APPENDIX 1 -
GC131216R09

City of Marion Streetscapes

DESIGN GUIDELINES

City of Marion
November 2016

DRAFT

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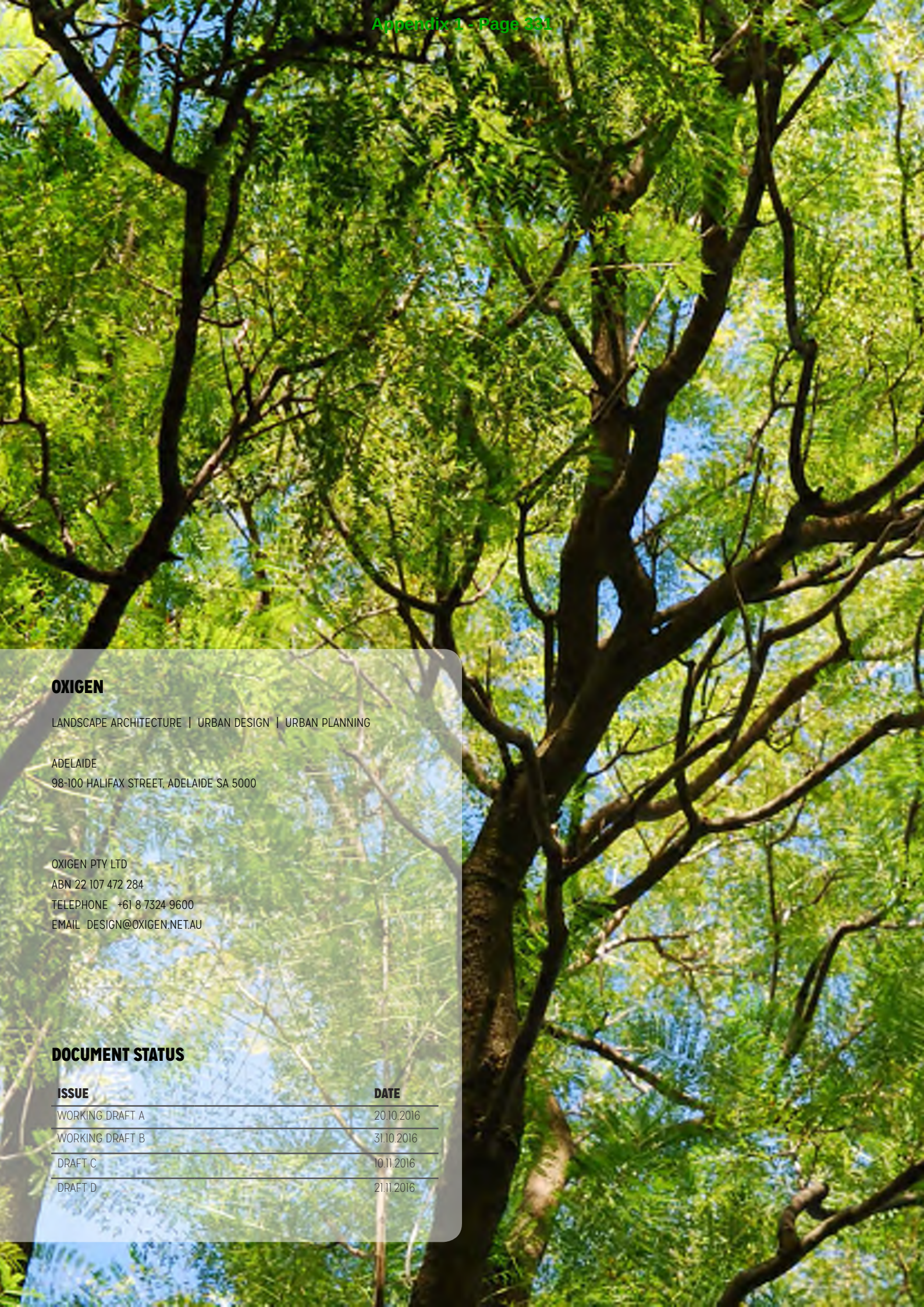

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Contents

Introduction

Introduction

Overview

The City of Marion Streetscapes Design Guidelines provide direction for the development of high quality, recognisable and sustainable streets that balance the needs of people and vehicles, and contribute to the City of Marion's 'sense of place'.

Council's vision is to improve the amenity and functionality of streetscapes within the City of Marion to contribute to neighbourhood identity, and support active communities and healthy environments.

The guidelines reinforce the vision established in Council's Streetscape Policy describing, a framework for the development of high quality streetscapes in Marion. It describes the City of Marion's physical structure, defined by rail, roads, urban form, water catchments and topography, and the importance this structure has in characterising its streets, parks and public spaces.

The guidelines then describe the desired character of streets, including the physical composition, quality and feel, and activation. The elements which comprise the public realm are described, including: street trees and planting, paving, furniture, lighting, signage, wayfinding, public art and verges.

The design intent of the guidelines are to:

1. Reinforce a vision for streetscapes that balances the needs of pedestrians, cyclists and the environment, and the functional requirements of vehicles.
2. Develop standards for streetscape environments that reinforce the unique character and 'sense of place' of the City of Marion.
3. Develop a consistent language of streetscapes within the City of Marion.
4. Provide a consistent and recognisable aesthetic that is high quality, robust, and easy and economic to maintain.

The guidelines are multifaceted and are intended to be used by Council as both a functional 'reference manual' that provides a palette to develop and maintain great streetscapes and as a strategic tool to guide works programs and allocate capital works funding.

Objectives

Key objectives of the City of Marion Streetscapes Design Guidelines are to:

1. *Provide a consistent framework for development and management of streetscapes within the City of Marion's Streetscape Policy.*
2. *Develop a framework that enables the implementation of streetscapes in the City of Marion that are consistent, robust, easy to maintain, and provide strategic visual impact.*
3. *Deliver an improved public realm that demonstrates best practice by focusing on the needs of pedestrians and the community.*
4. *Identify key enablers for implementation.*

Introduction

Framework

The City of Marion Streetscapes Design Guidelines are organised into seven sections as described below.

Part A - Defining the Character of Marion describes and analyses the physical form of the City of Marion, in particular its historic and cultural context, and the urban structure and landscape that makes it unique and recognisable: waterways, rail and tram corridors, roads, and topography.

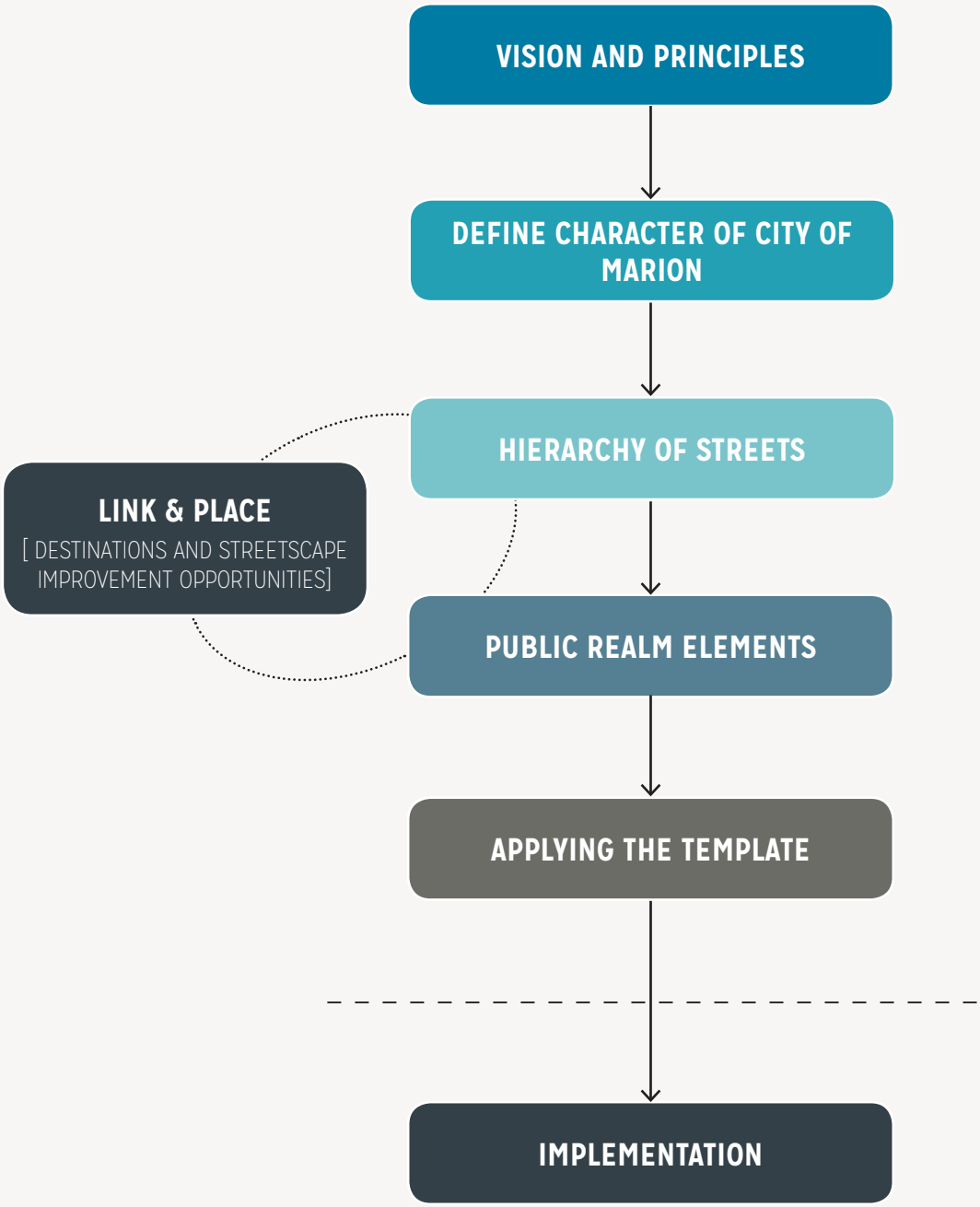
Part B - Vision & Principles For a Preferred Future reinforces a vision and principles (aligned with the City of Marion 'Community Vision' and Streetscape Policy) to guide the desired character of streetscape development in Marion.

Part C - Hierarchy of Streets describes the existing hierarchy of streets (movement and character) and illustrates, using text and diagrams, a preferred character for streets in the City of Marion.

Part D - Public Realm elements that describe a palette ('design guide') of appropriate public realm materials and elements for each street classification, reinforcing the positive qualities and character of the City of Marion. The 'design guide' includes the elements that comprise streetscapes: footpaths, street trees, lighting, furniture, public art, signage and wayfinding, and verges (street gardens and water sensitive urban design)

Part E - Applying the template illustrates how the elements that comprise a street can be applied to the hierarchy of streets.

Part F - Implementation provides a high level overview of key enablers for delivering improved streetscapes in the City of Marion.


VISION AND PRINCIPLES
DEFINE CHARACTER OF CITY OF MARION
HIERARCHY OF STREETS
LINK & PLACE
[DESTINATIONS AND STREETSCAPE IMPROVEMENT OPPORTUNITIES]
PUBLIC REALM ELEMENTS
APPLYING THE TEMPLATE
IMPLEMENTATION

Introduction

The importance of attractive streets

Attractive streets foster vibrant communities, contribute to robust economies and healthy environments, and reinforce walking and cycling and social activity. Well designed and used streets are important in defining 'Sense of Place' and local character.

The design of streets is often centred on vehicle transport, comprising multiple lanes of through traffic, with secondary allowance for pedestrian footpaths and bicycle corridors, and places to meet and occupy for pedestrians.

The City of Marion's approach to streetscape design focuses on a balanced view embracing people, environment and place. We no longer consider vehicle movement as the only function of streets and understand their multitude of functions, providing civic and community destinations, facilitating activity, enhancing local walking and cycling movement, and contributing to the local environment.

Future streetscape opportunities

Streetscape opportunities include:

1. **Identifying street tree renewal priorities.** Replacing declining or under performing street trees with medium-large shade trees enhances amenity and the pedestrian environment.
2. **Utilising water sensitive urban design (WSUD) techniques.** Installing rain gardens and bioretention tree pits reduces flood risk, improves water quality and enhances streetscape amenity.
3. **Supporting streets as destinations.** Providing amenity, shade, visual appeal and places for social interaction as key ingredients of active streets.
4. **Shifting the focus towards walking and cycling.** Promoting wide footpaths and enhancing amenity contribute towards improving the streetscape environment.
5. **Organising service infrastructure.** Consolidating and under-grounding service infrastructure maximises space for street trees.
6. **Integrating the built form edge.** Promoting active frontages and outdoor activation, minimising driveways and prioritising walking and cycling enhances the quality and feel of streets.
7. **Valuing Kaurna culture.** Exploring opportunities for expression of a rich culture past and present.
8. **Valuing all spaces.** Utilising verges and medians as valuable spaces that provide opportunities for food production, WSUD, habitat creation and community space.
9. **Prioritising maintenance and whole of life costs.** Ensuring long term sustainability and asset management by contributing to a longer lasting and more robust public realm.
10. **Establishing 'pocket parks'.** Exploring opportunities for streets to contribute toward community open space through the integration of wider-verges, and providing places for rest and social interaction.
11. **Reducing effects of urban heat island.** Integrating Green Infrastructure

Think of a city and what comes to mind? Its streets. If a city's streets look interesting, the city looks interesting; if they look dull, the city looks dull.

Jane Jacobs, The Death and Life of Great American Cities

Part A
Character of Marion

City of Marion

Marion's cultural heritage

'The City of Marion has a rich indigenous and later settlement and development history. The land on which Marion is located has been, throughout time, inhabited by the Kaurna people of the Adelaide Plains who call it 'Warriparinga', a windy place by the creek. Warriparinga is a special ceremonial place of significance to Aboriginal people, and has particular significance for the Kaurna people as it forms part of the Tjilbruke Dreaming.

Colonial settlement in the 1830's established 'The Marion Village', surveyed by Colonel William Light's company, Light, Finniss & Co. Early Industries included farming, vineyards, almond orchards and market gardens, which earned Marion the title 'The Garden of Adelaide'.'

After the Second World War, Marion experienced a period of significant growth, largely driven by the development of low-cost housing, and the local manufacturing and industry sector.

The City of Marion continued to grow in the 1960's and 70's with the development of the suburbs of Hallett Cove, Trott Park and Sheidow Park forming the southern extent of the Council area.

CITY OF MARION CULTURAL HERITAGE

PHOTOS COURTESY OF THE STATE LIBRARY OF SOUTH AUSTRALIA








City of Marion

The city now

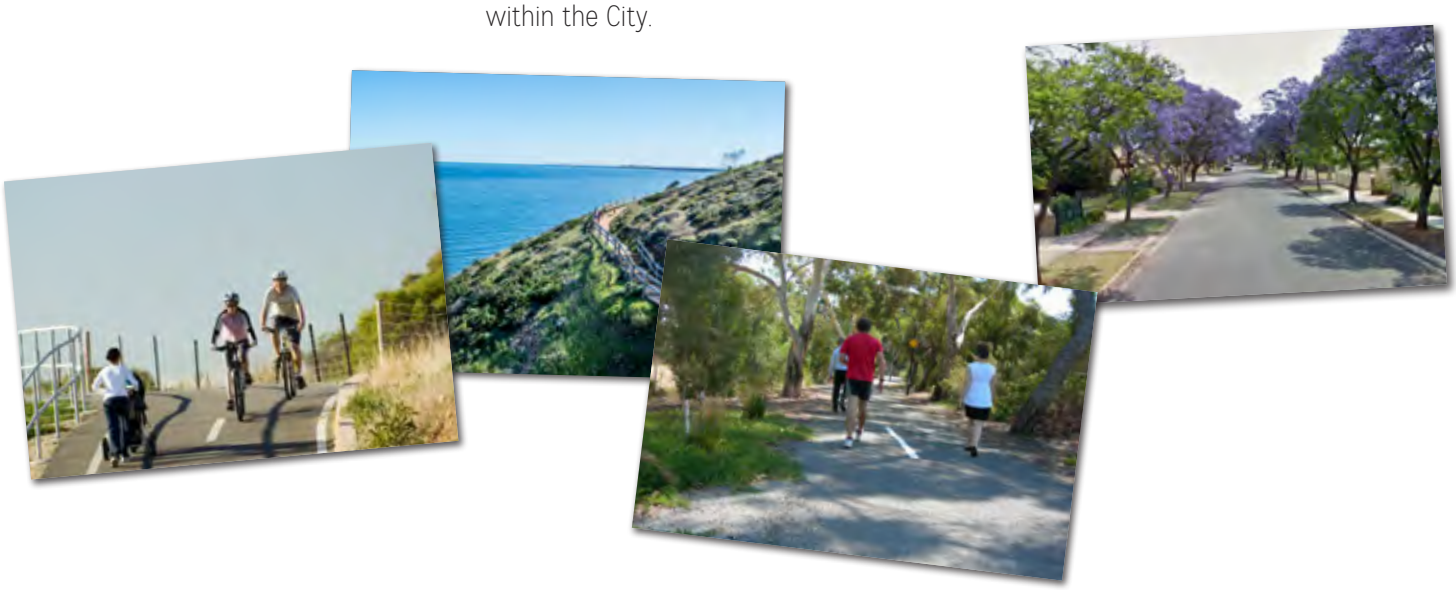
The City of Marion's location in Adelaide's southern suburbs, stretches from the Glenelg to Adelaide tramline in the north to Field River in the south. The City is bounded by the City of West Torrens to the north, the Cities of Unley and Mitcham to the east, the City of Onkaparinga to the south, and Gulf St Vincent and the City of Holdfast Bay to the west.

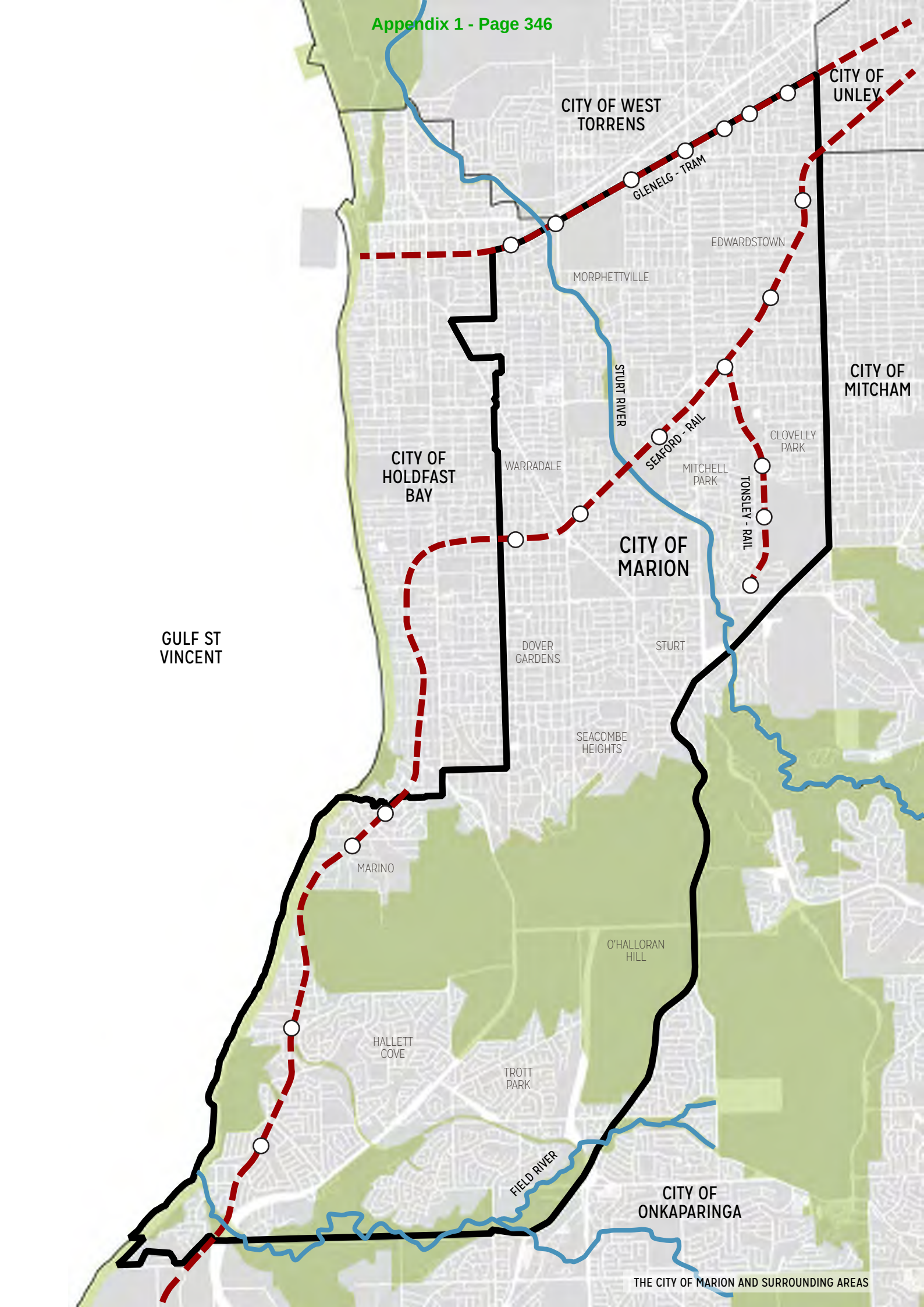
The City of Marion is predominantly residential in land use, with significant other commercial, industrial and open space uses distributed throughout the City area.

The Sturt River traverses the northern part of the City and the Field River meanders along the southern boundary. The Noarlunga rail line, Tonsley line and Adelaide to Glenelg tramline pass through the Local Government Area. The southern part of the City adjoins the coastline and includes part of the Hills Face Zone. The O'Halloran Hill Recreation Park, Marino and Hallett Cove Conservation Parks are also within the City.

Following the Second World War, the City of Marion experienced significant growth of low-density development structured on car-based transport. Most 'greenfield' land in the city have now been developed. Future growth is focused on infill,

The City of Marion comprises the suburbs of Ascot Park, Bedford Park (part), Clovelly Park, Darlington (part), Dover Gardens, Edwardstown, Glandore (part), Glengowrie, Hallett Cove, Marino, Marion, Mitchell Park, Morphettville, O'Halloran Hill (part), Oaklands Park, Park Holme, Plympton Park, Seacliff Park (part), Seacombe Gardens, Seacombe Heights, Seaview Downs, Sheidow Park, South Plympton, Sturt, Trott Park and Warradale.



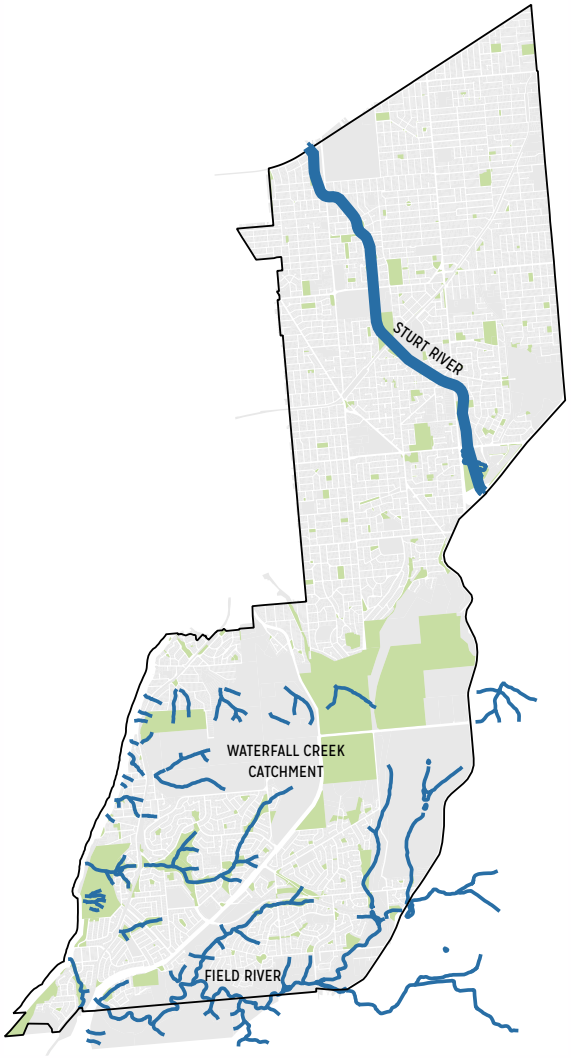


THE CITY OF MARION AND SURROUNDING AREAS

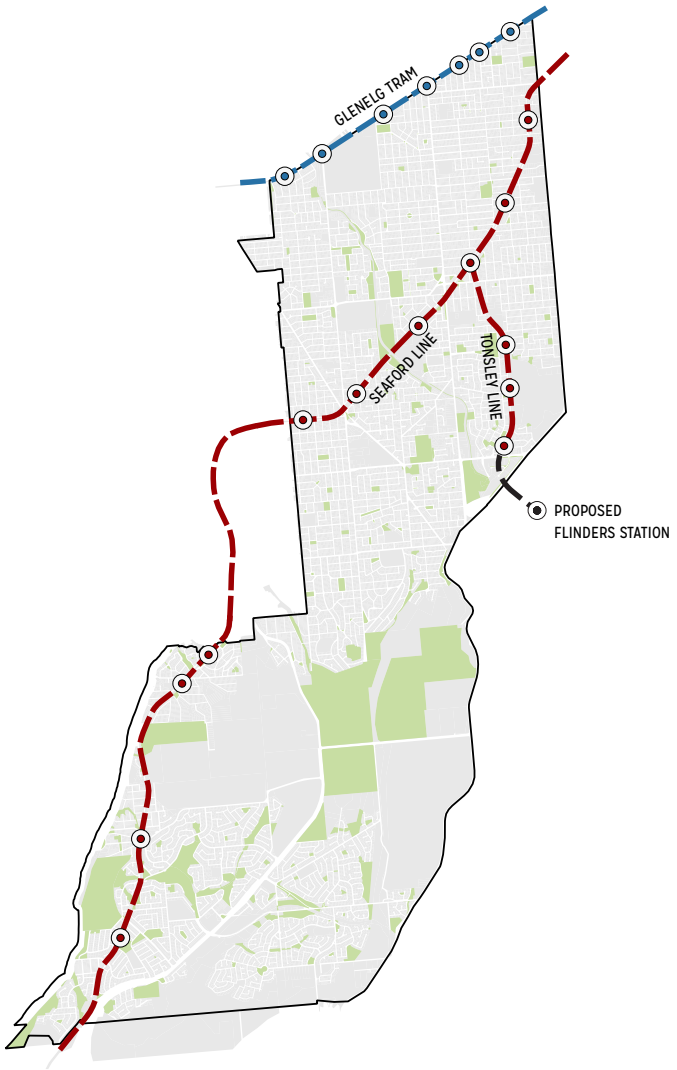
Urban structure

The urban structure of the City Marion is formed by the Sturt River, rail and tram corridors, major roads, and the distinct topography of the area. This urban structure defines the character and identity of the City Marion and contributes to the network of movement, open space and streetscapes.

Waterways

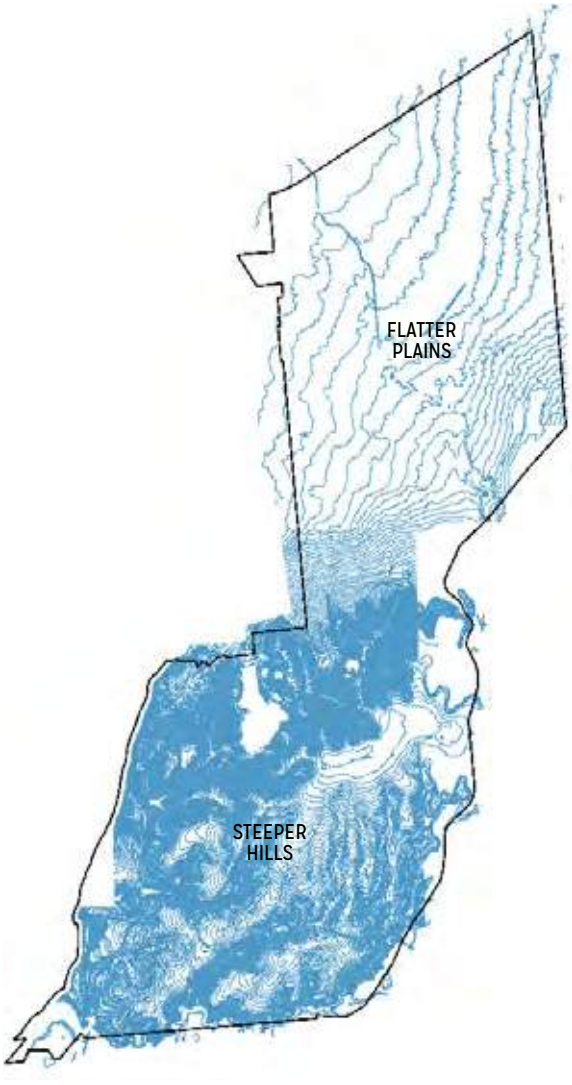


Rail & Tram



Roads

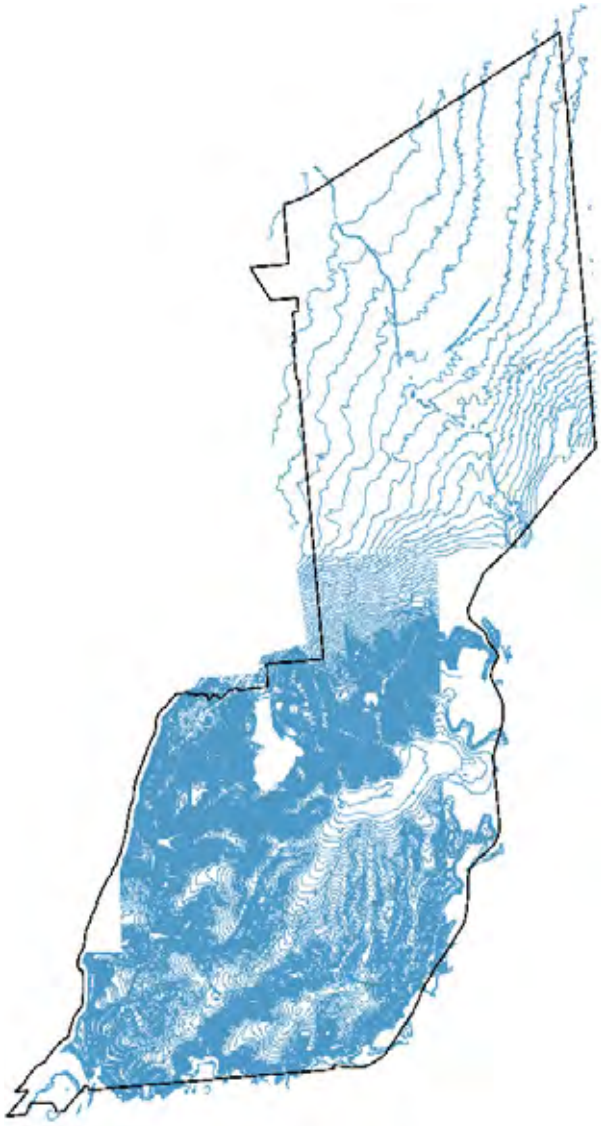
Topography



North & South

The City of Marion's geographical area has two distinct characters (north and south) as a result of varied topography and form of development. The northern suburbs were primarily developed prior to World War 2 and follow a grid plan. The southern suburbs, such as Sheidow Park and Trott Park, have been largely developed in the last 20 years on hillier topography with a more 'organic' urban layout. These two areas are separated by the O'Halloran Hill Recreation Park, Marion Conservation Parks and Glenthorne Farm.

Approximately three-quarters of City of Marion's population lives in the northern sector.



North

- Older suburbs
- Grid-pattern
- Flatter topography
- Set-back from coast
- Some mixed use development
- Less open space and reserves
- Few large street trees, some in reserves
- Integration of industry (South Road)

South

- Newer suburbs
- Curved layout with cul-de-sacs
- Hillier topography
- Adjacent to coast
- Views to coast
- Nearly all residential land use
- More open space reserves
- Few large street trees, some large copses in reserves
- Views

TYPICAL STRUCTURE OF STREETS IN NORTH MARION

TYPICAL STREETSCAPE CHARACTER OF STREETS IN NORTH MARION

TYPICAL STRUCTURE OF STREETS IN SOUTH MARION

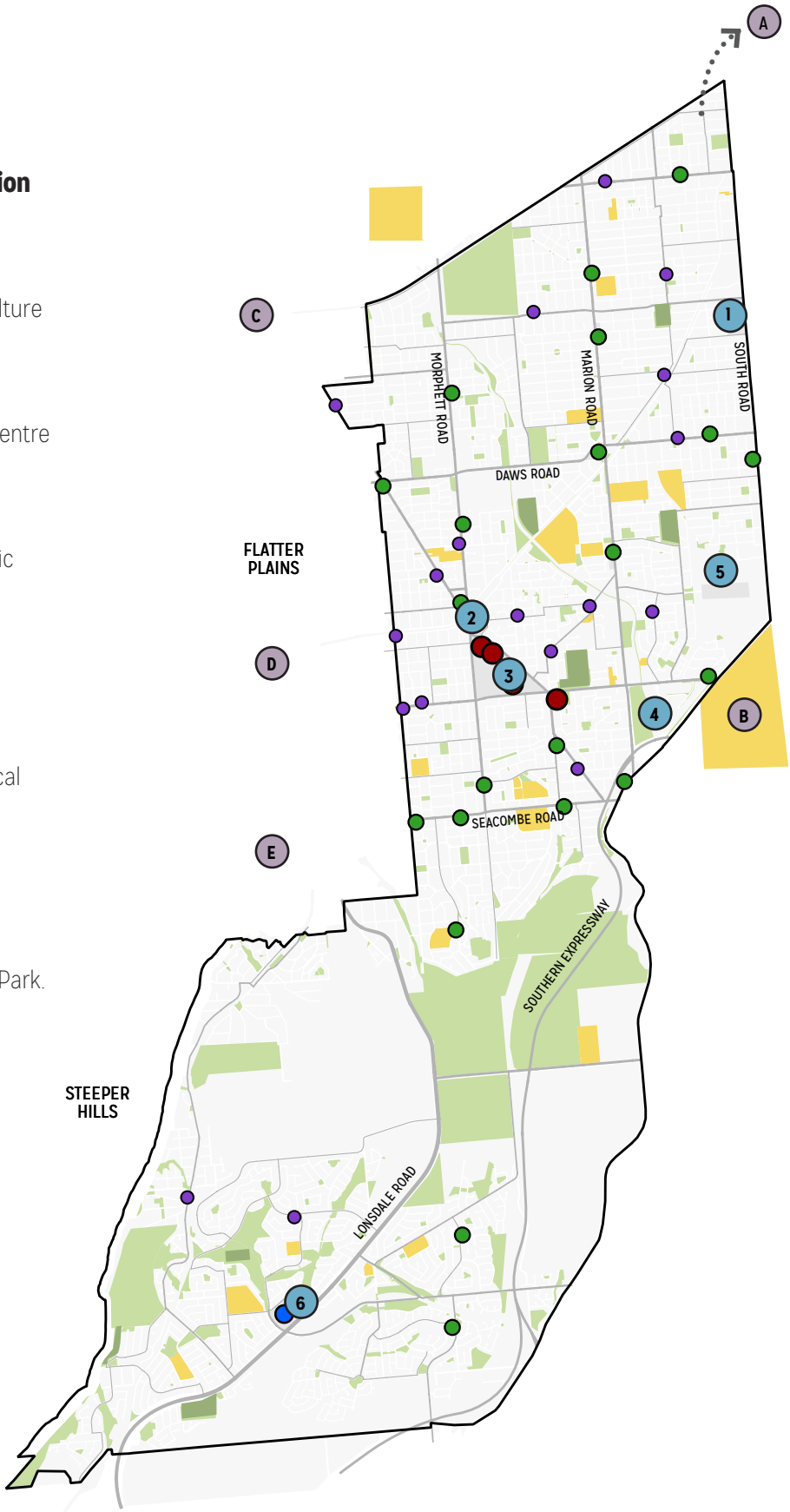
TYPICAL STREETSCAPE CHARACTER OF STREETS IN SOUTH MARION

Destinations

Destinations

Key destinations within the City of Marion include:

- 1 Castle Plaza Shopping Centre
- 2 Marion Aquatic Centre and Marion Culture Centre (MCC);
- 3 Westfield Marion and Civic Centre;
- 4 Warriparinga Living Kaurna Cultural Centre and Wetland. Marion Holiday Park;
- 5 Tonsley Park Redevelopment;
- 6 Hallett Cove Shopping Centre and Civic Centre;
- Neighbourhood destinations;
- Local centres;
- A Adelaide CBD
- B Flinders University and Flinders Medical Centre;
- C Glenelg Beach + Jetty Road Shopping Precinct;
- D Brighton Beach and Jetty;
- E Seacliff Beach and Brighton Caravan Park.
- Major centres;
- Schools and child care facilities;
- Key reserves / open spaces;
- Key sport and recreation; and



Major routes

Vehicle and public transport

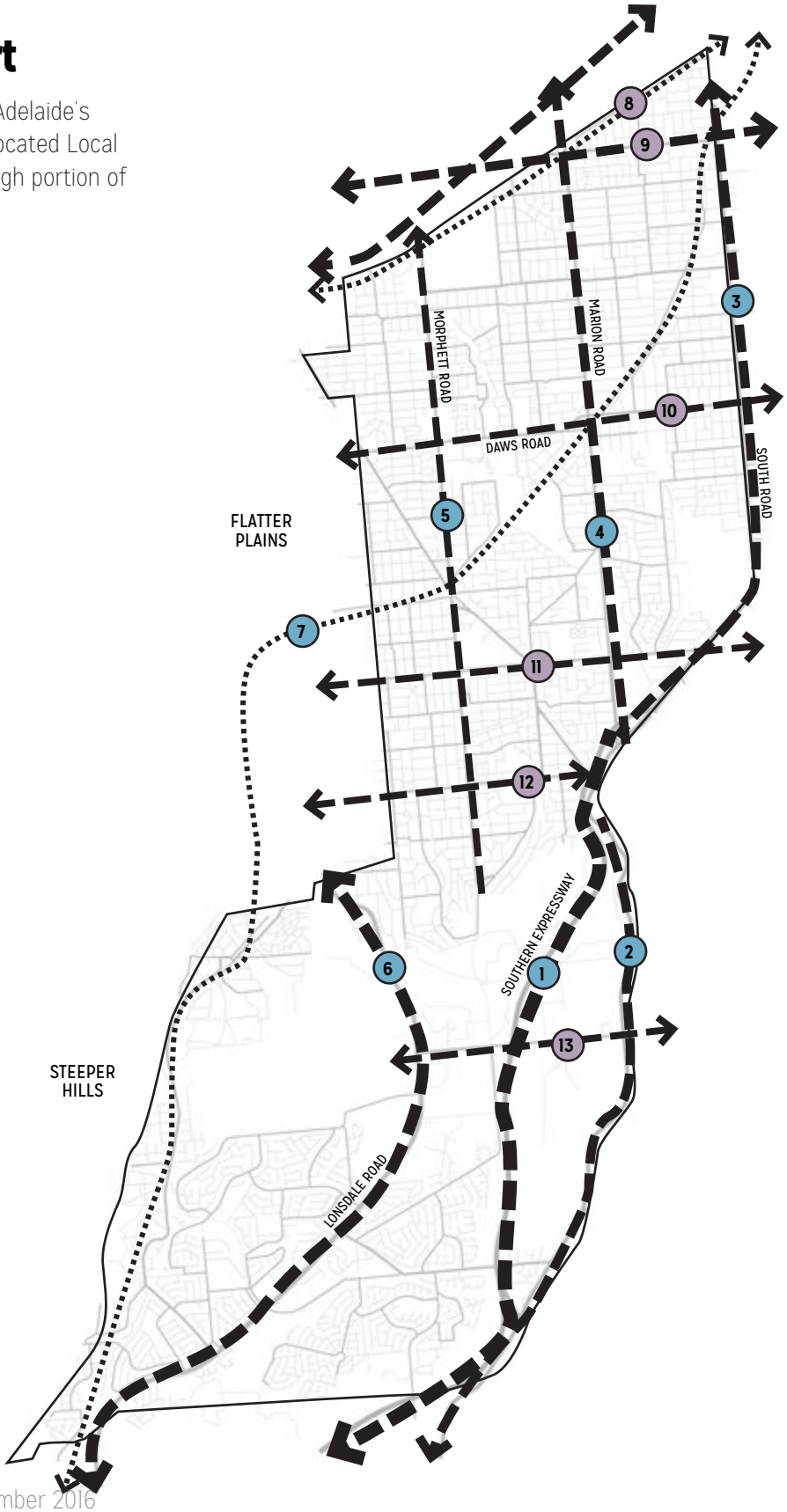
The City of Marion is located in the middle of Adelaide's southern suburbs. Like many other centrally located Local Government Areas, the City of Marion has a high portion of through traffic.

Key north/south routes include:

1. Southern Expressway;
2. Main South Road;
3. South Road;
4. Marion Road;
5. Morphett Road;
6. Ocean Boulevard / Lonsdale Road; and
7. Seaford Rail line.

Key east/west routes include:

8. Adelaide to Glenelg Tramway;
9. Cross Road
10. Oaklands + Daws Roads;
11. Sturt Road; and
12. Seacombe Road.

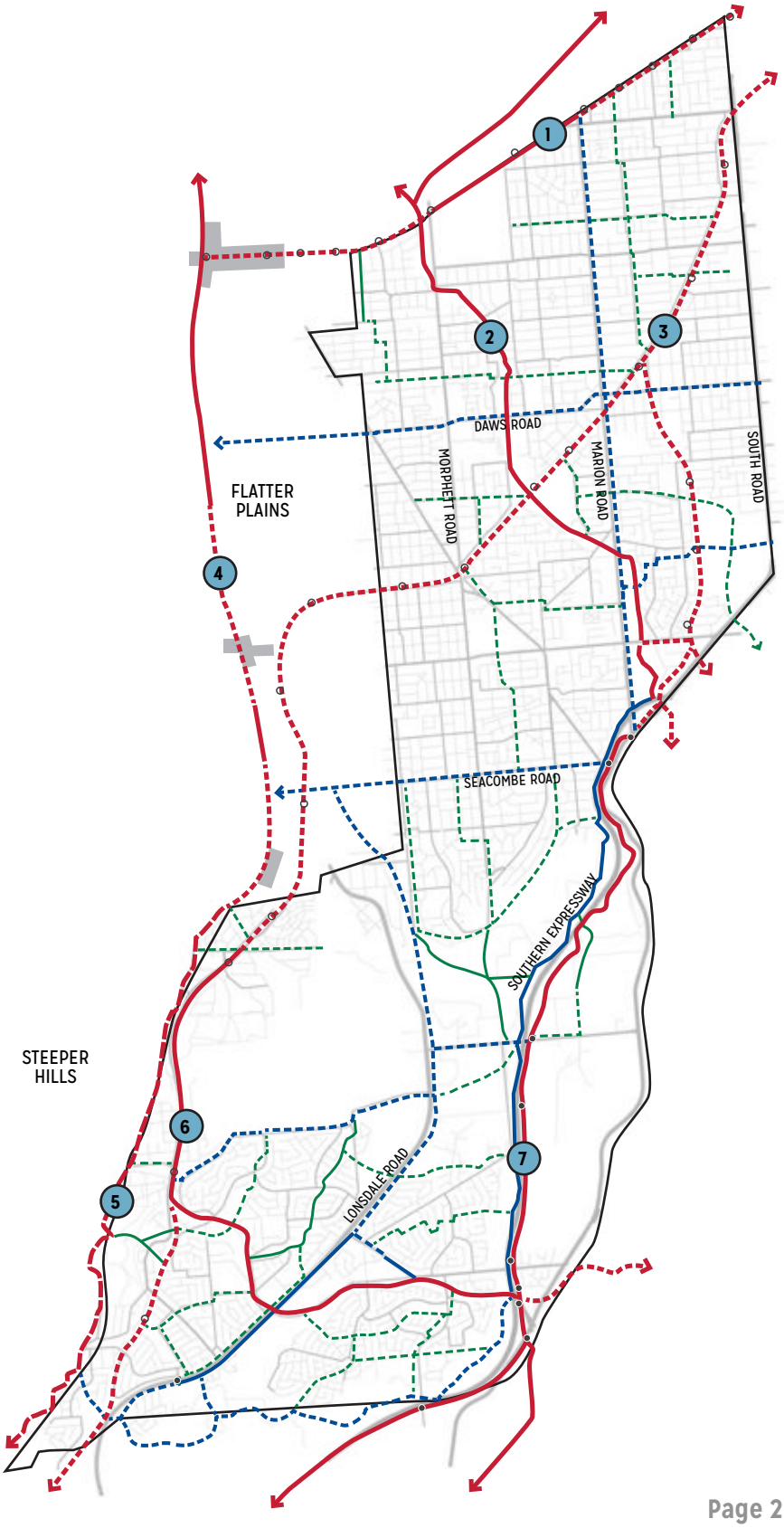


Walking and cycling

Key routes include:

1. Mike Turtur bikeway;
2. Sturt River Linear Trail;
3. Adelaide - Marino Rocks;
4. Coast Park;
5. Marion Coastal Walk;
6. Coast to Vines; and
7. Patrick Jonka Veloway.

- Greenways (existing)
- Greenways (proposed)
- Regional (existing)
- Regional (proposed)
- Local (existing)
- Local (proposed)
- Bike lane/shoulder (bikedirect)
- Train / Tram stop (existing)
- Veloway access point (existing)



Roads

City of Marion road hierarchy

Key routes include:

Arterial

Arterial roads provide important regional transport corridors that carry through traffic as well as distribute traffic locally.

Sub-arterial

Sub-arterial roads connect arterial roads to areas of development, and carry traffic directly from one local area to another.

Distributor

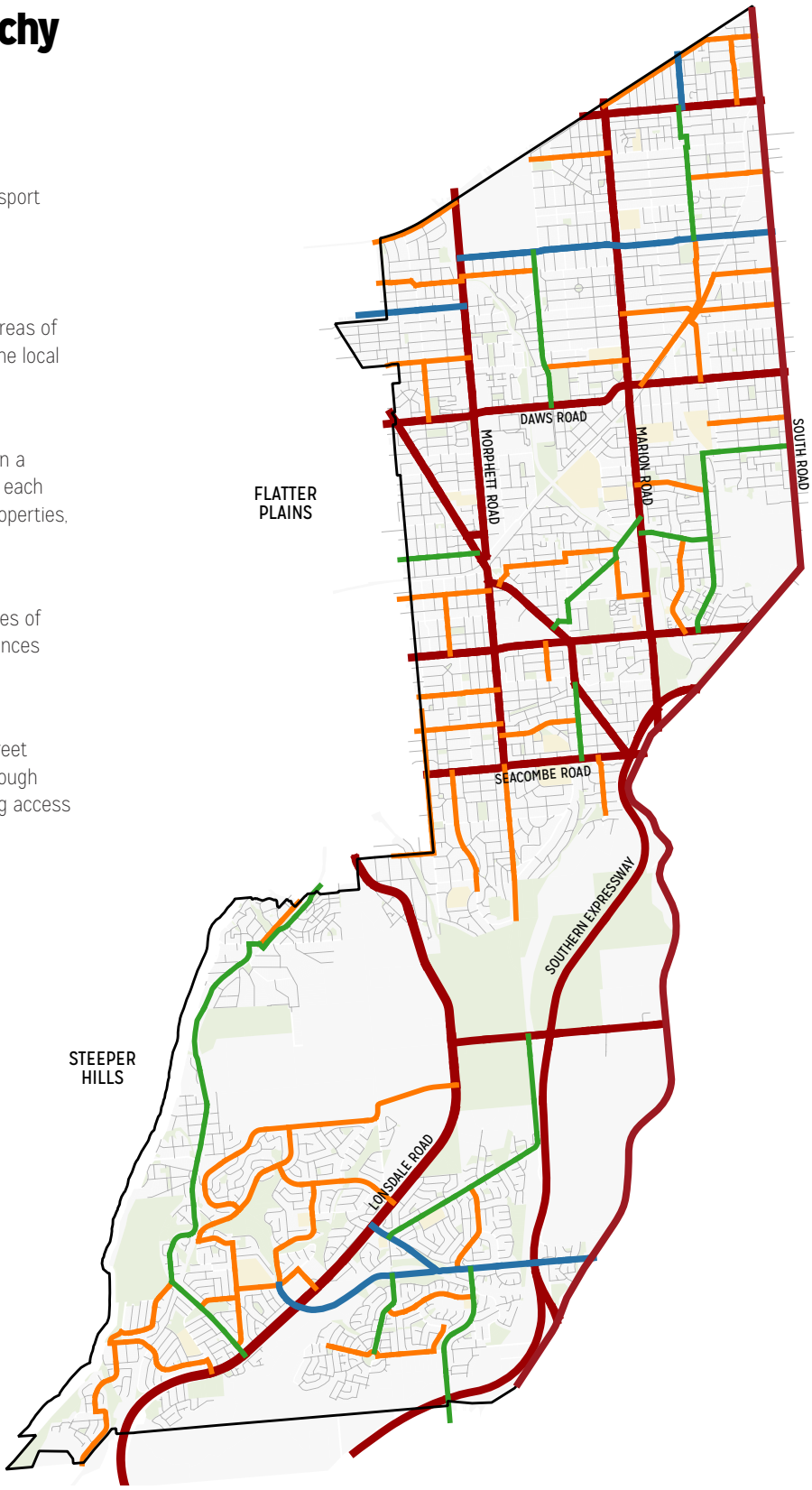
Distributor roads disperse traffic into or within a local area. These roads consist of one lane in each direction and provide access to residential properties, local centres, schools and open space.

Collector

Collector roads cater for low-moderate volumes of local traffic providing access to private residences and local centres.

Local

Local roads are largely the neighbourhood street system. These roads are relatively free of through traffic and mostly handle local traffic providing access to residential allotments.



Road ownership

Road ownership includes:

- State Government;
- City of Marion;

Part B

Vision & Principles

Vision & Principles

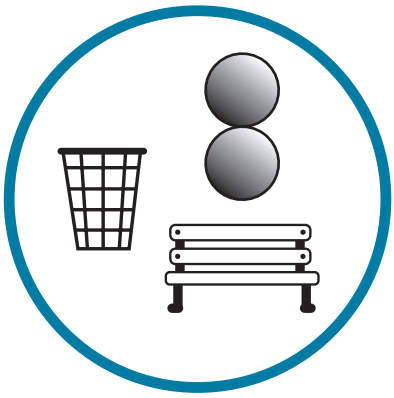
Vision

To improve the amenity and functionality of streetscapes within the City of Marion to contribute to neighbourhood identity, and support active communities and healthy environments.

Principles

Functional & Balanced

A strategic approach will define the street network through balancing the multiple roles of streets as safe thoroughfares for movement of pedestrians, cyclists and vehicles, and as destinations for people in addition to stormwater drainage requirements.

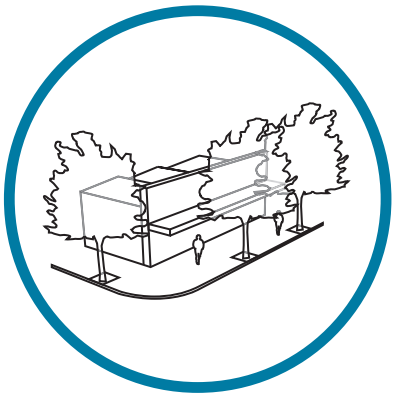


Amenity

Streetscape design will be attractive, enable accessibility, and be of high amenity value in key locations so they are places where people of all ages, cultures and abilities want to spend time at different times of the day and year.

Sustainability

Landscaping will be environmentally sustainable incorporating the use of water sensitive urban design and the use of indigenous plantings where possible to support the role of streets as connectors, enhance habitat corridors, cool the urban environment, and enhance road safety. Locally sourced materials will be used where possible.



Urban Environment

Streetscapes will be enhanced by visual connections with their surrounding environments creating a strong sense of place.

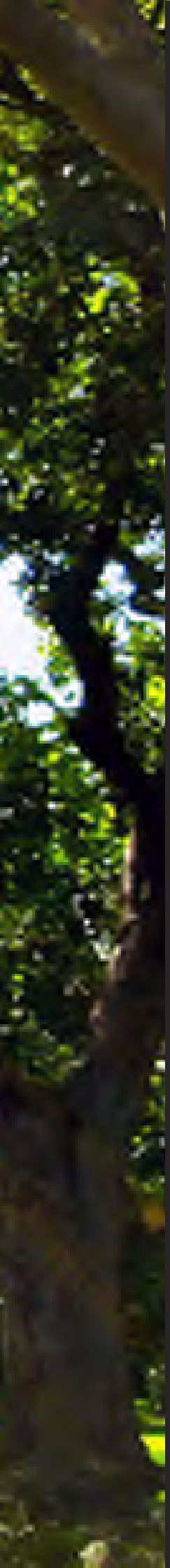
Attractiveness & Comfort

Residential, commercial, business and education precincts will be enhanced by streetscapes that contribute to the attractiveness and identity of these areas and provide comfort to human senses.

Management & Maintenance

The level of service for streetscapes will be maintained by the timely application of proactive maintenance and auditing programs. Material selection and whole of life costs will be considered to ensure financially sustainable solutions are adopted.

REFERENCED FROM MARION STREETSCAPE POLICY - JUNE 2016



Part C
Hierarchy of Streets

ARTERIAL

SUB-ARTERIAL

DISTRIBUTOR

COLLECTOR

LOCAL

Arterial

Overview

Arterial roads provide important regional transport corridors that carry through traffic as well as distribute traffic locally. Arterial roads carry high volumes of traffic as well as cyclists and pedestrians. Arterial roads:

- Carry through traffic that is then distributed to secondary roads and local streets.
- Carry high volumes of traffic at higher speeds.
- Usually have wider traffic lanes to accommodate buses and heavy vehicles.
- Often provide the route for high voltage power and other service infrastructure.

Existing character

Arterial roads within the City of Marion carry considerable amounts of traffic servicing regional and local centres as well as through-traffic. These roads are an important component of the metropolitan road network as well as playing an important role in the identity of and place recognition of the city.

SOUTH ROAD - EDWARDSTOWN

LONSDALE ROAD - HALLETT COVE

DAWS ROAD - MARION

SOUTHERN EXPRESSWAY - STURT

Key arterial roads include:

1. Cross Road;
2. South / Main South Road;
3. Marion Road;
4. Morphett Road;
5. Daws / Oaklands Road;
6. Diagonal Road;
7. Sturt Road;
8. Seacombe Road;
9. Londsdale Road / Ocean Boulevard;
10. Majors Road; and
11. Southern Expressway

Arterial

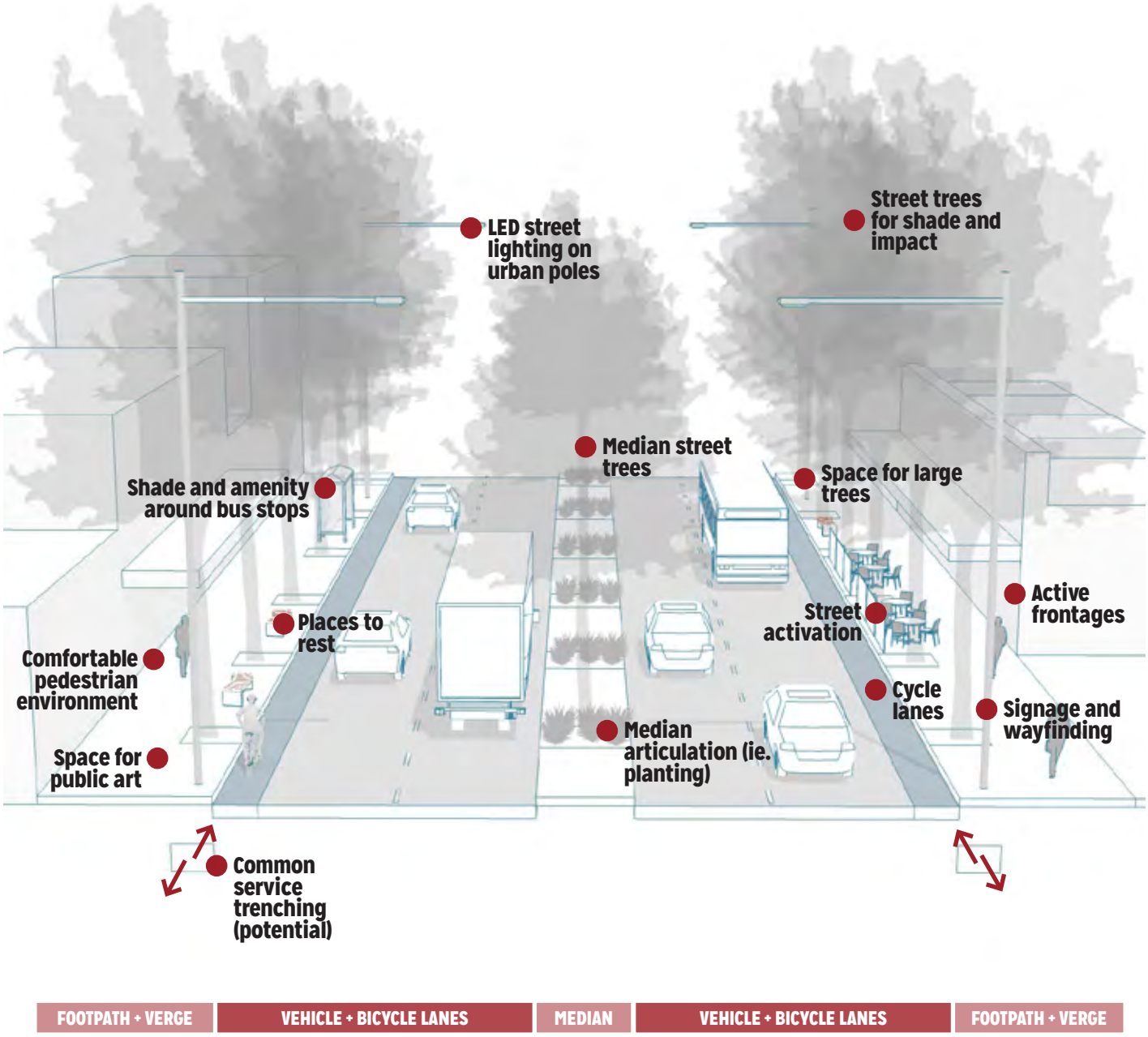
Desired character

Arterial roads function as district and regional connectors, playing an important role in providing places for civic activity and enhancing the local environment. Well designed and supported arterial roads contribute to urban uplift and enhance city character. Arterial roads:

- Incorporate tree planting to provide amenity, visual scale, and a sense of arrival.
- Function as transit corridors for vehicles, pedestrians and cyclists.
- Provide a vibrant and comfortable public realm, supported with furniture, lighting, and wayfinding.
- Support destinations along streets by providing access to car parking and services.
- Provide places for social interaction and activity.
- Encourage active frontages that engage with the streetscape.
- Reinforce district character, and sense of place.
- Consider power undergrounding and common service trenching.
- Integrate public art.

DESIRED ARTERIAL ROAD CHARACTER

Example of arterial road



Sub-arterial

Overview

Sub-arterial roads connect arterial roads to areas of development, and carry traffic directly from one local area to another. They primarily function as vehicle distributors, but also service facilities such as commercial centres, schools and open space. Sub-arterial roads:

- Function as transit routes for heavy and other vehicles, public transport and cyclists.
- Carry high-moderate volumes of fast moving traffic.
- Facilitate through movement and provide access to public transport.
- Contribute to local and regional cycle connections.
- Provide access to regional and local centres.

Existing character

There are few sub-arterial roads within the City of Marion. These roads are generally wide and open in character. They typically comprise of vehicle lanes, designated bicycle lanes, and on street car parking.

North

- Semi-mature street trees.
- Footpaths on both sides.
- Designated bicycle lanes.
- Overhead infrastructure.
- Access to local and neighbourhood centres.

South

- Open character.
- Wide vehicle lanes.
- No on-street parking.
- No bicycle lanes.
- Footpaths on one side.
- Underground service infrastructure.

WINIFRED AVENUE - GLANDORE

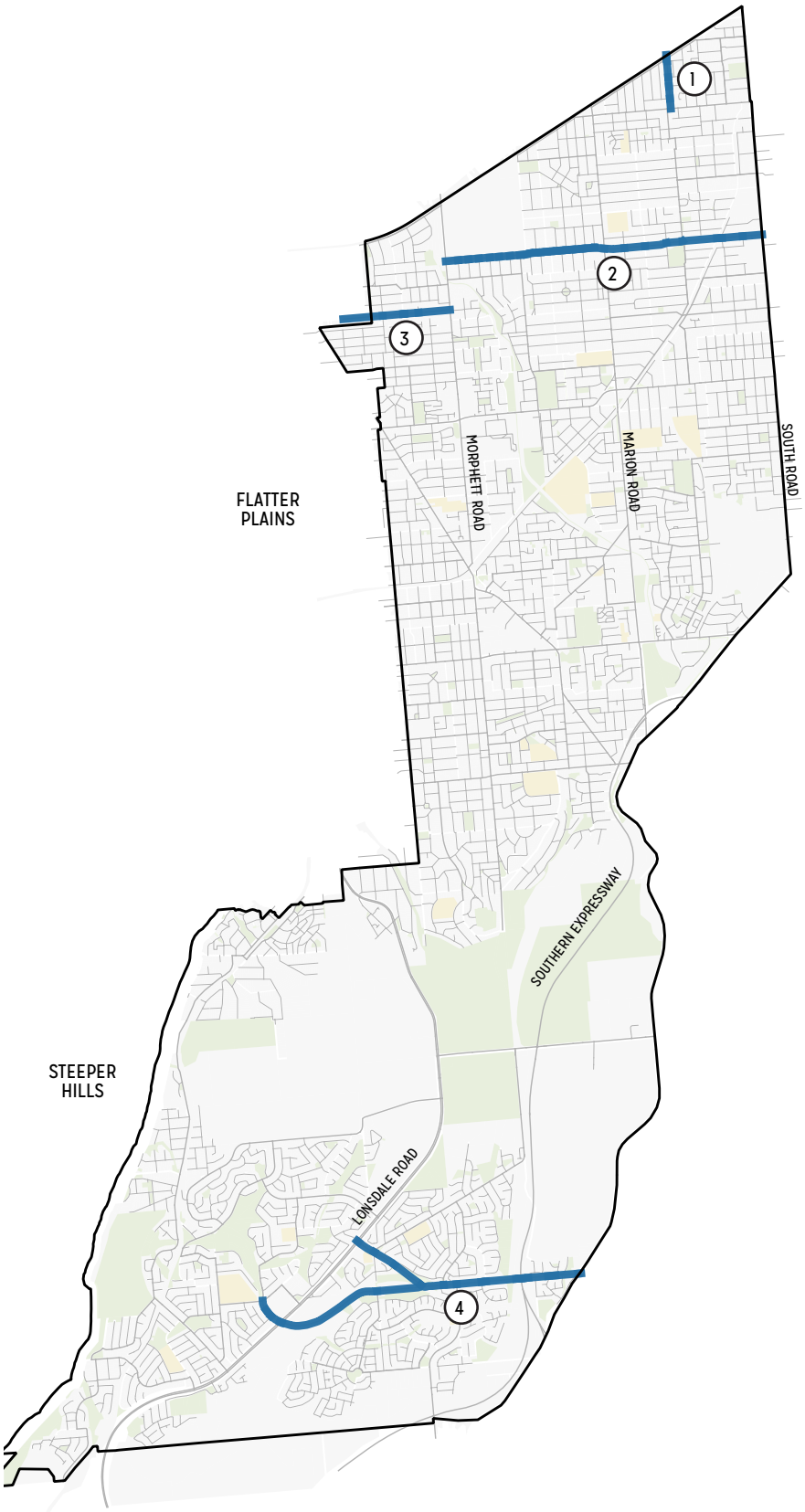
RAGLAN AVENUE - SOUTH PLYMPTON

CLIFF STREET - MORPHETTVILLE

PATPA DRIVE - SHEIDOW PARK

Sub-arterial roads include:

1. Winifred Avenue;
2. Raglan Avenue / Bray Street;
3. Cliff Street; and
4. Lander Road / Patpa Drive / Quailo Avenue.



Sub-arterial

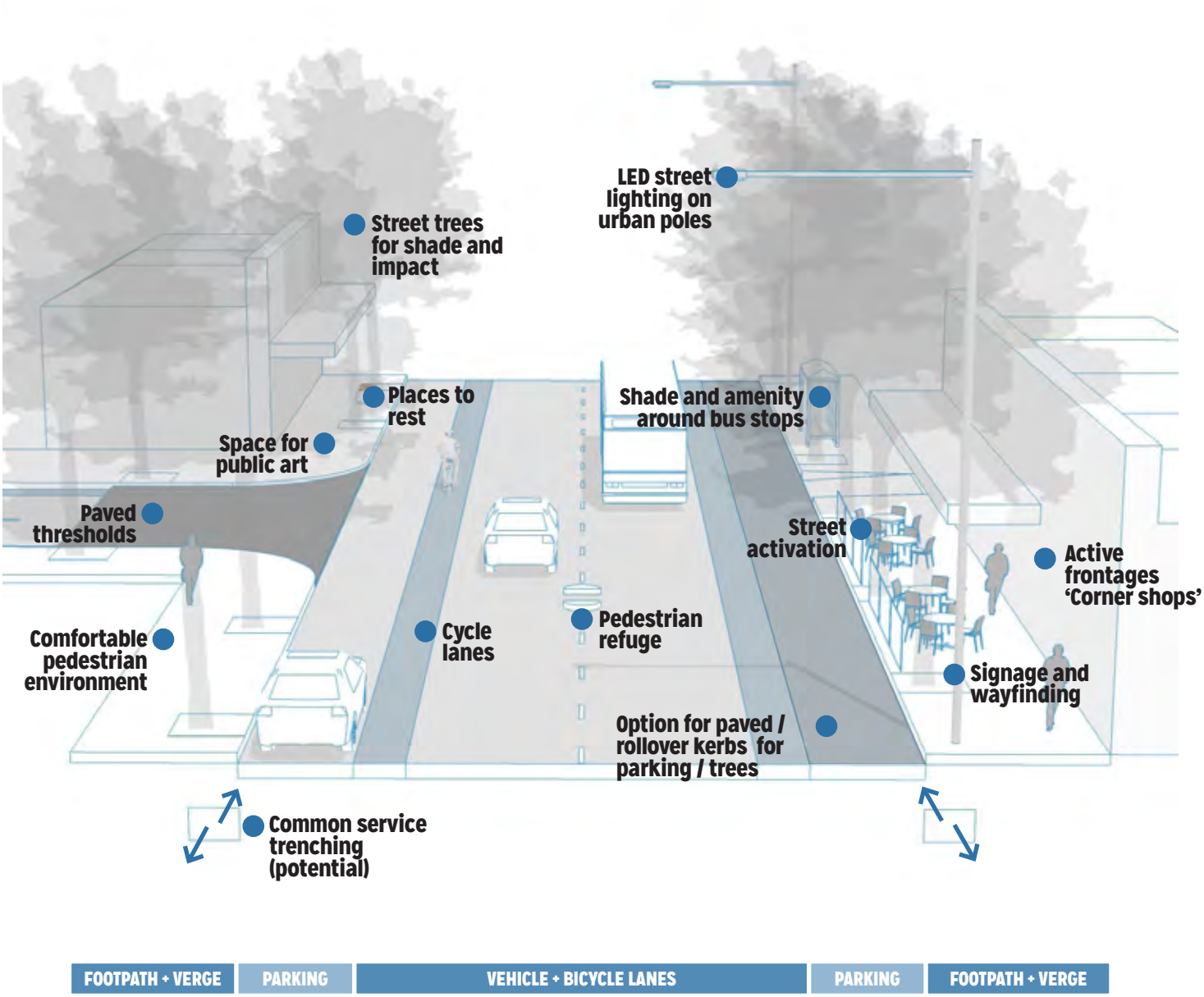
Desired character

Sub-arterial roads cater for high volumes of through traffic, providing access from arterial roads to neighbourhood and local centres, and supporting local and regional bicycle connections. Sub-arterial roads:

- Accommodate large trees to provide visual scale, and amenity and shade for pedestrians and cyclists.
- Provide places for rest.
- Support walking and cycling through the provision of continuous and high quality footpaths and dedicated on-street bicycle lanes.
- Encourage Water Sensitive Urban Design through the provision of bioretention tree pits and rain gardens.
- Support protuberances adjacent local centres and 'corner shops' to provide opportunities for street activity.
- Balance the requirements of heavy vehicle traffic, and pedestrians and cyclists.
- Integrate signage and wayfinding.
- Should aim to reduce the impact of infrastructure through the consolidation of services in common service trenches (where practicable).
- Integrate public art.
- Consider protuberances to add character and provide greater space for tree planting and water sensitive landscaping.
- Incorporate pedestrian refuges.

DESIRED SUB-ARTERIAL ROAD CHARACTER

Example of sub-arterial road



Distributor

Overview

Distributor roads disperse traffic into or within a local area. These roads consist of one lane in each direction and provide access to residential properties, local centres, schools and open space. Distributor roads:

- Function as access routes for private vehicles and cyclists.
- Carry moderate volumes of slower moving traffic.
- May carry public transport vehicles.
- Provide safe thoroughfare for pedestrians.
- Offer on-street parking.

Existing character

Distributor roads in the city are typically wide and open in character, comprising one lane traffic, dedicated bicycle lanes, semi-mature street trees, footpaths on both sides and verges.

North

- Urban character.
- Street trees of varying maturity and species. Not all residences have a street tree.
- Footpaths on both sides.
- Designated on-street parking.
- Prominent overhead services.
- Designated bicycle lanes.

South

- Open character.
- Minimal street tree planting.
- Footpath on one or both sides.
- Designated on-street parking.
- Narrow verges or no verge.
- Underground services.
- Designated bicycle lanes.

ALAWOONA AVENUE - MITCHELL PARK

TOWERS TERRACE - SOUTH PLYMPTON

HENDRIE STREET - MORPHETTVILLE

THE COVE ROAD - MARINO

HIERARCHY OF STREETS

Distributor roads include:

1. Hendrie Street;
2. Towers Terrace;
3. Dunrobin Road;
4. Finniss Street;
5. Alawoona Avenue;
6. Bradley Grove;
7. Celtic Avenue;
8. Miller Street;
9. The Cove Road;
10. Adams Road;
11. Berrima Road and;
12. Young Street.

Distributor

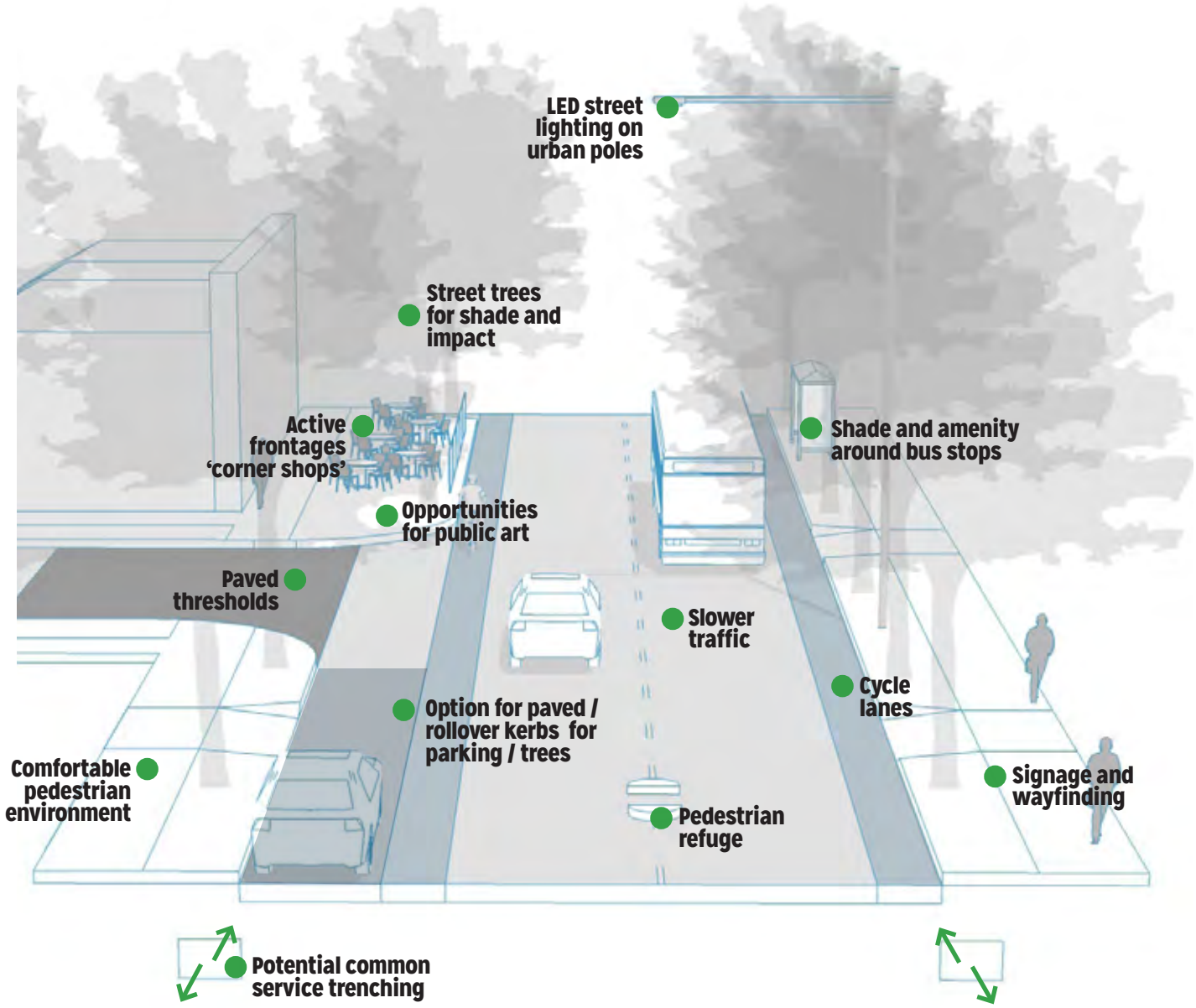
Desired character

Distributor roads provide access to local residences and local centres (shops and schools). Lower vehicle speed and volume allows for a more comfortable pedestrian and cycling environment. Distributor roads:

- Accommodate large trees that reinforce local character and provide amenity and shade for pedestrians and cyclists.
- Support Water Sensitive Urban Design through the provision of bioretention tree pits and rain gardens.
- Support local 'corner shop' development including protuberances and outdoor activity.
- Support local bicycle movement through the provision of dedicated bicycle lanes.
- Incorporate on street parking facilities.
- Should aim to reduce the impact of infrastructure through the consolidation of services in common service trenches (where practicable).
- Incorporate pedestrian refuges.
- Integrate signage and wayfinding.
- Integrate public art.
- Consider protuberances to add character and provide greater space for tree planting and water sensitive landscaping.

DESIRED DISTRIBUTOR ROAD CHARACTER

Example of distributor road



Collector

Overview

Collector roads cater for low-moderate volumes of local traffic providing access to private residences and local centres. These roads are relatively free of through traffic. Collector roads:

- Comprise low to moderate volumes of traffic - primarily cars, pedestrians and cyclists.
- Are mixed use environments with pedestrian priority.
- May incorporate public transport routes.
- Incorporate roundabouts and right-of-way signs rather than traffic lights.
- Provide direct property access.

Existing character

Collector roads are typically narrow in character, comprising of one vehicle lane in each direction, no dedicated bicycle lanes, minimal footpath and verge width and prominent overhead infrastructure.

North

- Narrow urban character.
- Street trees of varying maturity and species.
- Footpaths and narrow verges on both sides.
- No dedicated bicycle lanes.
- On-street parking with no linemarking.
- Overhead services.

South

- Open character.
- Minimal and mixed street tree planting.
- Footpath on one or both sides.
- On-street parking, sometimes in marked bays.
- Narrow verges or no verge.
- Underground services.

GEORGE STREET - MARION

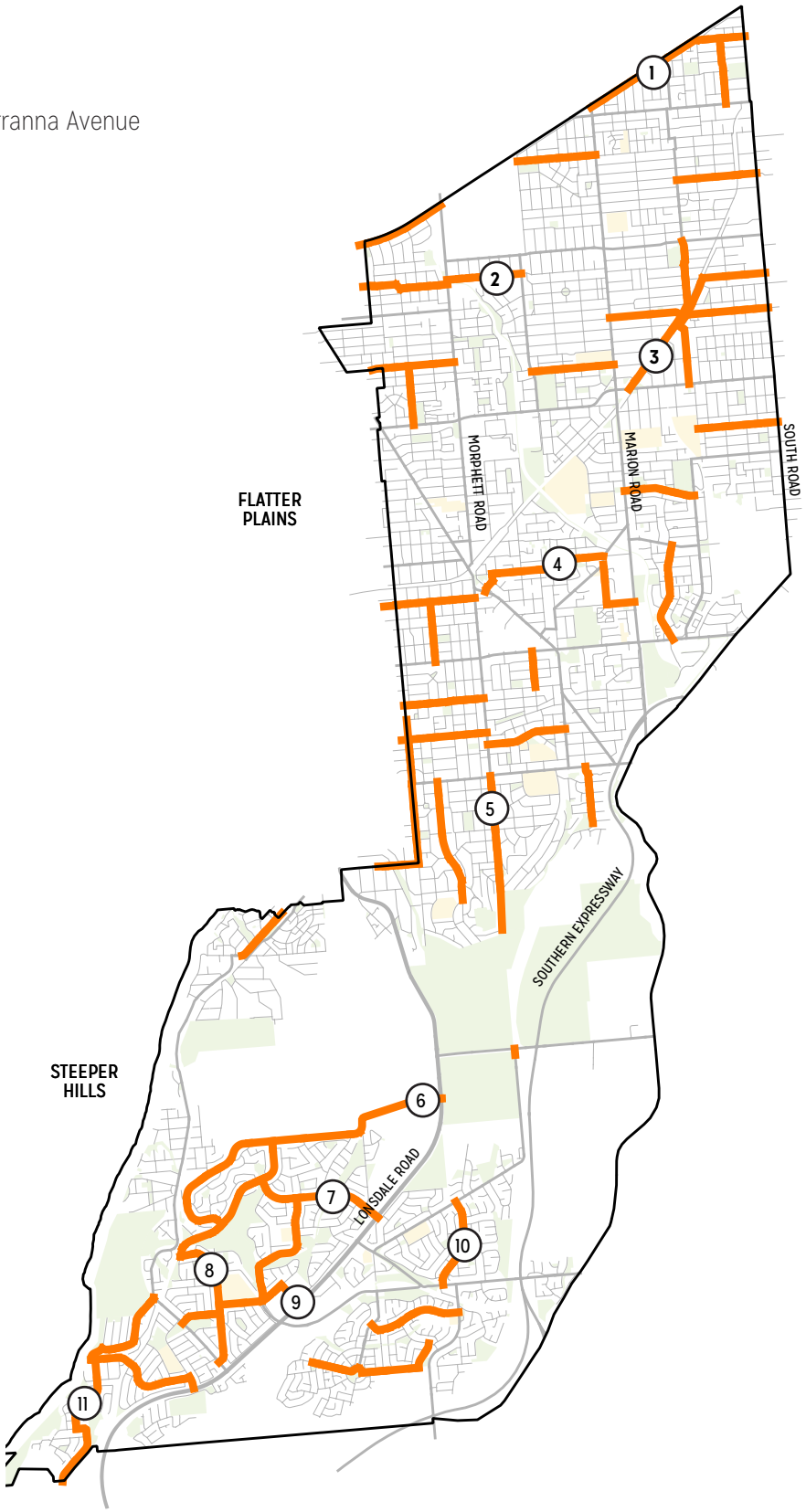
MORPHETT STREET - SEAVIEW DOWNS

TARRANNA STREET - PARK HOLME

PERRY BARR ROAD - HALLETT COVE

Collector roads include:

1. Pleasant Avenue;
2. Austral Terrace / Beadnall Terrace / Tarranna Avenue
3. Railway Terrace;
4. George Street / Dwyer Road;
5. Morphett Road (southern section);
6. Perry Barr Road;
7. Barramundi Drive;
8. Sandison Road;
9. Ramrod Avenue;
10. Heysen Drive and;
11. Meyer Road;



Collector

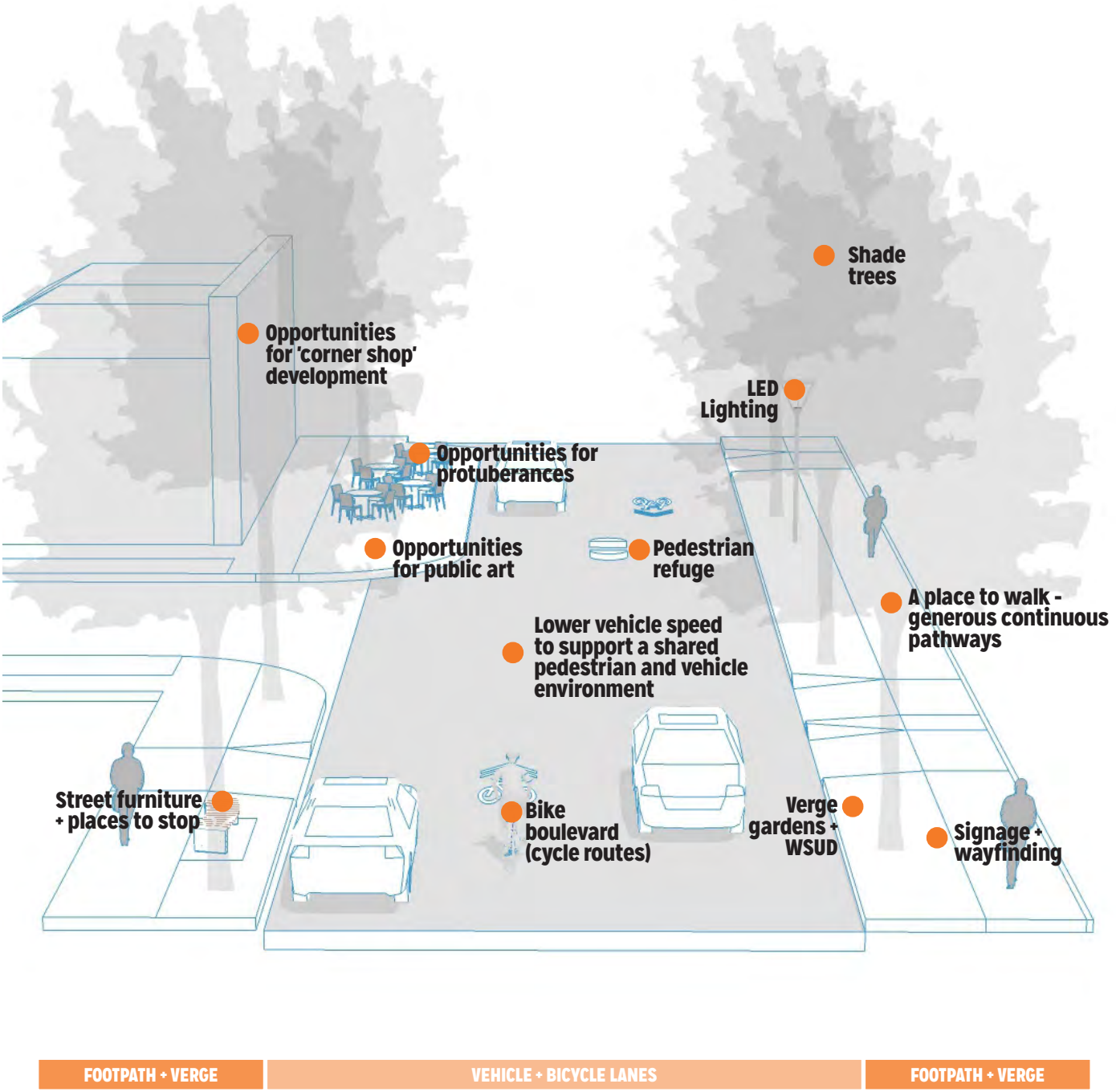
Desired character

Collector roads provide access to dwellings and other roads in the street hierarchy. Local roads contribute to local walking and cycling movement and provide opportunities for social interaction. Local roads:

- Support walking and cycling through the provision of continuous footpaths (on both sides of the street where possible).
- Accommodate large street trees that contribute to character and provide shade for pedestrians and parked cars.
- Support Water Sensitive Urban Design through the installation of rain gardens and bioretention tree pits.
- Support provisions for verge gardening.
- Should aim to reduce the impact of infrastructure through the consolidation of services in common service trenches.
- Support reduced traffic speeds and volumes through traffic calming.
- Accommodate pedestrian crossings.
- Provide places for rest.
- Integrate signage and wayfinding.
- Integrate public art.
- Incorporate pedestrian refuges.
- Support local 'corner shop' development including protuberances and outdoor activity.
- Consider protuberances to add character and provide greater space for tree planting and water sensitive landscaping.

DESIRED COLLECTOR ROAD CHARACTER

Example of collector road



Local

Overview

Local roads are largely the neighbourhood street system. These roads are relatively free of through traffic and mostly handle local traffic providing access to residential allotments. Local roads are characterised by:

- Lower traffic speed.
- Lower traffic volumes.
- Safer and more accessible pedestrians and cycling connections.
- Lower service standards (footpaths, lighting, furniture, signage).

Existing character

Local roads can be generally classified by their geographical location in the north or south section of the city.

North

- Street trees of varying species and maturity.
- Footpaths on both sides.
- Verges comprising mix of lawn, planting, and gravel.
- Fences to residential interface.
- Overhead services.
- On-street parking.
- Overhead services.

South

- Minimal street tree planting.
- Footpath on one or both sides.
- No verge or verge only on one side.
- No fences to residential interface.
- Generally underground services.
- On-street parking.

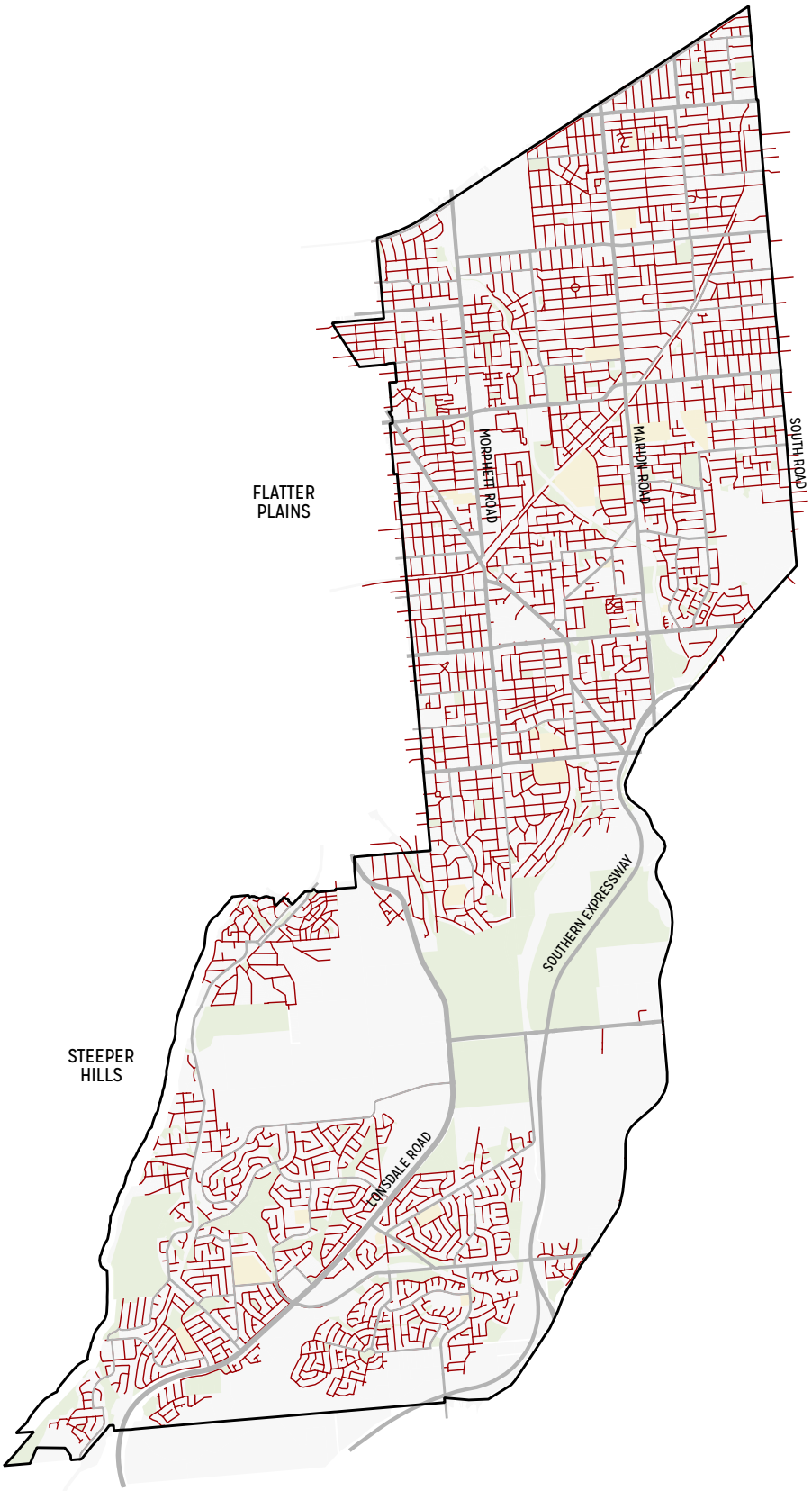
ST LAWRENCE AVE - EDWARDSTOWN

NALIMBA STREET - HALLETT COVE

CASTLE STREET - PLYMPTON

EDWARD BECK DRIVE - SHEIDOW PARK

HIERARCHY OF STREETS



Local

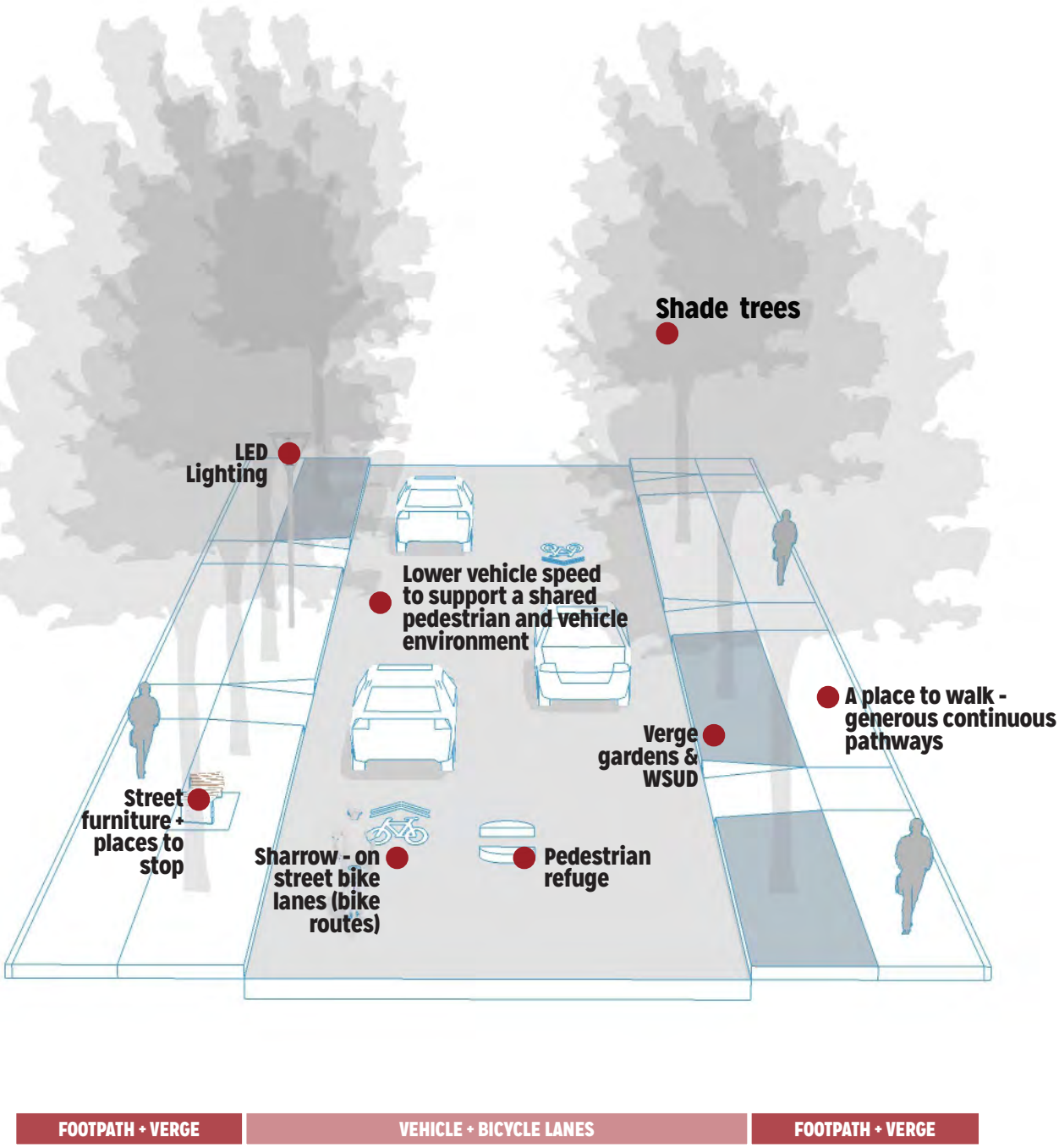
Desired character

Local roads provide access to dwellings as vehicle speeds are lower than on other roads. Local roads can become important places for communities to meet and interact on a daily basis. Local roads:

- Support walking and cycling through the provision of continuous and high quality footpaths (on both sides of the street where possible).
- Accommodate street trees that contribute to character and provide shade for pedestrians and parked cars.
- Support Water Sensitive Urban Design through the installation of rain gardens and bioretention tree pits.
- Accommodate provisions for Green Infrastructure, for example, verge gardening.
- Should aim to reduce the impact of infrastructure through the consolidation of services in common service trenches.
- Support reduced traffic speeds and volumes through traffic calming.
- Support a variety of housing types.
- Consider protuberances to add character and provide greater space for tree planting and water sensitive landscaping. Incorporate pedestrian refuges.
- Support local 'corner shop' development including protuberances and outdoor activity.

LOCAL ROAD CHARACTER

Example of local road



Part D
Public Realm Elements

STREET TREES & PLANTING

PAVING

FURNITURE

LIGHTING

SIGNAGE & WAYFINDING

PUBLIC ART

VERGES

Public realm elements

Overview

The following section identifies the design intent for elements and materials used within streetscapes in the city. The elements identified in this section maximise amenity, accessibility, and user experience.

Local materials are suggested wherever possible and all materials and elements are considered in relation to relevant standards. Materials and elements selected provide a guide whilst allowing individual precinct development.

The materials and elements are grouped under the following categories:

i. **Street trees & Planting**
ii. **Paving**
iii. **Furniture**
iv. **Lighting**
v. **Signage & Wayfinding**
vi. **Public art**
vii. **Verges**

Summary of elements

i. Street trees & Planting

Trees
Planting

ii. Paving

Lightly washed concrete paving
Broom finished concrete paving
Asphaltic concrete
Pre-cast unit pavers 01
Pre-cast unit pavers 02
Tactile indicators
Grates
Covers

iii. Furniture

Seat 01
Seat 02
Seat 03
Bespoke seating
Cycle racks
Drinking fountain
Bollard 01
Bollard 02
Bin surrounds 01
Bin surrounds 02

iv. Lighting

Feature lighting
Feature flood light
Pedestrian pole-top light
Street pole-top light
Street light

v. Signage & Wayfinding

Street signs
Wayfinding
Compacted granulitic

vi. Public art

vii. Verges

Lawn
Verge gardens
Verge planters
Rain gardens
Kerb & watertable

Street trees & Planting

Principles

Reinforcing the urban structure and legibility of the city

- The overall structure and legibility of the city is enhanced through avenue planting and defining primary connections and routes.
- Larger trees are used to define major roads and routes.
- Continuity and consistency is provided along the length of streets.

Amenity

- Tree planting is utilised to provide comfort and protection from the sun and wind reducing urban heat island effect.
- A mix of deciduous, native and indigenous trees and plants are used.
- Overhead wires are consolidated underground (with the Power Line Environment Committee [PLEC]) for key streetscapes to improve street appearance and allow for the planting of larger tree species where feasible.
- Streets that offer special connections between reserves and areas of biodiversity are enhanced with indigenous or native planting (where possible) to provide wildlife corridors.
- Scale of space is considered to accommodate tree species at maturity.

Maintenance

- Species are selected for their low maintenance requirements, non-invasive growth habits, life span and suitability to the local microclimate.
- Good tree form and health is promoted through:
  - suitable tree pit preparation;
  - selecting quality advanced tree stock exhibiting good growth and form;
  - suitable planting technique and using stakes and ties (rather than tree guards);
  - providing adequate irrigation, particularly during establishment (WSUD integrated where possible);
  - suitable placement to avoid vehicle damage;
  - avoiding compaction around the base of the trees where possible;
  - not affixing structures or lights to trees; and
  - consideration of root control barriers where possible.

Trees

NATIVE	EXOTIC
LARGE TREES	
Angophora sp.	*Acer x freemanii 'Jeffersred'*
Brachychiton sp.	*Cedrus libani*
Corymbia maculata	*Platanus × acerifolia*
Eucalyptus leucoxylon subsp. Megalocarpa	*Quercus canariensis*
Eucalyptus scoparia	*Quercus cerris*
	Quercus robur
	Quercus rubra
	Quercus palustris
MEDIUM TREES	
Banksia integrifolia	*Celtis australis*
Corymbia eximia	*Celtis occidentalis*
Eucalyptus porosa	*Celtis laevigata*
Eucalyptus torquata	*Ginkgo biloba*
Lophostemon confertus (supplementary only)	*Gleditsia triacanthos 'Shademaster'*
Melia azedarach 'Elite' (sterile)	*Jacaranda mimosifolia*
	Koelreuteria bipinnata
	Koelreuteria paniculata
	Sophora japonica
	Ulmus parvifolia 'Todd'
	Zelkova serrata 'Green Vase'
SMALL TREES	
Eucalyptus leptophylla	*Cercis siliquastrum*
Eucalyptus socialis	*Cercis canadensis*
Geijera parviflora	*Lagerstroemia sp.*
Pyrus sp. (supplementary only)	*Pistacia chinensis*
	Sapium sebiferum

JACARANDA MIMOSIFOLIA

GINKGO BILOBA

LAGERSTROEMIA INDICA 'NATCHEZ'

PLANTING 01

Planting

INDIGENOUS	NATIVE	EXOTIC
MEDIUM SHRUBS (max 900mm high within verge)		
Acacia acinacea	*Correa sp.*	*Raphiolepis X delacourii*
Allocasuarina muelleriana	*Eremophila sp.*	*Viburnum X burkwoodii*
Bursaria spinosa	*Grevillea varieties*	
Dodonaea viscosa subsp. spathulata	*Hakea varieties*	
Eutaxia diffusa	*Westringia sp.*	
Pittosporum angustifolium		
Rhagodia candolleana		
SMALL SHRUBS & GRASSES		
Acacia cupularis	*Anigozanthos flavidus*	*Convolvulus cneorum*
Atriplex plaudosa subsp cordata	*Atriplex sp.*	*Convolvulus erubescens*
Billardierii cyamosa	*Dianella sp.*	*Convolvulus mauritanicus*
Dianella brevicaulis	*Dianella cultivars*	*Convolvulus remotus*
Dianella longifolia	*Eremophila cultivars*	*Hebe 'Blue Gem'*
Dianella revoluta	*Eutaxia microphylla*	*Juniperus conferta*
Dicanthium sericeum	*Poa labillardieri*	*Rhaphiolepis indica*
Goodenia amplexans	*Hardenbergia sp.*	*Rosmarinus lavandulaceus*
Hakea rugosa	*Lomandra cultivars*	*Rosmarinus officinalis 'Prostratus'*
Hardenbergia violacea	*Westringia cultivars*	*Scaevola sp.*
Olearia ramulosa	*Vittadinia blackii*	*Trachelospermum jasminoides*
Themeda triandra		*Viburnum varieties*
GROUNDCOVERS		
Disphyma crassifolium	*Carpobrotus rossii*	
Goodenia albiflora	*Goodenia sp.*	
Scaevola albida	*Pandorea jasminoides*	
Wahlenbergia luteola	*Myoporum parvifolium*	
Wahlenbergia stricta	*Viola hederacea*	
WSUD		
	Cyperus vaginatus	
	Ficinia nodosa	
	Juncus subsecundus	
	Themeda sp.	

Species list for reference only. Final selection to be determined on an individual street basis.

LOCAL INDIGENOUS SPECIES

Local indigenous plant material is to be collected from remnant vegetation within the City of Marion or remnant native vegetation within 10km of the Council boundary. Material sourced from revegetation projects should not be used unless the original source material adheres to the provenance locations defined.

Paving

Principles

General

- Paving is high quality, enables safe movement, is robust and low maintenance.
- Footpaths are provided on both sides of the street where the street cross-section allows sufficient width.
- Footpaths are wide enough to allow for comfortable movement.
- Public and privately owned outdoor spaces are integrated through consistent materials and detailing.
- Footpaths are wider around activity areas, schools and local hubs without jeopardising space for street trees and greening.
- Locally sourced materials are used where possible.

Consistency of use

- A consistent palette of paving is provided within the City of Marion.
- Key activity nodes are distinguished by paving treatments.
- Paving is selected to suit different areas within the city, considering level of use, character and cost (whole-of-life).

Comfort & Safety

- Surface treatments are selected to suit pedestrian use and frequency or, if shared by vehicles, the type and speed of traffic. Paving is designed to accommodate either:
  - pedestrians only;
  - pedestrians and cyclists;
  - pedestrians and occasional service or maintenance vehicles;
  - pedestrians and vehicles; or
  - where pedestrians and vehicles share a paved surface, their use is clearly differentiated by paving type and colour.

PAVEMENT TYPE 01

Lightly washed concrete paving

FEATURES

Description	Lightly washed exposed aggregate concrete
Colour	Hanson concrete - 'Barossa / Moonscape' or similar approved
Finish	Washed 1mm reveal
Performance requirements	› Incorporates reinforcing, expansion and control joints, heavy vehicle load rated, slip rated › 100mm depth for pedestrian traffic › 150mm depth for vehicular traffic › Footpath minimum width 1.2 m
Maintenance	If required, repair by replacing damaged panel between cracking joints. General cleaning
Uses	Standard pavement to be used along: › Arterial roads › Sub-arterial roads › Character precincts

COST

	Low	Med	High
Initial cost	○	●	○
Maintenance cost	●	○	○
Whole of life cost	●	○	○

PAVEMENT TYPE 02

Broom finish concrete paving

FEATURES

Description	Broom finish concrete
Colour	Hanson concrete - Barossa or similar approved
Finish	Broom finish
Performance requirements	› Incorporates reinforcing, expansion and control joints, heavy vehicle load rated, slip rated › 100mm depth for pedestrian traffic › 150mm depth for vehicular traffic › Minimum width 1.2 metres
Maintenance	If required, repair by replacing damaged panel between cracking joints. General cleaning
Uses	Standard pavement to be used along: › Distributor roads › Collector roads › Local streets

COST

	Low	Med	High
Initial cost	○	●	○ ○ ○
Maintenance cost	●	○	○ ○ ○
Whole of life cost	●	○	○ ○ ○

PAVEMENT TYPE 03

Asphaltic concrete

FEATURES

Description	Asphaltic concrete containing selected aggregate
Colour	Standard asphaltic concrete (black)
Finish	Smooth rolled
Performance requirements	› AC7 pedestrian and cycle rated pavements › AC10 vehicle rated pavements › Minimum 98% MMDD › Restrained edges all sides
Maintenance	Patch any cracks. General cleaning
Uses & Applications	› Shared use paths - timber edge › Street surface - 100mm wide concrete edge

COST

	Low	Med	High
Initial cost	●	○	○ ○ ○
Maintenance cost	●	○	○ ○ ○
Whole of life cost	●	○	○ ○ ○

PAVEMENT TYPE 04

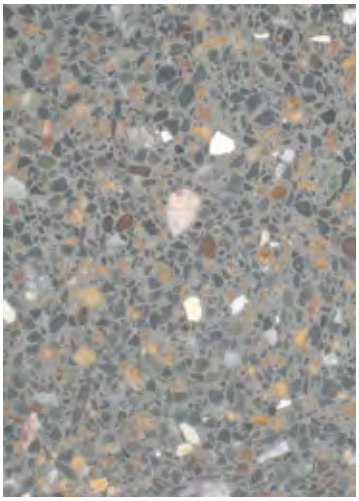
Pre-cast concrete unit pavers 01

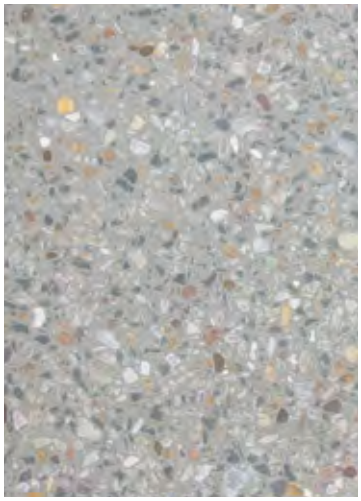
FEATURES

Description	Pre-cast concrete unit paving
Colour	Varies
Finish	Milled or semi-honed
Performance requirements	› Minimum 40MPa concrete, incorporate expansion joints, slip rated › 40-60mm depth for pedestrian traffic › 60-80mm depth where vehicle occurs › Full pavers used (not cut to fit)
Maintenance	Lift broken/chipped pavers and replace. General cleaning
Uses & Applications	› Special designated areas and character areas › Road thresholds at primary intersections › Headers and paving bands › Specific pedestrian gathering areas including main avenues and entries

COST

	Low	Med	High
Initial cost	○	○	●
Maintenance cost	○	●	○
Whole of life cost	○	●	○





PAVEMENT TYPE 05

Pre-cast concrete unit pavers 02

FEATURES

Description	Interlocking concrete unit paving (Trihex or Unipave)
Colour	Varies
Finish	Natural or semi-honed
Performance requirements	› Slip rated for pedestrian and vehicle traffic › Paving profile and finish designed to suit function and vehicle loadings
Maintenance	Lift broken/chipped pavers and replace. General cleaning
Uses & Applications	› Special designated areas and character areas › Road thresholds at local, collector and distributor roads › Where permeable pavement is required

COST

	Low	Med	High
Initial cost	○	●	● ○ ○
Maintenance cost	●	○	○ ○ ○
Whole of life cost	●	○	○ ○ ○

TRIHEX - OPTION FOR PERMEABLE PAVING

NATURAL FINISH

SEMI HONED FINISH

TACTILE INDICATORS 01

Tactile indicators

FEATURES

Description	Stainless steel warning markers to Australian Standards / Precast concrete caution tactile unit paver to Australian Standards
Material	Stainless Steel / Precast concrete
Finish	Machined Finish / Standard finish
Performance requirements	› Setout and colour contrast to Australian Standards › Installed to Australian Standards
Maintenance	General cleaning
Uses & Applications	**Stainless steel** › Special designated areas › High use areas and key activity nodes **Precast concrete** › Standard within Council › New pram ramps and cross overs › Public transport stations and stops

COST

	Low	Med	High
Initial cost	○	●	○ ● ○
Maintenance cost	●	○	○ ○ ○
Whole of life cost	●	●	○ ○ ○

Stainless steel

Precast concrete

GRATES 01

Grates

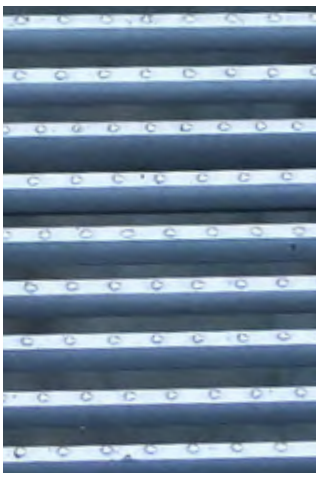
FEATURES

Description	Grate covers to drains
Material	Stainless Steel / Cast iron
Finish	Varies
Performance requirements	› Installed to manufacturer's specifications › Slip rated to Australian Standards › Class rating fit for purpose › Compliant for wheelchair and walking cane safety › Where possible, compliant for bicycle tyre penetration resistance and surface openings in pedestrian areas
Maintenance	General cleaning of grates
Uses & Applications	**Stainless steel** › Special designated areas › High use areas and key activity nodes **Cast iron** › Standard within Council

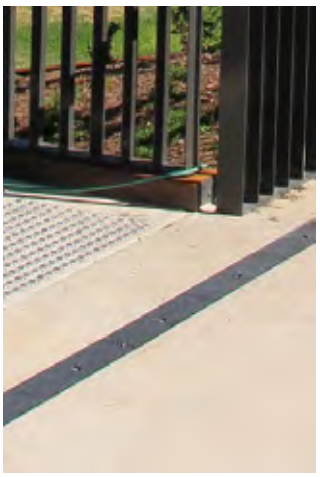
COST

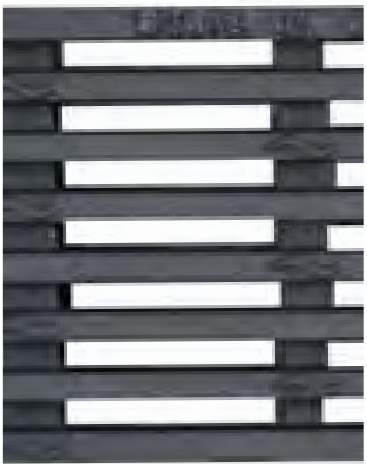
	Low	Med	High
Initial cost	○	●	● ○ ○
Maintenance cost	●	○	○ ○ ○
Whole of life cost	●	●	○ ○ ○

Stainless steel



Cast iron





COVERS 01

Covers

FEATURES

Description	Pit covers
Material	Match adjacent paving surface
Finish	Varies
Performance requirements	› Covers suitable to accommodate infill of 60mm unit paving or concrete rated for vehicle traffic (where applicable) › Install to manufacturer's specifications
Maintenance	General cleaning of pits and pit covers / replacement of chipped or cracked pavers
Uses & Applications	› Standard within Council

COST

	Low	Med	High
Initial cost	Varies		
Maintenance cost	●	○	○ ○ ○
Whole of life cost	●	○	○ ○ ○

Furniture

Principles

- Furniture is provided in appropriate locations along streets and within the public realm.
- Items are robust and durable, resistant to vandalism, and require little to no maintenance.
- Items are cost-efficient and readily available for additional items or replacement.
- High-quality materials and construction techniques are used to ensure items are robust and low maintenance.
- Surface treatments surrounding furniture provide access for those with disabilities.
- Locally sourced materials are used where possible.
- Public art opportunities are explored and integrated with furniture where possible.
- Furniture is placed to support;
  - nodes and gathering places;
  - comfort for individuals using a space; and
  - comfort and ease of use for all members of the community, including the aged and carers with young children.
- Seats are located to:
  - take advantage of views, either in the distance or to the 'passing parade';
  - maximise shade in summer;
  - be out of the way of movement lines, particularly cyclists; and
  - be mindful of safety and passive surveillance consistent with best practice crime prevention through environmental design (CPTED) principles.

Seat 01

FEATURES

Description	Cast aluminium frame, timber batten bench seat (single seat 'cheeky', arm rest and bench seat options available)
Model	'Urbum'
Material	Frame: Cast aluminium Battens: Class 1 durability hardwood timber battens
Finish	Frame: Buffed finish Battens: Oiled
Performance requirements	› Installed sub-surface to manufacturer's specifications › Tamper proof fixings
Maintenance	No direct maintenance required. Cleaning, possible repair of battens
Uses & Applications	Standard bench seat for; › Arterial roads › Sub-arterial roads › Designated high use areas and activity nodes

COST

	Low	Med	High
Initial cost	○	●	○
Maintenance cost	●	○	○
Whole of life cost	○	●	○

Seat 02

FEATURES

Description	Mild steel frame, timber batten bench seat (single seat option available)
Model	'PL'
Material	Frame: Mild steel Battens: Class 1 durability hardwood timber battens
Finish	Frame: Weathered Battens: Seasoned - dressed all round
Performance requirements	› Installed sub-surface to manufacturer's specifications › Tamper proof fixings
Maintenance	No direct maintenance required. Cleaning, possible repair of battens
Uses & Applications	Standard bench seat for: › Distributor roads › Collector roads › Local roads › Green corridors and reserves

COST

	Low	Med	High
Initial cost	○	●	○ ○ ○
Maintenance cost	●	○	○ ○ ○
Whole of life cost	●	○	○ ○ ○

Seat 03

FEATURES

Description	Cast aluminium frame, timber batten bench seat with arm rests (bench seat option available)
Model	'Quayside Seat'
Material	Frame: Cast aluminium powder coated Battens: Class 1 durability hardwood timber battens
Finish	Frame: Powder coated. Colour: RAL 7043 Battens: Oiled
Performance requirements	› Concealed surface mount installed to manufacturer's specifications › Tamper proof fixings
Maintenance	Periodic oiling of timber. Cleaning, possible repair of battens
Uses & Applications	Alternative bench seat for; › Local roads › Green corridors and reserves

COST

	Low	Med	High
Initial cost	○	●	○ ○ ○
Maintenance cost	●	○	○ ○ ○
Whole of life cost	○	●	○ ○ ○

SEAT 04

Bespoke seating

FEATURES

Description	Bespoke seating (diversity of form)
Colour & Finish	Varies
Performance requirements	› Shape, size and form to be in scale and fit for purpose › Design and materials to provide comfort and ease of use › Coordinated with other streetscape elements and public art › Considerate of maintenance and management requirements, and whole of life costs › Local fabricators used where possible
Uses & Applications	› Civic centres and special character areas › Designated high use areas and activity nodes

COST

	Low	Med	High
Initial cost	Varies		
Maintenance cost	○	●	○ ○ ○
Whole of life cost	●	○	○ ○ ○





EXAMPLES OF BESPOKE SEATING

CYCLE RACK 01

Cycle rack

FEATURES

Description	Stainless steel bike racks
Model	Marion 'Round' & Marion 'Urban'
Material	50mm stainless steel circular hollow section (316 grade)
Finish	Brushed
Performance requirements	Sub-surface installation to manufacturer's specifications
Maintenance	No on-going maintenance required
Uses & Applications	Located extensively at key nodes and adjacent cycling corridors **Round** › Standard within Council **'Urban'** › Special designated areas › High use areas and key activity nodes

COST

	Low	Med	High
Initial cost	○	●	○ ○ ○
Maintenance cost	●	○	○ ○ ○
Whole of life cost	●	○	○ ○ ○

MARION 'ROUND'

MARION 'URBAN'

DRINK FOUNTAIN 01

Drinking fountain

FEATURES

Description	Aluminium drinking fountain
Model	'Arqua Fountain - DF4'
Material	Body: Solid cast aluminium Button and spout: Marine grade stainless steel 316
Finish	Body: Powder coat with anti-graffiti coating - Colour: RAL 7043 - Texture: GL277A Button and spout: Polished
Performance requirements	› Concrete footings and fixings to manufacturer's recommendation › Refer to engineer's specifications for connections and drainage › Subsurface polycrete pit with metal cover plate in hard anodised finish
Maintenance	Removal of staining and general cleaning. Able to withstand continual cleaning with high pressure water apparatus.
Uses & Applications	Key nodes along walking and cycling corridors, and activity areas

COST

	Low	Med	High
Initial cost	○	○	●
Maintenance cost	●	○	○
Whole of life cost	○	●	○

BOTTLE STATION

DOG BUBBLER

BOLLARD 01

Bollard 01

FEATURES

Description	'City of Marion' bollard suite
Material & Finish	Painted steel with anti-graffiti coating. Colour: RAL 7043 Timber inlay option - Class 1 durability hardwood
Performance requirements	› Fixed and removable options available › Lighting option available › Footings to manufacturer's specification
Maintenance	Touch up painting as required. Replacement when damaged
Uses & Applications	Council standard bollard for: › Vehicle separation › Outdoor dining areas › Equal access › Carparking bays

COST

	Low	Med	High
Initial cost	○	●	○
Maintenance cost	●	○	○
Whole of life cost	○	●	○

TYPE 1 STEEL TIMBER INLAY

TYPE 2 STEEL WITH TIMBER FEATURE

TYPE 2 STEEL LIGHTWEIGHT

BOLLARD 02

Bollard 02

FEATURES

Description	Timber bollard / Recycled plastic bollard
Material & Finish	Timber: Class 1 seasoned hardwood dressed all round, species: › Spotted Gum (*Eucalyptus maculata*) › Grey Ironbark (*Eucalyptus paniculata*) › Native Pine (*Callitris gracilis*) Plastic: Recycled plastic composite, charcoal
Dimensions	Timber: 145W x 1500H (900mm above surface) Plastic: 125W x 1500H (9000mm above surface)
Performance requirements	› Installed sub-surface to manufacturer's specifications › Stand-alone or linked with chain or rope › Fixed options only
Maintenance	No maintenance required. Replace damaged bollards
Uses & Applications	Council standard bollard for: › Reserve edges › Pathway nodes

COST

	Low	Med	High
Initial cost	○	●	● ○ ○
Maintenance cost	●	○	○ ○ ○
Whole of life cost	●	○	○ ○ ○

TIMBER BOLLARD

'REPLAS' RECYCLED PLASTIC BOLLARD

BIN 01

Bin surrounds 01

FEATURES

Description	'City of Marion' bin surround
Material	Panels: Aluminium perforated venting side panels (2 coat epoxy painted) Splash tray and trim: Stainless steel (316 grade) Internal frame: Galvanised steel
Finish & Colour	Panels: Industrial grade paint system with anti-graffiti coating. Colour: RAL 7043 Splash tray and trim: Brushed
Dimensions	Front 680W x Side 800W x Height 1320 mm
Performance requirements	› 240L Wheelie Bin compatible › Fitted with continuous hinge. Keyed access › Concealed tamper proof vandal resistant fixings › Direct fix install on concrete pad footing
Maintenance	Regular emptying of rubbish. Removal of staining and general cleaning. Able to withstand continual cleaning with high pressure water apparatus
Uses & Applications	Located at key nodes along: › Arterial roads › Sub-arterial roads › Distributor roads › Civic centres and special character areas

COST

	Low	Med	High
Initial cost	○	○	●
Maintenance cost	○	●	○
Whole of life cost	○	●	○

SINGLE BIN

DUAL WASTE/RECYCLE STATION

BIN 02

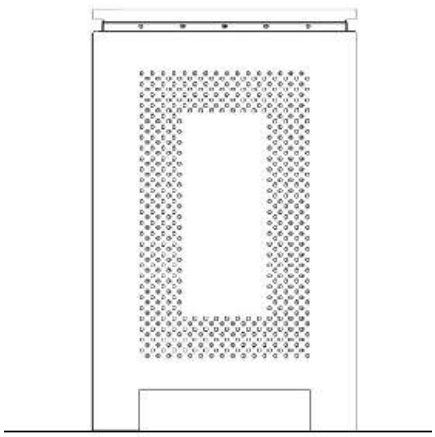
Bin surrounds 02

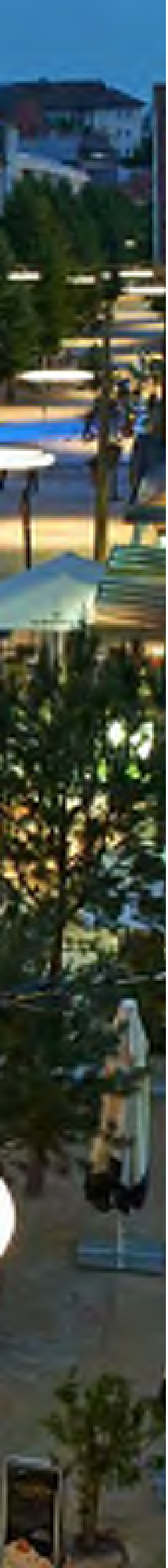
FEATURES

Description	Parade bin surrounds
Model	'Parade'
Material	Panels: Perforated (entire panel) powder coated zinc plated steel Splash tray and trim: Stainless steel (316 grade)
Finish & Colour	Panels: Powder coated. Colour: RAL 7043 Splash tray and trim: Brushed
Dimensions	Front 715W x Side 780W x Height 1140 mm
Performance requirements	› 120 - 240L Wheelie Bin compatible › Fitted with continuous hinge. Keyed access › Concealed tamper proof vandal resistant fixings › Direct fix install on concrete pad footing
Maintenance	Regular emptying of rubbish. Removal of staining and general cleaning. Able to withstand continual cleaning with high pressure water apparatus
Uses & Applications	Located at key nodes along: › Green corridors › Reserves

COST

	Low	Med	High
Initial cost	○	●	○
Maintenance cost	○	●	○
Whole of life cost	○	●	○





Lighting

Principles

- Lighting meets criteria in terms of quality, illumination levels, visual appearance of the luminaires, robustness (vandal resistance and low maintenance), and energy efficiency.
- Lighting is used to bring life, clarity, colour and safety to the public realm.
- Appearance of light poles and luminaires is considered during the day as well as night.
- Energy efficient luminaires, such as light emitting diode (LED) are utilised.
- Lighting is co-ordinated with other public realm elements such as the placement of trees and furniture.
- Lighting is used to enhance the night time environment and contribute towards vibrancy.
- Light pole and luminaire colours and finishes are consistent with other public realm elements.
- Light spill is limited through use of appropriate fittings that direct light to where it is needed.
- 'Warm white' lighting (as opposed to yellow or 'cool white') is used to increase usage of public space and improve safety and surveillance.
- Key routes and public spaces are adequately lit.
- Lighting is strategic and dramatic, highlighting focal points and not lighting everything. Items that can be highlighted include:
  - up-lighting large trees;
  - primary pedestrian paths,
  - public art;
  - heritage buildings; and
  - landmarks.

FEATURE LIGHT 01

Feature lighting

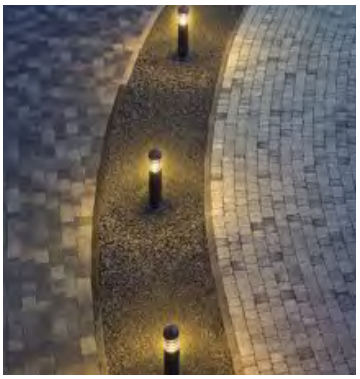
Feature lighting is used to:

- Highlight feature trees and buildings of special character
- Enhance the legibility and safety of the public realm
- Define places of interest
- Highlight public art
- Primary pedestrian and cycling pathways

Feature lighting comprises the following:

- Catenary lighting
- Recessed lighting
- Bollard lighting
- Up-lighting and down-lighting
- Surface lighting
- Gobo lighting





COST VARIES*

FEATURE LIGHT 02

Feature flood light

FEATURES

Description	Feature flood lighting
Model	iGuzzini - 'Woody'
Material	Pole: 6.0 - 12.0m high aluminium 150mm Ø (bottom) 80 Ø (top) CHS (round) to suit location Body: Die-cast aluminium 80mm Ø pole attachment
Colour	Pole: Grey (15) Body: Grey (15)
Performance requirements	› 4000K › 5 year warranty › Compliant with relevant Australian Standards for pedestrian lighting
Maintenance	No direct maintenance required. General cleaning
Uses & Applications	› Illuminate large areas of open space such as plazas and parks › Additional lighting during events

COST

	Low	Med	High
Initial cost	○	●	○
Maintenance cost	●	○	○
Whole of life cost	○	●	○

PEDESTRIAN LIGHT 01

Pedestrian pole-top light

FEATURES

Description	Pedestrian Pole top light
Model	iGuzzini - 'Lavinia'
Material	Pole: 4.5 - 6.0 m high aluminium 120 mm Ø CHS (round) to suit location Body: Die-cast aluminium 120 mm Ø pole attachment
Colour	Pole: Grey (15) Body: Grey (15)
Performance requirements	› 4000K › 5 year warranty › Compliant with relevant Australian Standards for pedestrian lighting
Maintenance	No direct maintenance required. General cleaning
Uses & Applications	Standard pedestrian light for use along: › Primary walking and cycling corridors › Activity nodes and special character areas

COST

	Low	Med	High
Initial cost	○	○	●
Maintenance cost	●	○	○
Whole of life cost	○	●	○

PEDESTRIAN LIGHT 02

Street pole-top light

FEATURES

Description	Street pole top light
Model	Bega - 'Nail' (99 403)
Material	Pole: 4.0 - 5.0 m high aluminium 120 mm Ø (bottom) 76 Ø (top) CHS (round) to suit location Body: Die-cast aluminium 76 mm Ø pole attachment
Colour	Pole: RAL 9007 Body: RAL 9007
Performance requirements	› 4000K › 3 year warranty › Compliant with relevant Australian Standards for pedestrian lighting
Maintenance	No direct maintenance required. General cleaning
Uses & Applications	Standard pedestrian light for use along: › Distributor roads › Connector roads › Local roads

COST

	Low	Med	High
Initial cost	○	●	○
Maintenance cost	●	○	○
Whole of life cost	○	●	○

STREET LIGHT 01

Street light

FEATURES

Description	LED street light (Standard SAPN tariff approved)
Material	Pole: Galvanised steel Body: Die-cast aluminium
Colour:	Pole: RAL 9005 Fitting: RAL 9005
Performance requirements	› Compliant with SA Power Networks Standards › Compliant with relevant Australian Standards for vehicle traffic lighting
Maintenance	No direct maintenance required. General cleaning
Uses & Applications	› Standard street light in the City of Marion

COST

	Low	Med	High
Initial cost	○	○	●
Maintenance cost	●	○	○
Whole of life cost	○	●	○


Grafton Shopping 1 min
Cinema 1 min
Shopmobility 5 min
Toilets 5 min
6 mins Main Bus Stops
7 mins Historic Centre Shopping
10 mins Tourist Information Centre

Signage & Wayfinding

Principles

- A hierarchy of signage is used to lead people though the public realm.
- Signage is obvious, functional and easily read.
- Signage is used strategically and does not clutter the public realm.
- Signage and wayfinding recognises the rich culture of the Kaurna community through use of Kaurna language.
- Signage is integrated with public art elements.
- Signage is consistent, whilst allowing for the unique requirements of specific uses and activities.
- Placement of signs and information informs and contributes to the perception of personal safety.
- Digital technologies such as online maps, the national broadband network (NBN) and mobile phone applications are incorporated.
- Signage references City of Marion brand for identification.

SIGNAGE 01

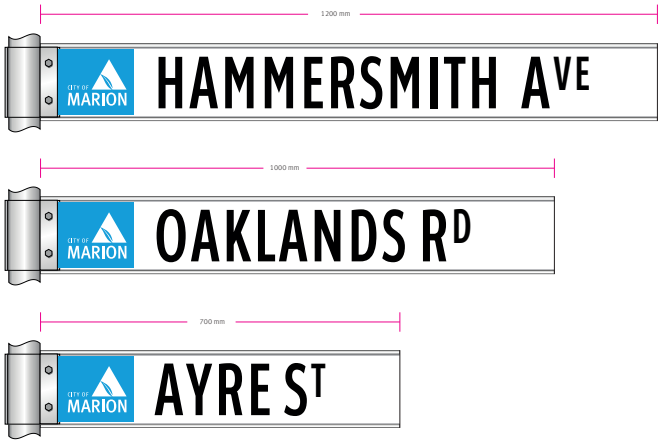
Street signs

FEATURES

Description	Council standard street sign / Custom street sign
Material & Finish	Varies
Performance requirements	Refer City of Marion Signage Standard Preferred materials for custom signs include: › Oiled timber › Corten steel › Painted aluminium sheet (City of Marion colours)
Maintenance	No direct maintenance require. Replace or repair damaged street signs
Uses & Applications	**Standard street sign** › Standard street sign used in the city **Custom street sign** › Special character areas including heritage areas and civic centres

COST

	Low	Med	High
Initial cost	○	●	○ ○ ○
Maintenance cost	●	○	○ ○ ○
Whole of life cost	●	○	○ ○ ○



STANDARD CITY OF MARION STREET SIGN

EXAMPLE CUSTOM STREET SIGN IN SPECIAL CHARACTER AREAS

CITY OF MARION SIGNAGE STANDARDS

WAYFINDING 01

Wayfinding

FEATURES

Description	Council standard wayfinding signage / Custom wayfinding signage
Material & Finish	Varies
Performance requirements	Refer City of Marion Signage Standard Preferred materials for custom wayfinding include: › Oiled timber › Corten steel › Painted aluminium sheet (City of Marion colours)
Maintenance	No direct maintenance require. Replace or repair damaged street signs
Uses & Applications	**Standard wayfinding signage** › Standard wayfinding used in the city **Custom wayfinding signage** › Special character areas including heritage areas and civic centres

COST

	Low	Med	High
Initial cost	○	●	○
Maintenance cost	●	○	○
Whole of life cost	○	●	○

CITY OF MARION SIGNAGE STANDARDS

CITY OF MARION BENCHMARK STANDARDS

EXAMPLE WAYFINDING IN SPECIAL CHARACTER AREAS

'LITTLE MARION PEERING, LOOKING INTO THE WELL', GERRY MCMAHON. 2008 - PHOTOGRAPH BY SAM OSTER

Public art

Principles

- Public art is part of the culture of the 'place', and a component of the integrated processes of design and renewal.
- Public art is considered at the planning stage of streetscape development.
- Public art is used to express the story of the city, its community and culture.
- Public art is coordinated across the city to ensure consistency in approach and style.
- Procurement of public art is managed by Council and complies with best practice procurement protocols.
- Public art is designed by artists, the community, or others and is managed from conception to installation by a public art coordinator as required.
- Public art is an integrated component of streetscapes and is considered in the design of public realm elements including furniture, lighting and wayfinding.
- Siting and location of public art is considered and coordinated with other elements of the public realm.
- Public art is used to enhance places of Kaurna cultural significance.
- Public artworks are site specific and reflect their unique setting.
- Public artwork is permanent or temporary, with materials reflecting durability and robustness levels required for the life of the work.
- Public artwork must offer value for money.
- Maintenance requirements and budgets are considered.
- Local materials are used where possible.
- Focus areas for public art include:
  - Arterial roads
  - Sub-arterial roads
  - Distributor roads
  - Collector roads
  - Special character areas and heritage precincts
  - Plazas, squares and civic centres.

Verges

Principles

- Water Sensitive Urban Design (WSUD) techniques, including rain gardens and bioretention tree pits are considered and installed where practicable.
- Consideration is given to utilisation of verges for productive purposes.
- Soil condition / type is considered prior to selection of plant material.
- Responsibility and budgets are established for maintenance and management.
- Root barriers are considered where trees are planted within close proximity to footpaths and structures.
- Preference is to use recycled water for irrigation where available.
- Areas of special character or importance are distinguished through the treatment of verges that can include street trees.
- Permeability of verge is considered to reduce water runoff and improve local infiltration.

VERGE 01

Compacted granulitic

FEATURES

Description	Granulitic Sand or X6
Material	Quarry sand available from Fitzgerald Quarry or 'X6' available from Boral
Finish	Compacted and stabilised
Performance requirements	› Compact granulitic sand to minimum dry density ratio (standard compaction) to AS 1289.5.4.1: 95%. › Soilbond additive required. Mixed and installed to manufacturer's specification › Restrained edges all sides
Maintenance	Infrequent topping up and re-compacting allows for tree expansion. Occasional spot weeding.
Uses & Applications	Standard verge, median and tree pit treatment for: › Distributor roads › Collector roads › Local roads › Minor paths and seating areas along streets, green corridors and reserves

COST

	Low	Med	High
Initial cost	○	●	○ ○ ○
Maintenance cost	○	●	○ ○ ○
Whole of life cost	●	○	○ ○ ○

VERGE 02

Lawn

FEATURES

Description	Lawn verge
Species	Kikuyu, Buffalo, Couch or other rhizome grass suitable for low water use requirements
Maintenance	Mowing, watering and top dressing
Uses & Applications	Verge and median treatment (generally by property owners) for: › Distributor roads › Collector roads › Local roads

COST

	Low	Med	High
Initial cost	●	○	○ ○ ○
Maintenance cost	○	○	● ○ ○
Whole of life cost		●	○ ○ ○

VERGE 03

Verge gardens

FEATURES

Description	Community/resident gardens within verges (non-edible and edible)
Guidelines	Procedures to allow the community to establish and maintain verge gardens
Maintenance	Maintained by property owner in collaboration with community
Uses & Applications	Select verges along: › Collector roads › Local roads

COST

	Low	Med	High
Initial cost	○	●	○ ○ ○
Maintenance cost	○	●	○ ○ ○
Whole of life cost	●	○	○ ○ ○

EXAMPLES OF VERGE GARDENS

VERGE 04

Verge planters

FEATURES

Description	Raised verge planters (diversity of form)
Colour & Finish	Varies
Performance requirements	Shape, size and height to be in scale and fit for purpose
Maintenance	Maintained by property owner in collaboration with community
Uses & Applications	› To provide barriers between vehicle traffic and activity areas › To provide amenity in streets › Are considered as part of public art strategy

COST

	Low	Med	High
Initial cost	Varies		
Maintenance cost	○	●	○ ○ ○
Whole of life cost	●	○	○ ○ ○

EXAMPLES OF RAISED VERGE PLANTERS

VERGE 05

Rain gardens

FEATURES

Description	Rain garden
Performance requirements	Rain garden profile to engineer's specification incorporating: › Kerb: Slotted kerb › Planting: Refer WSUD species list (10 plants / sqm) › Filter media: Sand based material (300-800mm depth) › Transition layer: Course sand (100-300mm depth › Drainage layer: Gravel (200-300mm depth) › Drainage: 'Hynds' debris control screen to stormwater entry
Maintenance	General maintenance required. Supplementary planting as required.
Uses & Applications	Used where possible in all street in the city.

COST

	Low	Med	High
Initial cost	○	●	○
Maintenance cost	●	○	○
Whole of life cost	○	●	○

EXAMPLES OF WATER SENSITIVE URBAN DESIGN RAIN GARDENS

KERB 01

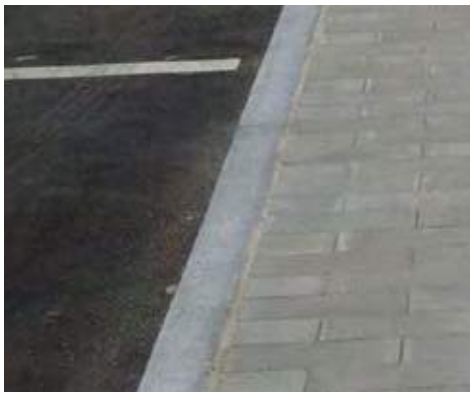
Kerb & watertable

FEATURES

Description	In situ concrete kerb and water table
Material	Standard concrete to Council specifications
Finish	Smooth steel trowel
Performance requirements	› To Council standard › Restrained edges all sides
Maintenance	No direct maintenance required
Uses & Applications	**Typical 140mm wide kerb** › Distributor roads › Collector roads › Local roads **250mm wide kerb** › Arterial roads › Sub-arterial roads › Special character areas

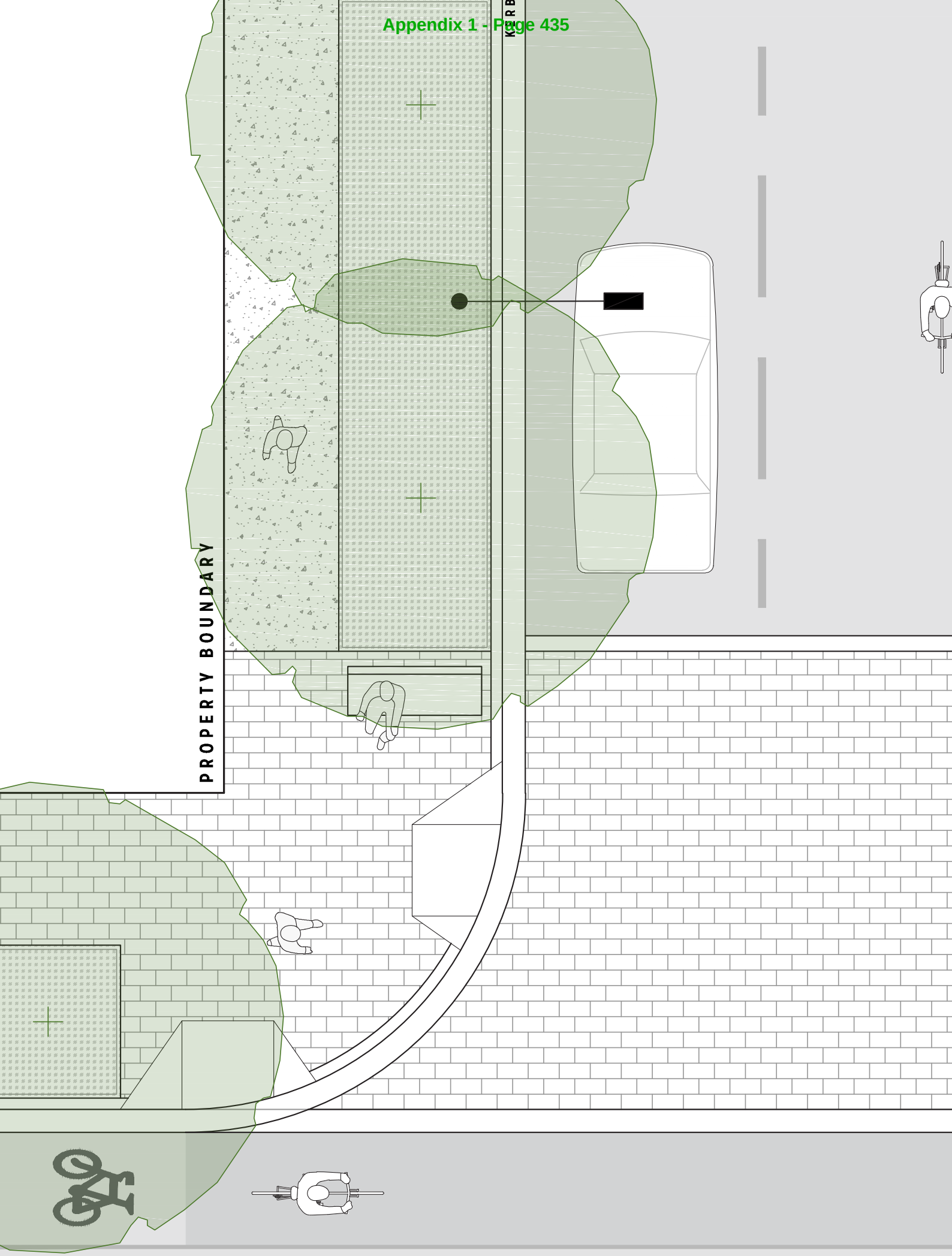
COST

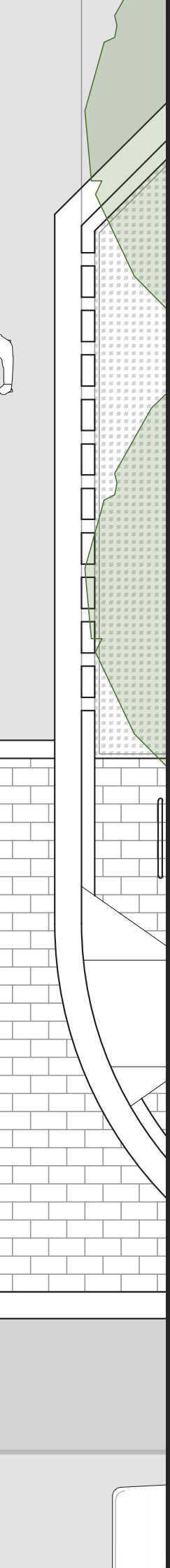
	Low	Med	High
Initial cost	○	○	● ● ○
Maintenance cost	●	○	○ ○ ○
Whole of life cost	●	○	○ ○ ○



140MM WIDE KERB

250MM WIDE KERB


PROPERTY BOUNDARY



Part E

Applying the Template

Templates

Overview

The following sections illustrates a series of templates intended for use by Council staff as a guide to inform the design and installation of high quality, comfortable streets in the city that contribute to local walking and cycling networks and facilitate street activation.

The templates are grouped under the following categories:

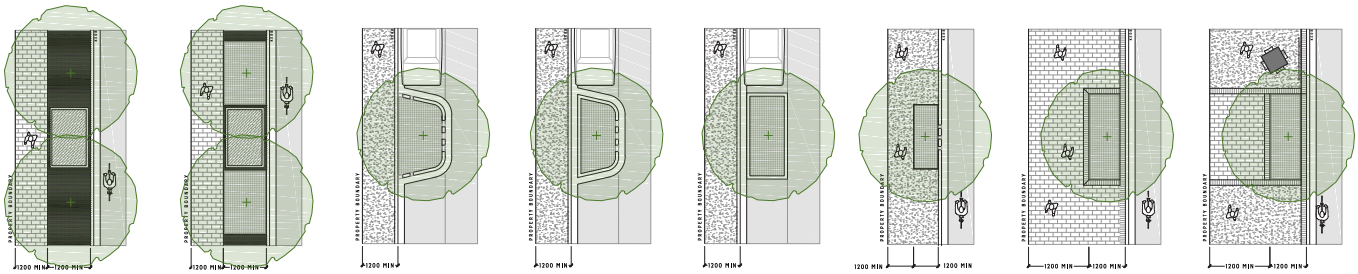
i. **Verges**

ii. **Intersections**

iii. **Bicycle lanes**

Content

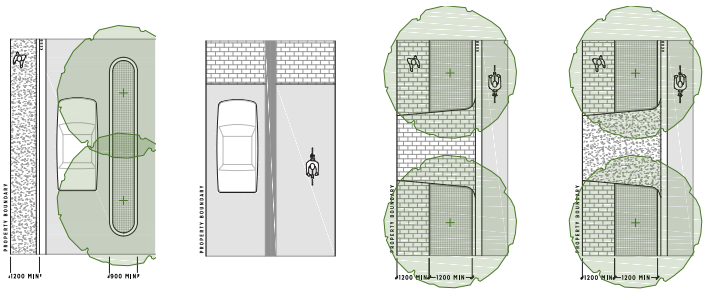
i. Verges



Typical streets

High use streets

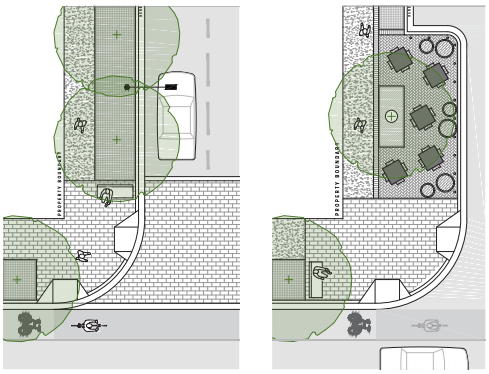
i. Verges



Alternative streets & laneways

Crossovers

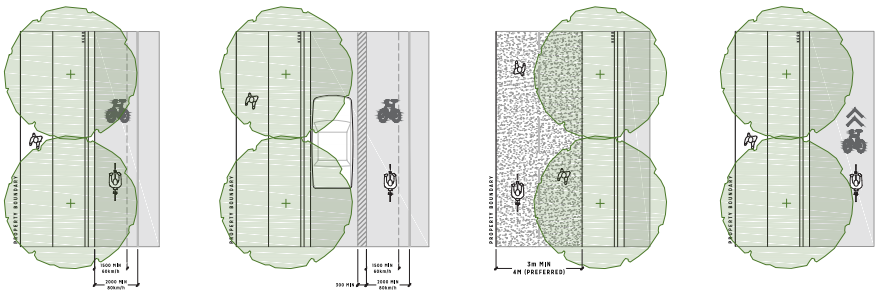
ii. Intersections



Thresholds

Protuberances

iii. Bicycle lanes



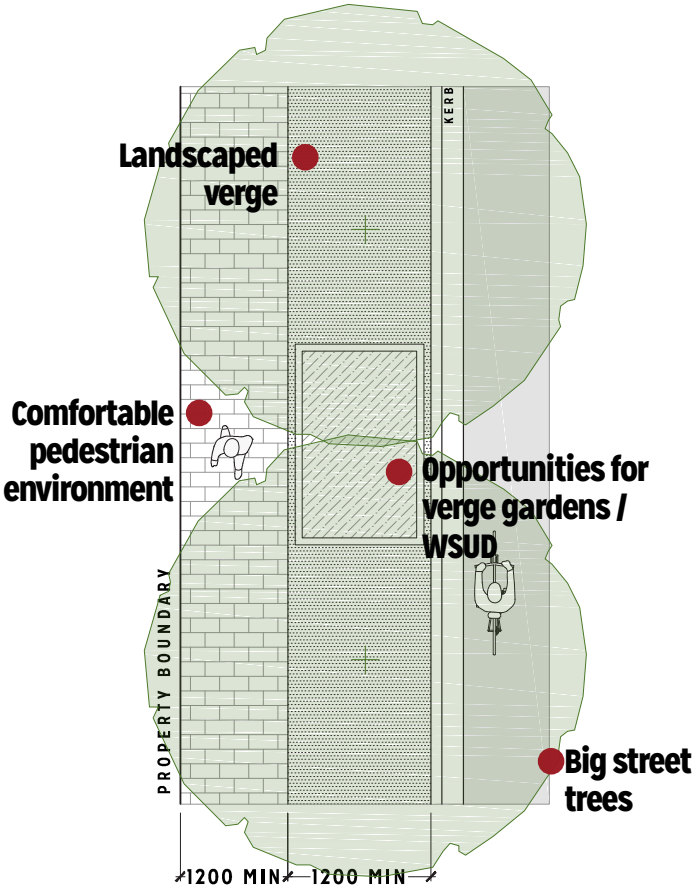
On-road bicycle lanes

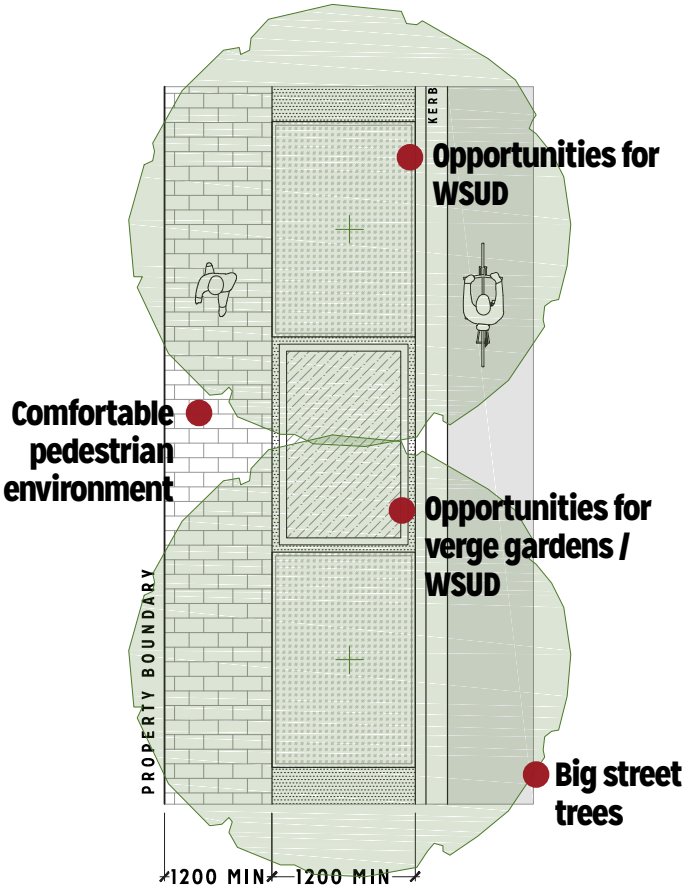
Shared paths

Shared streets

Verges

Typical streets





Where to apply

Typical verge treatment for;

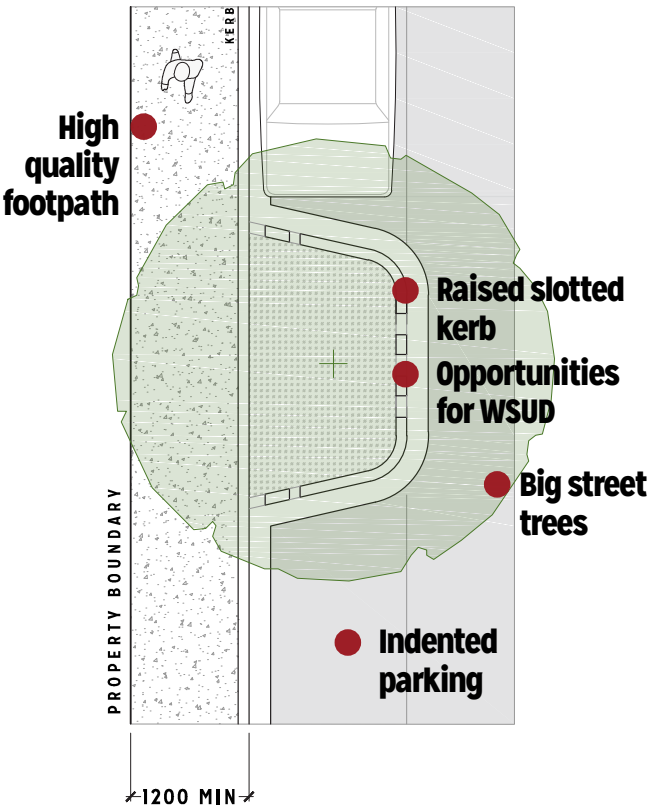
- Distributor roads
- Collector roads
- Local roads

Where to apply

Typical verge treatment where opportunities for WSUD exist, including:

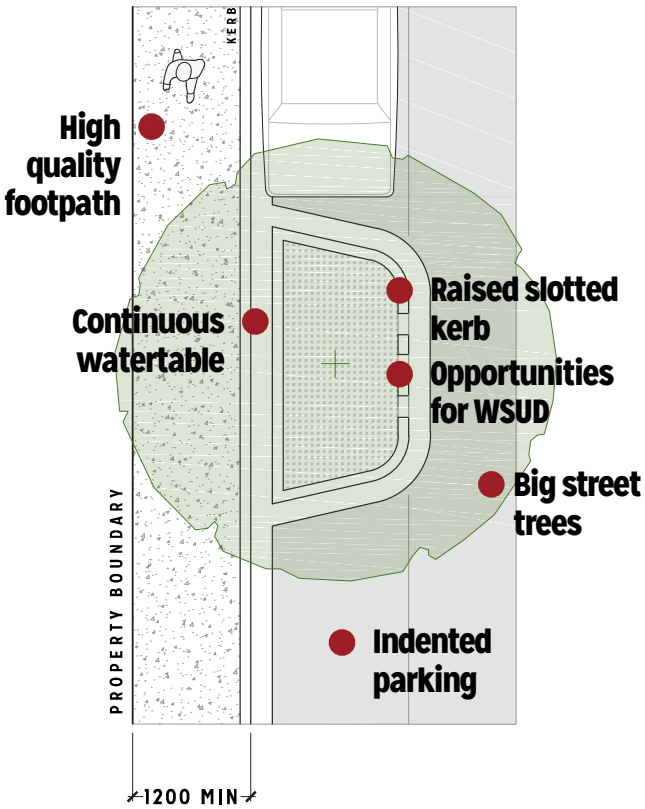
- Distributor roads
- Collector roads
- Local roads

Typical streets



Where to apply

- Local and collector roads with indented parking and slower traffic speeds and volumes
- Roads where rain gardens can be connected to stormwater

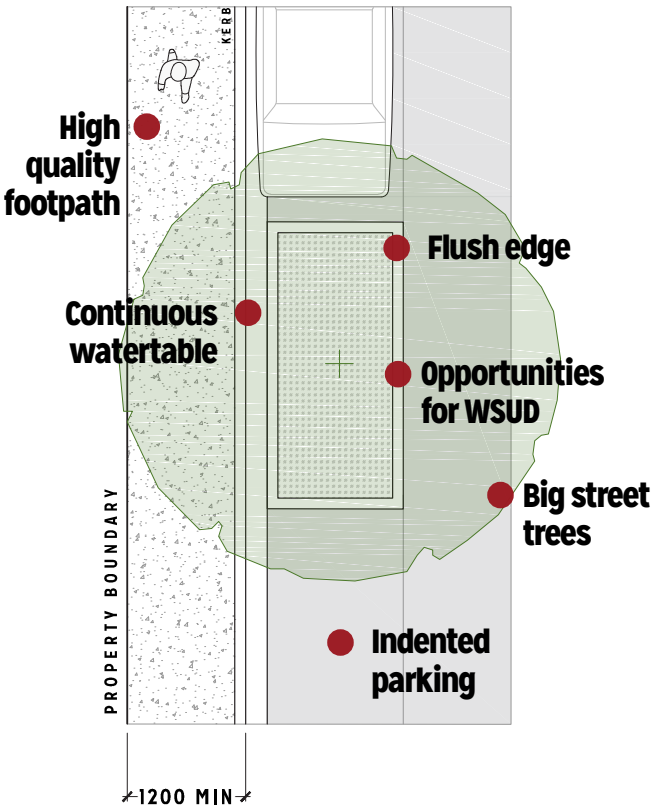


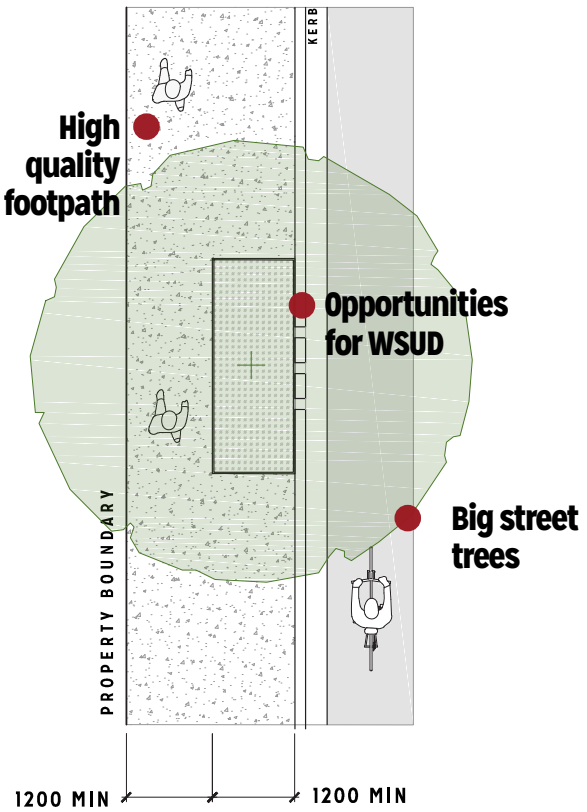
Where to apply

- Local and collector roads with indented parking and slower traffic speeds and volumes
- Roads where rain gardens cannot be connected to stormwater

Verges

Typical streets





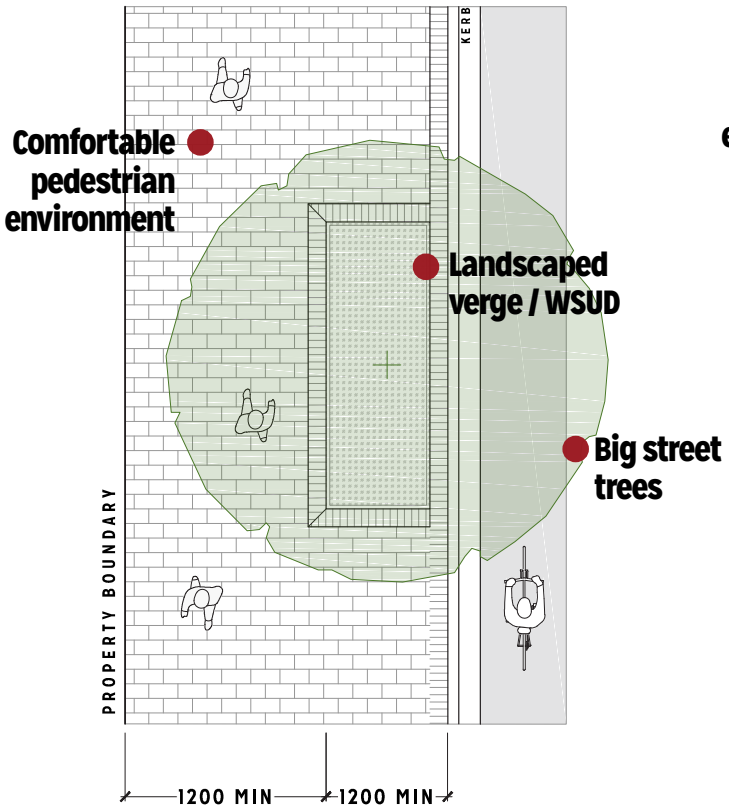
Where to apply

- Local and collector roads with minimal verge width, indented car parking and slower traffic speeds and volumes
- laneways (where road width allows)

Where to apply

- Local and collector roads with minimal verge width and slower traffic speeds and volumes
- Roads where rain gardens can be connected to stormwater

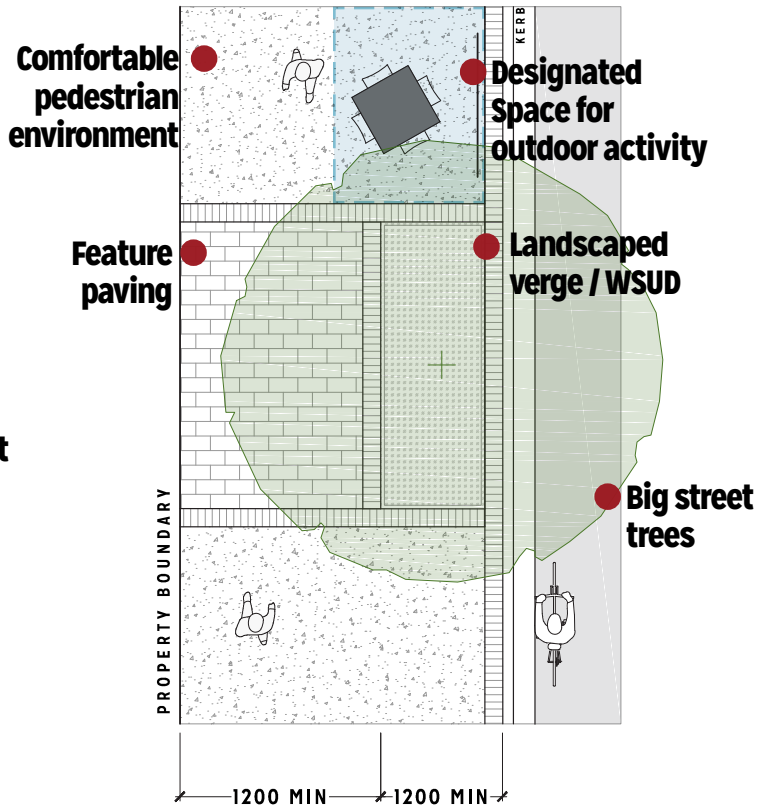
High use streets



Where to apply

Typical verge treatment for:

- Arterial
- Sub-arterial
- Distributor roads at key nodes and activity centres



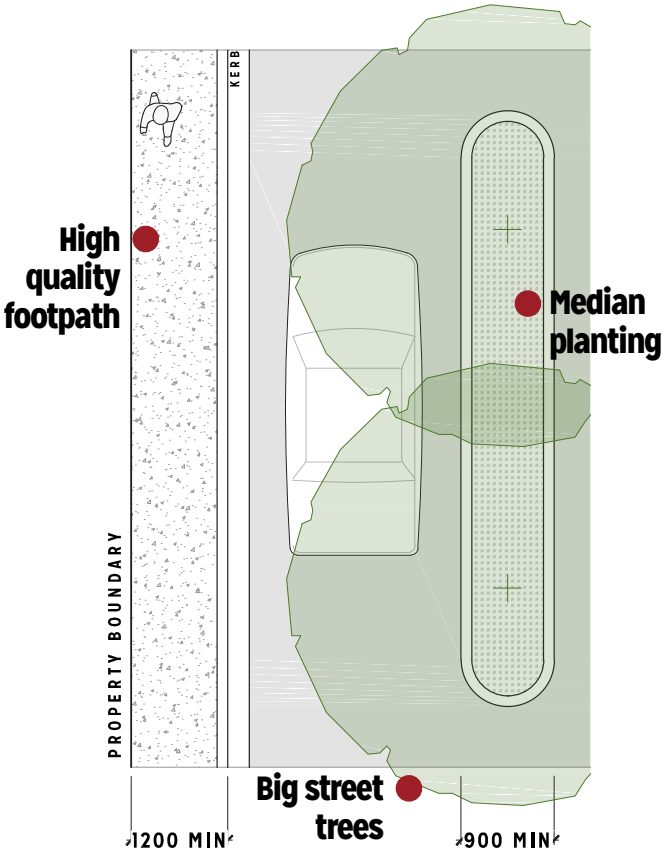
Where to apply

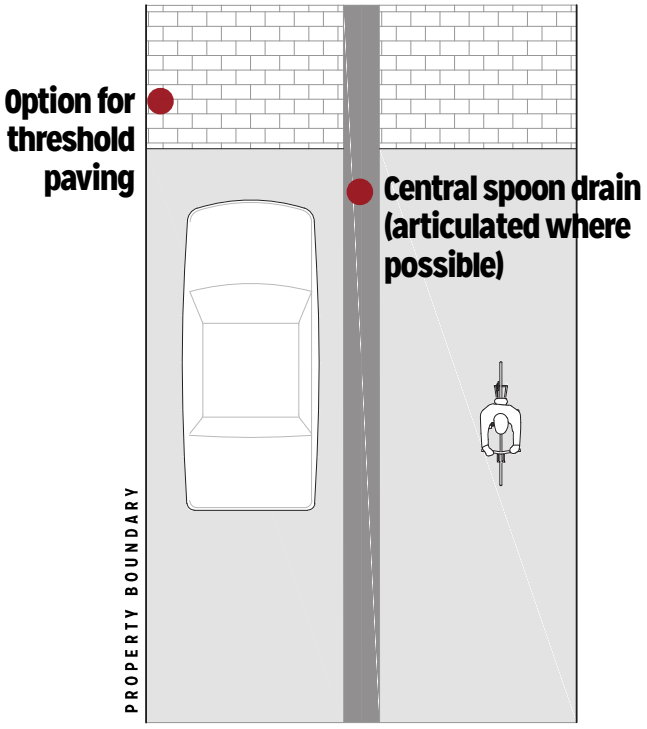
High quality verge treatment for use at:

- Arterial, sub arterial and distributor roads that incorporate space for outdoor activity
- Key nodes and civic centres

Verges

Alternative streets and laneways





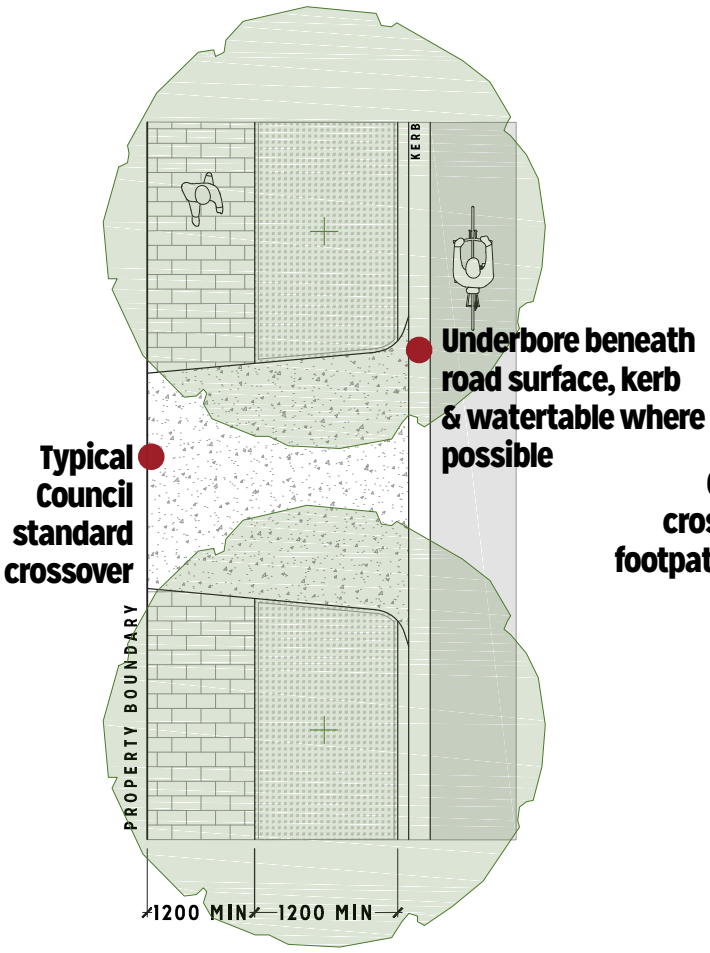
Where to apply

- Local and collector roads that incorporate minimal verge width and slower traffic speeds and volumes
- Roads with prominent overhead infrastructure
- Laneways (where road width allows)

Where to apply

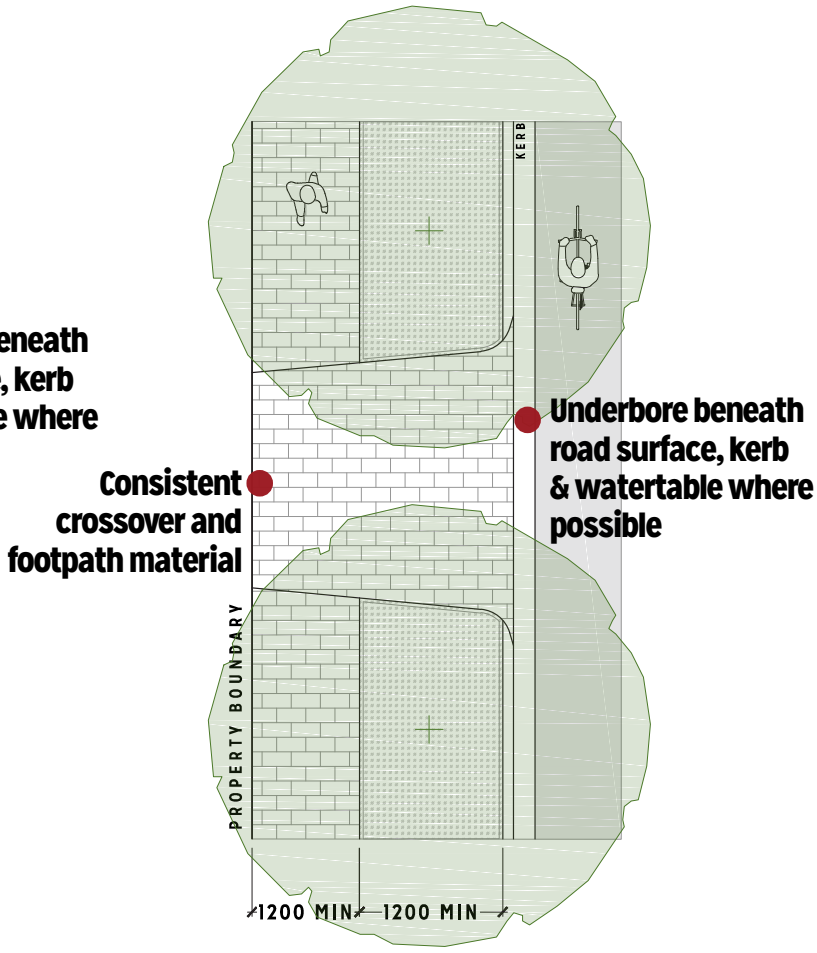
Laneways

Crossovers



Where to apply

Standard crossover treatment within Council

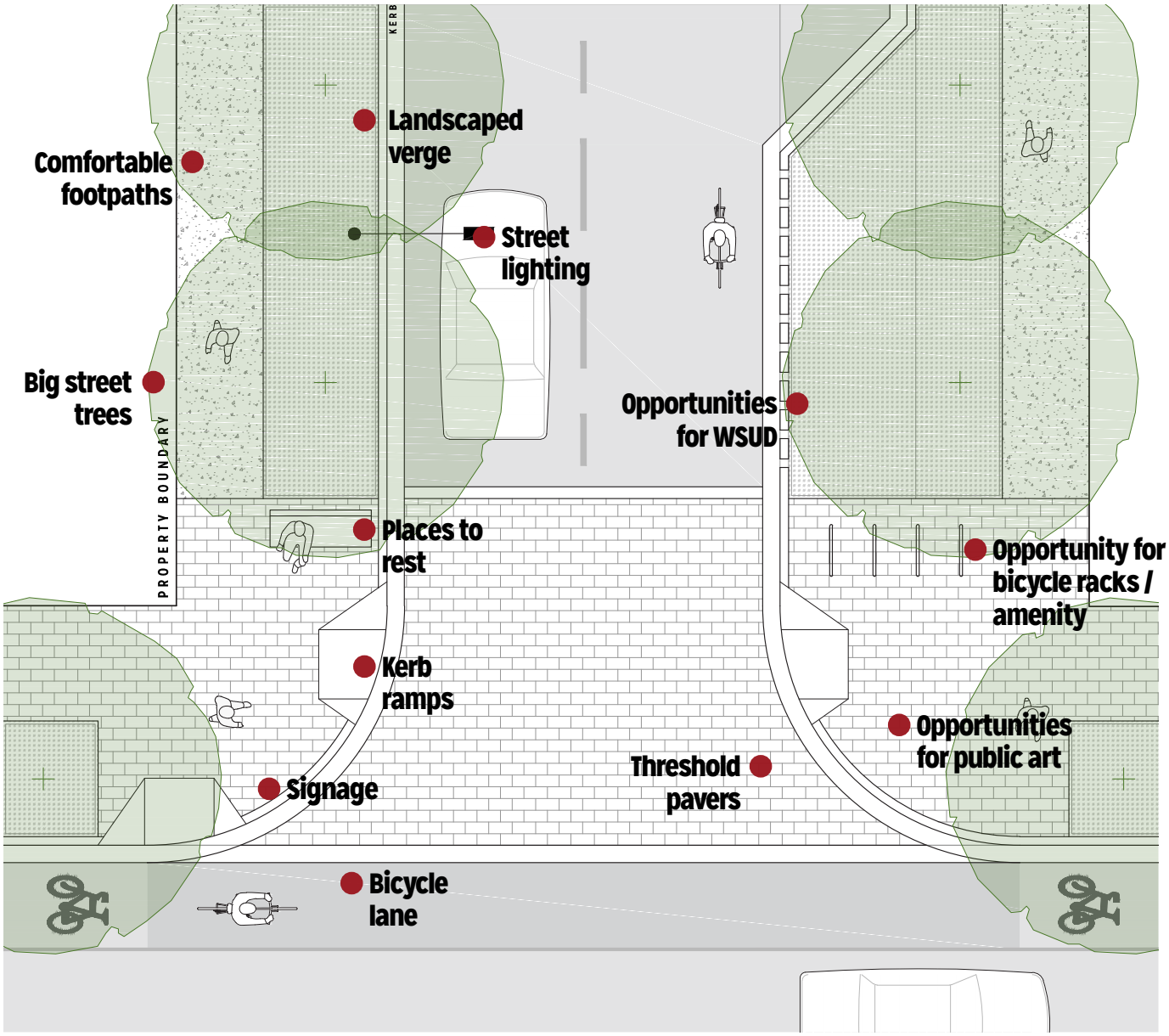


Where to apply

Significant streetscapes

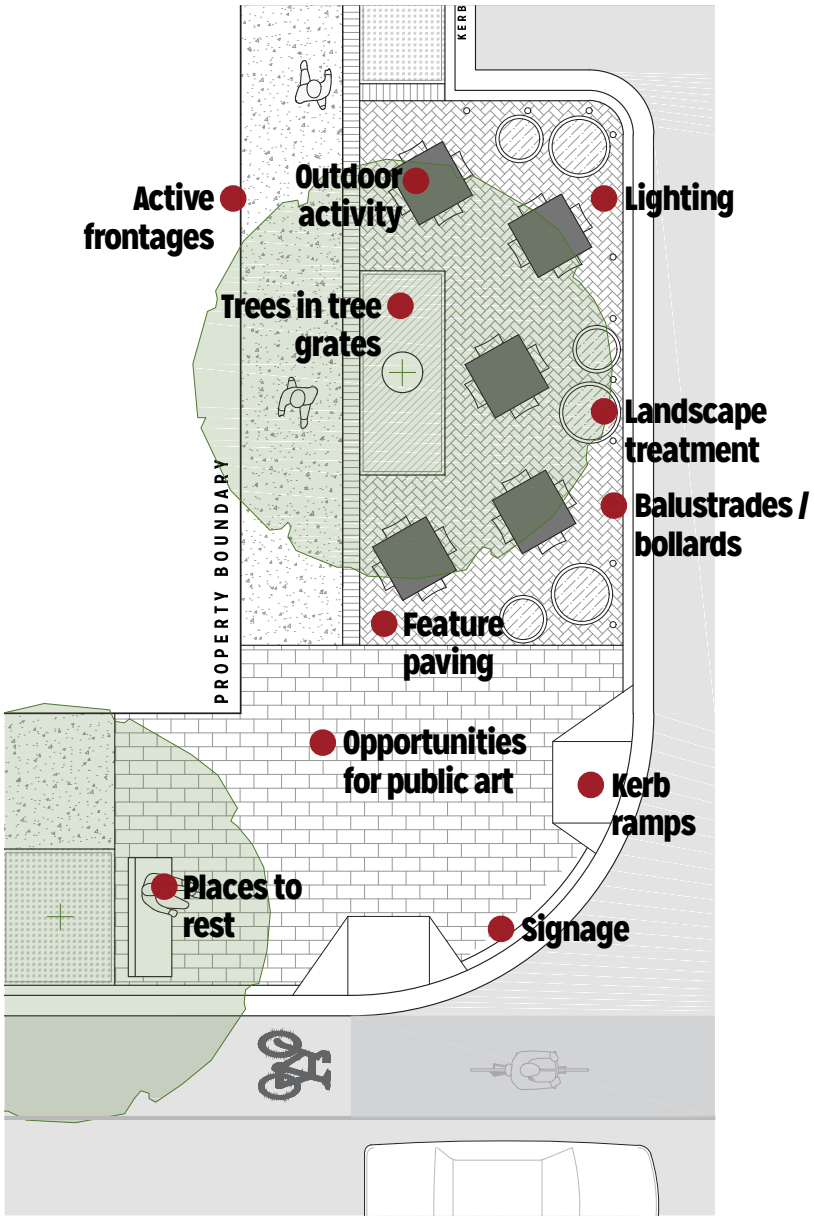
Intersections

Thresholds



Example of traffic control device to complement streetscapes

Protuberances

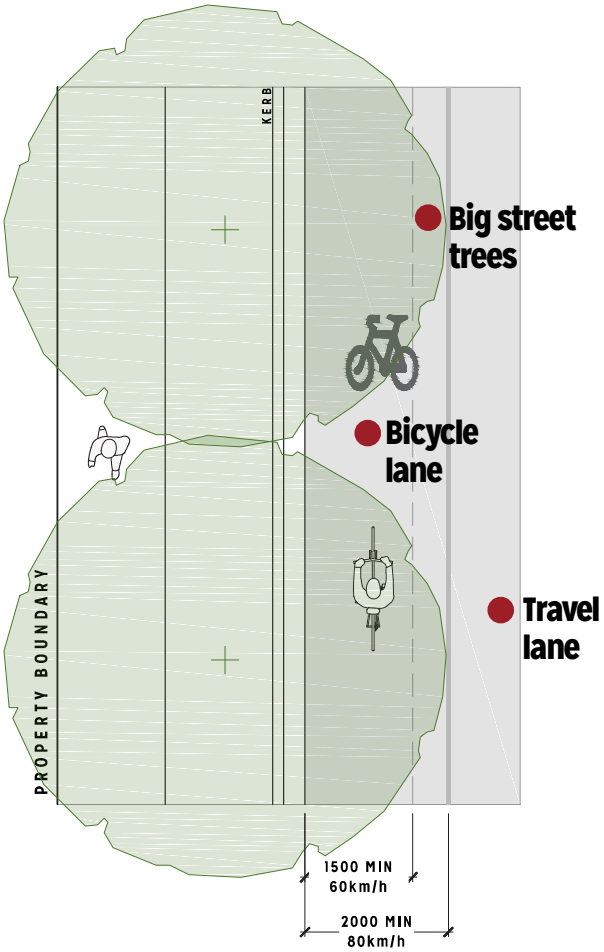


Where to apply

Key activity areas adjacent 'corner shops', local and neighbourhood centres (typically located on local, collector and distributor roads).

Bicycle lanes

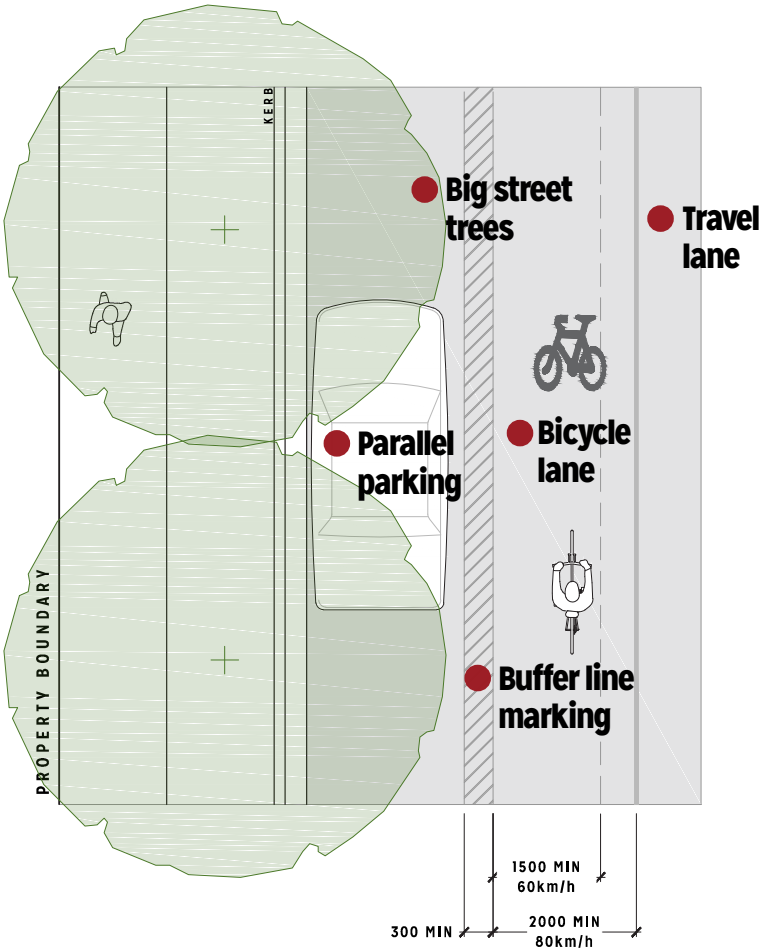
On-road bicycle lanes



Where to apply

Standard bicycle lane for:

- Arterial roads
- Sub-arterial roads
- Distributor roads
- Collector roads

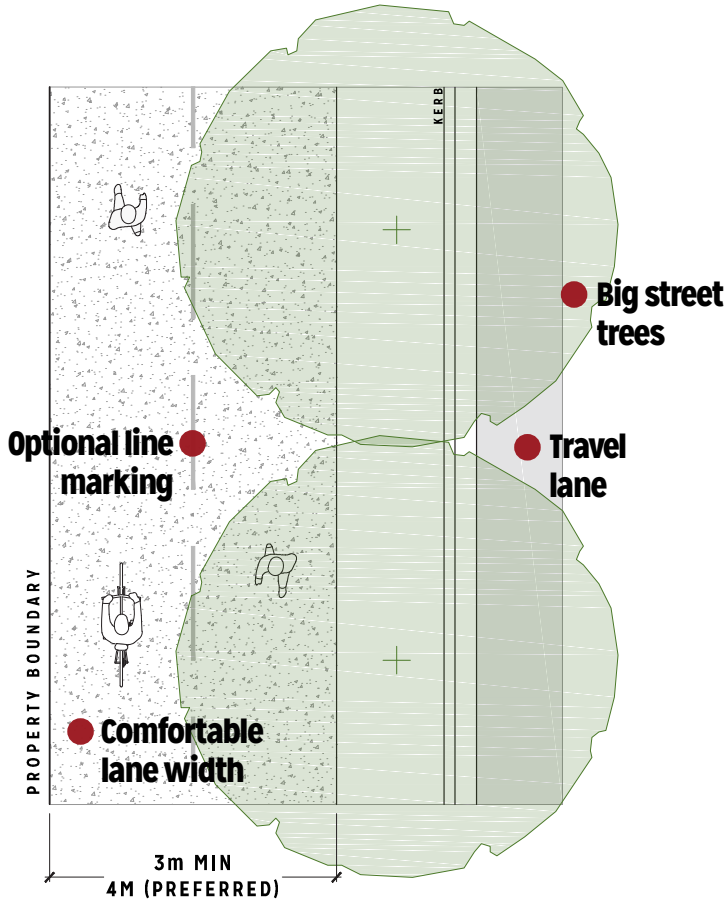


Where to apply

Typical bicycle lane for roads incorporating designated on-road parking including:

- Arterial roads
- Sub-arterial roads
- Distributor roads
- Collector roads

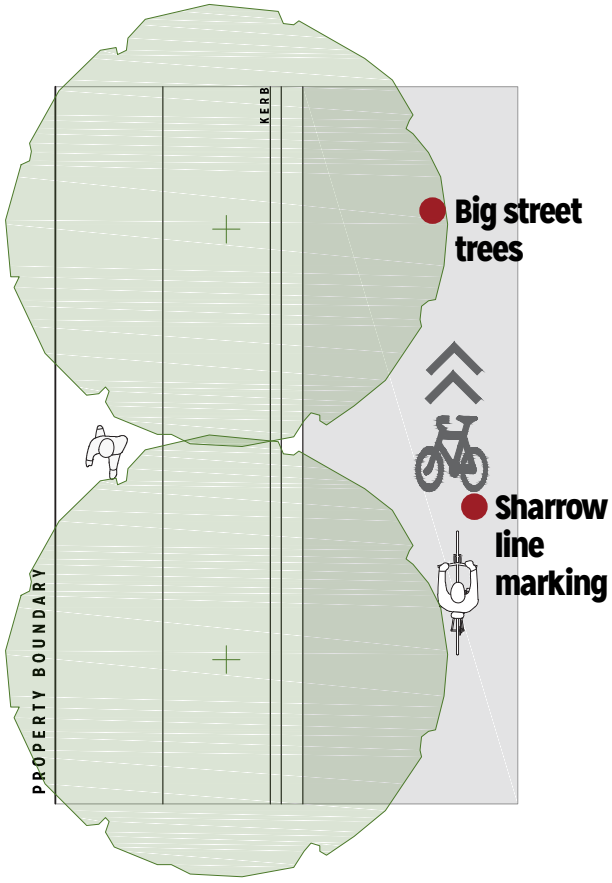
Shared paths



Where to apply

- Roads with high vehicle speeds and volumes where adequate separation can be achieved
- Linear reserves and parks

Shared streets



Where to apply

Roads with low traffic speeds and volumes including:

- Collector roads
- Local roads

Part F
Implementation

Implementation

Overview

The City of Marion Streetscapes Design Guidelines establishes a long term vision for streetscapes in the city. The guidelines are a significant first step in developing high quality, recognisable streets that enhance the character and amenity of the city and balance the needs of vehicles, pedestrians and cyclists.

Implementation of the guidelines will occur over a number of years and will occur as standalone projects and concurrently with other streetscape improvement in the city including infrastructure and service upgrades.

Delivery

As a guiding document, it is intended that the guidelines will be used as a reference manual by Council staff to inform capital works budgets, staging, funding opportunities and delivery mechanisms.

The preferred approach to the delivery of guidelines is to adopt an integrated approach that aims to embed streetscape strategies within existing Council processes and enhance efficient delivery of the vision.

Staging

Transformational Projects

Significant high cost projects that change the nature, amenity and environment of the street and often relate to other initiatives and projects, such as walking and cycling.

Renewal Programs

Projects that may consist of street tree planting, footpath upgrades, water sensitive urban design,

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