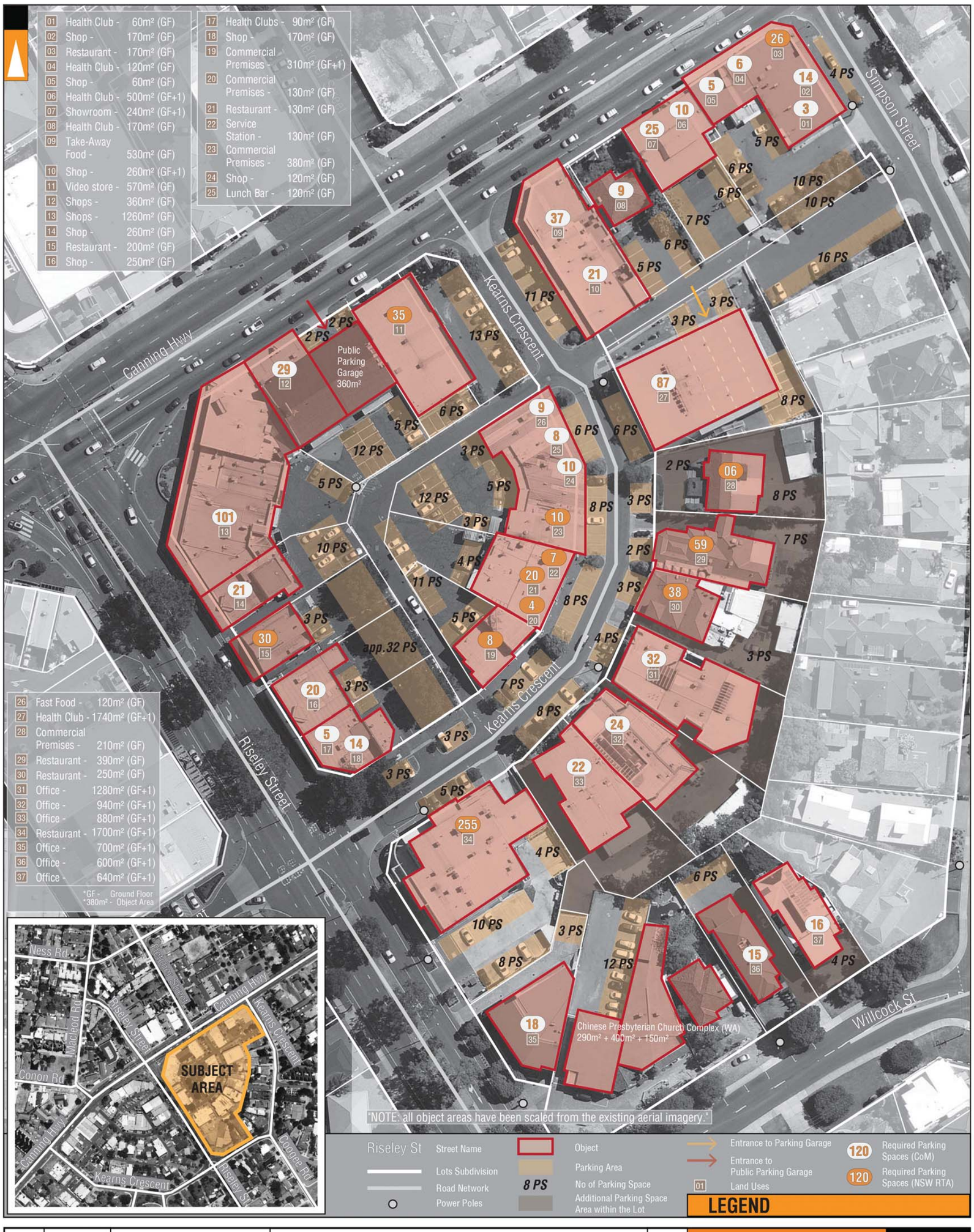
PH: 08 9250 4550
WEB: www.kleywegconsulting.com.au
FTP: www.kleywegconsulting.wetransfer.com

Appendix 3

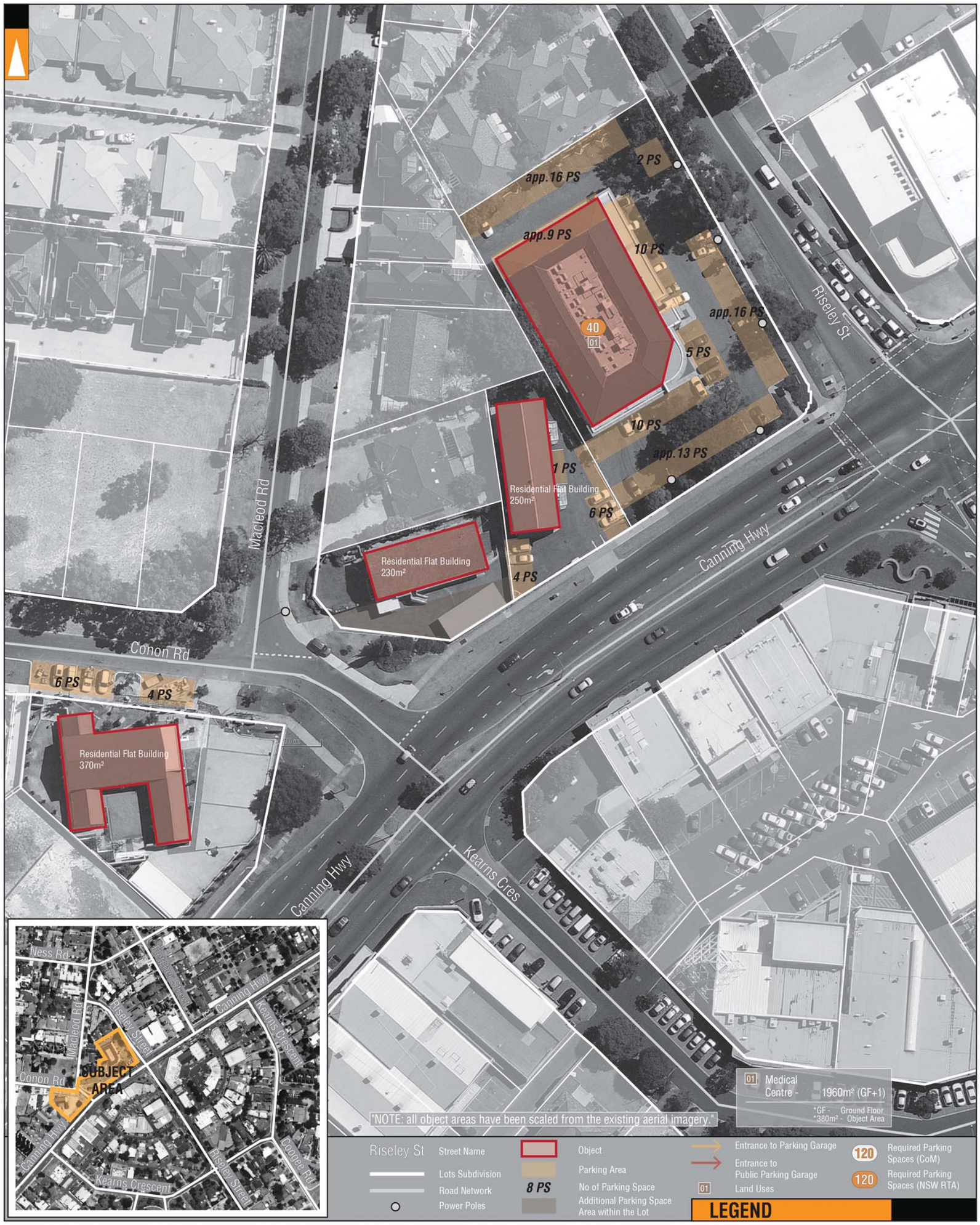
KC00115.000_S50a - Kearns Crescent, Parking Analisys (Q1)
KC00115.000_S50b - Kearns Crescent, Parking Analisys (Q2)
KC00115.000_S50c - Kearns Crescent, Parking Analisys (Q3)
KC00115.000_S50d - Kearns Crescent, Parking Analisys (Q4)



			PROJECT: Riseley Street Activity Centre SP Proposal	DRAWN BY:	Traffic Engineering Consultants PO Box 331 Guildford LPO WA 6935 PH: 08 9250 4550 WEB: www.kleywegconsulting.com.au FTP: www.kleywegconsulting.wetransfer.com
			TITLE: Kearns Crescent - Parking Analisys (Q1)	J.I.	
B	15-10-2013	PROJECT CODE CHANGED	DRAWING NUMBER: KC00115.000_S50a		
A	12-04-2013	ISSUED FOR REVIEW			
No	DATE	AMENDMENT			



			PROJECT: Riseley Street Activity Centre SP Proposal	DRAWN BY:	Traffic Engineering Consultants PO Box 331 Guildford LPO WA 6935 PH: 08 9250 4550 WEB: www.kleywegconsulting.com.au FTP: www.kleywegconsulting.wetransfer.com
			TITLE: Kearns Crescent - Parking Analisys (Q2)	J.I.	
B	15-10-2013	PROJECT CODE CHANGED	DRAWING NUMBER: KC00115.000_S50b		
A	12-04-2013	ISSUED FOR REVIEW			
No	DATE	AMENDMENT			



No	DATE	AMENDMENT
B	15-10-2013	PROJECT CODE CHANGED
A	12-04-2013	ISSUED FOR REVIEW

PROJECT:
Riseley Street Activity Centre SP Proposal

TITLE:
Kearns Crescent - Parking Analisys (Q3)

DRAWING NUMBER:
KC00115.000_S50c

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No	DATE	AMENDMENT
B	15-10-2013	PROJECT CODE CHANGED
A	12-04-2013	ISSUED FOR REVIEW

PROJECT:
Riseley Street Activity Centre SP Proposal

TITLE:
Kearns Crescent - Parking Analisys (Q4)

DRAWING NUMBER:
KC00115.000_S50d

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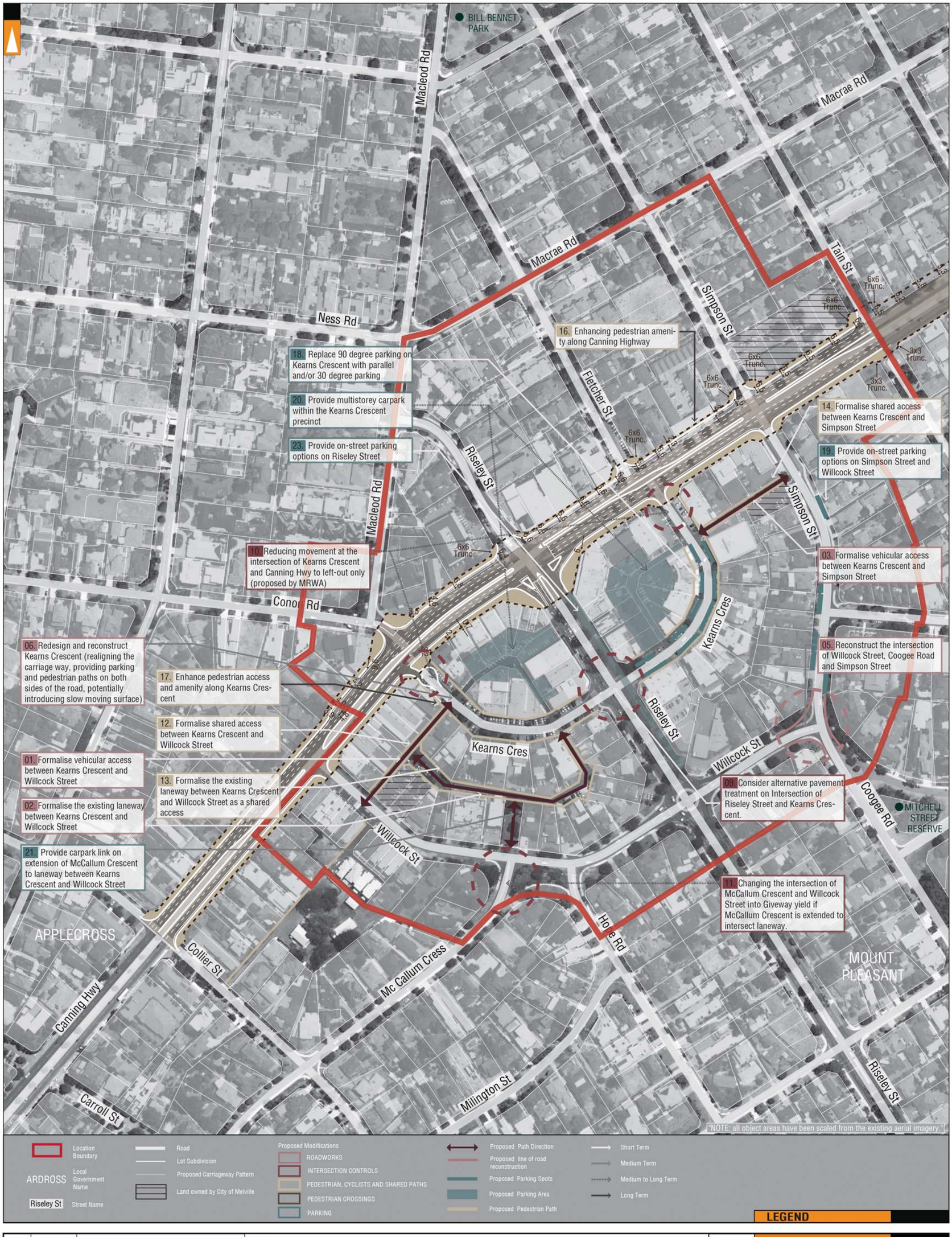
Appendix 4

KC00115.000_S60 - Action Plan



No	DATE	AMENDMENT
C	03-04-2014	SUBJECT AREA BOUNDARY AMENDED
B	14-10-2013	REVISED IN ACCORDANCE WITH MARKUPS RECEIVED ON 11.10.2013
A	15-05-2013	ISSUED FOR REVIEW

PROJECT: Riseley Street Activity Centre SP Proposal

TITLE: Action Plan

DRAWING NUMBER: KC00115.000_S60

DRAWN BY: J.I.

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