



# Marrangaroo

Master Plan Briefing Session





Master Plan Briefing Session:

**The Process**

**Vision and Design Principles**

**Master Plan**

**DCP Outline**

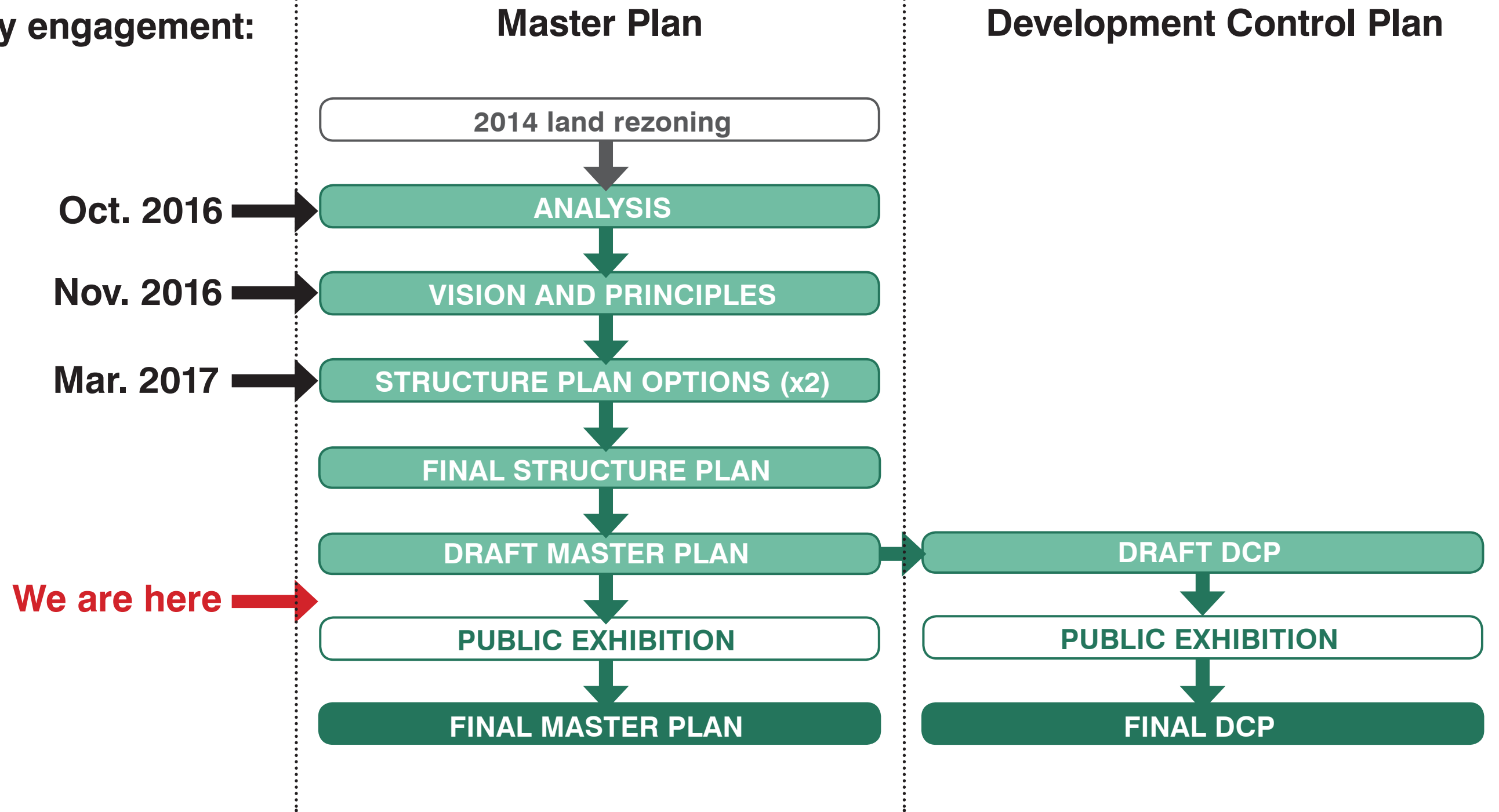
**Questions**

**Next Steps**



# The Process

Stakeholder, landowner and community engagement:



## The Vision for Marrangaroo

*“Marrangaroo will be a new urban village that will provide housing, amenity, recreational and employment opportunities to a diverse range of residents and visitors, while promoting sustainability initiatives and maintaining the semi rural and natural qualities of the site.”*



# Design Principles

## Context and Interfaces

- Provide natural buffers between enterprise corridor and industrial and urban areas
- Ensure safe and adequate access from the highway
- Maintain the visual quality of the entrance to Lithgow
- Consider impacts of stormwater, flooding and drainage on adjacent properties
- Provide cycle and public transport connections to Lithgow
- Protect Marrangaroo Creek, its water quality and wildlife
- Separate Correctional Centre and residential housing
- Retain key landscape views from the Highway and residential areas east of the Highway
- Create a distinct and identifiable community with a strong sense of arrival





# Design Principles

## Natural Features

- Consider bushfire access
- Consider building heights in relation to topography
- Maintain the natural beauty of hills and ridgelines for wildlife attractiveness and recreation
- Avoid urban development in flood prone areas, bushfire danger and steep slopes
- Incorporate water sensitive urban design into all aspects of the development, utilising existing drainage corridors and waterways





# Design Principles

## Community and Amenity

- Provide a range of recreational opportunities including play spaces and access to bushland walks
- Do not plan or develop services greater than the needs to the target population
- Provide green streets that minimise road pavement and maximise green verges and trees. Provide and encourage walking, cycling and public transport use
- Provide a connected network of open spaces distributed throughout the development and in varying topographic locations
- Preserve and celebrate heritage features
- Promote efficient land-use for urban purposes to preserve rural land
- Create a village heart within the residential neighbourhood that provides basic services such as local retail/education/community centre





# Design Principles

## Housing and Density

- Provide large lots in areas that will contribute to landscape views, rural character and environmental protection
- Provide enough housing to sustain infrastructure costs, public transport, community facilities and a small amount of local retail.
- Locate density where amenity is the highest, such as adequate open space or neighbourhood centre.
- Provide for senior living
- Provide housing choice and diversity





# Design Principles

## Employment and Economy

- Separate incompatible uses from one another
- Increase economic opportunities to live and grow in Lithgow
- Provide enough land to encourage investment and cater for future demand
- Provide employment generating land uses, including land with good access and visibility





# Design Principles

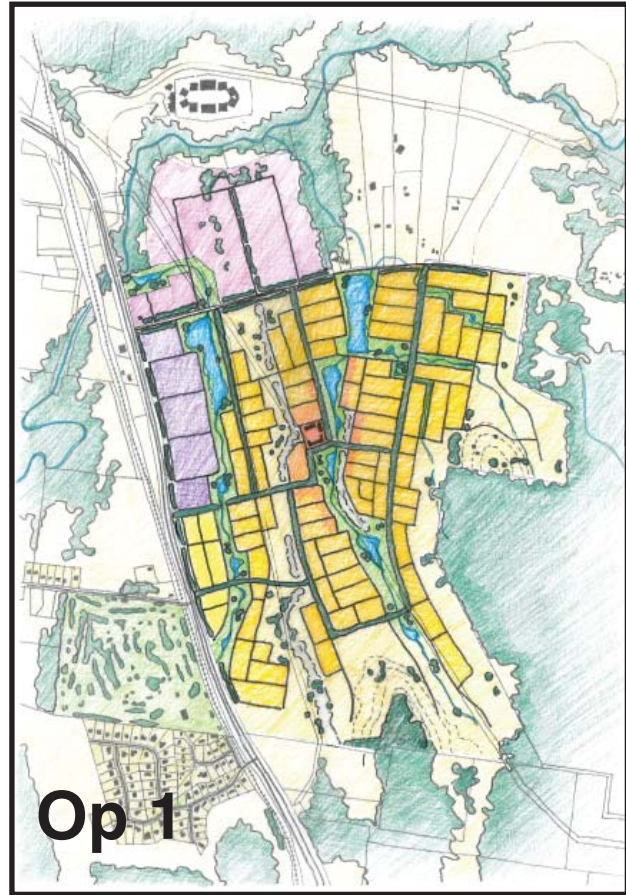
## Staging and Implementation

- Provide a robust set of development guidelines to ensure a well considered and consistent outcome into the future
- Recognise the impact of existing property boundaries on staging
- Design and implement cost effective infrastructure for the whole area to support its development
- Locate development near existing services and infrastructure where possible



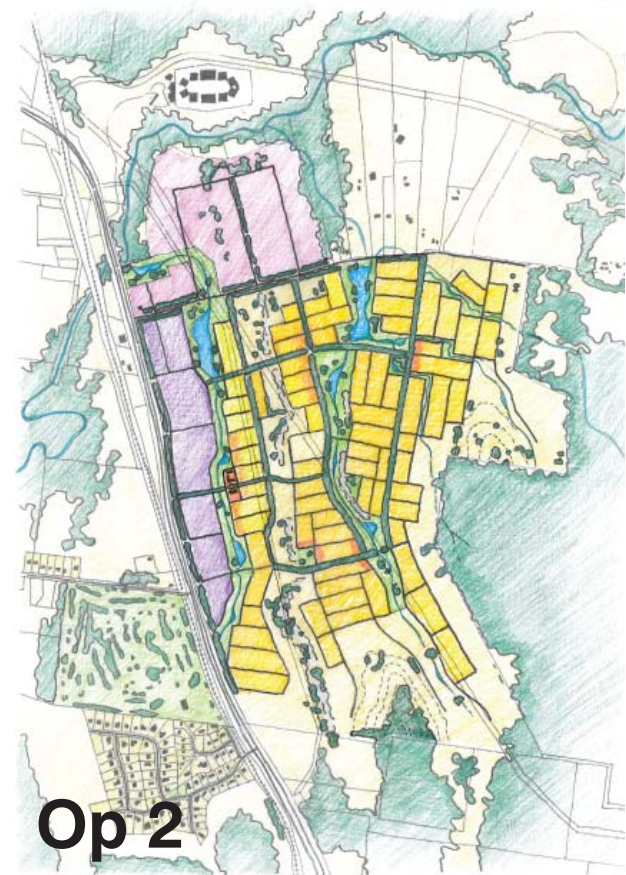


# Master Plan



## Preferred Structure Plan

- Reduced employment land area
- Central Village Centre

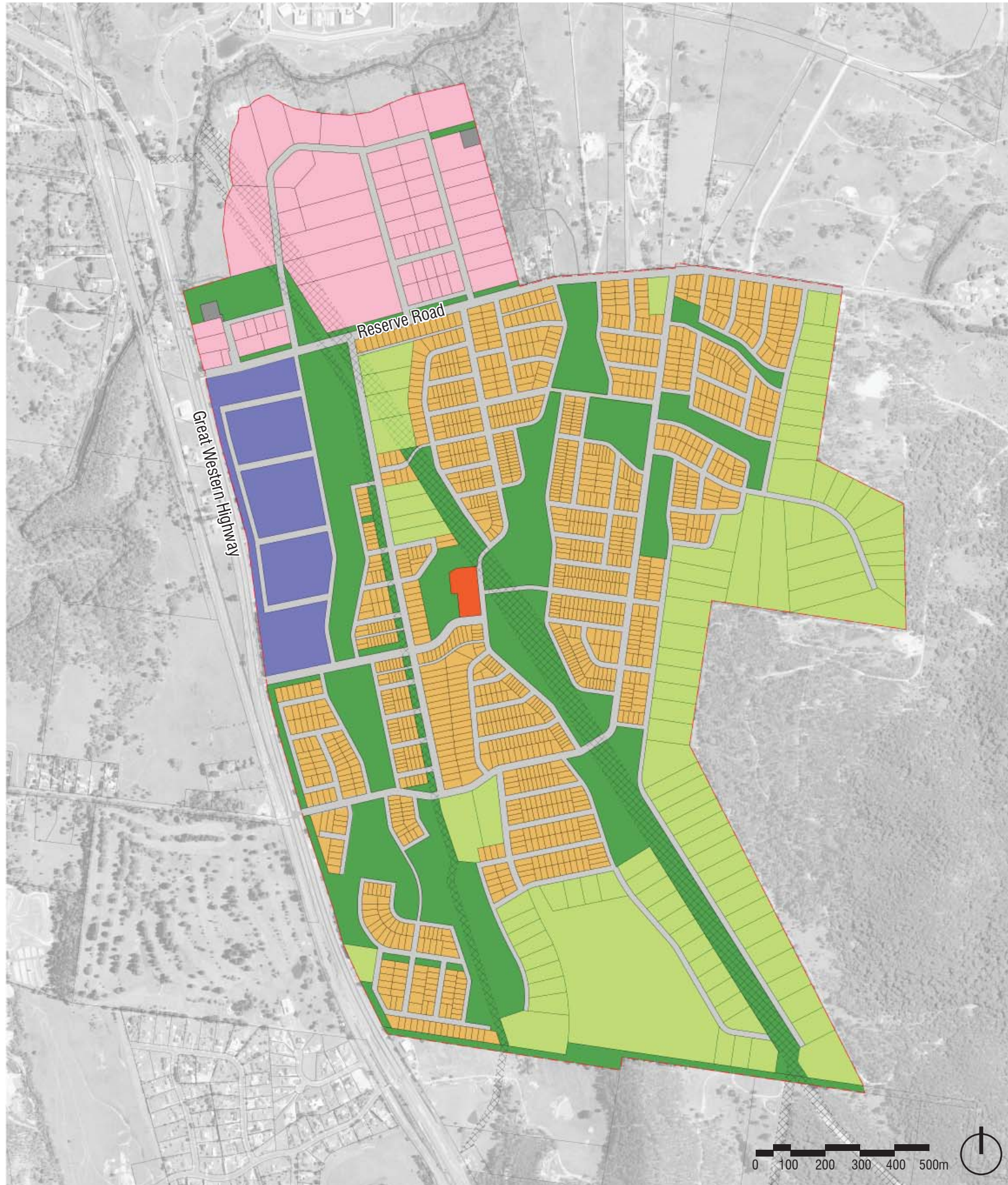


# Draft Master Plan





# Land Use

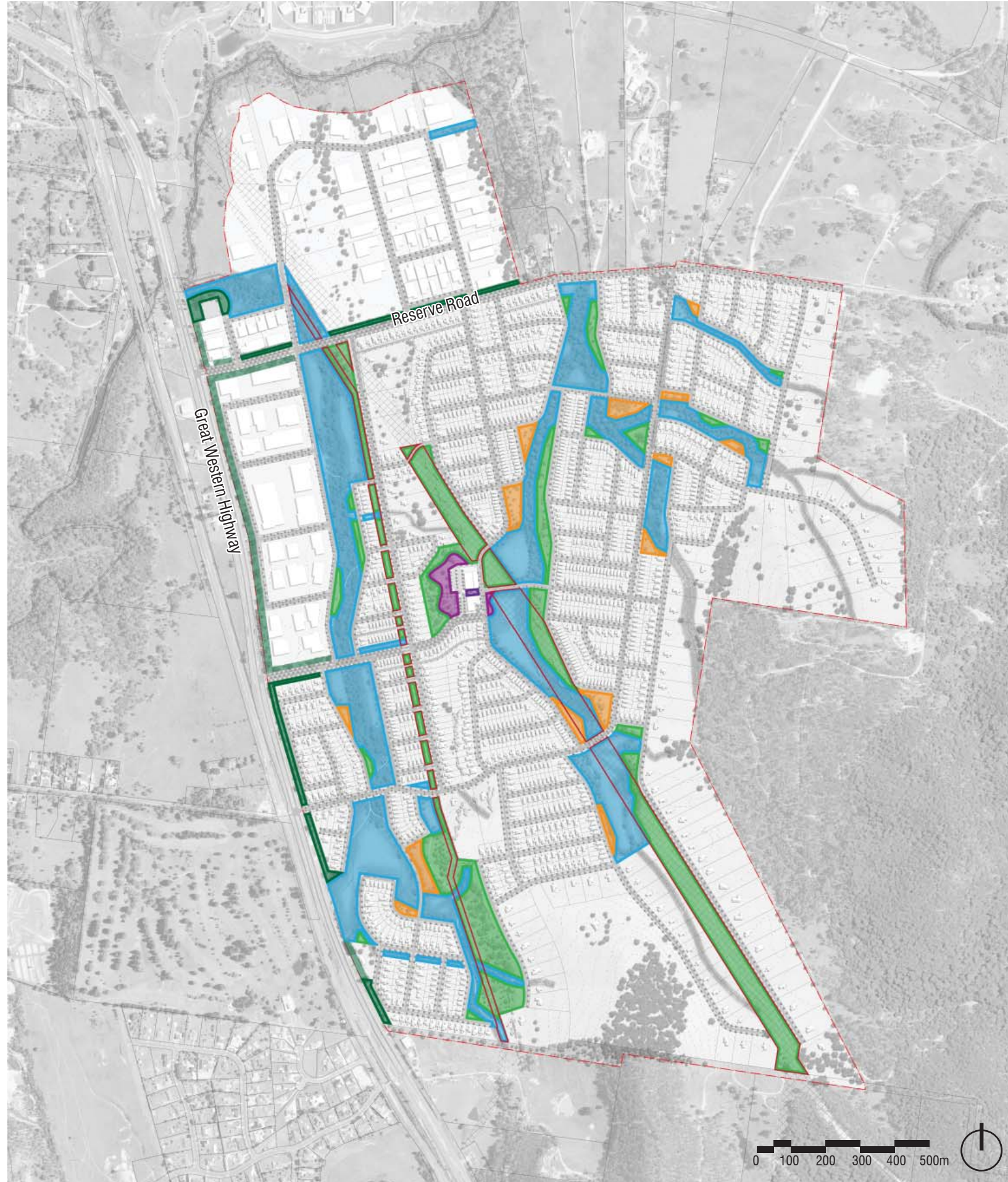


- Neighbourhood Centre (B1)
- Industrial (IN1)
- Enterprise Corridor (B6)
- Open Space (RE1)

- General Residential (R1)
- Large Lot Residential (R5)
- Road reserves
- Sewer infrastructure (SP2)



# Open Space



- Village Square
- Village Park
- Neighbourhood Park
- Drainage Corridors

- Rural Open Space
- Landscape Buffer
- Landscape Buffer - on private land
- Easements - restrictions apply



# Open Space

## Village Square

- This will be the focal public space for the village centre





# Open Space

## Village Park

- A high quality public park for use by the whole community





# Open Space

## Neighbourhood Parks

- Local parks that provide opportunities for informal recreation and gathering

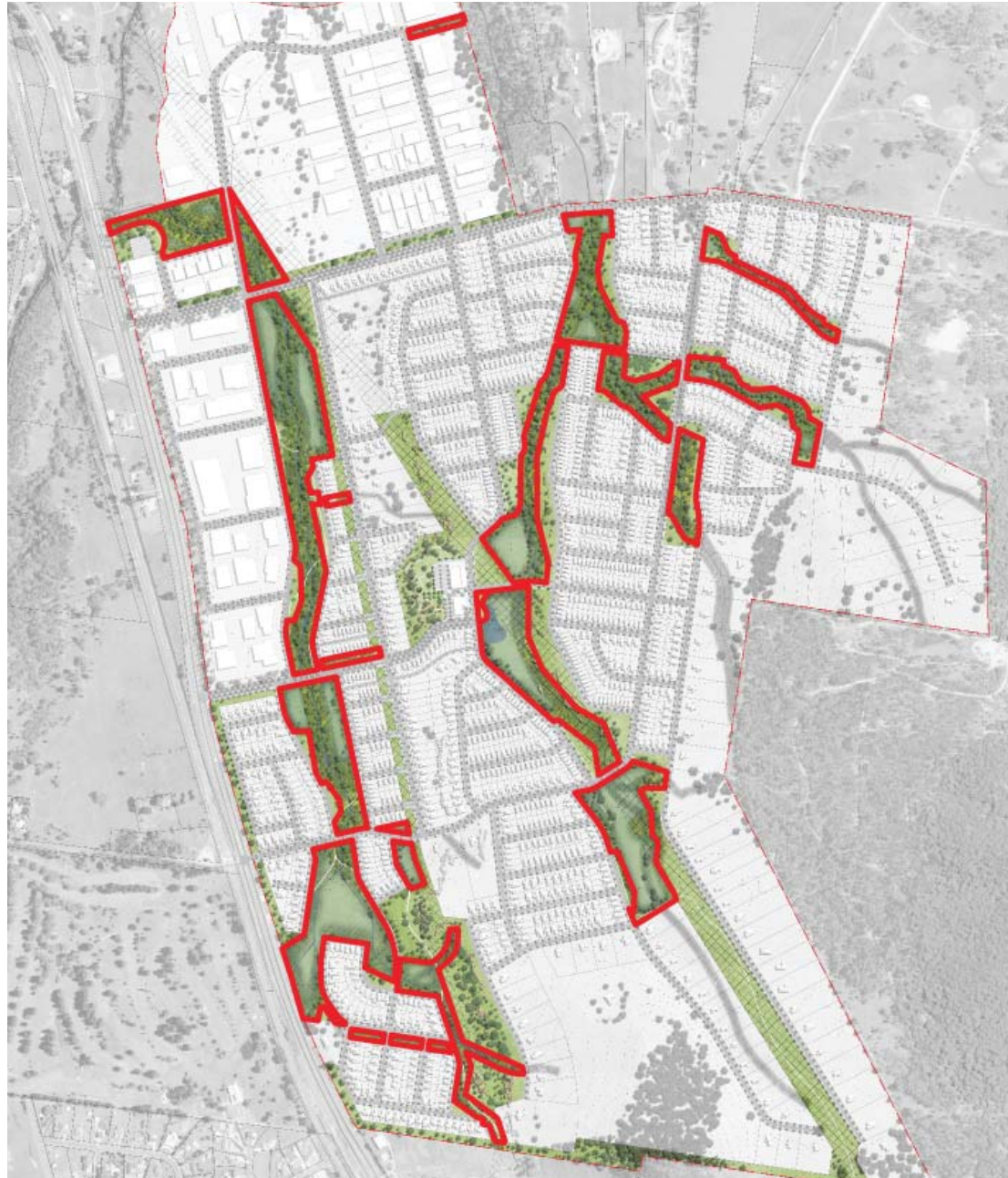




# Open Space

## Drainage Corridors

- Ephemeral creeks and Water Sensitive Urban Design (WSUD) to manage and treat all of the stormwater drainage for the site

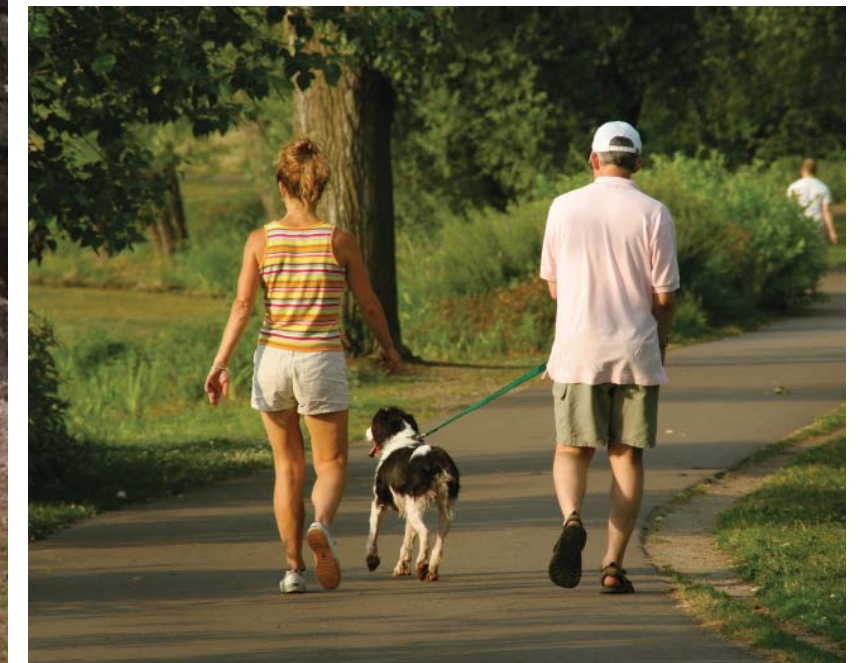




# Open Space

## Rural Open Space

- Low maintenance open space





# Open Space

## Landscape Buffers

- Heavily planted spaces designed to screen undesirable views and contribute to a green and natural aesthetic

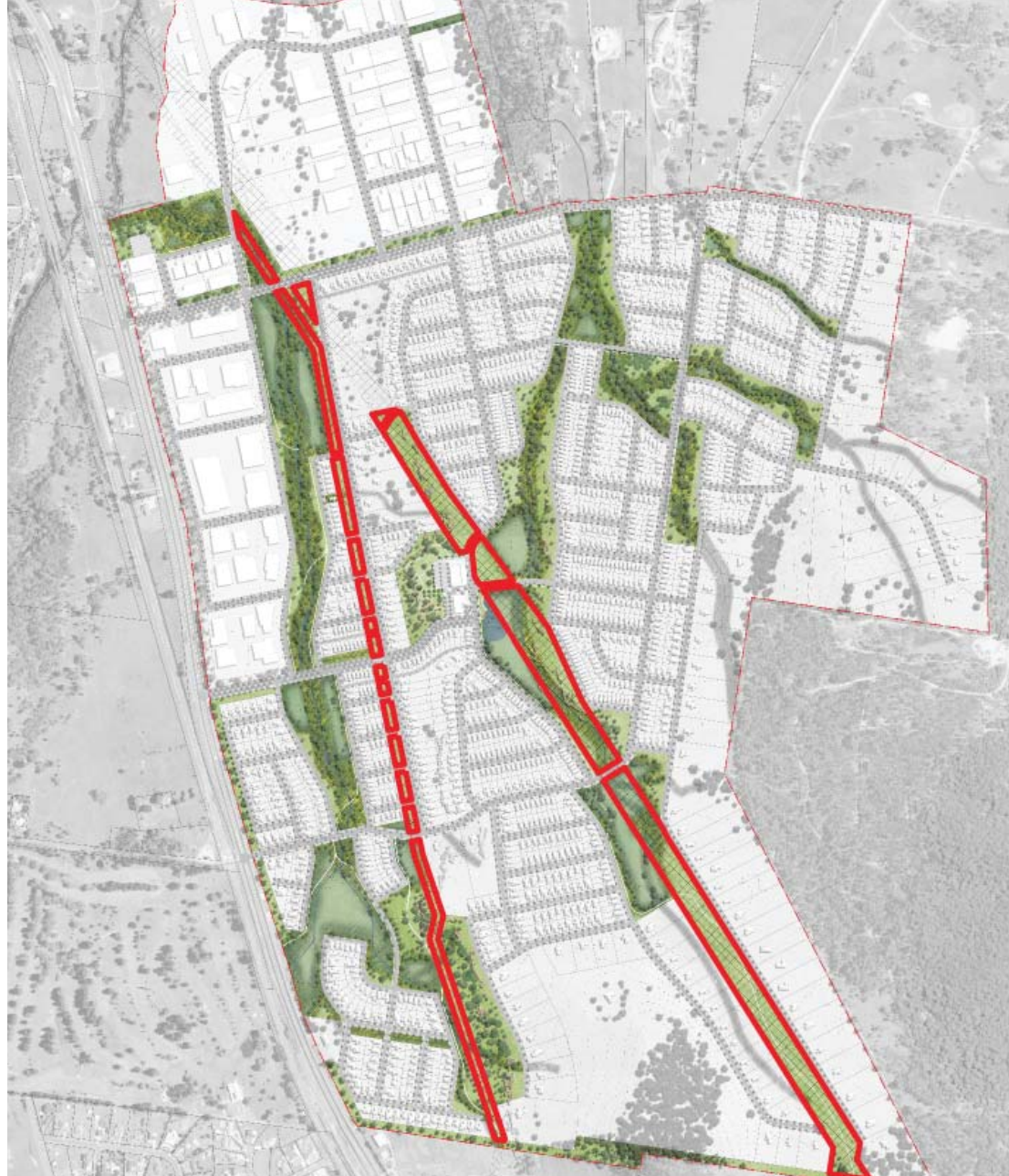




# Open Space

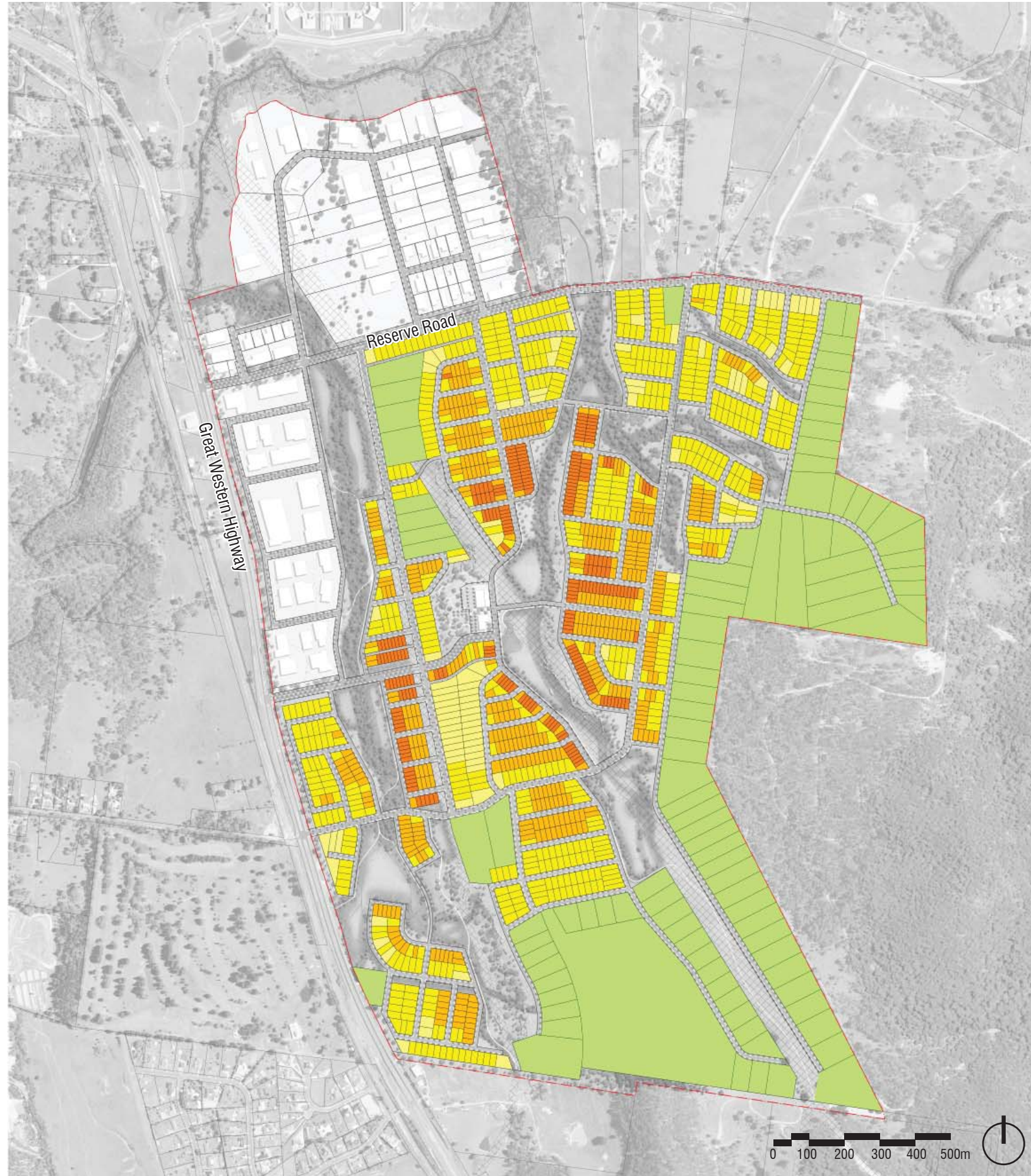
## Easements

- Easements are incorporated into the open space system to provide access as a requirement by the service providers






# Residential Density





## Lot Sizes:

 Compact (250-399m<sup>2</sup>) - up to 247 lots




 Medium (400-599m<sup>2</sup>) - up to 527 lots

 Standard (600-999m<sup>2</sup>) - up to 627 lots

 Standard (1000-3999m<sup>2</sup>) - up to 90 lots



 Large (4000m<sup>2</sup> +) - up to 98 lots

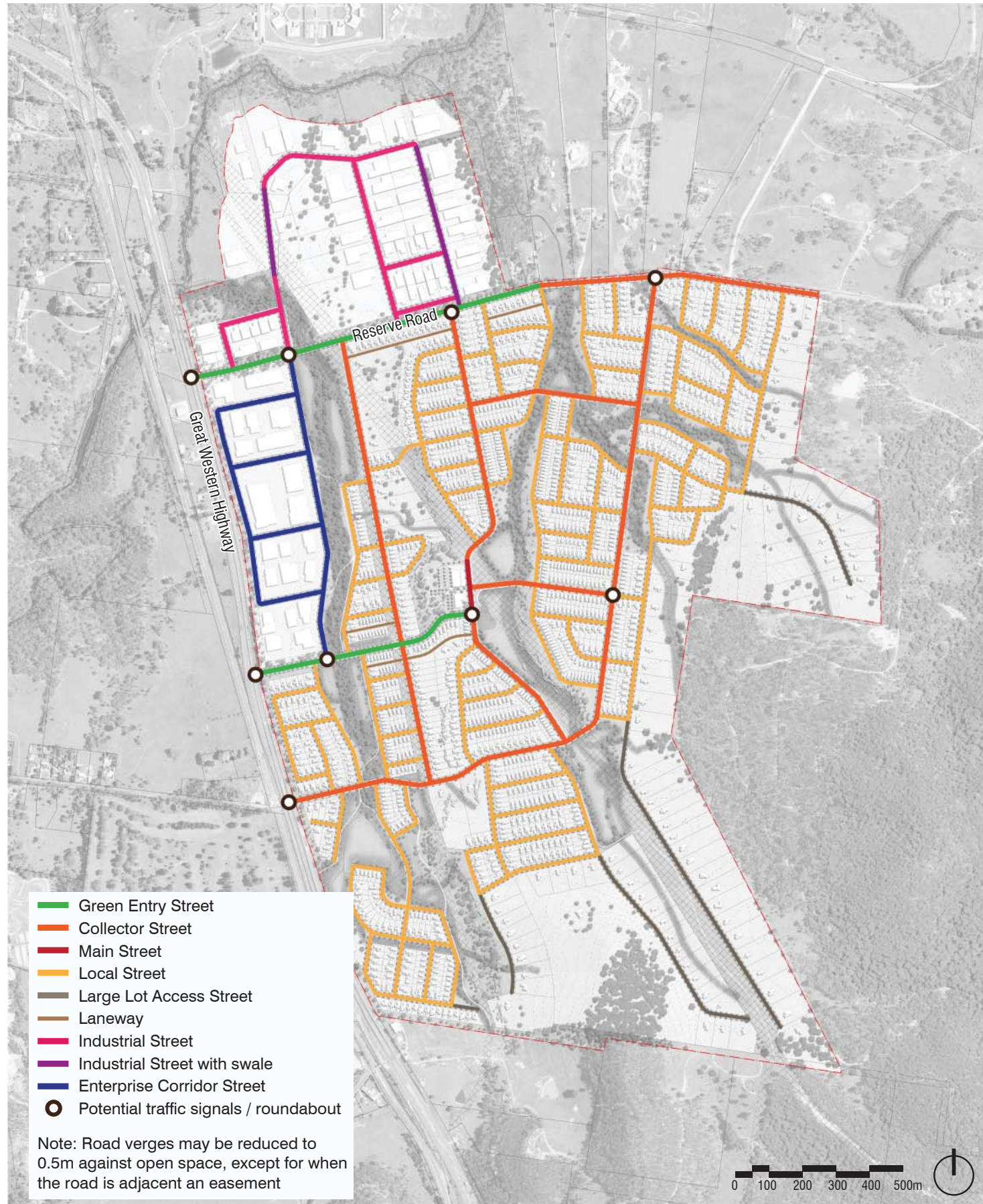


**TOTAL - up to 1589 Lots**

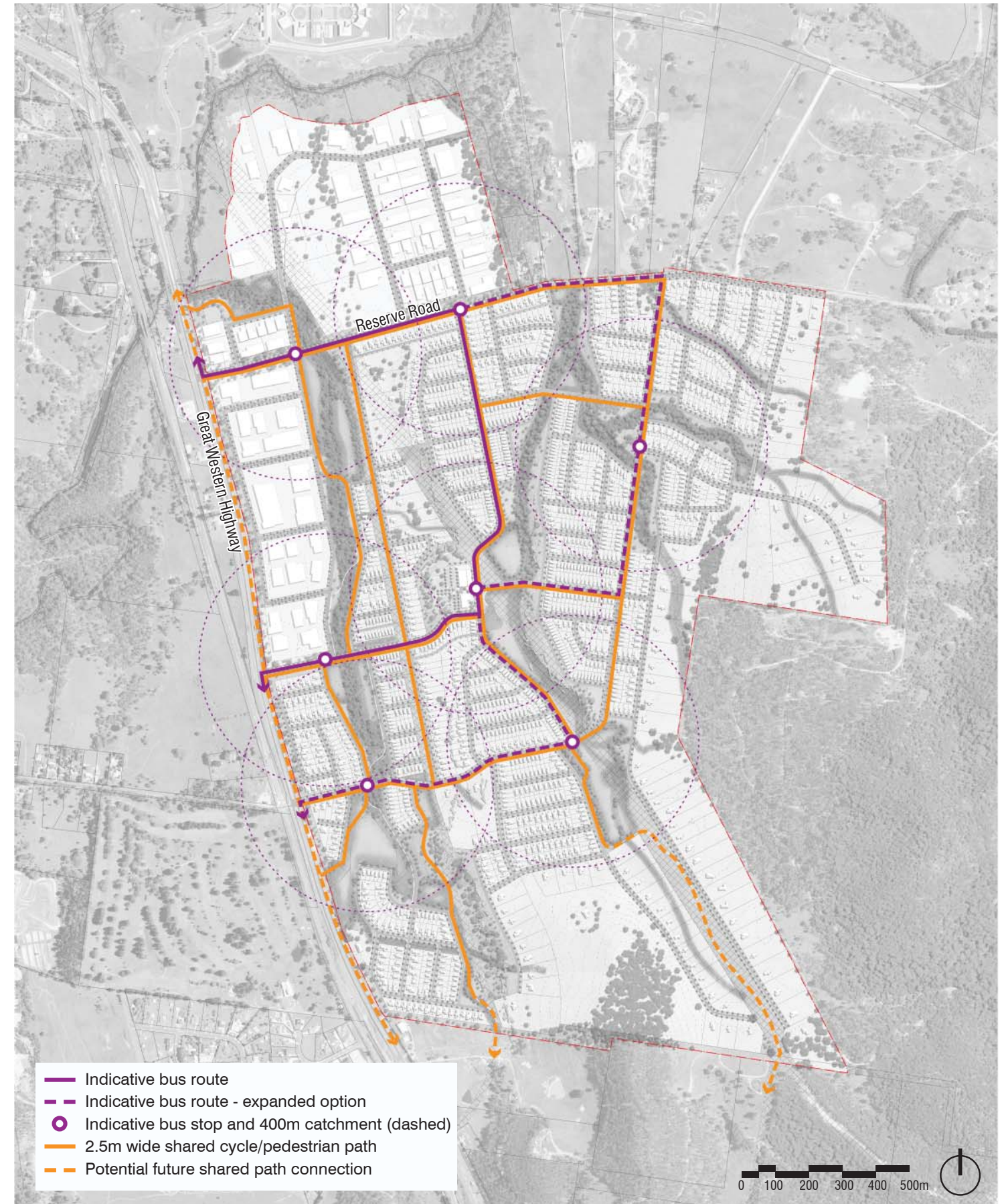


# Connectivity

## Street Hierarchy



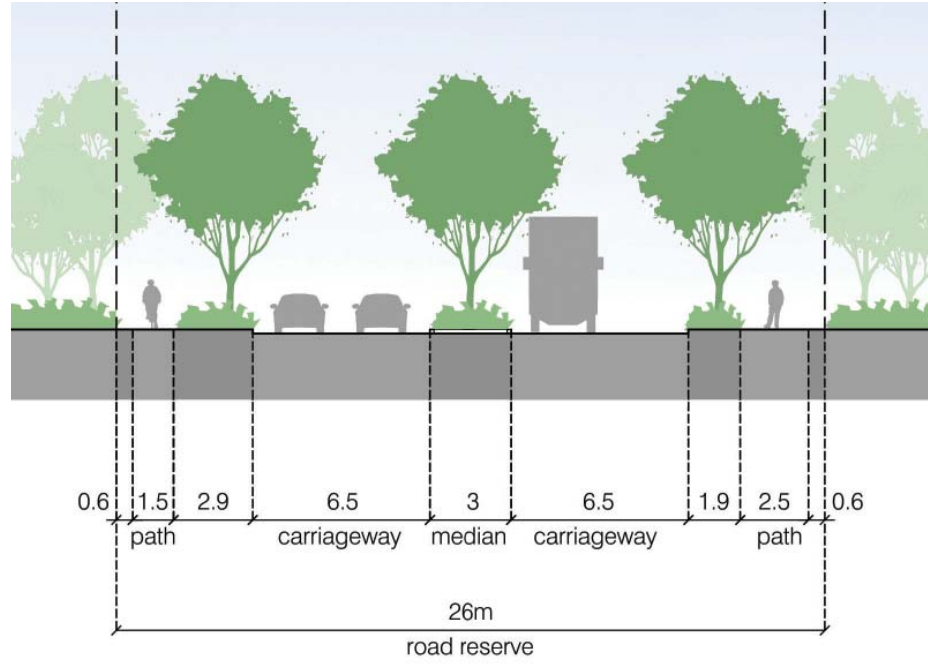
## Cycle and Bus



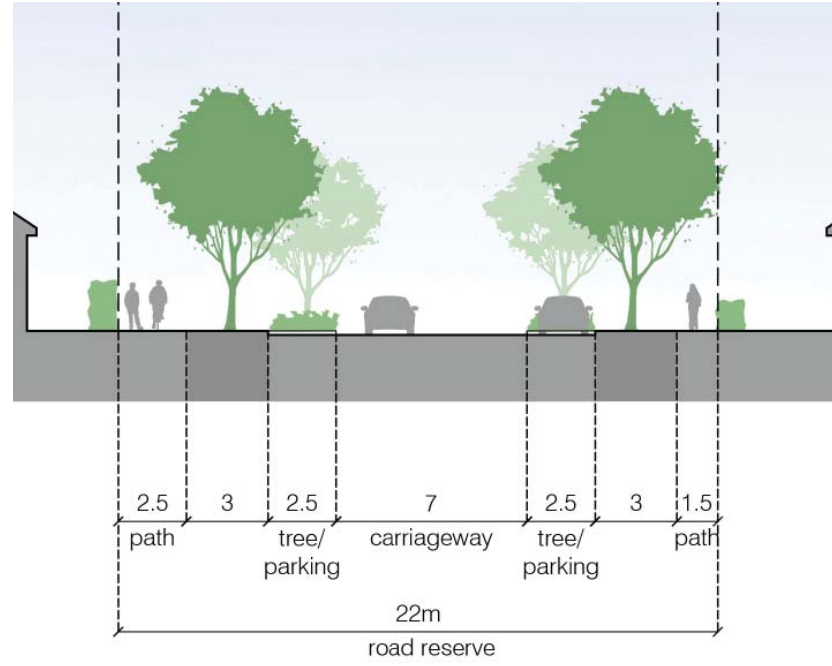


# Connectivity

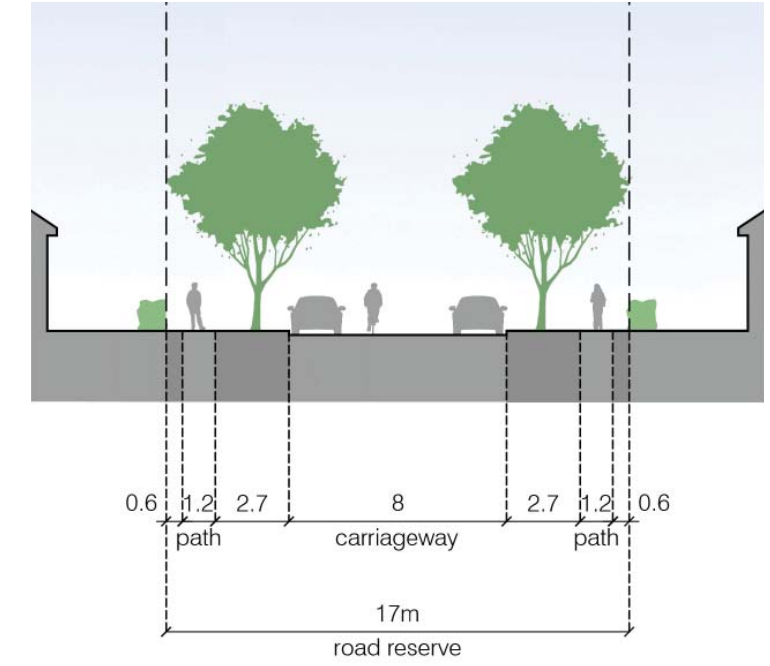
## Green Entry Street



## Collector Street



## Local Street





# Village Centre



1. Small grocer
2. Retail facing onto main street
3. Community facilities
4. Village Square
5. Car parking
6. Village Park
7. All-ages playground
8. Rocky outcrops
9. Shared path
10. Electrical easement
11. Stormwater treatment basin
12. Park overlooking the permanent pond
13. Permanent pond



# Village Centre





# Aerial Views



Looking south along the eastern open space corridor



# Aerial Views



Looking north-east to the village centre across the southern highway intersection



# Aerial Views



Looking south-east over the employment lands



# Aerial Views



Looking north towards the village centre



# Aerial Views



Looking west to the village centre over residential lots and open space



# Development Control Plan

*Contents:*

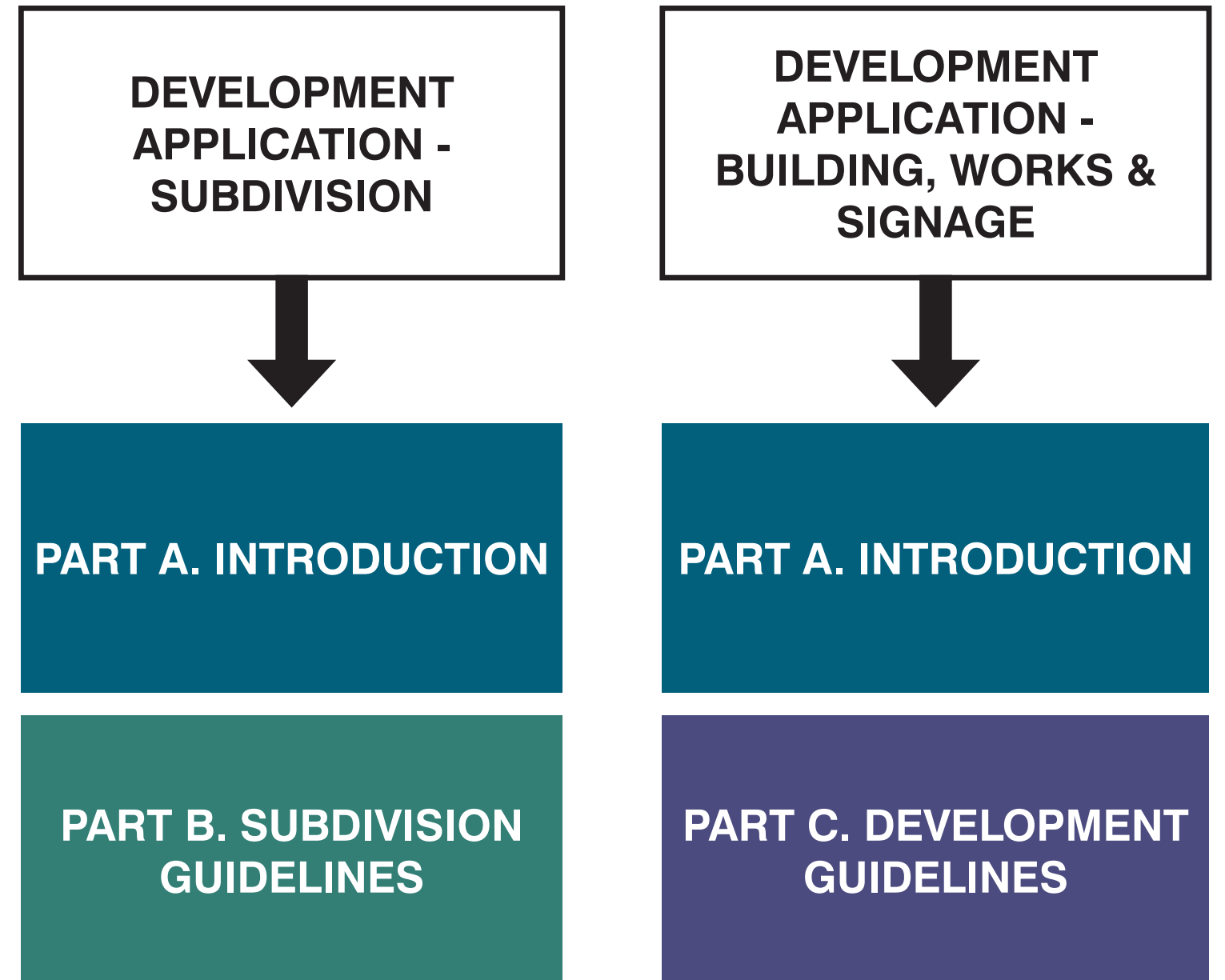
**Introduction**

**Subdivision Design Guidelines**

**Development Design Guidelines**

**Appendix**

*How to use the document:*





# Subdivision Design Guidelines

Site Responsive Design

Subdivision and Lot Layout

Local Infrastructure

Access and Circulation

Public Domain

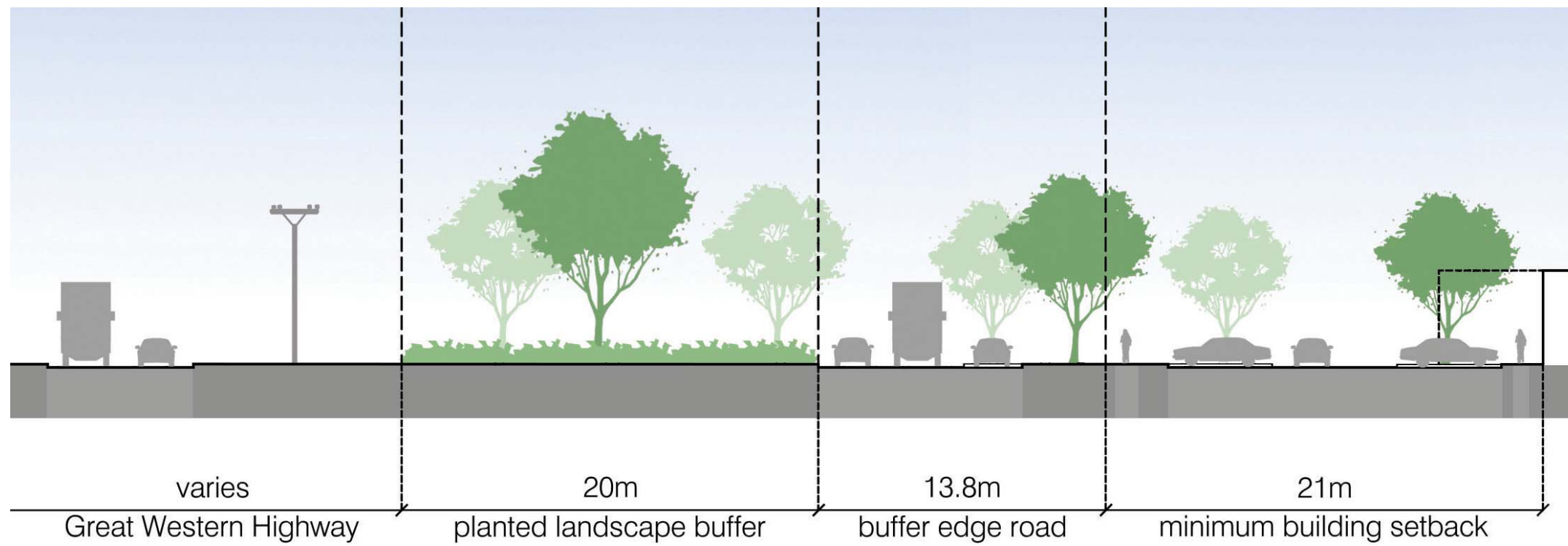
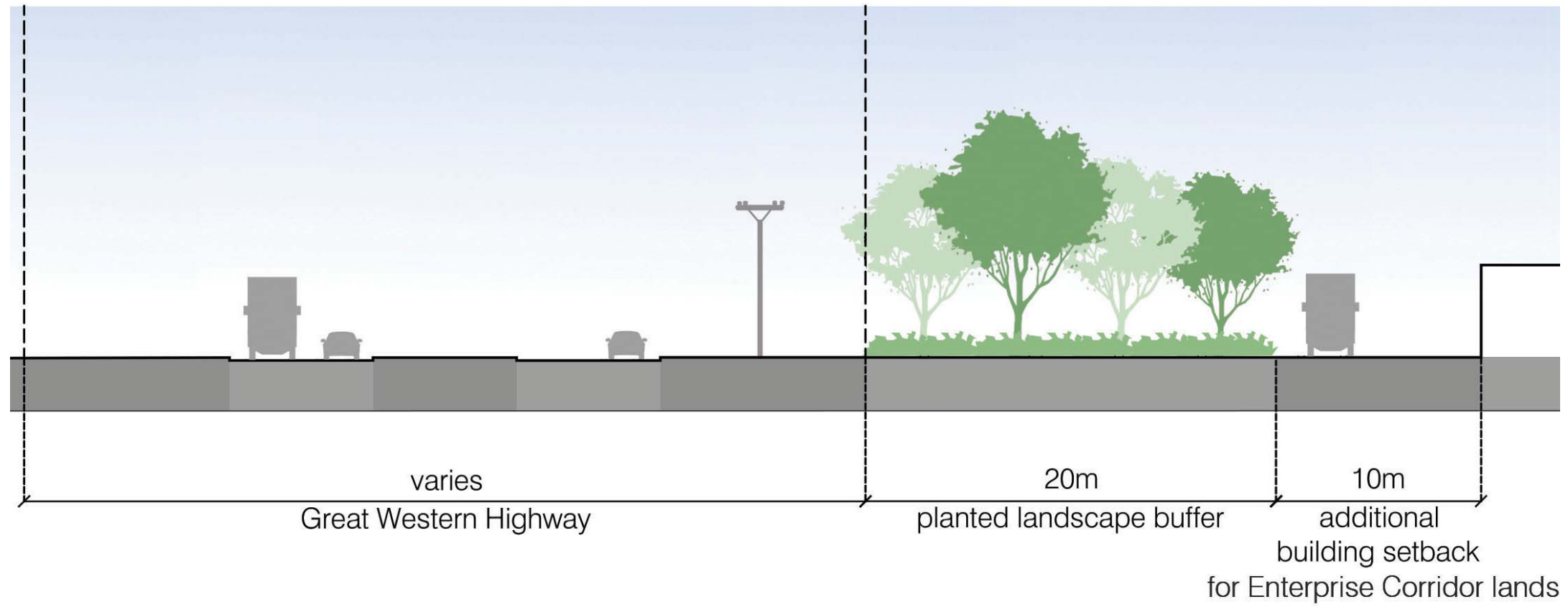
Interface Treatments

Stormwater Management

Environmental Hazards

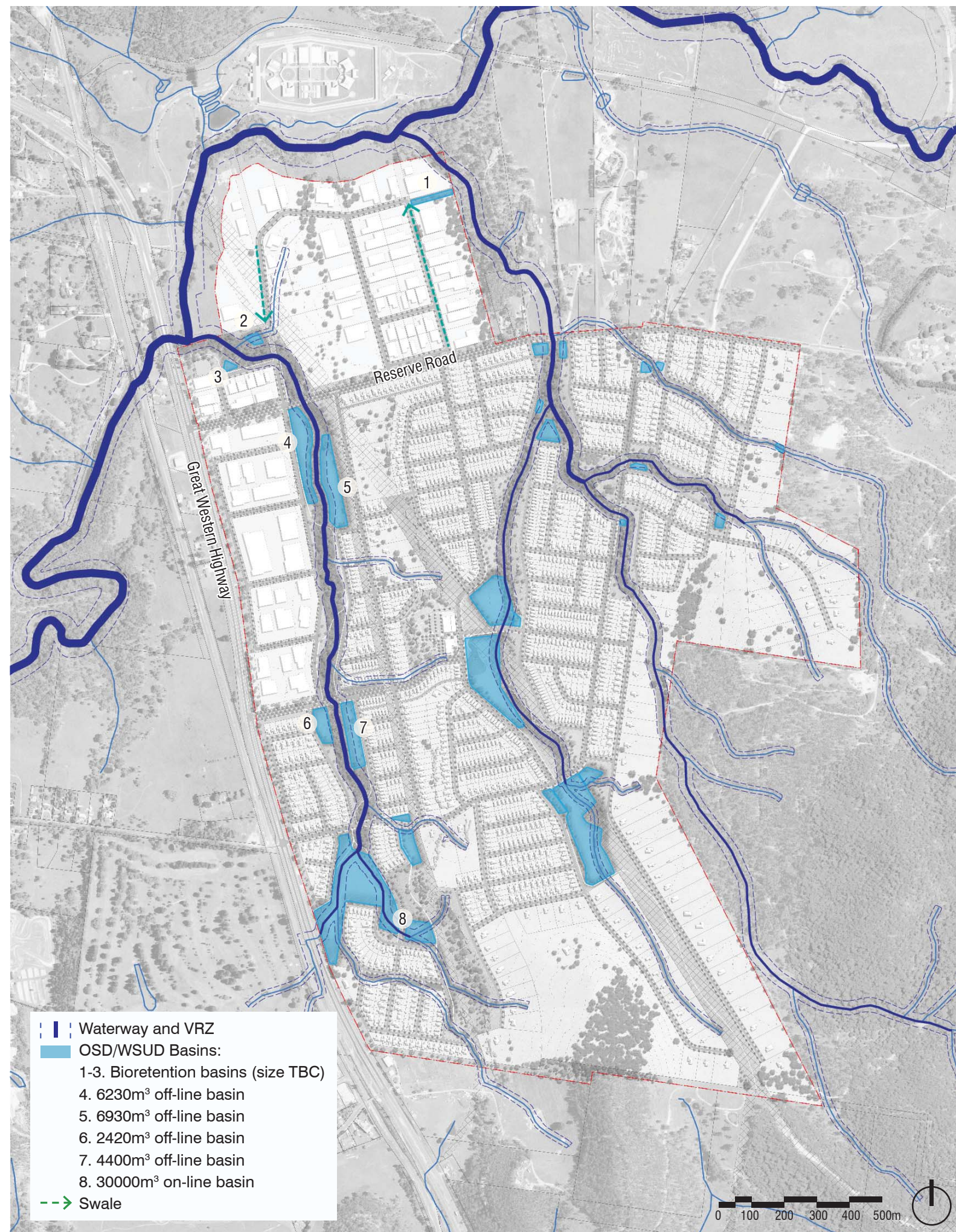


# Interface Treatments





# Stormwater Management





# Development Design Guidelines

Site Responsive Design

Access and Circulation

Building Siting and Orientation

Built Form

Landscaping

Site Amenity

Interface Treatments

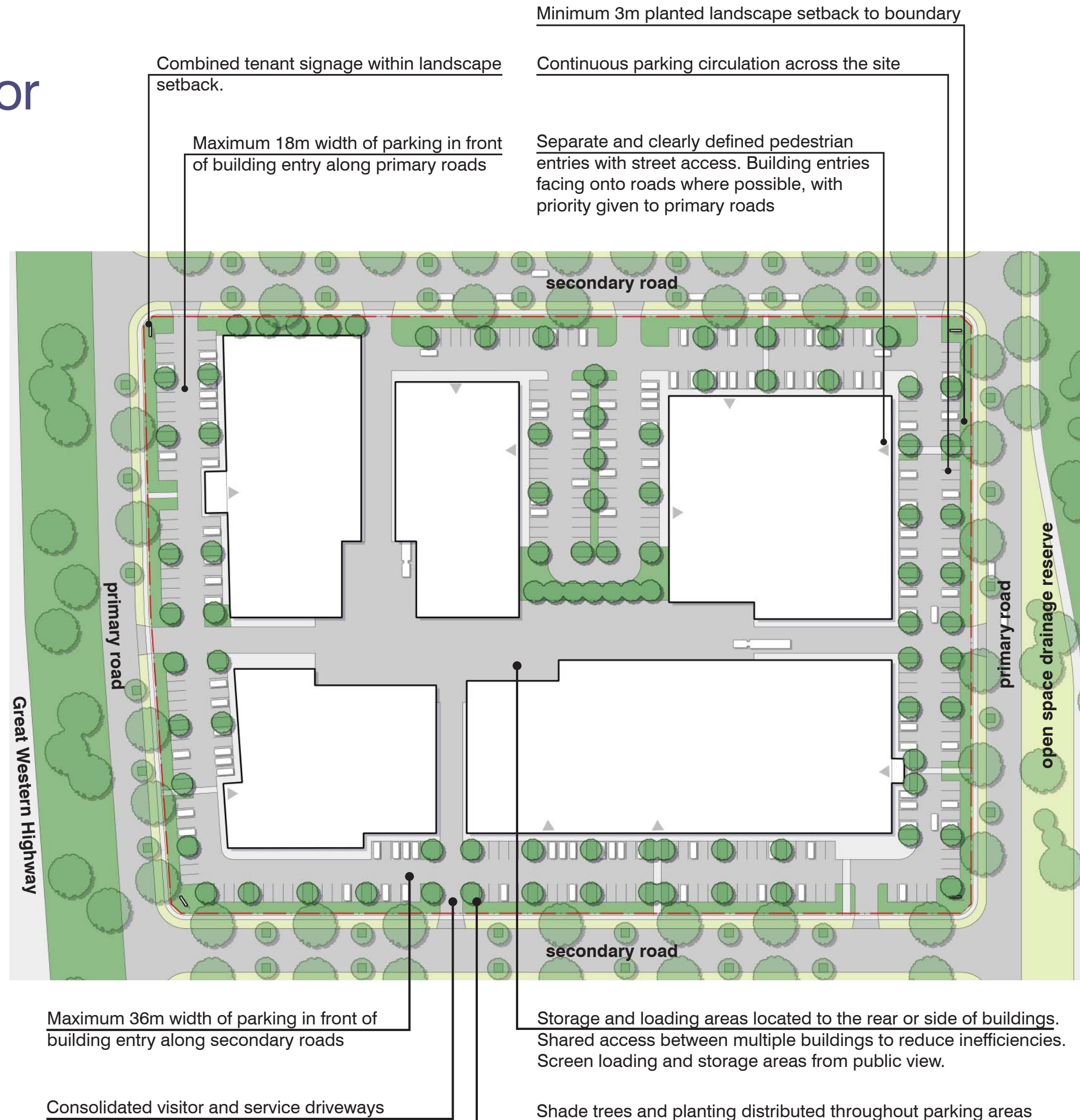
Specific Requirements

Environmental Hazards

Environmentally Sustainable Design



# Example layout - Enterprise Corridor



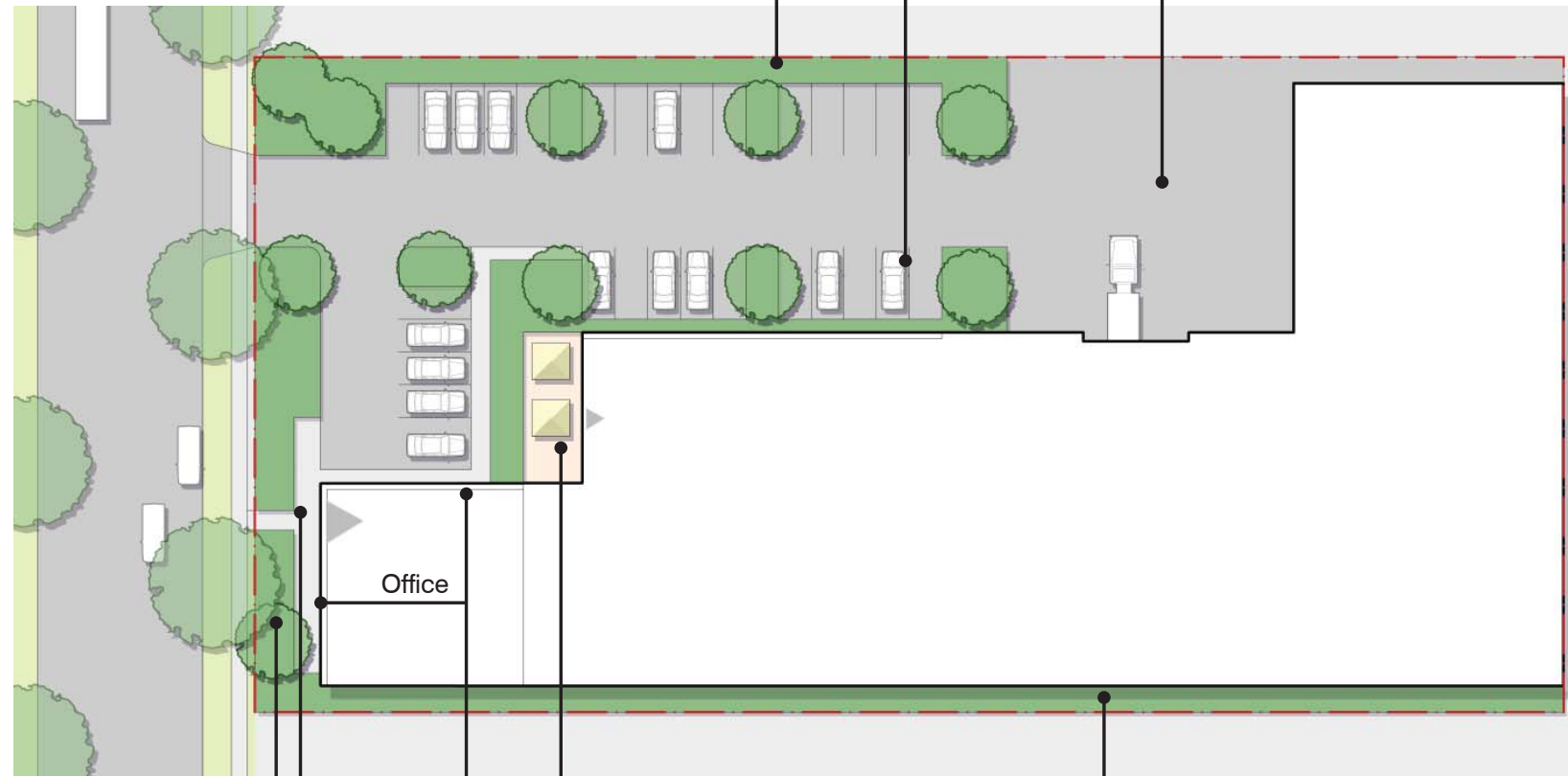


# Example layout - Industrial

Storage and loading areas located to the rear or side of buildings. Screen loading and storage areas from public view. Integrate loading into the design of the building.

Additional parking to side of building.  
Shade trees and planting distributed throughout parking areas.

Min 1m planting between parking and side boundary



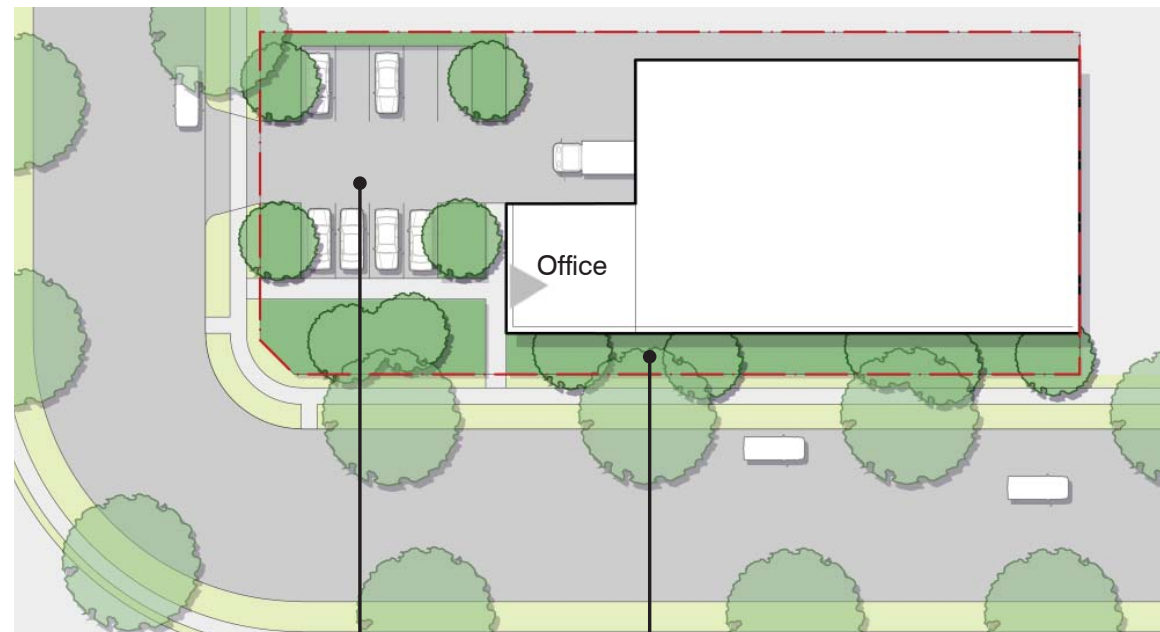
Shaded staff outdoor area

2m side building setback

Windows to street and parking areas

Separate and clearly defined pedestrian entries with street access.  
Building entries facing onto roads where possible. Max 18m width of parking between building entrance and the street

Minimum 3m planted landscape setback to boundary

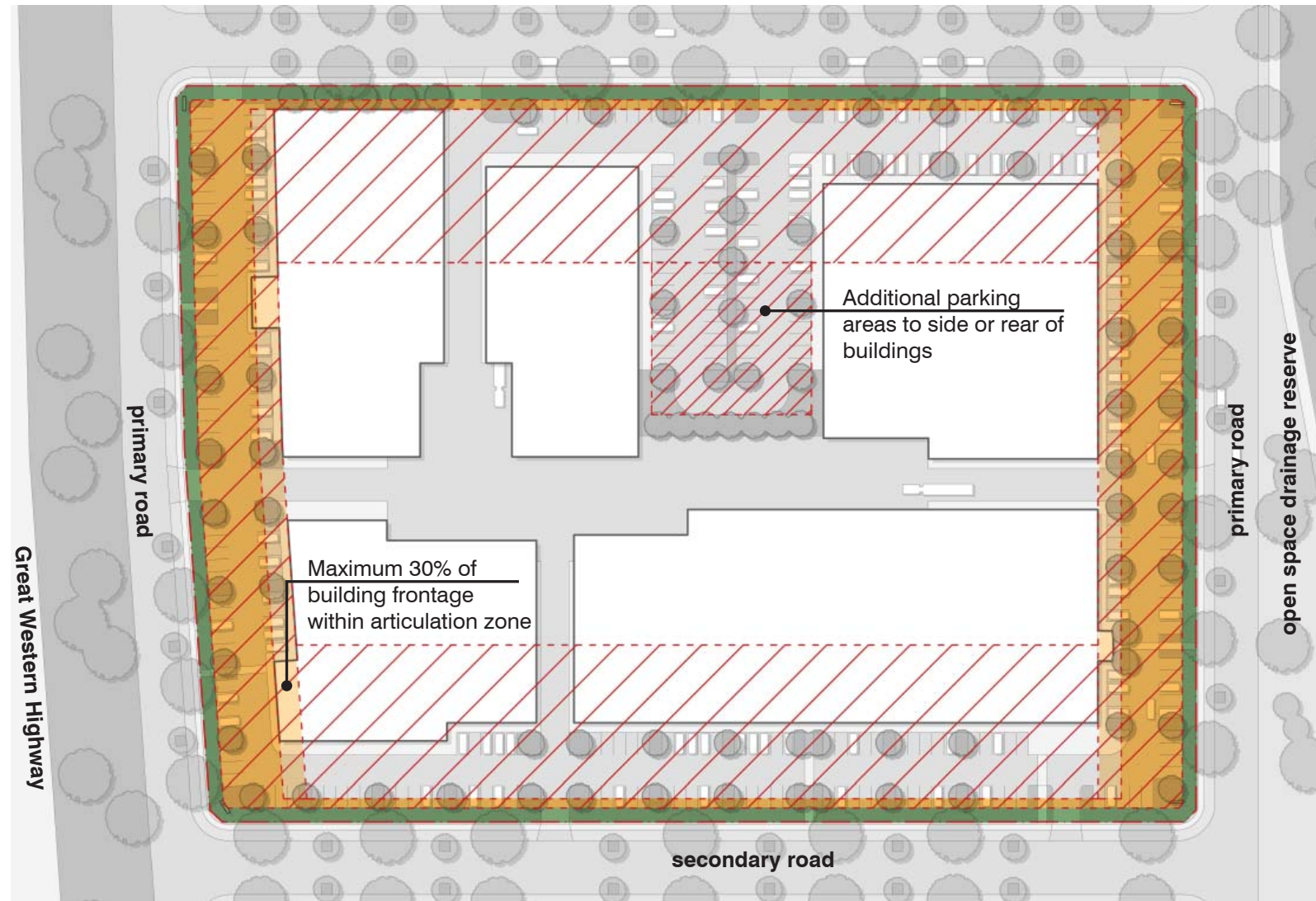


Minimum 3m planted landscape setback to boundary

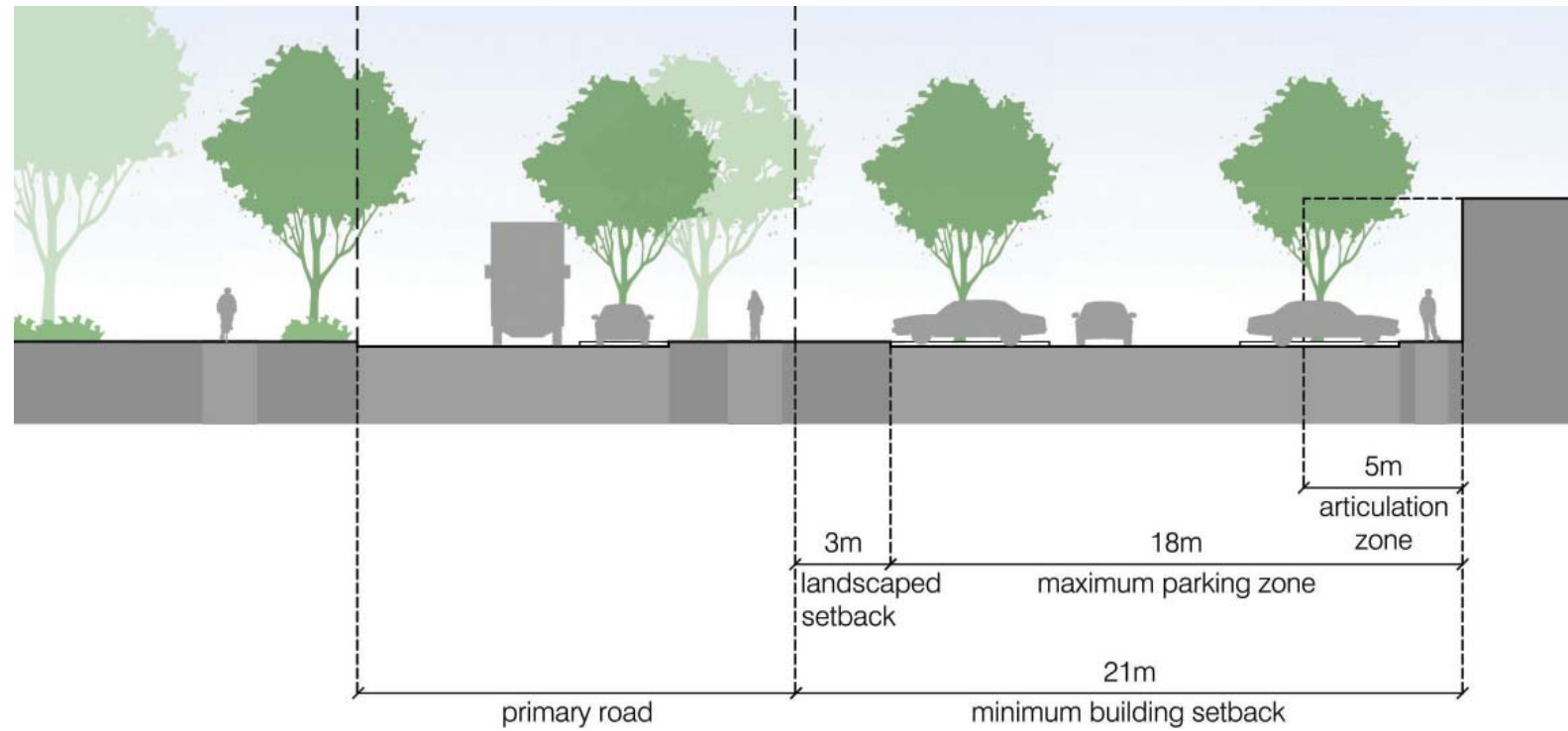
Max 18m width of parking between building entrance and the street



# Setbacks



- · - · Lot Boundary
- Minimum 3m landscaped setback to boundary
- Building setback: Minimum 5m to secondary road boundary  
Minimum 21m to primary road boundary, with 5m articulation zone included within 21m
- /// Parking zones: Maximum 18m width between primary road boundary and building  
Maximum 36m width between secondary road boundary and building





# Built Form



# Landscaping



# Sustainable Design





# Infrastructure Staging

## Water Supply Infrastructure

Stage 1:

- Clean and refurbishment of existing DN250 - no additional infrastructure required

Stage 2:

- Construction of a 5ML reservoir
- Construction of transfer main from Fish River Scheme (500 m DN300 transfer main)

## Wastewater Infrastructure

Stage 1:

- Construction of a Sewerage Pumping Station
- Dual rising mains to Sewerage Treatment Plant (5km)

Stage 2:

- Construction of a second Sewerage Pumping Station
- Rising main to first SPS

## Electrical

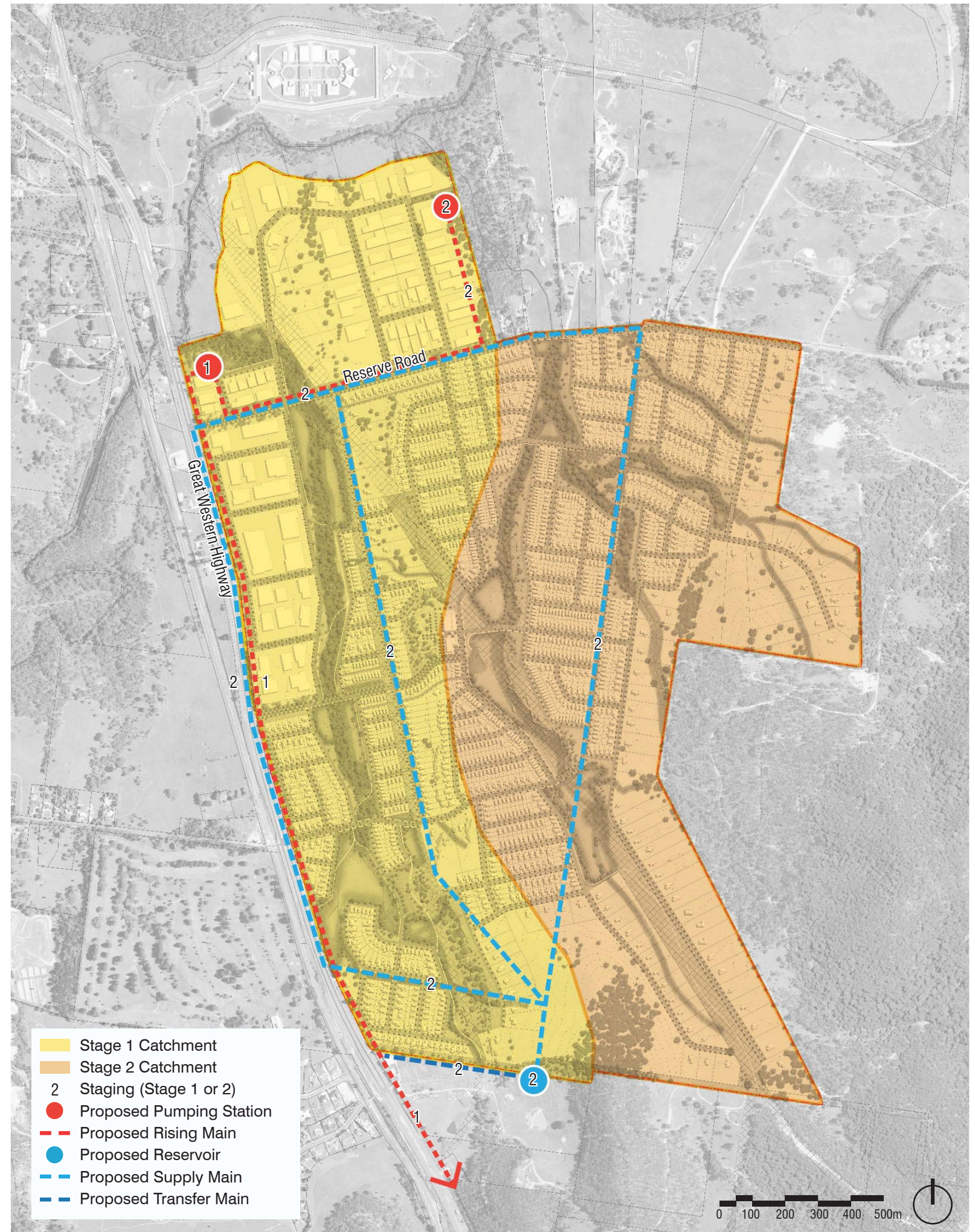
- Industrial and residential development areas will require local electrical substations.

## Gas

- A gas main is present along the Great Western Highway and the development can be serviced from this main.

## Telecommunication

- Telecommunication is expected to be provided from the existing network.







**Questions?**





## Next Steps

**Masterplan and DCP Public Exhibition**

**Final Masterplan and DCP**