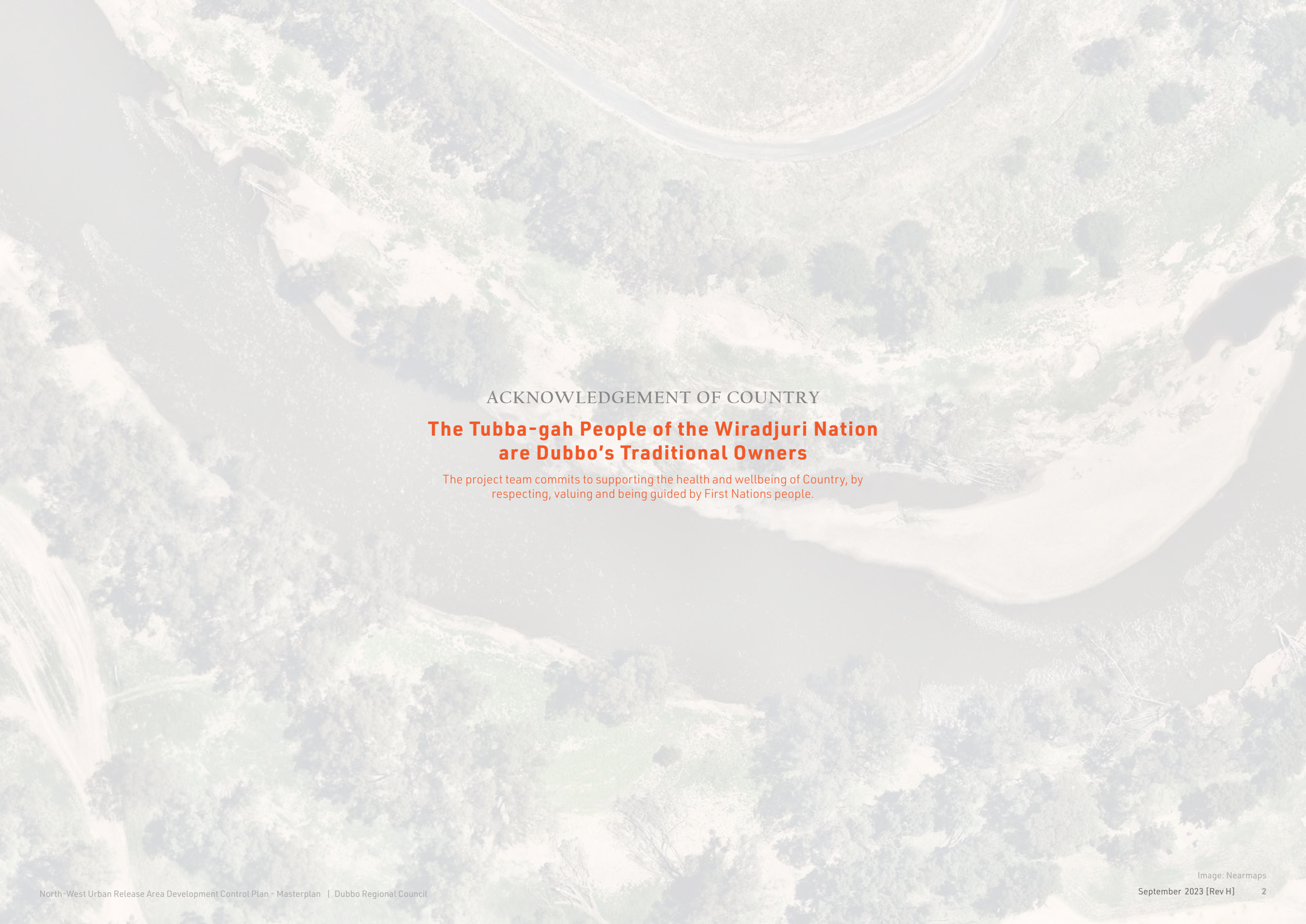


NORTH-WEST URBAN RELEASE AREA
DEVELOPMENT CONTROL PLAN - MASTERPLAN

SEPTEMBER 2023
REVISION H



ACKNOWLEDGEMENT OF COUNTRY

The Tubba-gah People of the Wiradjuri Nation are Dubbo's Traditional Owners

The project team commits to supporting the health and wellbeing of Country, by respecting, valuing and being guided by First Nations people.

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1 PROJECT METHODOLOGY

1.1 PLANNING FOR REGIONAL GROWTH

This Development Control Plan - Masterplan presents a long-term vision for the Urban Release Area, identified as an urban growth area in Dubbo, central New South Wales (refer Figure 01).

Whilst the Dubbo Regional Council Local Government Area (LGA) has a population of approximately 54,000 people (ABS, 2021), it is the main economic centre of the Central Orana region and a major inland regional growth centre. The town of Dubbo provides healthcare, cultural and retail services for up to 120,000 people from the surrounding towns and rural areas, including the nearby town of Wellington, and is experiencing ongoing pressure to provide additional housing in a sustainable and forward-thinking manner.

Developed by LatStudios in collaboration with Dubbo Regional Council (Council), Marra+Yeh Architects, private landowners and a supporting design group, the Masterplan seeks to deliver a best-practice and world-class development and provides a framework to guide future development within the Urban Release Area. The Urban Release Area will deliver new housing for approximately 13,800 people, while seeking to address pressures associated with projected growth in the region.

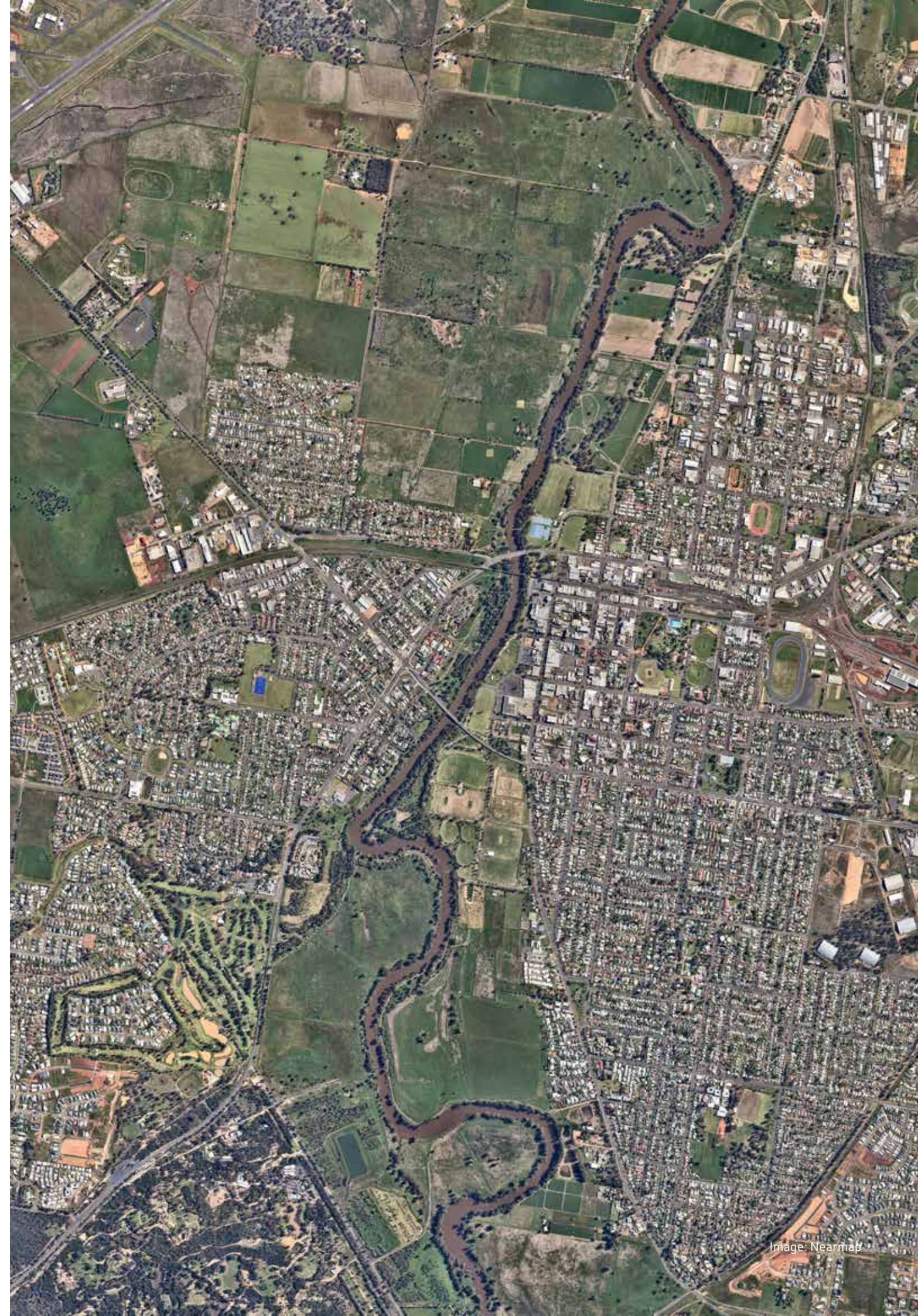
The development of the Masterplan has been informed by a six-month design process, which has included:

- A review of key policy and local planning documents to identify the relevant regional and local planning outcomes for the area
- A site visit undertaken on the 17th and 18th of October, 2022, to assess the existing site conditions and identify opportunities and challenges presented by the site.
- A review of the current Urban Release Area plan, including how it achieves the strategic vision for Dubbo and the identification of opportunities of how this vision may be achieved through the design and delivery of the Urban Release Area.
- Multiple rounds of stakeholder engagement; and
- Regular design workshops.

Figure 01: National Context



Figure 02: State Context



1.2 THE VISION

The North-West Dubbo Urban Release Area is a unique new residential Urban Release Area that differs from current regional expectations.

Promoting a range of housing forms and welcoming streetscapes, *the Urban Release Area is ecologically and economically sustainable, supports walkability, diversity and the protection of the natural landscape.*

It is a place that *respects the culture of the Traditional Owners of the land and that acts as a ‘Village’ to the CBD,* connected across the River.

The Urban Release Area sets the standard for an *inclusive, sustainable, culturally respectful, unique and connected village.*

The following aspirations are for Dubbo city, and highlight areas of focus across the region. These were adopted for the purposes of the Urban Release Area masterplanning process, as they are both important in delivering good design outcomes, and in delivering a design that ties into the surrounding city and its future.



Figure 03: Aspirations for the North-West Residential Urban Release Area



1.3 A SUSTAINABLE DESIGN APPROACH

Guiding the design process are the United Nation's 17 Sustainable Development Goals (refer Figure 03), which seek to achieve a better future for all.

These goals drive design at a local scale, through a push for sustainable, equitable and innovative alternatives to typical residential subdivision.

To support the development of the Masterplan, these goals were broken down into four principles:

- Designing for People
- Designing for Place
- Designing for Nature
- Designing for Community.

These four principles guided collaborative discussions, workshops and community conversations around the development of the Masterplan, to ensure that the development of the Urban Release Area delivers sustainable development that meets the needs of the existing and future Dubbo community.



Figure 04: The United Nations 17 Sustainable Development Guidelines

2 THE SITE

2.1 REGIONAL CONTEXT

The Dubbo Regional Council Local Government Area (LGA) is located in central New South Wales, approximately 400km inland from Sydney and at the intersection of significant road, air and rail transport infrastructure. The Newell Highway, which runs directly through the Dubbo LGA, provides a highly valuable road corridor that connects to both Melbourne and Brisbane, and the Dubbo Regional Airport acting as a valuable gateway for this inland region.

The town of Wellington (approximately 45km south-east from the Dubbo CBD) is the second most populous town within the Dubbo LGA, and along with neighbouring towns relies on Dubbo for healthcare, cultural and retail services.

From a regional context, there is pressure on Dubbo as a major inland regional growth centre (with more than 7,500km² in land) to provide adequate housing for a growing region in a sustainable and forward-thinking manner.

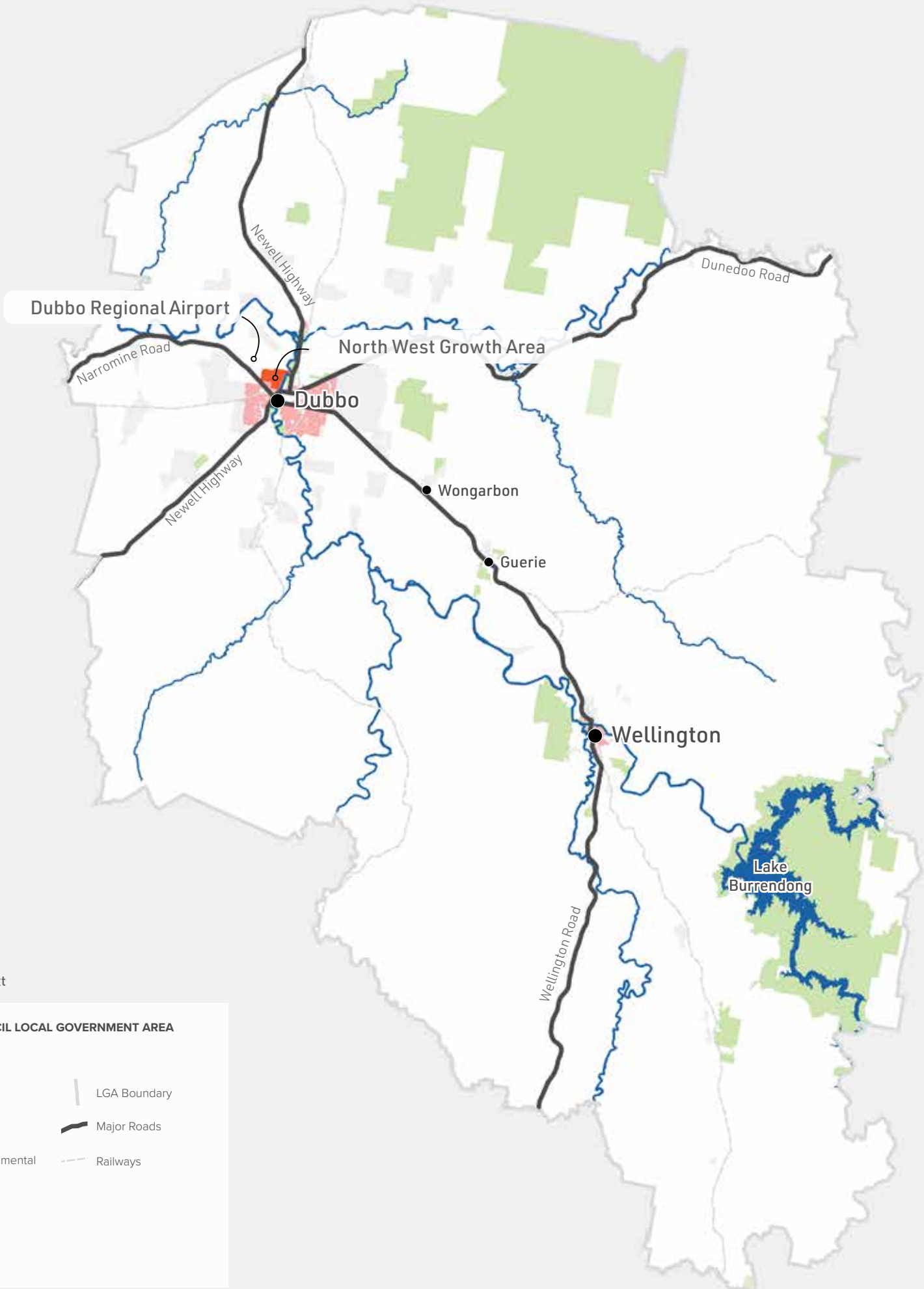


Figure 05: Regional Context

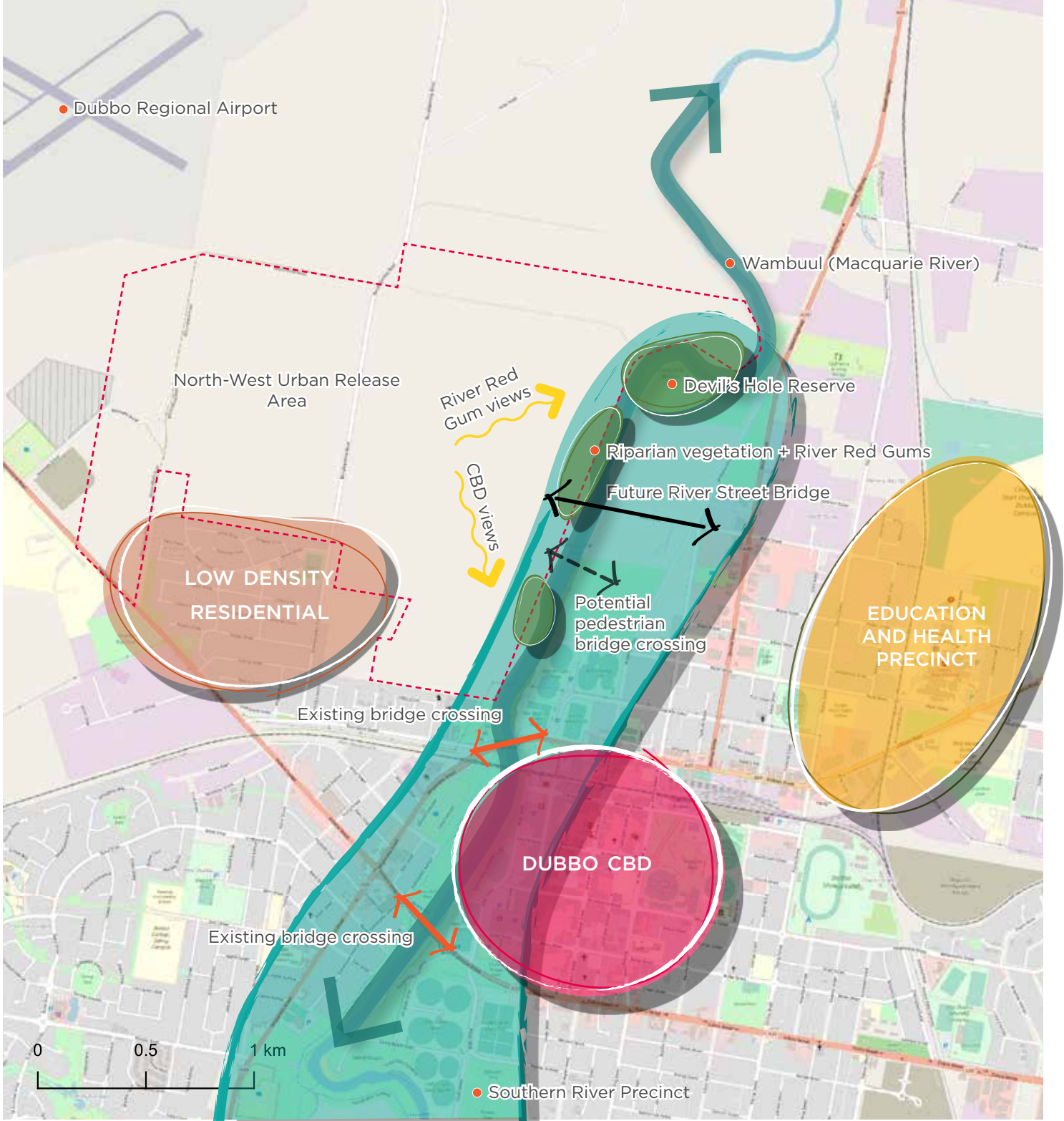


2.2 LOCAL CONTEXT

The Urban Release Area occupies currently underdeveloped land between the Dubbo Regional Airport and the Macquarie River, with Bunglegumby Road running north-south through the centre of the site. It is located within close proximity to Dubbo central business district (CBD), the education and health precinct, and the natural amenity associated with the Macquarie River and Devil's Hole Reserve. It is also ideally located to take advantage of several key areas of interest flagged for future development. The proposed River Street bridge will provide direct vehicular access from west Dubbo into the established Dubbo urban area, and further masterplanning to the immediate east south-east of the site identifies significant investment in public recreation, environmental and open space.

An existing low density residential development exists to southern site boundary, which adjoins the Mitchell Highway and takes advantage of this existing road corridor to provide access into the CBD. Agricultural and rural industrial land expands north from the northern site boundary with industrial land uses benefiting from the Newell Highway towards the west.

The Emile Senisier Bridge and LH Ford Bridge (both to the south of the project site) provide pedestrian connection over the Macquarie River, though there are no current pedestrian connections north of these.



2.3 SITE ANALYSIS

FLOOD OVERLAY

While the site benefits from being a riverfront location with high levels of natural amenity, there are associated risks concerning flooding.

The site slopes towards the Macquarie River, with areas of land particularly towards the north-east of the site susceptible to inundation.

It will be imperative to ensure appropriate land use planning within these areas, also taking into consideration effects of climate change and the possibility of increasing flood events. The proposed riverfront parklands by Dubbo Regional Council on the eastern banks of the river make the most of the river front amenity, while removing sensitive development from the flood extent – an approach which is both relevant and desirable in the Urban Release Area.



Figure 07: Flood overlay

- Legend
- Flood Extent

TOPOGRAPHIC WETNESS INDEX (TWI)

The topographic wetness index provides insight into likely overland flow paths and areas that area likely to experience higher levels of water retention.

The index shows overland flows running east-west across the site, and drain towards the river. It is important to consider the site in this regard, and while acknowledging likely change as a result of the implementation of urban stormwater infrastructure, they show an underlying trend that can help guide the design process.



Figure 08: Topographic Wetness Index

- Legend
- TWI Extent

EXISTING OPEN SPACE

There is a significant amount of existing public open space to the east and south of the site, particularly concentrated around the River.

The Macquarie River Masterplan highlights an upgrade in green and public infrastructure predominately concentrated along the eastern banks of the river, with a significant upgrade earmarked directly opposite the site.

Given that the majority of land to the north is associated with agriculture or airport use, and to the south land is heavily associated with residential, it will be imperative to provide adequate open space for the future residents of the Urban Release Area locally.



Figure 09: Existing open space

- Legend
- Public Open Space
 - Environmental Management

HERITAGE

High-level site analysis has identified 22 sensitive Aboriginal sites within the Urban Release Area. These include artefacts such as culturally modified trees which require special consideration and protection. Additionally, on-site conversations with indigenous stakeholders identified cultural heritage where it is linked to the River Red Gums that line the river, and the need to protect and retain this landscape element. While local elders believed the landscape to be in relatively good health, it is stressed that the caring for the land and water to ensure its longevity is of utmost importance.

A stone cottage of considerable historic and archaeological significance known as Mount Olive sits close to the river. In relatively good condition, this dwelling was constructed in approximately 1870. While the land has been subdivided and forms part of this masterplan, the structure will be protected and is an integral part of the modified landscape.



Figure 10: Existing heritage values

- Legend**
- Aboriginal Heritage Markers for further investigation
 - Mt Olive

EXISTING ROADS NETWORK

The site, currently predominantly used for agricultural purposes, has minimal internal road infrastructure. The primary vehicular connection is the north-south Bunglegumbie Road, which intersects with the unsealed Blizzardfield Road to the north of the Urban Release Area.

External to the site, the Mitchell Highway runs to the south, providing connection to the Dubbo CBD over the LH Ford Bridge. The Newell Highway, also south of the site, provides vehicular connection over the Emile Senisier Bridge. A localised road network within the residential estate to the south of the site has the potential to be integrated within the site in the future.

Providing a critical connection, the planned and funded River Street West upgrade will provide a flood-free vehicular connection over the Macquarie River to the northern end of the CBD, and will create a strong east-west connection through the site to Westview Street and to the Mitchell Highway at the south-west of the site.



Figure 11: Existing key road connections

- Legend**
- Existing Key Roads

EXISTING PEDESTRIAN CONNECTIVITY

There is currently minimal pedestrian prioritised connectivity throughout or surrounding the site. While the Emile Senisier and LH Ford Bridges do permit pedestrians, the connections are dominated by heavy streams of vehicular traffic.

The residential estate to the south of the site does not provide footpaths in most instances, with Bunglegumbie Road also not currently providing pedestrian access.



Figure 12: Pedestrian connectivity

- Legend**
- Existing Pedestrian Connection

2.4 UNDERSTANDING THE SITE

SITE TOPOGRAPHY AS A DESIGN DRIVER

The natural landscape and landform was a key design driver throughout the entirety of the masterplanning process.

With the site sloping from the west towards the River, and with areas more likely to experience flooding or overland flow, it was important to acknowledge the importance of these portions of land for their part in natural processes and systems.

The layout of the site has been dictated by contours, with roads and blocks aligned with the undulation of the site, minimising the need for extensive earthworks. This also avoids significant and adverse impacts on floodplains and respects the need for occasional flooding of the River Red Gums environment for ongoing health.

By responding to the site, we are able to fully utilise natural filtration processes and create a site responsive stormwater management and open space network.

The Urban Release Area will proudly respond to the site instead of fighting against it.



Image: Nearmap



Image: MarraYeh Architects



Image: LatStudios



September 2023 | RCH

Image: LatStudios

3 COMMUNITY ENGAGEMENT

3.1 OUR COLLABORATIVE ENGAGEMENT PROCESS

The Urban Release Area has been subject to a number of strategic design and consultation processes. This included but was not limited to Public Exhibition of the Precinct Plan for the North West Dubbo Urban Release Area and community feedback.

This feedback was provided to the NWURA team as the background or pre-work to the visioning process for the Masterplan and Development Control Planning for the Urban Release Area, as this consultation identified a number of key challenges to be addressed, namely:

- The need for a signalised intersection with the Newell Highway
- Ensuring existing native vegetation areas are incorporated into the Urban Release Area
- The need for housing choice and housing affordability
- The need for well-designed and placed public open space to ensure future residents have fair and equitable access. This also includes the importance of the Macquarie River Precinct
- The need for a neighbourhood shopping precinct to service the needs of residents
- The importance of passive and active transport lines, especially to Dubbo CBD

To supplement strategic design workshops with Council, a series of more personalised conversations were undertaken with broader community stakeholders to garner thoughts and aspirations prior to developing the masterplan. The following notes show the groups and individuals consulted and their summarised feedback.

It is appreciated that engagement with the community is a continual process to ensure that community aspiration is matched with delivery intent.

3.2 WALK ON COUNTRY

A walk on Country with local Indigenous stakeholders provided cultural insight to the land, water and surrounds.

Several key considerations were posed, which considered multiple aspects of culture, land and processes. These included:

- Find ways to showcase the Wiradjuri language within the Urban Release Area.
- Consider indigenous land management practices to help restore the land and seek out ways to have local people involved throughout the life of the project.
- The importance of being guided by First Nations peoples when considering planting and materials on the project.
- Allow importance of being guided by First Nations peoples in respect to the protection and care of significant vegetation, landscapes, or artefacts.
- Commit to collectively seek out ways for the local Indigenous peoples to see themselves within the project.

The design team considers this feedback invaluable, and will endeavour to ensure it is embedded into both the design outcome and process.



3.3 OPPORTUNITIES AND CHALLENGES IDENTIFIED BY THE COMMUNITY



3.4 KEY OUTCOMES



PEOPLE



NATURE

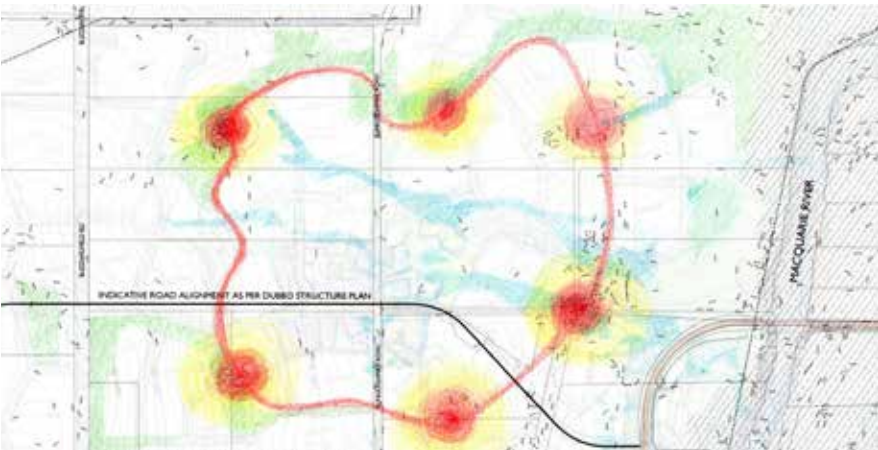
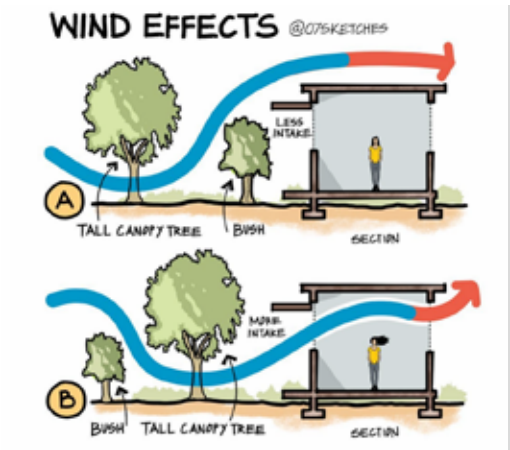
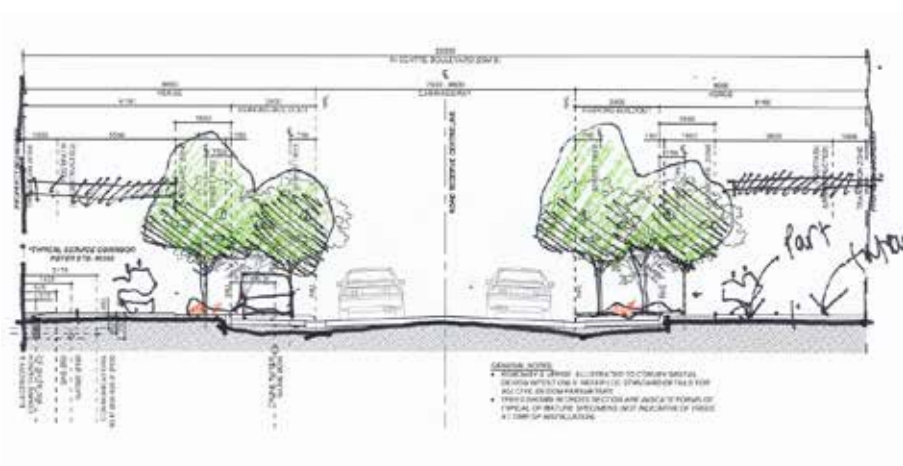
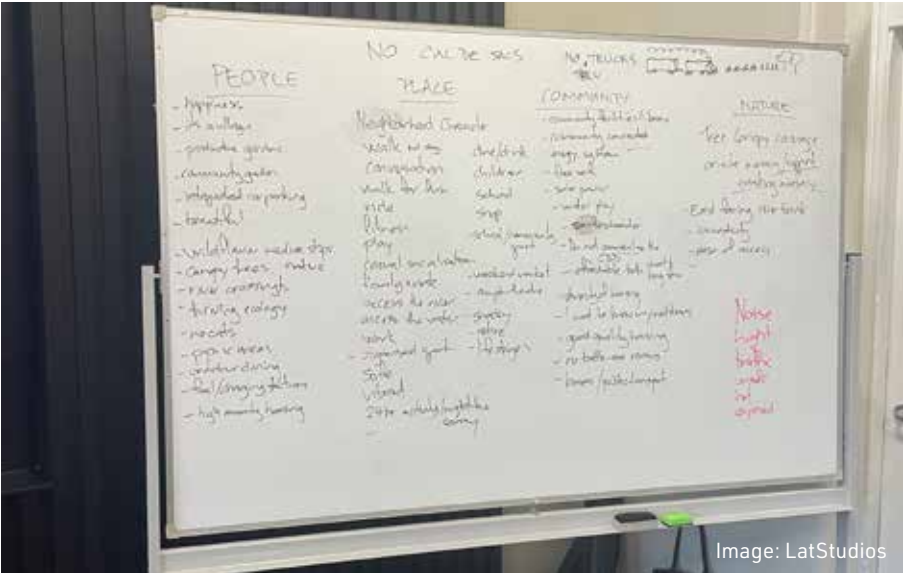


PLACES



COMMUNITY

- Designing for people matters to you, so we need to ensure development is human scale and considers people of all ages and abilities.
- It's important to you that we embed Traditional Owner principles
- Use the site's topography as a design driver
- Protecting the River Red Gums is a top priority
- It's important to us all the masterplan celebrates a connection with the River
- Work to protect the natural values of the areas and re-establish the valued local landscape, including both flora and fauna
- Provide consistent tree canopy coverage to shade our streets and make walking and riding comfortable.
- Incorporating shade and greenery matters to everybody
- Having a walkable neighbourhood that connects pedestrians and cyclists through natural areas is important to you
- We need to retain the primacy of the CBD
- We want to create a strong sense of neighbourhood character within the Urban Release Area
- We need to plan for a diverse population, with options for housing at all stages of life.
- Housing choice and affordability are crucial to Dubbo residents
- Creating a 'Village' feel is important to you
- The opportunity for casual socialisation is important to you, so we need to plan for quality public and open space that affords this
- You want to know your neighbours



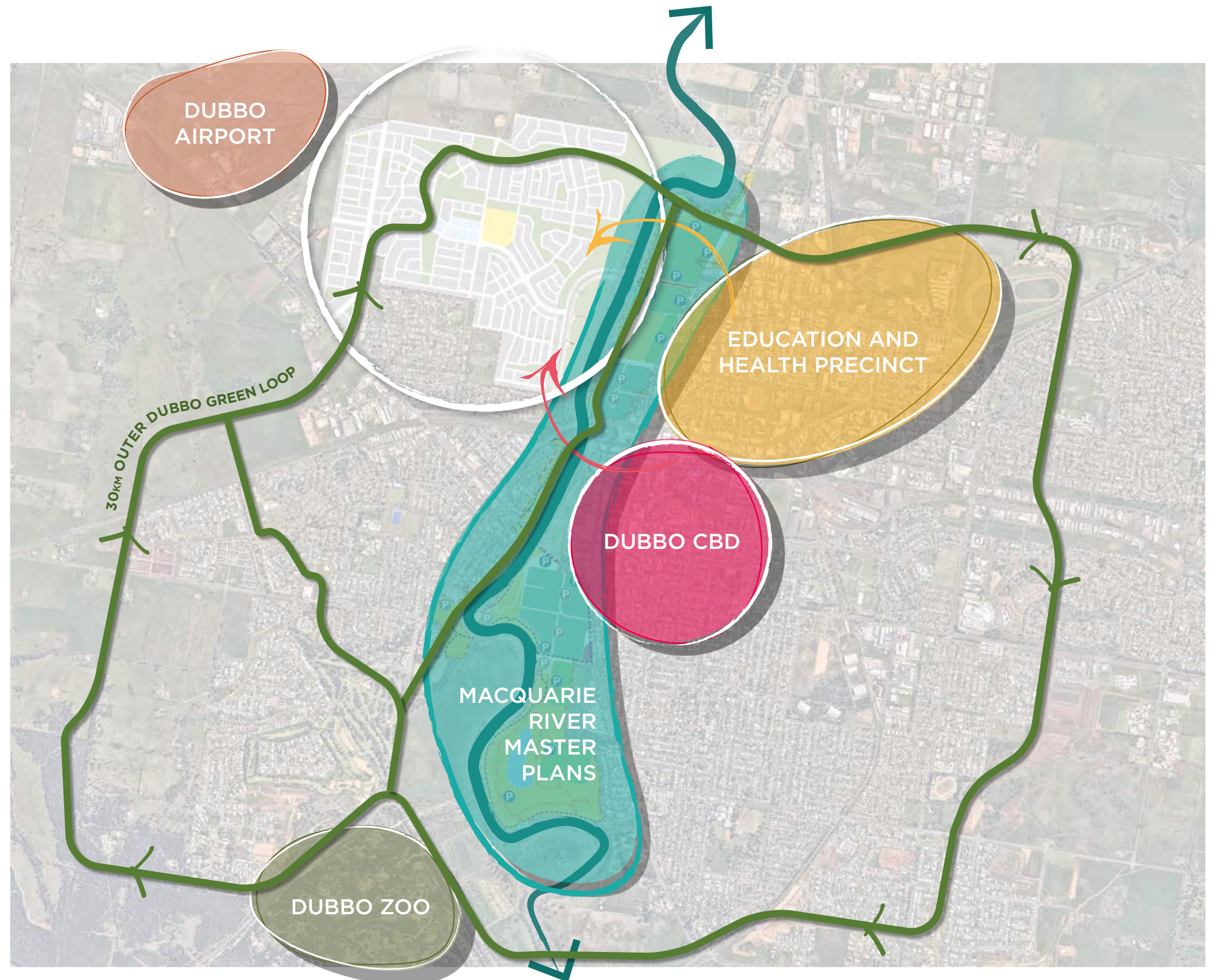
4 APPLYING THE VISION: THE MASTERPLAN

4.1 THE GREEN LOOP

At a city-wide level, the Urban Release Area will provide connections to several key precincts in and around Dubbo.

A 30km green loop will connect residents of the Urban Release Area to Dubbo's airport, education precinct, CBD, Macquarie River open spaces, zoo, and residential areas in between.

This green loop will enable residents and visitors to move around the city independent of major road networks, creating a safe, green and enjoyable journey.



4.2 A GREEN HEART

20% of the Urban Release Area will be dedicated to open and green spaces, co-located with areas likely to experience inundation/overland flows and with areas containing existing significant vegetation.

Informed by the sites hydrology, the greenspace network celebrates the relationship of the Urban Release Area to the river's edge.

It creates internal connectivity, allowing access to natural amenity for residents from all corners of the Urban Release Area while connecting to broader green networks of the city.

The green space network that runs the eastern border of the site will focus on the long-term and ongoing restoration and rehabilitation of the river corridor and its riparian landscape.



4.3 THE VILLAGE HEART

With a potential population of 13,800 people over a 20 year period, the Village Heart will be a place of diversity, scale and resilience.

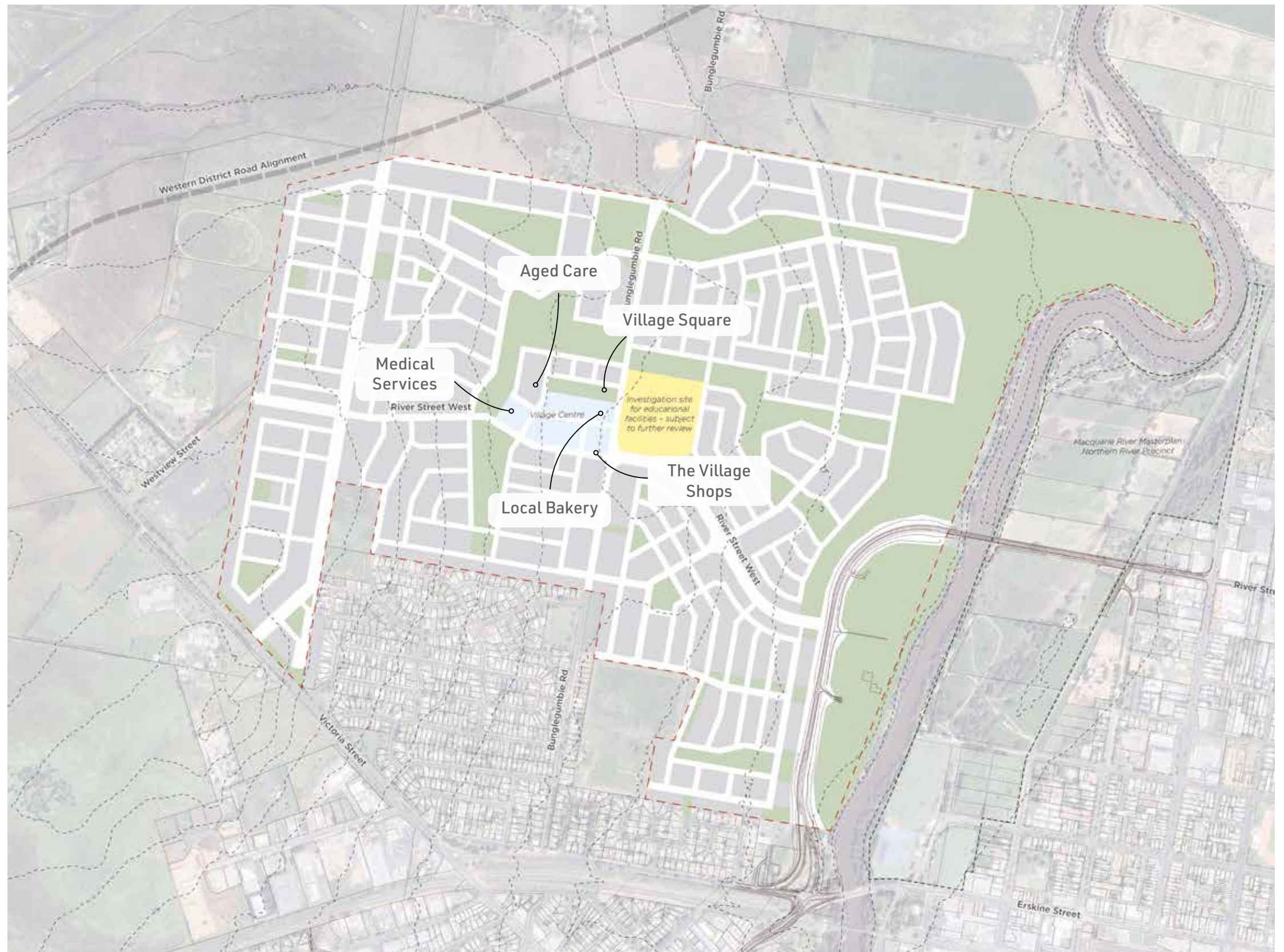
The masterplan seeks to promote diversity and choice through a mix of compatible development types and land uses that work together to create thriving places that respond to local need, aspect, and topography.

This is achieved through:

- Establishing a network of streets and public spaces that will vary in scale, character, experience, detail and materiality
- The gathering of compatible uses such as education, age care, health, and commerce within a village centre to promote intergenerational learning and care within the community.
- Considering commercial and retail uses including smaller retailers that reinforce a sense of place and support the 'local'
- Ensure each development precinct has its own specific character to avoid homogeneous development.



Image: Melbourne Food and Wine Festival



4.4 STORMWATER MANAGEMENT

Overland flow paths overlap with green corridors to create integrated and innovative green infrastructure.

Where possible, typical pit and pipe stormwater solutions are avoided, using the network of green spaces to filter, retain and direct stormwater catchments before reaching the River.

The blue and green corridors overlap will create an effective network of space that is both beautiful and resilient.



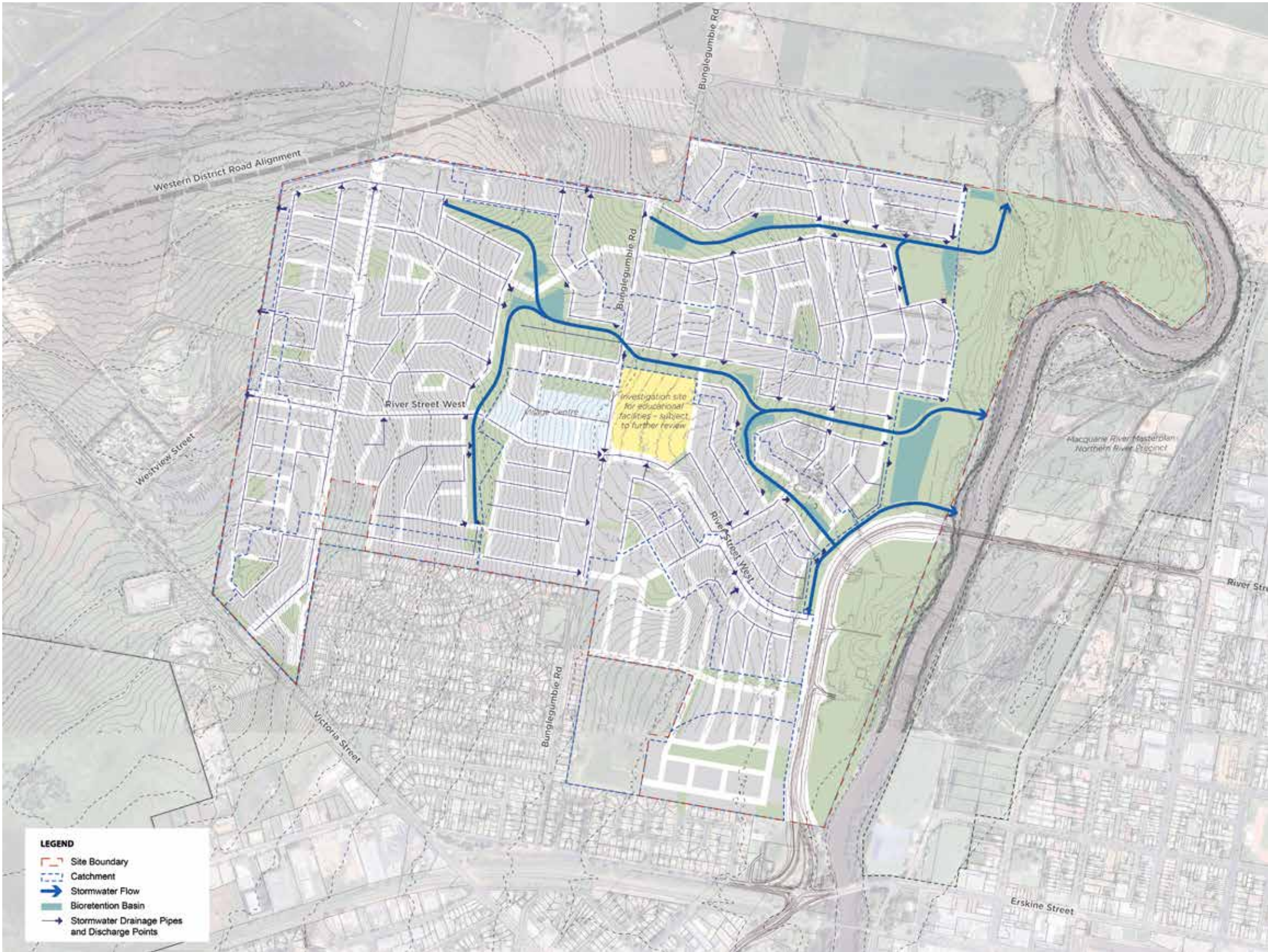
Image: LatStudios



Image: Water Sensitive Cities

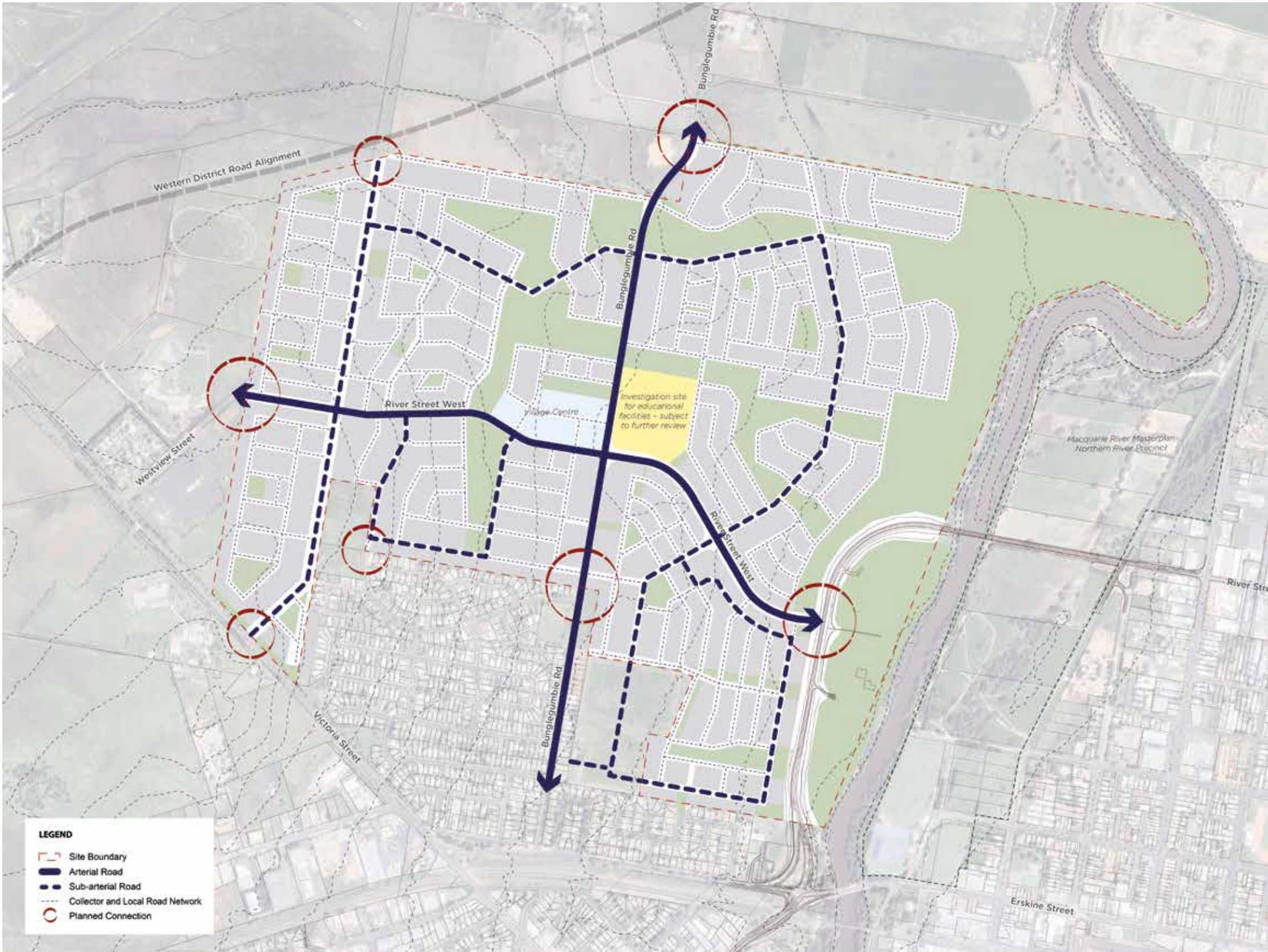


Image: Water Sensitive SA



4.5 ROAD HIERARCHY AND CONNECTIVITY

Bunglegumby Road provides the primary vehicular north-south connection through the site, with River Street West providing east-west connection towards Mitchell Highway and the Dubbo CBD. The new River Street bridge provides an efficient and flood free connection across the Macquarie River directly into the CBD and to the education and health precincts.



4.6 BUS NETWORK

An internal bus loop provides a public transport route within walkable distance for all residents. It promotes sustainable travel modes and access to the village centre, the Dubbo CBD and the broader region.

The bus loop and infrastructure will prioritise clean energy and autonomous public transport vehicles, highlighting the potential of regional areas to participate in technologically and sustainably advanced transport modes.



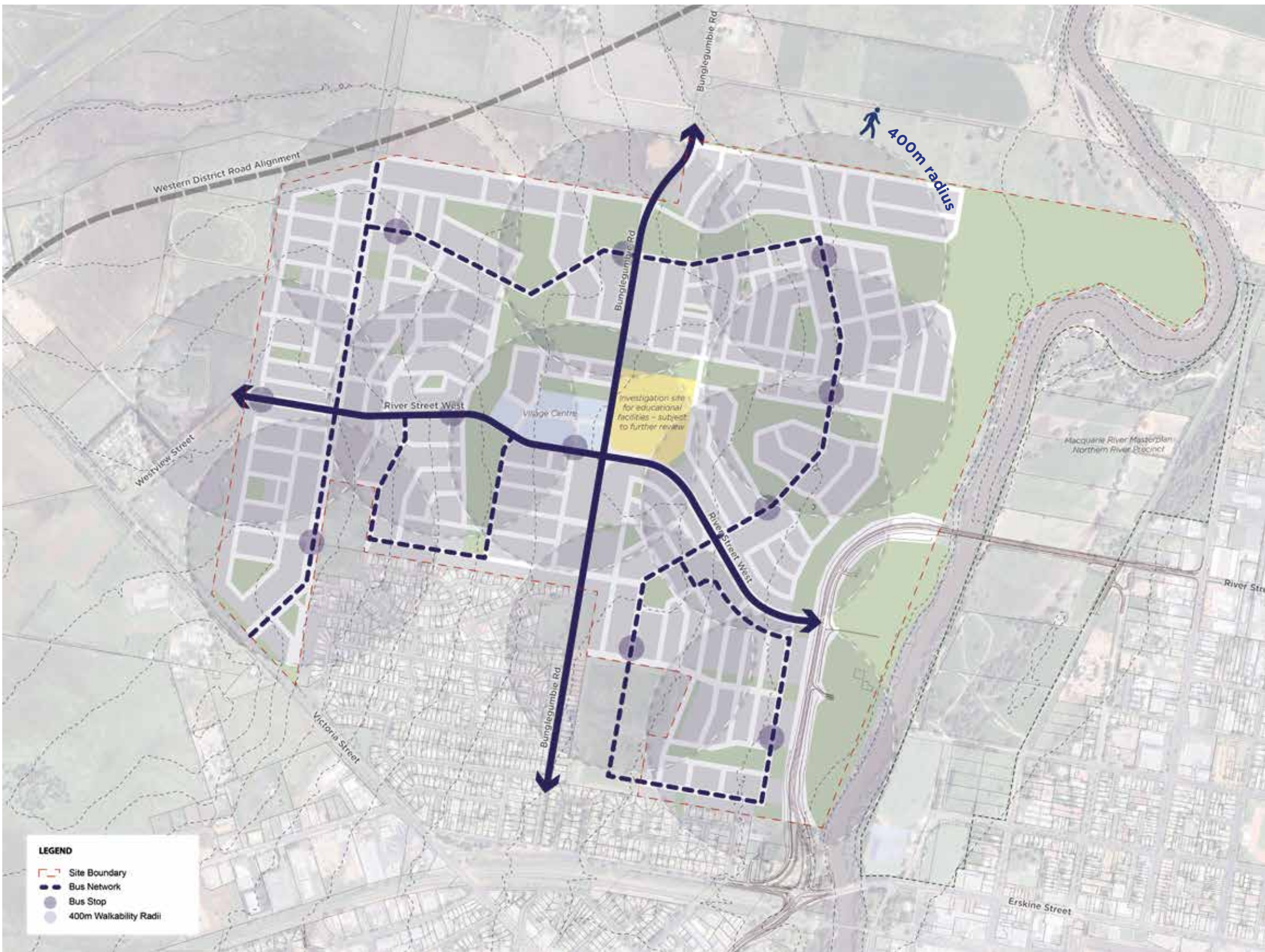
Image: Volgren



Image: John Gollings



Image: Rundell Ernstberger Associates

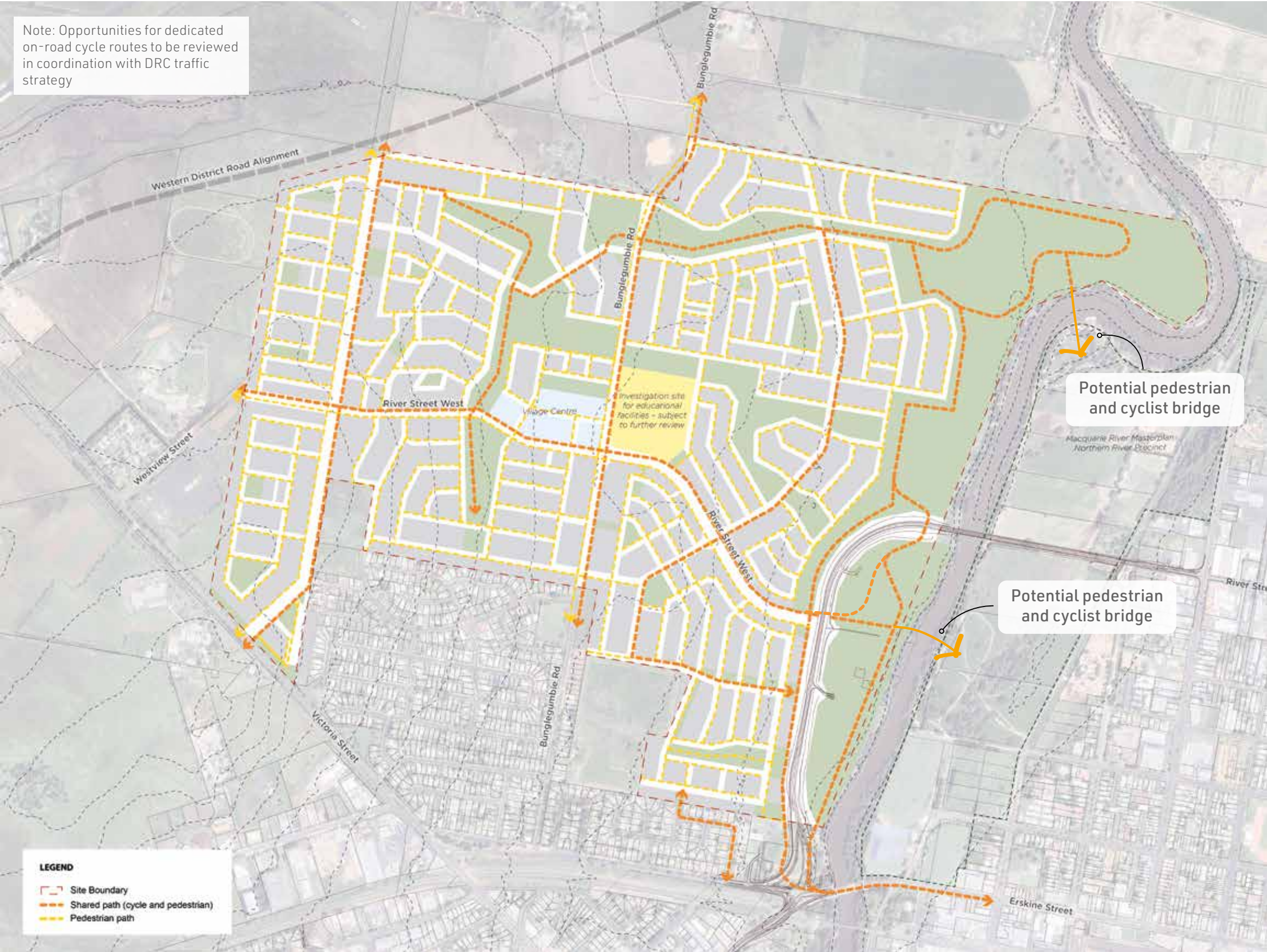


4.7 PEDESTRIAN AND CYCLE NETWORK

The pedestrian and cycle network creates primary circulation routes that integrate high quality landscaping and amenity.

Key north-south and east-west corridors enable access through the site, while an internal loop uses the open space to create safe, green and cool pedestrian and cycle links.

In time, a new pedestrian bridge will create a safe connection over the River from near Mt Olive to the Macquarie River Northern River Precinct and onwards to the CBD, utilising open space connections and separating pedestrians from vehicular movement. This piece of people-first infrastructure also has the potential to showcase local artistic talent and highlight an important entry into the Urban Release Area.



4.8 WALKABILITY AND OPEN SPACE

It is important to the community and to the project’s core sustainability principles that the Urban Release Area is walkable, cyclable and accessible.

The dispersal of natural and built form amenity throughout the site means that residents are able to access green space and key neighbourhood elements within 400m of their front door, enabling accessibility and walkability.



Image: LatStudios



Image: LatStudios



Image: LatStudios



4.9 ART STRATEGY

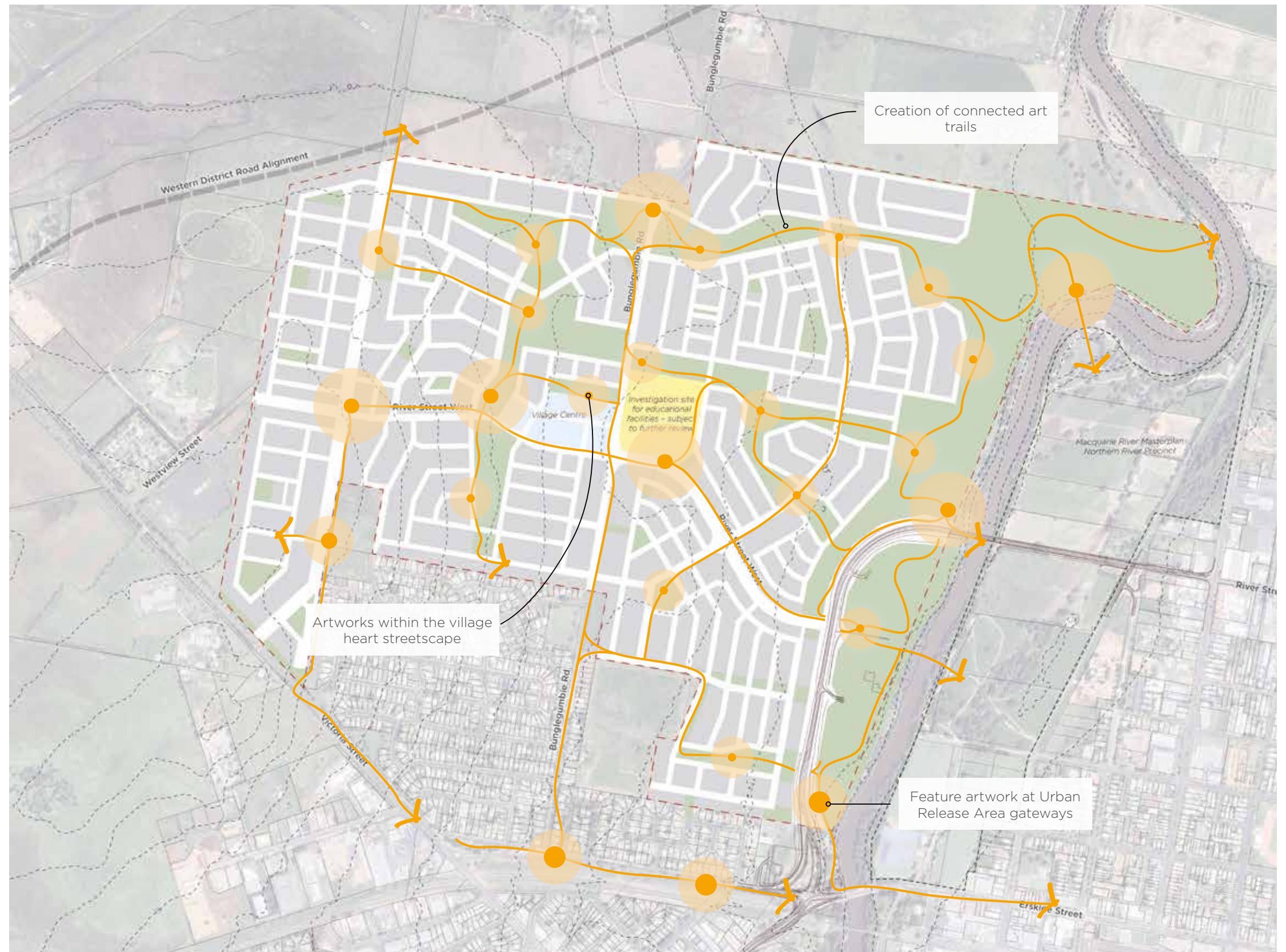
Embedded artwork - a connected local story.

ARTWORK AND IDENTITY

The Masterplan seeks to promote character, life, identity, and culture. To engender positive memories connected to place.

This may include investment into a curated Art Strategy that:

- Considers the little touches, the big surprises, and the unexpected delights.
- Incorporates opportunities for art, projections, lighting, movable furniture, playscapes performance, and other programs to enliven the Urban Release Area long into the future.



4.10 MASTERPLAN

SCALE 1:10,000

0 100 500m

NORTH-WEST URBAN RELEASE AREA MASTERPLAN

DRAWING KEY

	Open green space		Topographic Wetness Index (TWI) *Refer Martens Stormwater Management Strategy
	Tree cover		Flood Extent (1% AEP) *Refer Martens Stormwater Management Strategy
	Village Centre - public space (i.e. carparks, plaza)		Investigation site for educational facilities – subject to further review
	Village Centre		Active Centre extents
	Health/Medical services		

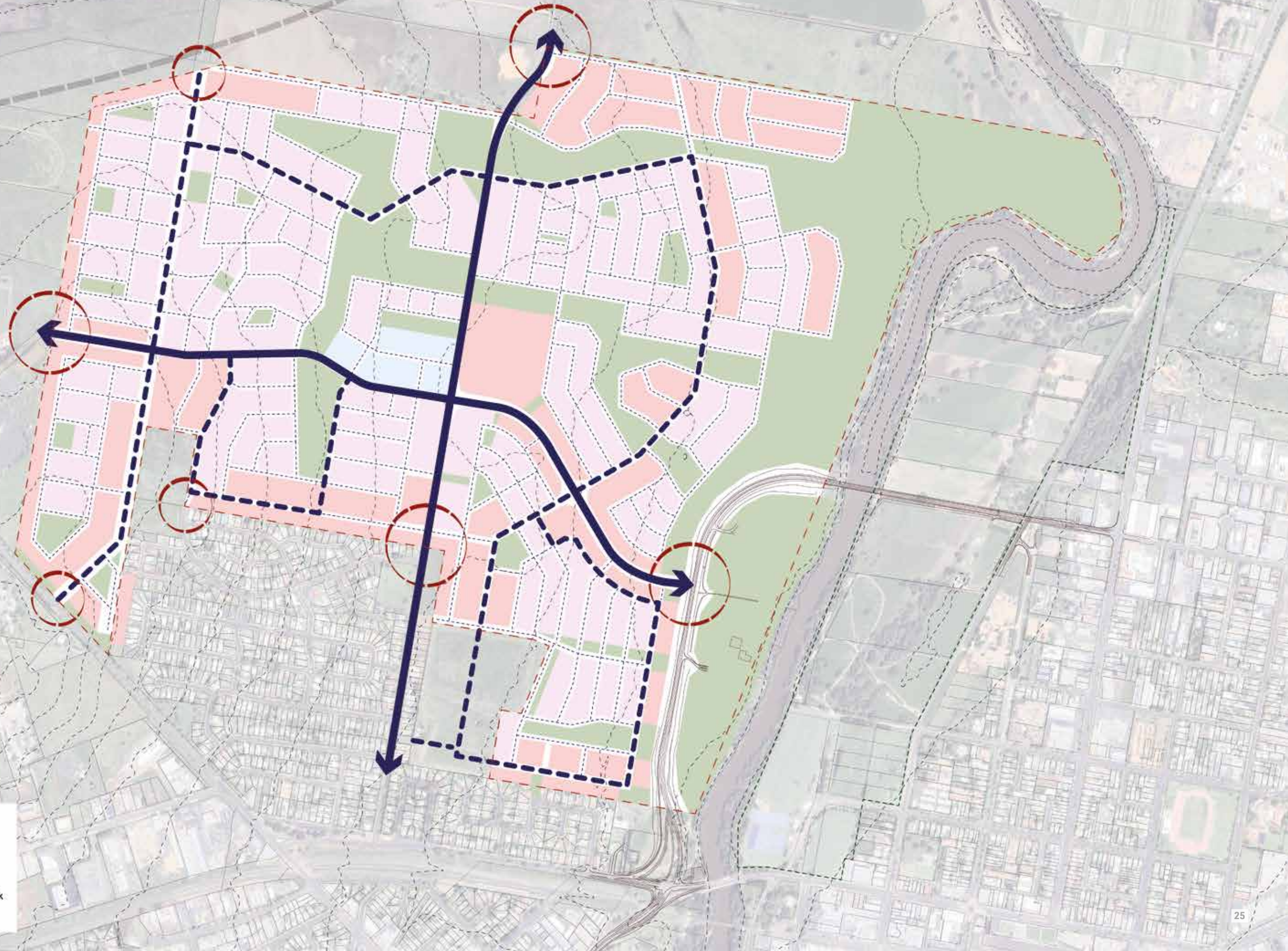


- This Masterplan is indicative only and subject to change
- Lot density and distribution is indicative and to be treated as a pre-design guide only
- The alignment of density types is indicative only and does not take into consideration land tenure or ownership
- Area allocation of uses per total precinct and per sub precinct is subject to review and refinement following land parcel / ownership feasibility assessment (by others)
- Validation and feasibility assessment to be completed by others prior to confirming finalised yield study
- Potential projected population and relative indicative persons per dwelling to be confirmed via demographic analysis (by others)

4.11 REVISED INDICATIVE LAYOUT PLAN

SCALE 1:10,000

0 100 500m



- LEGEND**
- Site Boundary
 - Arterial Road
 - Sub-arterial Road
 - Collector and Local Road Network
 - Planned Connection

5 HOUSING DIVERSITY AND CHOICE

5.1 UNDERSTANDING THE HOUSING CHALLENGE

The Housing Crisis can be understood through a summary of key points:

- House prices have more than doubled in real terms over the past 20 years and wage increases have not kept up with the property market
- Dwelling completions per quarter have barely increased over the last five decades, creating a shortage of housing and not keeping up with population growth
- A lack of diversity has created a lack of housing at different price points and has restricted choice and affordability
- An excess of low-rise development catering to single dwellings located in areas that rely on private vehicle ownership.

5.2 DELIVERING HOUSING DIVERSITY AND CHOICE

Dubbo Regional Council’s strategic plan for the Urban Release Area sets out the ambition for this area. In conjunction with Council’s Community Strategic Plan, the key principles and desirable outcomes are:

- Reference to the UN Sustainable Development Goals
- A well-designed region that includes a variety of housing types, densities, locations and price points
- A range of lot sizes and frontages to allow variation in the size and style of residential housing
- Residential development that promotes active neighbourhoods
- Zoning that enables the delivery of housing diversity and choice, including dwelling houses, semi-detached, attached, dual occupancies, shop top housing and residential flat buildings of appropriate scale
- The delivery of sustainable house designs that remain low rise but higher density
- The provision of high-quality housing that leaves no-one behind, catering for market-rate housing but also social, affordable and universal-design housing.

5.3 BENEFITS OF HOUSING DIVERSITY

- Enables flexibility for future planning to accommodate families expanding or downsizing, intergenerational living, extended families and changing ownership patterns
- Enables a mix of life stages and ageing in place
- It is context specific, aligned with demographics and the desired future character of Dubbo as a regional centre
- Increases housing supply, choice, tenure mix, price point mix and affordability.

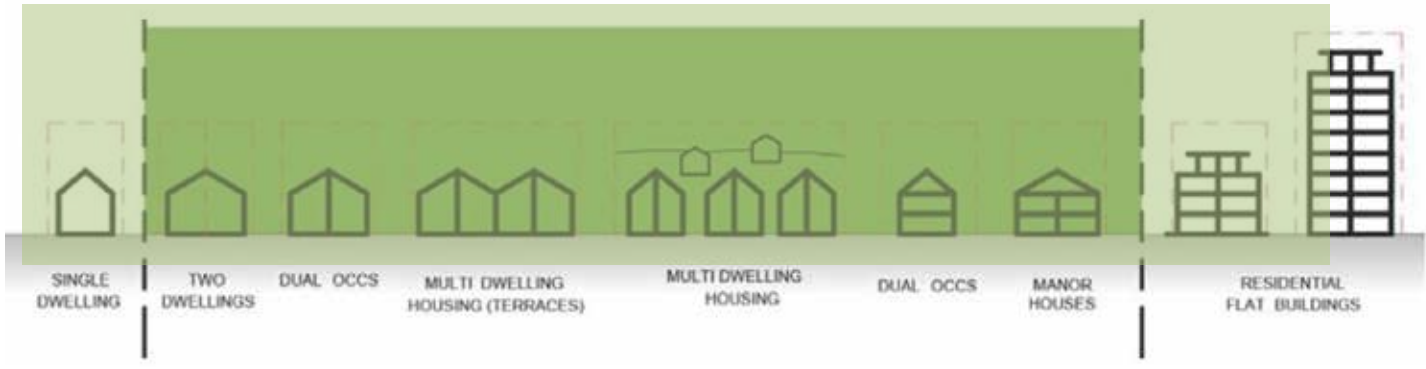


Figure 13: The housing diversity spectrum envisioned for the North-West Dubbo Urban Release Area



5.4 DWELLING TYPOLOGIES



Image: Brett Boardman

DETACHED DWELLING

- Detached dwellings create a transition zone and integrate the Urban Release Area with existing neighbourhoods
- Traditional product well understood in the marketplace
- Appeals to large families
- Can be delivered within a range of lot sizes.



Image: Christopher Frederick Jones

DUAL OCCUPANCY

- Dual occupancies enable smaller dwellings to be delivered on smaller lots, increasing density without streetscape impacts
- Price point diversity enabled through size reduction
- Appeals to small households, first-home buyers, key workers, independent seniors.



Image: Emma Cross

ATTACHED DWELLING

- Attached dwellings enable construction efficiencies through shared party walls, increasing the density of dwellings per land area but resulting in a streetscape compatible with other residential typologies
- Parking can be provided per dwelling or in shared configurations, enabling innovation in designs
- Price point diversity enabled through size reduction
- Appeals to singles, small households, first-home buyers, key workers, independent seniors.



Image: Brett Boardman



SECONDARY DWELLINGS

- Secondary dwellings are delivered in conjunction with a primary detached dwelling, enabling increase in density within a single lot
- Secondary dwellings may face laneways and provide eyes on the street, activation and safety, removing blank rear fences
- Appeals to home owners seeking rental income or additional space for adult children or elderly family members
- Small units, usually 1-bedroom, provide a self-contained form of housing rarely available.



Image: Brett Boardman

SENIORS HOUSING AND CO-LIVING

- Seniors housing is key to providing opportunities for residents to age in place and downsize from the family home within the Urban Release Area
- Seniors housing can range in accommodation from independent to assisted living to fully supported residential aged care units
- Co-locating seniors housing with the village centre enables residents to walk to services and shops and retain independence
- Co-living housing can cater for students as well as supported housing.



Image: Peter Clarke

SHOPTOP HOUSING, APARTMENTS AND VILLAGE CENTRE

- Shoptop housing co-locates residents within the village centre and enables incidental patronage of shops and retail which is directly linked to their viability
- Shoptop housing and apartments offer opportunities for innovative models of living such as live/work offerings that can attract creative businesses and artists.

5.5 HOUSING DIVERSITY

The Urban Release Area will leverage the abundance of high-quality open space and natural amenity to support diverse housing typologies. **With potential for approximately 5,500 new dwellings, the Urban Release Area has the ability to act as a truly integrated and diverse village.**

A diversity of housing typologies means the Urban Release Area is able to support homes of differing typologies and price ranges, including a focus on affordability.

Ageing in place is made possible due to the range of homes on offer and their proximity to open space, retail, employment, and connections to the CBD.

Legend

- Open space
- Low rise/low density
- Low rise/medium density
- Medium density (15x23.5m)
- Medium density (8.5x35m)
- Medium density (7.5x25m)
- Apartments



- This Masterplan is indicative only and subject to change
- Lot density and distribution is indicative and to be treated as a pre-design guide only
- The alignment of density types is indicative only and does not take into consideration land tenure or ownership
- Area allocation of uses per total precinct and per sub precinct is subject to review and refinement following land parcel / ownership feasibility assessment (by others)
- Validation and feasibility assessment to be completed by others prior to confirming finalised yield study
- Potential projected population and relative indicative persons per dwelling to be confirmed via demographic analysis (by others)

HOUSING DIVERSITY



LOW RISE / LOW DENSITY HOUSING

LOW RISE/MEDIUM DENSITY HOUSING TYPOLOGIES

MEDIUM DENSITY - 15 X 23.5M LOTS



HOUSING DIVERSITY



MEDIUM DENSITY - 8.5 X 35M LOTS



Image: MarraYeh Architects



Image: Morley von Sternberg



MEDIUM DENSITY - 7.5 X 25.0M LOTS



Image: Christopher Frederick Jones



Image: Andrew Lloyd



APARTMENTS AND VILLAGE CENTRE



Image: Trevor Mein



Image: Peter Clarke

6 PUBLIC REALM AND OPEN SPACE

6.1 STREETSCAPES

GREEN STREETS AND SHADE WAYS

The masterplan proposes shaded streets that are accessible and welcoming throughout the Urban Release Area.

The incorporation of 'Shade-ways' into main streets underpins the vision, whereby mature street trees provide shelter and respite for pedestrians, with high quality landscaping acting as a buffer between pedestrian and vehicular traffic.

Wayfinding and signage elements are to be incorporated to ensure access is legible and residents and visitors alike can enjoy a safe, comfortable, and engaging journey.

The concept of humanizing streets sees the prioritisation of pedestrians over vehicles. Promoting legibility and high levels of visual connectivity through the development, coupled with distinctive well shaded streetscapes provides recognisable routes, intersections and landscapes to help people find their way throughout the Urban Release Area.



A WELCOMING ADDRESS

This aspiration of green and shaded streets for Dubbo provides an opportunity to re-imagine the existing street network for the outer periphery of the Urban Release Area. By introducing additional tree coverage into the broader Street system of Bunglegumbe Road, Thompson Street and Blizzardfield Road there is a natural opportunity for a green grid of shade and amenity to be achieved. This positive transformation to the streetscape is also a cooling element reducing the impacts of urban heat effect, by reducing the exposed heat-conducting surfaces of roadways and pavements.

The green vista for those traveling nearby this western growth community via routes between the airport and Dubbo CBD will be a highly improved welcoming gesture.

Council will investigate the delivery and beautification of these external streetscapes.



EXISTING CONDITION



Consider a shared user path or trail to weave through the space and bring active transport into Dubbo

Consider shade tree planting (small trees) to provide part shade to the trail

Re-establish a eucalypt forest in key locations to showcase the local landscape



Commemorative Plaque illustrating the historic railway crossing

CONCEPT VISION FOR THOMPSON STREET

Opportunity for a 'welcome' sign



Seek out ways to reduce the extent of road pavement when it may not always be required to be sealed.

Reduce heat island and improve ground water infiltration

Introduce an local endemic planting or 'wild' meadow palette

Consider a turf / low maintenance grass to area under the power lines to enable access to maintenance of the infrastructure .. this may meander between 7.5 and 12m wide

Introduce a 3-5m height planting to screen the rail corridor fencing

NOTE: Ensure standard street furniture is incorporated into design, including public seating, drinking fountains, wayfinding, etc. Refer DRC park network requirements.

EXISTING CONDITION

CONCEPT VISION FOR BUNGLEGUMBIE ROAD

Consider shade tree planting
(small trees) to provide part
shade to streetscape



Seek out ways to reduce the
expanse of road

Introduce street tree
'build outs' to improve
urban greening.

Protect and enhance
existing street trees

Maintain on road
cycle paths

*NOTE: Ensure standard street furniture is incorporated
into design, including public seating, drinking fountains,
wayfinding, etc. Refer DRC park network requirements.*

EXISTING CONDITION



CONCEPT VISION FOR BUNGLEGUMBIE ROAD



Significant tree planting to street scape promotes cool and well shaded streets - a welcoming address to the Urban Release Area.

Relocate elevated services underground to allow for substantial tree planting of the streetscape

Seek out ways to reduce the extent of road pavement when it may not always be required to be sealed.

Reduce heat island and improve ground water infiltration with tree planting build outs

Consider formalised parking between where required for direct access to local parks

Consider formalised on-road cycle lanes

Introduce a local endemic planting palette

NOTE: Ensure standard street furniture is incorporated into design, including public seating, drinking fountains, wayfinding, etc. Refer DRC park network requirements.



6.2 REGIONAL PARKS

The design intent for the Macquarie River Parklands North-western Precinct is an expansive extension of the planned regional open space network. The longer-term vision sees the enhancement, restoration and rehabilitation of the River Red Gum forest occupying the riparian flood plain integrated with other passive and active recreation uses.

The landscape response includes:

- A robust materials palette and ground surface finishes that will age gracefully in the local climate.
- Substantial investment into replanting and enhancing the corridor to improve bank stability, improve water quality objectives and manage weed growth
- Car parking in proximity to a trail head cycling and walking experience throughout.
- Understated day user facilities nearby for picnic, BBQ and informal play
- Planned locations for future sports fields and amenities infrastructure to facilitate organised sporting use when community need arises.
- The identification of potential water access locations and or river crossings (subject to further refinement, consultation and review)
- Cluster / group vegetation to reflect the ecological characteristics on site.



Image: LatStudios



Image: LatStudios



Image: Johan Mouchat



Image: AREA Ecology



Image: LatStudios



Image: LatStudios



Image: LatStudios



Image: LatStudios



Image: Madeleine Maguire



6.3 DISTRICT PARKS

District Parks provide central facilities that are of a good standard, and that cater to group or community uses.

These facilities can be used for local sporting competitions and act as a meeting point for social events or community meet-ups, and provide a mixture of community assets.

These spaces typically contain shade trees, native vegetation, wayfinding signage (as well as bins, water fountains and fixed furniture), and amenities. They may also include spectator spaces, playgrounds, food and beverage opportunities, and sports lighting.



Image: LatStudios



Image: LatStudios



Image: LatStudios



Image: LatStudios



Image: LatStudios



Image: Christopher Frederick Jones



Image: Christopher Frederick Jones



Image: LatStudios



Image: Vivienne Pearson



6.4 LOCAL PARKS

Local parks are typically within walking distance of all residents. They are small sites, but are convenient and provide accessible community spaces.

These parks are typically associated with small sporting facilities such as half-court basketball courts, natural playing surfaces, and shade trees.

They provide a local shared space that meets the needs of small community groups and provides opportunity for outdoor play for local residents close to home.



Image: LatStudios



Image: LatStudios



Image: Peter Skitter



Image: Pod Design



Image: Tirachard Kumtanom



Image: Andrew Lloyd



Image: LatStudios



Image: LatStudios



Image: Yanapi Senaud

6.5 STREETSCAPE PLANTING PALETTE

Proposed species

The proposed planting palette incorporates native and locally occurring species that offer a range of flowering periods, colour contribution and cultural significance.

There will be a bias towards endemic species, supplemented with native species that will thrive in the micro-climates created in response to the Urban Release Area development.

The palette will provide shade where necessary, aesthetic value, and familiar colours and forms within the local context.

Detailed species list to be negotiated with DRC during future detailed design stages.

TREES



Acacia pendula
WEEPING MYALL



Alectryon oleifolius
BULLOCK BUSH TREE



Angophora floribunda
ROUGH BARKED
APPLE



Atalaya hemiglauca
WHITEWOOD



Brachychiton populenus
KURRAJONG



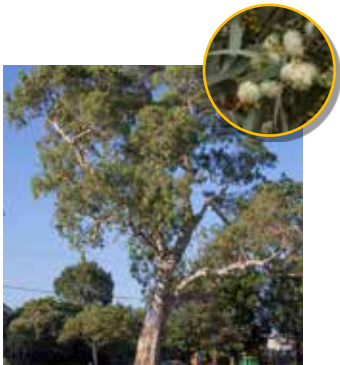
Allocasuarina verticillata
DROOPING SHEOAK



Acacia salina
COOBA



Corymbia maculata
SPOTTED GUM



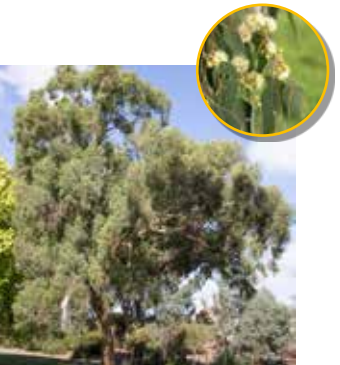
Eucalyptus camaldulensis
RIVER RED
GUM



Eucalyptus conica
FUZZY BOX



Eucalyptus pulverulenta
SILVER LEAVED
IRONBARK



Eucalyptus melliodora
YELLOW BOX



Eucalyptus microcarpa
INLAND GREY
BOX



Eucalyptus sideroxylon
RED IRONBARK



Eucalyptus leucoxylon
YELLOW GUM



Ficus microcarpa hillii
HILLS
WEEPING FIG



Acacia cognata 'Lime Magik'
LIME MAGIK



Hymenosporum flavum
NATIVE
FRANGIPANI

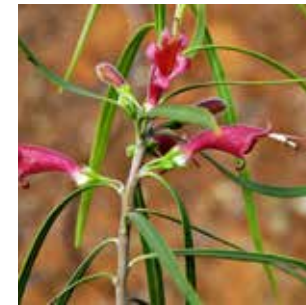
SHRUBS



Acacia decora
SHOWY WATTLE



Dianella revoluta
BLUE FLAX-LILY



Eremophila longifolia
EMU BUSH



Hardenbergia violacea
FALSE
SARSAPARILLA



Correa reflexa
NATIVE FUCHSIA



Micromyrtus ciliata
FRINGED HEATH
MYRTLE

GRASSES



Lomandra hystrix
MAT RUSH



Lomandra longifolia
BASKET RUSH



Lomandra tanika
'TANIKA' MAT RUSH



Lomandra confertifolia
'LITTLE CON' MAT
RUSH

GROUNDCOVERS



Senna artemisoides
SILVER
CASSIA



Eremophila debilis
AMULLA



Atriplex semibaccata
AUSTRALIAN
SALTBUSH



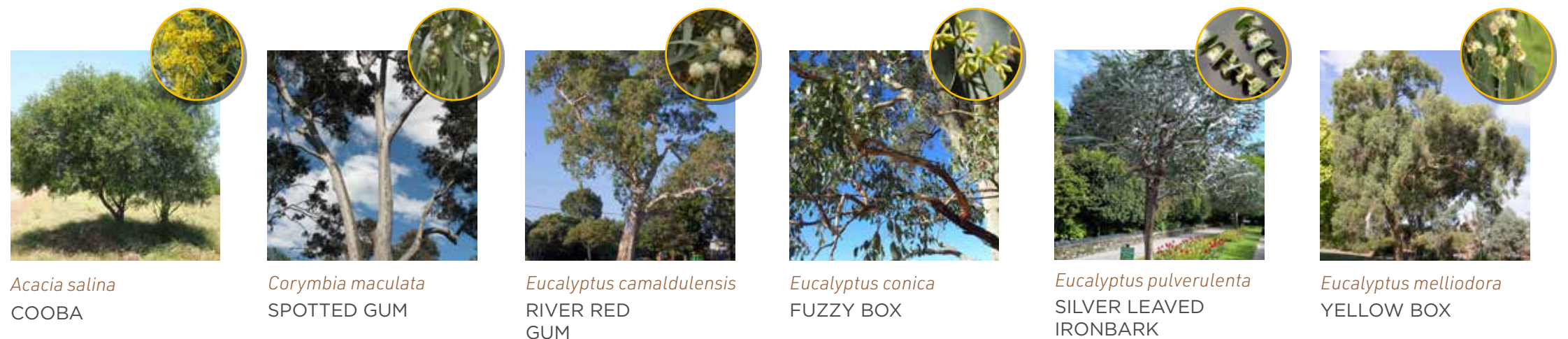
Einadia nutans
NODDING SALTBUSH

	 	 	 	 	 	 
	<i>Acacia pendula</i> WEEPING MYALL	<i>Alectryon oleifolius</i> BULLOCK BUSH TREE	<i>Angophora floribunda</i> ROUGH BARKED APPLE	<i>Atalaya hemiglauca</i> WHITEWOOD	<i>Brachychiton populeus</i> KURRAJONG	<i>Allocasuarina verticillata</i> DROOPING SHEOAK
INDIGENOUS NAME	Myall	Bunbarr	unknown	Birra	Kurrajong	Worgnal
FLOWERING	Dec - May	Sep - Feb	Sept - Nov	May - Oct	Sept - Nov	March - Sept
DESCRIPTION	Wattle tree with an erect, pendulous to spreading habit, with weeping, blue-grey foliage and small yellow flowers	Small tree with new silky growth and drooping branches	Medium sized to large tree that has a fibrous, rough-barked trunk.	Medium sized drought tolerant tree with clusters of soft white flowers and papery textured fruits	Small to medium tree is low maintenance and drought tolerant	Evergreen tree endemic to eastern Australia
USES	- Wattles produce edible seeds and nutritious flour can be made from the crushed seeds - Shields, digging sticks, spears, fuel, gum and medicines	- When the seed is ripe, its red aril swells and bursts the capsule open. The fruit can be eaten fresh or dried. - The heartwood of this plant is soft and easy to work with.	- The timber was used to create tools and shelter - A gum is harvested from the trunk and can be used to preserve ropes in water	Tree gum is harvested and kneaded until soft and then eaten	- Traditionally used as a food source and for making rope and twine suitable for the making of fishing lines and nets. - It is also used to make baskets and woven goods	- Traditionally used as a food source, medicine and for making adhesive (canoe sealant) - The wood is used for shields, boomerangs
FAUNA	Bees, nectar eating birds, butterflies, other insects	- Branches provide shelter for larger animals, - Bird attracting red aril	Ideal habitat tree for its hollows. Attracts native fauna for the nectar, seed and insect feeders. Yellow-bellied glider favours it for its sap	Seed eating birds, butterflies, other insects	Bees, nectar eating birds, butterflies, other insects	Attract many native birds such as the black cockatoo
 HUNTING	☒	☐	☐	☐	☒	☒
 TOOLS	☒	☒	☒	☐	☒	☒
 MEDICINE	☒	☐	☐	☐	☐	☒
 FOOD	☒	☒	☐	☒	☒	☒

Information sourced from:

- Aboriginal Plant use in south-eastern, Australian Government / Australian National Botanic Gardens Australia
- World wide wattle.com - Wurrundjeri wattles
- Cunninghamia - A journey of plant ecology for eastern Australia
- James Cook University
- Plants - Bush Tucker Medicinal and Other Uses of Minjerribah - Iselin & Shipway
- Aboriginal Plants in the grounds of Monash University
- Warndu.com - First Nations food guide
- Atlas of Living Australia

North-West Urban Release Area Development Control Plan - Masterplan
|
Dubbo Regional Council



Acacia salina
COOBA

Corymbia maculata
SPOTTED GUM

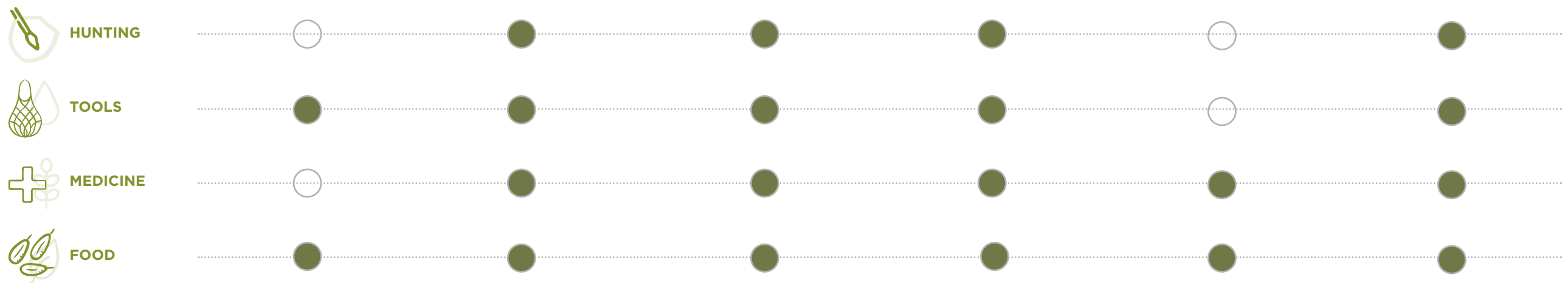
Eucalyptus camaldulensis
RIVER RED GUM

Eucalyptus conica
FUZZY BOX

Eucalyptus pulverulenta
SILVER LEAVED IRONBARK

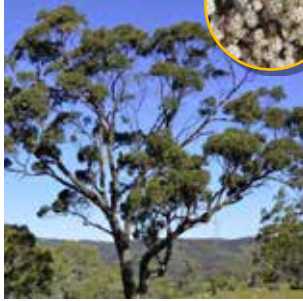
Eucalyptus melliodora
YELLOW BOX

INDIGENOUS NAME	Cooba	unknown	Carrickalinga or Yarraan	unknown	unknown	unknown
FLOWERING	Feb - June	Mar - Sept	Jul - Feb	Jul - Feb	Sept - Feb	Aug - Dec
DESCRIPTION	A medium to tall shrubby native tree woften found in semi-arid creekbeds and floodplains.	A medium to tall tree endemic to eastern Australia. Smooth bark with lance shaped leaves.	Large sized tree with smooth stripy bark. Foliage is relatively short and narrow	Large tree with rough, flaky bark on the trunk and smoother bark above.	Large flowering tree known for its juvenile silver foliage	A medium to large tree, with brown fibrous bark at the base graduating to smooth-barked branches
USES	- Traditionally used as a Toxin for fishing - The leaves may be burnt for medicinal/ narcotizing effect - Seeds eaten in some areas	- Bark was used to make shelters and canoes - The wood and bark is used to make dishes, bowls, weapons & tools - The gum is used an anti-inflammatory, with the leaves used as an antibacterial	- Canoes made from the bark. Inner bark fibre used to create rope - The wood and bark is used to make dishes, bowls, - Leaves were crushed and used for medicinal purposes	- Canoes made from the bark. Inner bark fibre used to create rope - The wood and bark is used to make dishes, bowls, - Leaves were crushed and used for medicinal purposes	- Leaves are used as a herbal remedies and mosquito repellent - The essential oil is a powerful antiseptic	- The flowers produce abundant nectar - Eucalypts provide food, medicine, vessels and tools
FAUNA	Attract many native birds & insects	Bees, nectar eating birds, butterflies, other insects	Bees, nectar eating birds, butterflies, other insects	Seed eating birds, butterflies, other insects	Bees, nectar eating birds, butterflies,	Bees, nectar eating birds, butterflies, other insects. Hollows are nesting and refuge site for an array of native birds



Information sourced from:

- Aboriginal Plant use in south-eastern, Australian Government / Australian National Botanic Gardens Australia
- World wide wattle.com - Wurrundjeri wattles
- Cunninghamia - A journey of plant ecology for eastern Australia
- James Cook University
- Plants - Bush Tucker Medicinal and Other Uses of Minjerribah - Iselin & Shipway
- Aboriginal Plants in the grounds of Monash University
- Warndu.com - First Nations food guide
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	<i>Eucalyptus microcarpa</i> INLAND GREY BOX	<i>Eucalyptus sideroxylon</i> RED IRONBARK	<i>Eucalyptus leucoxylon</i> YELLOW GUM	<i>Ficus microcarpa hillii</i> HILLS WEEPING FIG	<i>Acacia cognata 'Lime Magik'</i> LIME MAGIK	<i>Hymenosporum flavum</i> NATIVE FRANGIPANI
INDIGENOUS NAME	unknown	Mugga	unknown	unknown	unknown	unknown
FLOWERING	Mar - May	Apr - Dec	Mar - Sep	Dec - Feb	Sep - Dec	Sept - Feb
DESCRIPTION	A larger tree growing to 25m tall, with narrow dull-grey foliage	Large sized tree with a distinctive dark brown coloured bark	A medium to large tree with large, stiff leaves. Flowering over the winter months	A compact growing tree with emerald green foliage. A great shade tree or hedge	A small to medium tree with soft, lime green foliage.	Native evergreen tree with highly fragrant flowers
USES	- Wood is used to make fighting sticks and shields - Bowls and dishes can also be made from the heavy bark	- The flowers produce nectar used for eating and medicine - Indigenous Australians used the bark or the creation of canoes, shelters, shields and containers such as coolamon	The wood and bark is used to make shields and fighting/hunting tools	- The root, bark and leaf latex are used medicinally to treat wounds, headaches and toothache - Fibre is made into cloth. - Bark is used for tool making and fuel	Can be used for erosion control	Bark fibres are used to make cords to binds things
FAUNA	Flowers are a food source for sugar gliders, squirrel gliders, native birds and insects	Bees, nectar eating birds, butterflies, other insects. The nectar rich flowers sustain the endangered regent honey eater	Bees, nectar eating birds, butterflies, other insects	Important food host to a wide range of native fauna including; Wasps, bees, birds, butterflies	Bees, butterflies and other insects	Bees, nectar eating birds, butterflies, other insects



HUNTING



TOOLS



MEDICINE



FOOD

Information sourced from:

- *Aboriginal Plant use in south-eastern, Australian Government / Australian National Botanic Gardens Australia*
- *World wide wattle.com - Wurrundjeri wattles*
- *Cunninghamia - A journey of plant ecology for eastern Australia*
- *James Cook University*
- *Plants - Bush Tucker Medicinal and Other Uses of Minjerribah - Iselin & Shipway*
- *Aboriginal Plants in the grounds of Monash University*
- *Warndu.com - First Nations food guide*
- *Atlas of Living Australia*

6.6 TYPICAL STREETSCAPE SECTIONS

Street Typologies

These street typologies have been designed to adhere to typical council and engineering documentation guidelines, while also prioritising safe and efficient pedestrian and cyclist movement wherever possible.

Several typologies have been developed to reflect the proposed road hierarchy and identify the notional arrangements for planting, pavements, driveway locations and servicing.

Street tree planting details including structural soil zone and offsets as per DRC typical street planting details will be included.

TYPE A: TYPICAL LOCAL STREET
17.5m - DRIVEWAY ACCESS



TYPE B: COLLECTOR STREET
22m - DRIVEWAY ACCESS



TYPE C: COLLECTOR STREET
22m - NO DRIVEWAY ACCESS



TYPE D: COLLECTOR STREET
22Mm - BUILDOUTS, NO DRIVEWAY ACCESS



TYPE E: VILLAGE CENTRE BOULEVARD
WIDTH VARIES - BUILDOUTS, SHARED PATHS



TYPE F: RIVER STREET WEST
WIDTH VARIES - BUILDOUTS, SHARED PATHS, CENTRE MEDIAN

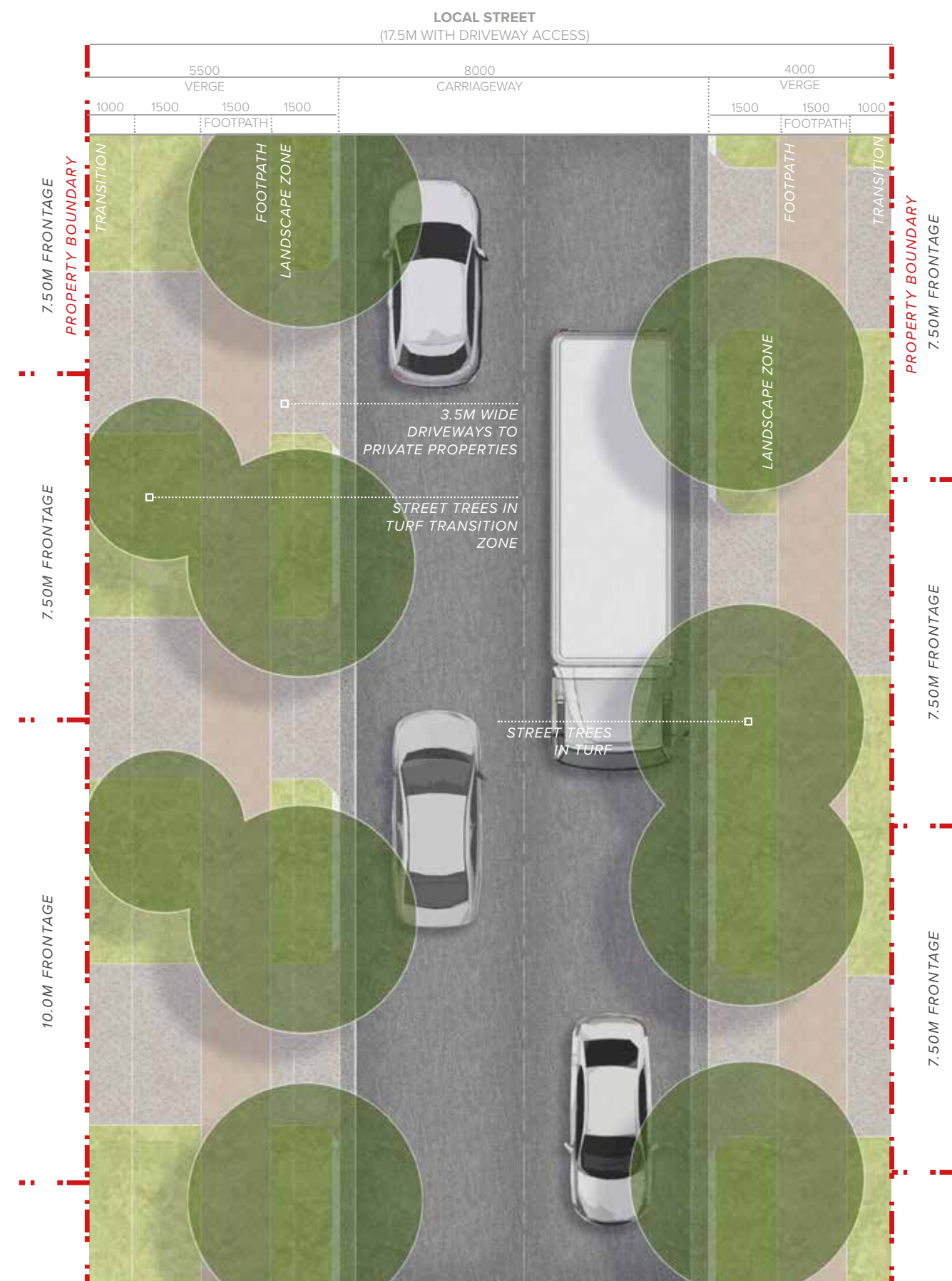


Street Sections

TYPE A: LOCAL STREET

17.5M WITH DRIVEWAY ACCESS

The following typical section and plan identifies the notional arrangement for planting, pavements, driveway locations and servicing. Street tree planting details including structural soil zone and offsets as per DRC typical street tree planting details.



Indicative only - subject to change, depending on additional detailed assessment including but not limited to future services alignment agreement.

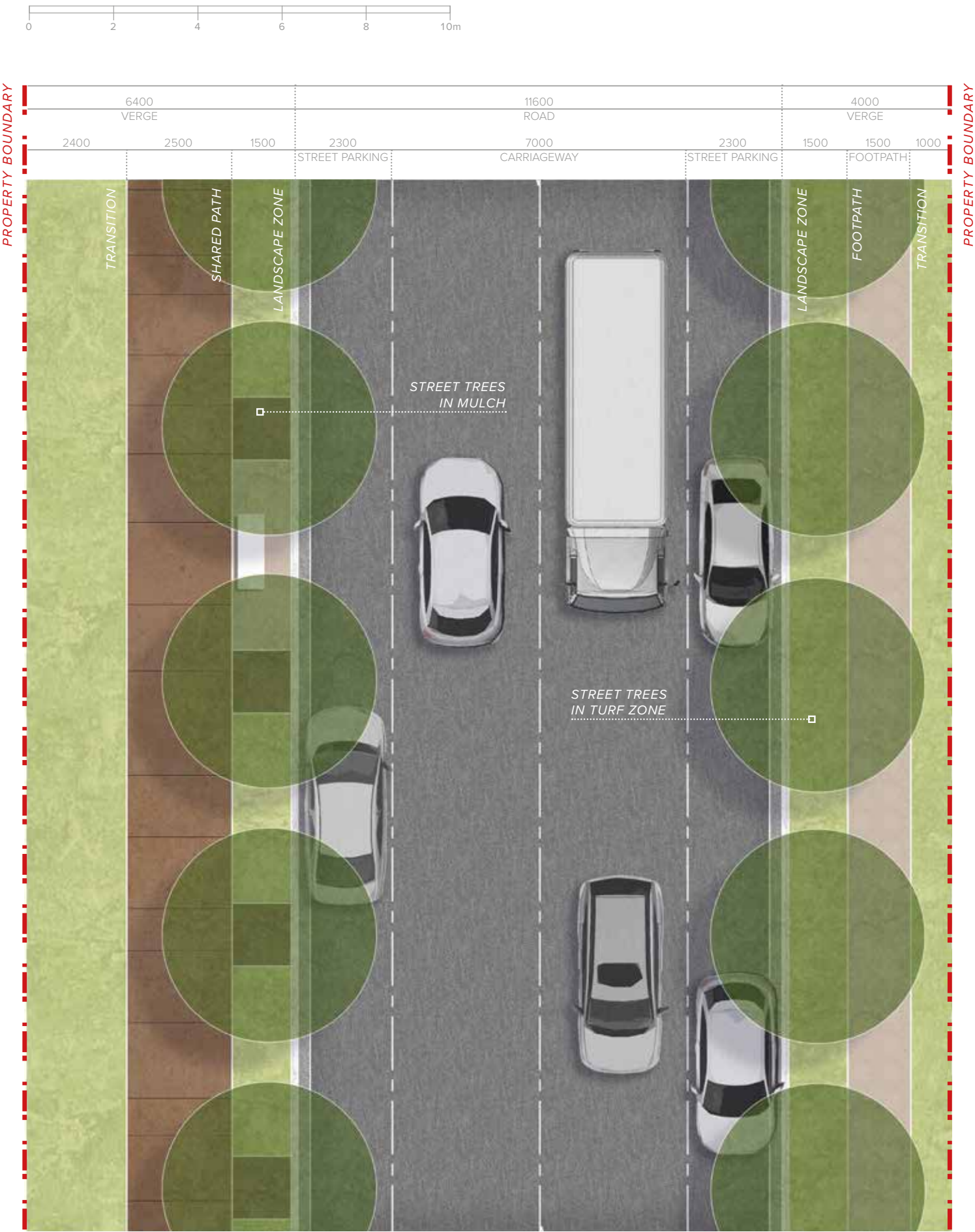
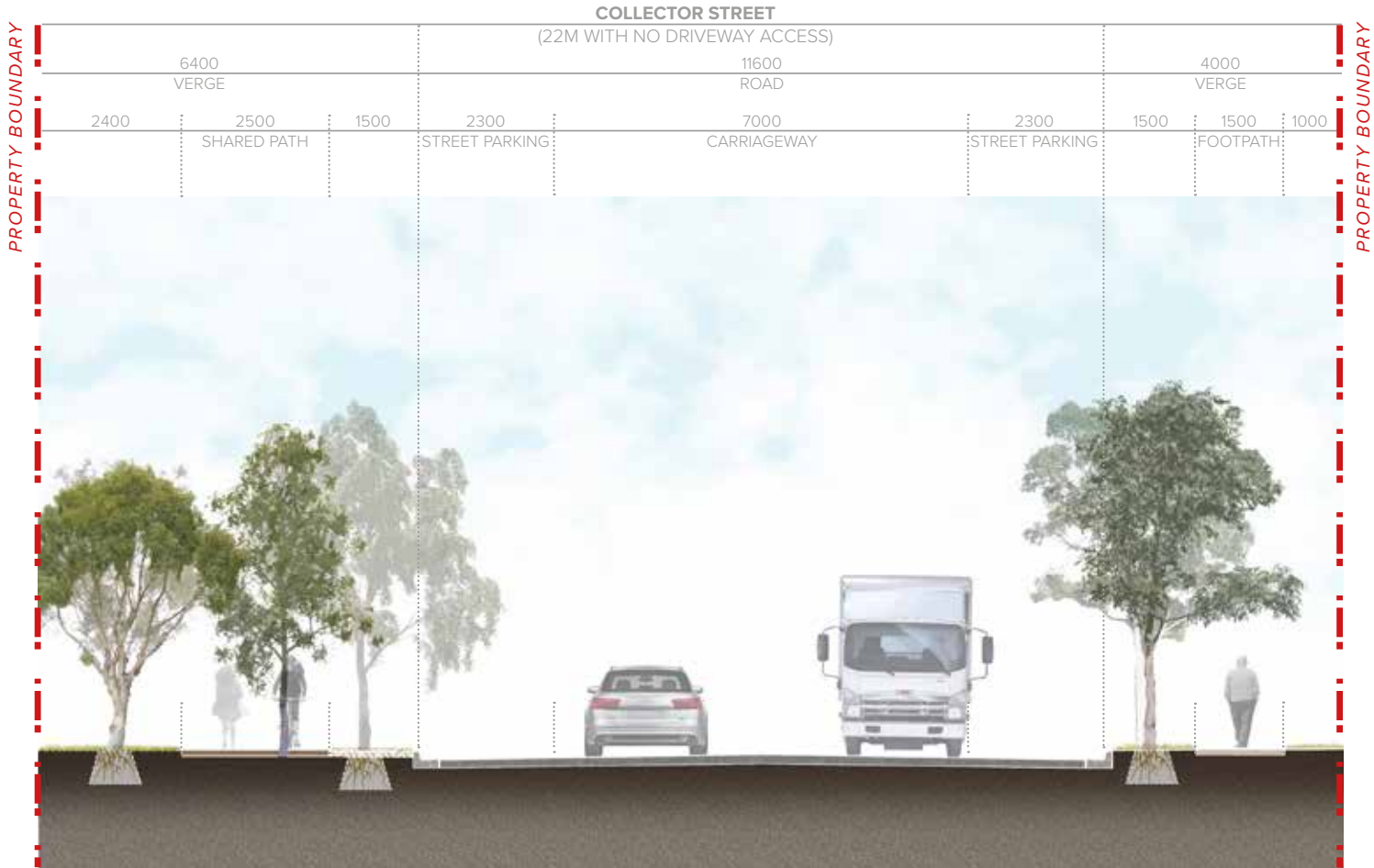


TYPE C: COLLECTOR STREET

22m WITH NO DRIVEWAY ACCESS

If a 22m street has driveway access, Type A applies. If a 22m street does NOT have driveway access, Type B or C applies.

The following typical section and plan identifies the notional arrangement for planting, pavements, driveway locations and servicing. Street tree planting details including structural soil zone and offsets as per DRC typical street tree planting details.



Indicative only - subject to change, depending on additional detailed assessment including but not limited to future services alignment agreement.

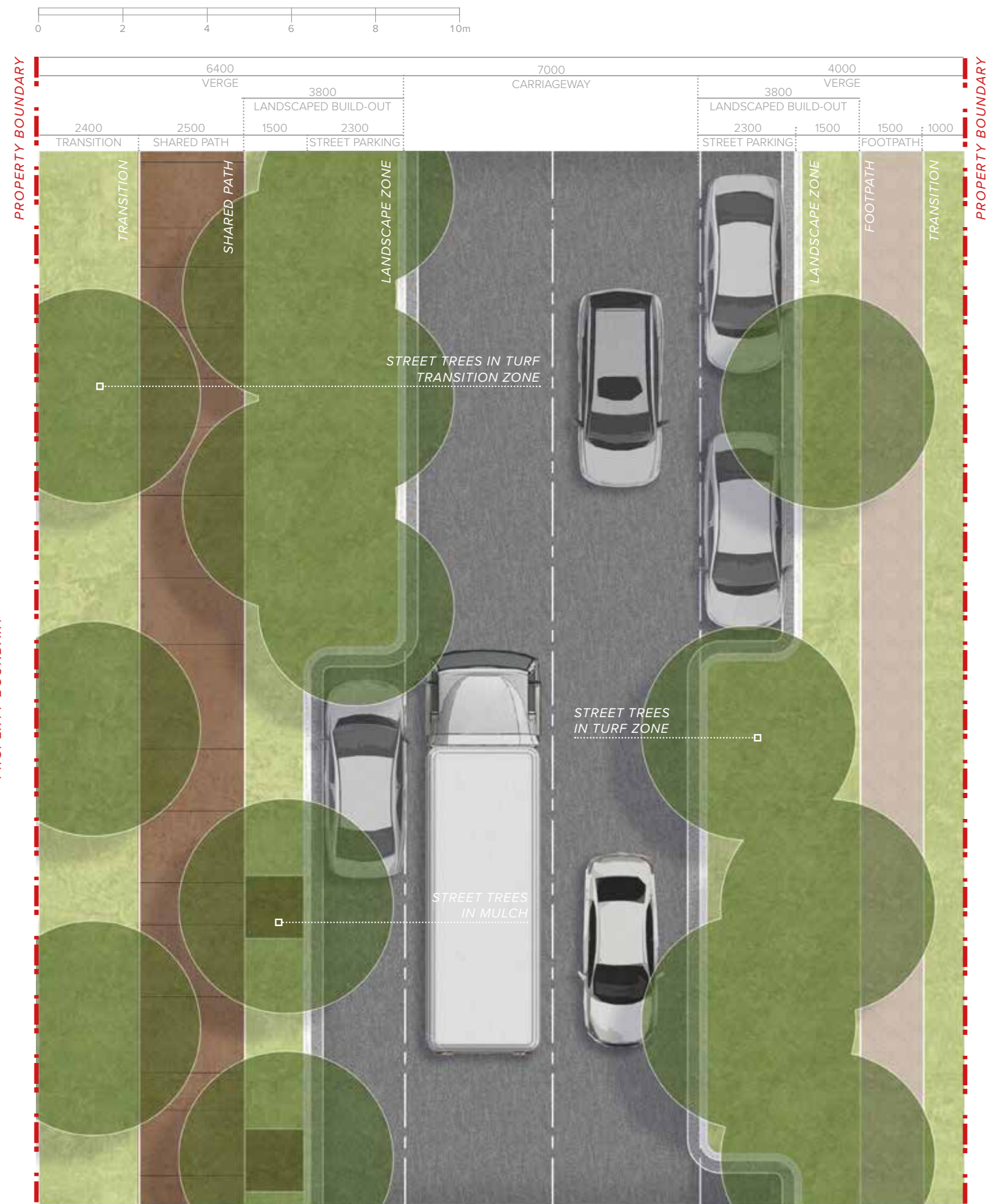


TYPE D: COLLECTOR STREET

22M WITH BUILD OUTS, NO DRIVEWAY ACCESS

If a 22m street has driveway access, Type A applies. If a 22m street does NOT have driveway access, Type B or C applies.

The following typical section and plan identifies the notional arrangement for planting, pavements, driveway locations and servicing. Street tree planting details including structural soil zone and offsets as per DRC typical street tree planting details.



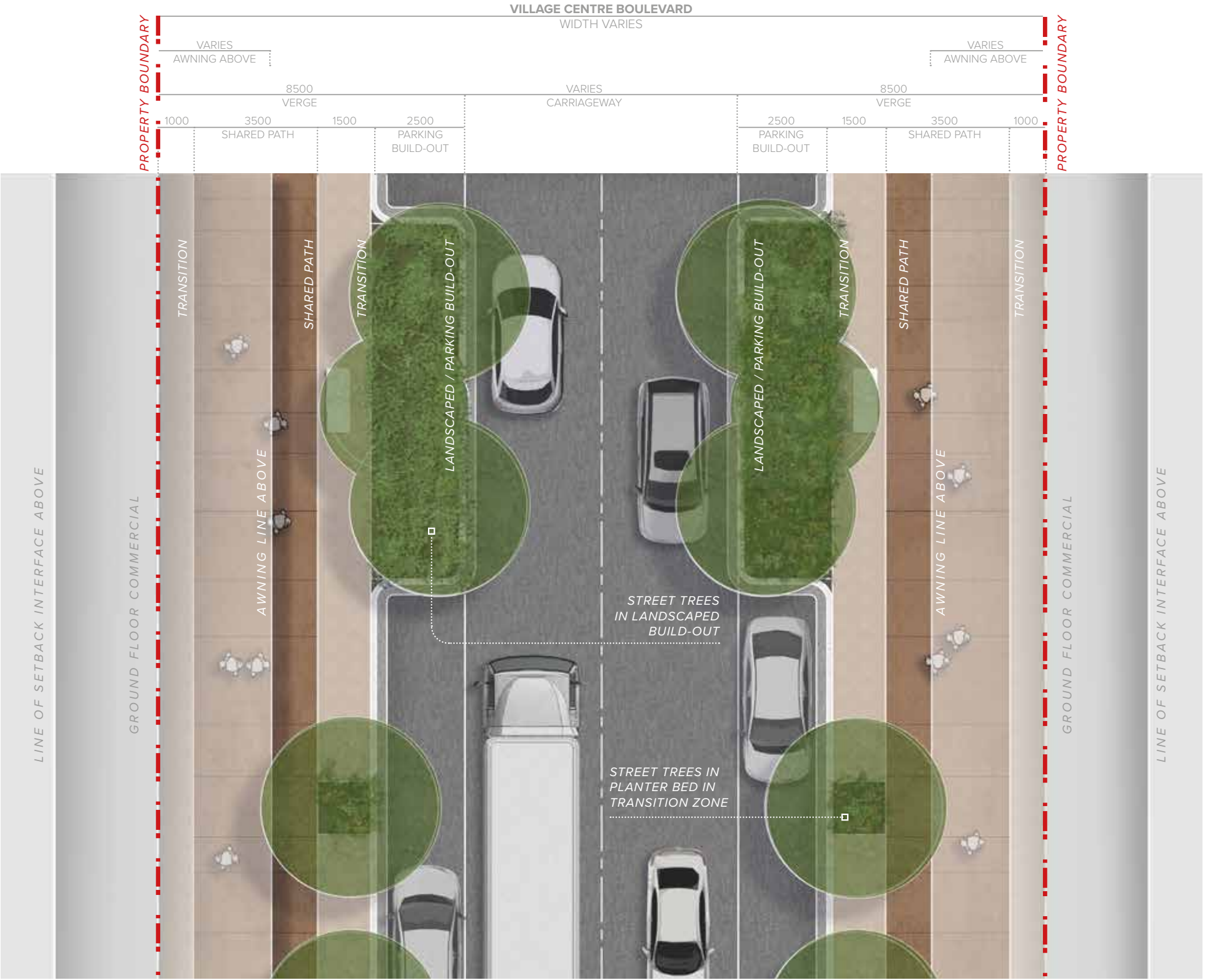
Indicative only - subject to change, depending on additional detailed assessment including but not limited to future services alignment agreement.



TYPE E: VILLAGE CENTRE BOULEVARD PLAN

WIDTH VARIES, COMMERCIAL DEVELOPMENT INTERFACES

The following typical section and plan identifies the notional arrangement for planting, pavements, driveway locations and servicing. Street tree planting details including structural soil zone and offsets as per DRC typical street tree planting details.



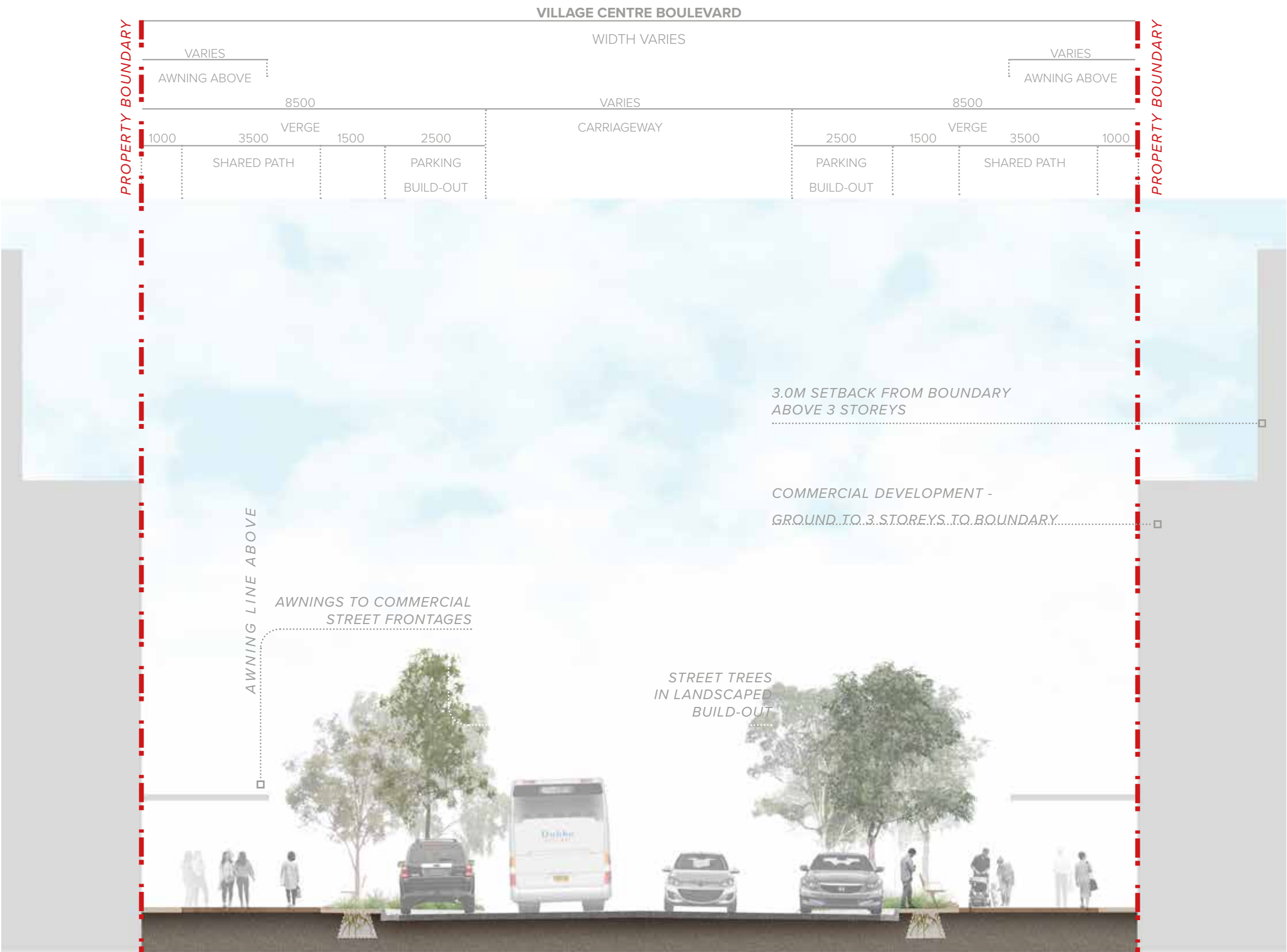
Indicative only - subject to change, depending on additional detailed assessment including but not limited to future services alignment agreement.



TYPE E: VILLAGE CENTRE BOULEVARD SECTION

WIDTH VARIES, COMMERCIAL DEVELOPMENT INTERFACES

The following typical section and plan identifies the notional arrangement for planting, pavements, driveway locations and servicing. Street tree planting details including structural soil zone and offsets as per DRC typical street tree planting details.



Indicative only - subject to change, depending on additional detailed assessment including but not limited to future services alignment agreement.



TYPE G: RIVER STREET WEST TYPICAL SECTION

The proposed streetscape works of the River Street West Boulevard sees the significant green corridor flanking the road carriageways.

A 3.5m wide shared path meanders under tree canopy to the Northern verge facilitating active transport between the village centre and the open space network beyond. The route is animated with streetscape furniture and pedestrian lighting.



Indicative only - subject to change, depending on additional detailed assessment including but not limited to future services alignment agreement.



TYPE G: RIVER STREET WEST

TYPICAL SECTION

The proposed streetscape works of the River Street West Boulevard sees the significant green corridor flanking the road carriageways.

A 3.5m wide shared path meanders under tree canopy to the Northern verge facilitating active transport between the village centre and the open space network beyond. The route is animated with streetscape furniture and pedestrian lighting.



Indicative only - subject to change, depending on additional detailed assessment including but not limited to future services alignment agreement.

