



URBAN DESIGN REPORT

WALKER GILLIESTON HEIGHTS PTY LTD



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ACKNOWLEDGMENT OF COUNTRY

Walker acknowledges the Traditional custodians of the land at 457 - 527 Cessnock Road the Wonnarua people and pay our respects to Elders past, present and emerging.

1.0 INTRODUCTION

1.1 OVERVIEW

1.1.1 PURPOSE OF THIS REPORT

This Urban Design Report has been prepared to support a Development Application for 457 - 527 Cessnock Road, Gillieston Heights, which seeks approval to develop a multi-staged residential land subdivision comprising 322 allotments.

1.1.2 SITE DESCRIPTION

The site comprises five rural residential Lots at 457, 463, 501, 507 and 527 Cessnock Road, Gillieston Heights that totals 43.57 hectares located within the City of Maitland local government area in the Hunter Region. The site is in close proximity to the existing centres of Cessnock, Kurri Kurri and Maitland and is approximately 38km northwest of Newcastle. The site is legally identified as Lot 1 and Lot 2 DP302745, Lot 1 DP311179, and Lot 1 and Lot 2 DP601226.

1.1.3 PROJECT BACKGROUND

In June 2022 Council endorsed a Planning Proposal to amend the Maitland Local Environmental Plan 2011 rezoning the site from Rural Landscape (RU2) and Environmental Conservation (C2) to General Residential (R1), Rural Landscape (RU2), Environmental Conservation (C2) and Environmental Management (C3), and is proposed as an extension of the recently completed 'Wallis Creek' residential development to the north of the site. In September 2022 the Maitland LEP 2011 (Map Amendment 3) was gazetted.

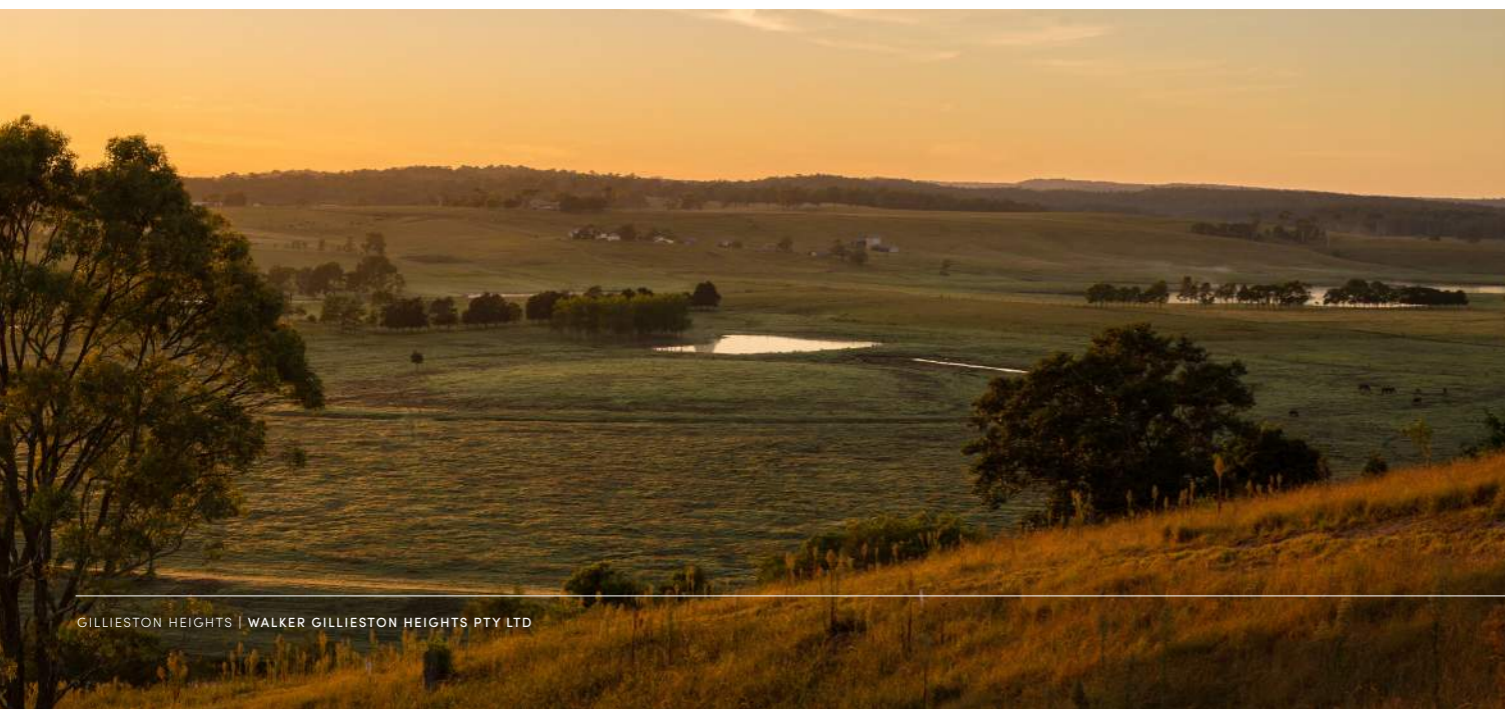
Prior to this, in December 2021 the land at 457 and 463 Cessnock Road received Land Environment Court approval for a Manufactured Housing Estate comprising 125 dwelling sites, community facilities, roads, and associated works.

Before the acquisition of 457 and 463 Cessnock Road, Walker had developed a masterplan layout with 252 allotments for the balance of site including a three-way intersection with Cessnock Road in line with Councils DCP Part F - Urban Release Areas for the South Gillieston Heights - East Precinct Plan. However, with the inclusion of this land in March 2023 and listening to community feedback, Walker elected to revise the site-wide masterplan to propose a 322 allotment layout representing a more holistic design approach, including the consolidation of fragmented three-way Cessnock Road intersections, to propose the current layout including connection to a four-way signalled intersection with the development at 464 Cessnock Road across the road.



1.1.4 VISION

The masterplan seeks to take advantage of and emulate the surrounding natural beauty of the area. The development draws inspiration from the dynamic form and movement of the water of Wallis Creek, while selecting a natural palette of native flora and materials including endemic plant species and the use of sandstone and cedar throughout the landscape. The result is a compelling family-friendly masterplanned community that sensitively responds to the natural landscape providing its residents an immersive urban country living experience setting a new benchmark for quality residential development in the area.



1.1.5 THE PROPOSAL

The masterplan is sensitively arranged in response to site characteristics, such as topography, natural landscape and waterways.

Key features of the Masterplan:

1. ENVIRONMENTAL CONSERVATION LAND

The existing rainforest will be retained and protected in perpetuity providing a natural barrier from development to Wallis Creek

2. ENTRY STATEMENT

A high quality landscaped entry statement will create a strong first impression for residents and visitors to the site from a proposed four-way signalled intersection

3. CESSNOCK ROAD INTERFACE

The dedication of 12.5m of the site fronting Cessnock Road will allow for the future upgrade and widening of Cessnock Road complimented with a 2.5m landscape buffer

4. CONNECTION TO ASPEN DRIVE

The extension of Walker's recently completed 'Wallis Creek' residential development to the site via Aspen Drive will provide an immediate sense of community for its residents

5. POCKET PARK

This park will enhance the sense of arrival to the development with a tree lined main entry road culminating at this publicly accessible open space sitting on the highest point of the site taking in sweeping views of Wallis Creek

6. DOG PARK

Providing some much needed amenity to the local area, this dog park promotes family-friendly community engagement as well as a healthy and active lifestyle for its inhabitants

7. DETENTION BASINS

The detentions basins, while providing the necessary stormwater management of the site, have also been developed with a landscape aesthetic in mind that enhances the local streetscape

8. VISUALLY SENSITIVE LOTS

Working with the challenging terrain in this area, the masterplan transitions from residential dwellings to the natural grasslands, enhanced by a carefully selected native planting palette that provides a visually pleasing transition of bulk and scale of residential development down to the sites surrounding rural landscape

9. PERIMETER ROAD

With the retention of the rainforest in the north-eastern portion of the site, the perimeter road provides the required access and bushfire protection of its residents that is accompanied by a shared path creating strong pedestrian connectivity from the existing 'Wallis Creek' residential development down to the dog park and through to Cessnock Road



1.1.6 SITE HISTORY

Following the discovery of high-quality coal in 1888, 99ha of land was purchased surrounding present-day Gillieston Heights. The land of Gillieston was used for the production of coal, which was then transported by dray to Maitland where it was sold. It was due to the coal mining operations in the area that the railway line from Maitland was extended, providing passenger and trade connectivity. Originally home to the miners, Gillieston Heights continued to see growth in its population as the passenger trains availability grew.

More recently the site has been used primarily for agriculture uses, with the southern portion of the site used for light dairy operations in previous decades. Aligned with the historical agricultural activities that the land encompassed, the vegetation is primarily cleared, with fields of grassed grazing paddocks and minimal trees. There are five existing dwellings on the site and several ancillary structures in varying forms that are associated with the rural residential activities

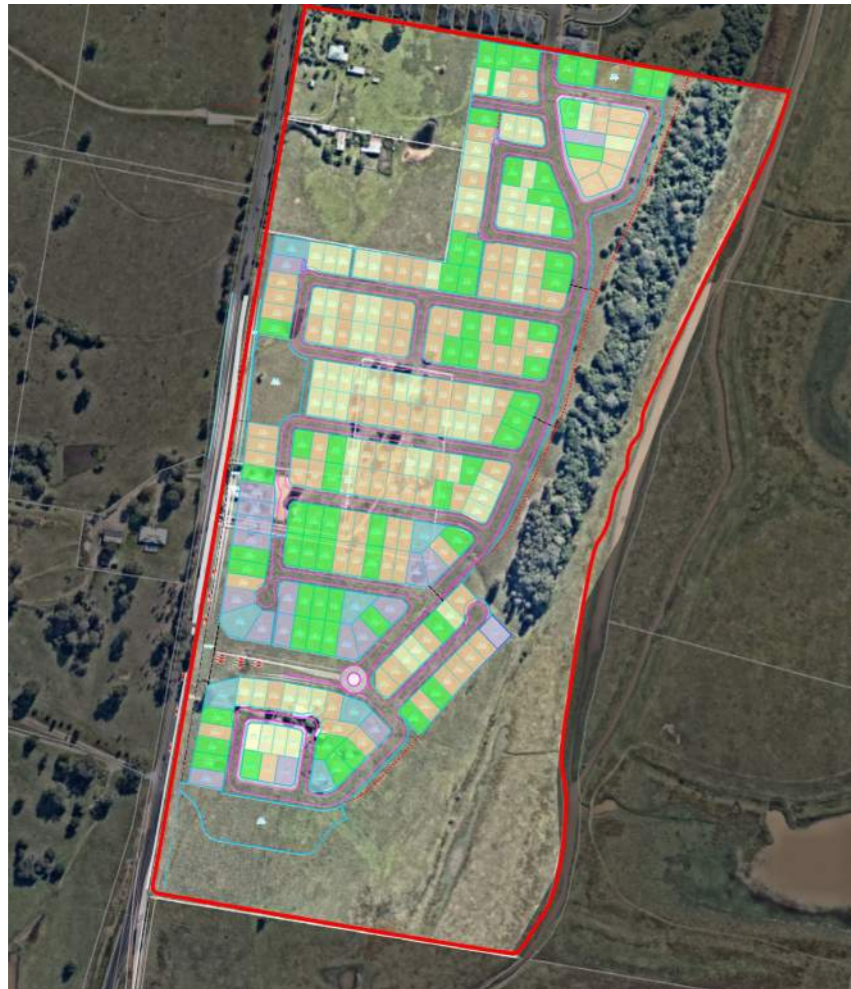


Historical aerial photographs highlight the existing rural uses of the site consisting of mostly sweeping grassland plains, the remnant rainforest area in the north eastern portion of the site, and some minor patches of introduced planted vegetation on property boundaries

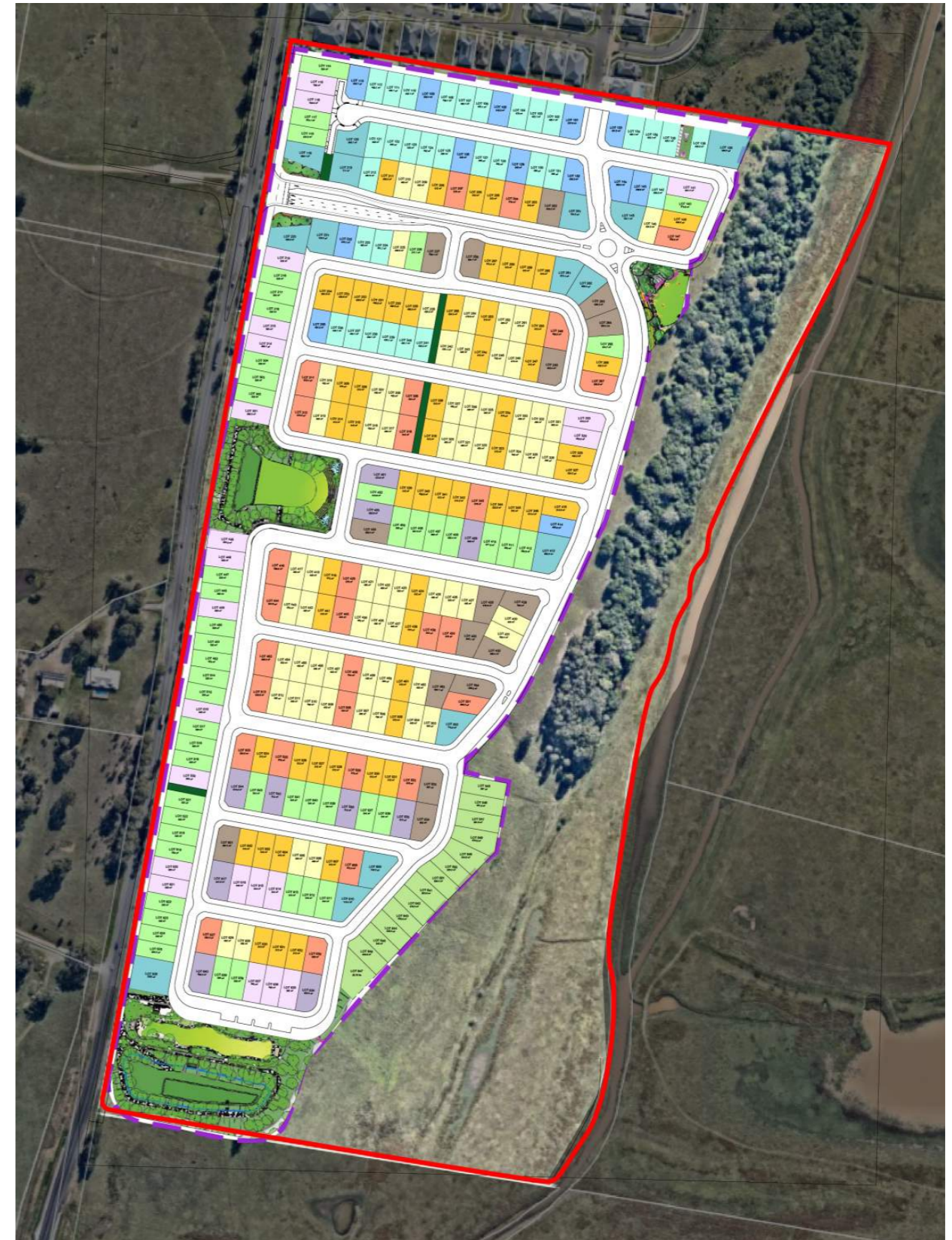
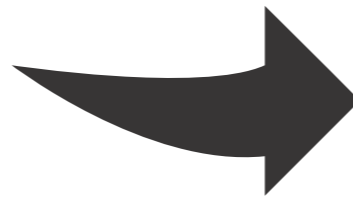
1.1.7 EVOLUTION OF THE MASTERPLAN

The proposed masterplan has been refined over time culminating in the proposal for the 322 allotment layout. Key improvements include:

- Incorporating the previously approved Manufacture Home Estate land on 457 and 463 Cessnock Road to propose a more sympathetic residential development to the local area
- Consolidating the previously proposed three-way intersections on Cessnock Road with the residential development of Urban Release Area - West Precinct to propose a four-way signalised intersection
- Providing more public open space amenity including a pocket park and dog park
- Providing better vehicular and pedestrian connectivity through the site including a reduction in the number of total cul-de-sacs
- Further enhancing the orderly and economic use and development of land



Draft masterplan dated October 2022 with a yield of 252 allotments layout prior to the acquisition of 457 and 463 Cessnock Road



Current proposed masterplan layout dated June 2023 with a yield of 322 allotments

2.0 ANALYSIS

2.1 PLANNING POLICY

2.1.1 STRATEGIC PLANNING CONTEXT

- Greater Newcastle Metropolitan Plan 2036
- Maitland City Council urban release area

The State Government and Maitland City Council both recognise the need to deliver additional residential dwellings in the area with an estimated 12,550 dwellings required in Maitland by 2036.

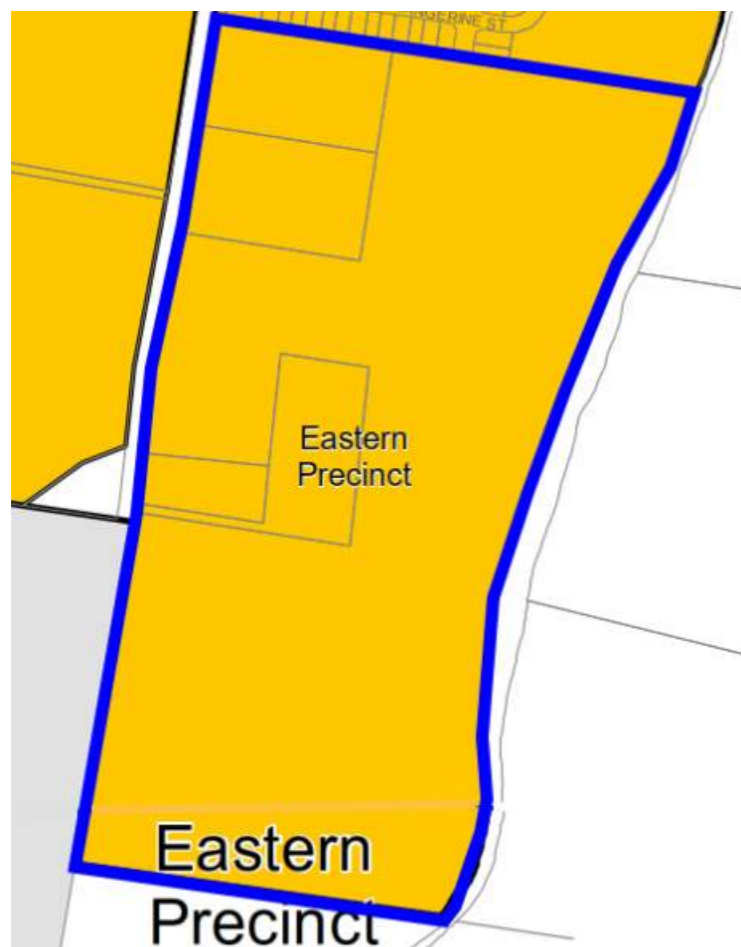
In line with the broader strategic vision, the proposed masterplan seeks to protect the important ecological values of the site and utilise established services and infrastructure close to existing towns to deliver much needed affordable housing, as well as a greater housing choice, in the form of a family-friendly green suburban community.



2.1.2 LOCAL PLANNING CONTROLS

The strategic opportunity for the site to support housing density and diversity in line with the Greater Newcastle Metropolitan Plan 2036 was acknowledged by Maitland City Council with the urban release area including the site known as the “Eastern Precinct”

In June 2022 Council endorsed a Planning Proposal to amend the Maitland Local Environmental Plan 2011 rezoning the site from Rural Landscape (RU2) and Environmental Conservation (C2) to General Residential (R1), Rural Landscape (RU2), Environmental Conservation (C2) and Environmental Management (C3) with a minimum lot size for General Residential zoning of 450m² with the balance of site zoning requiring a minimum lot size of 40 hectares.



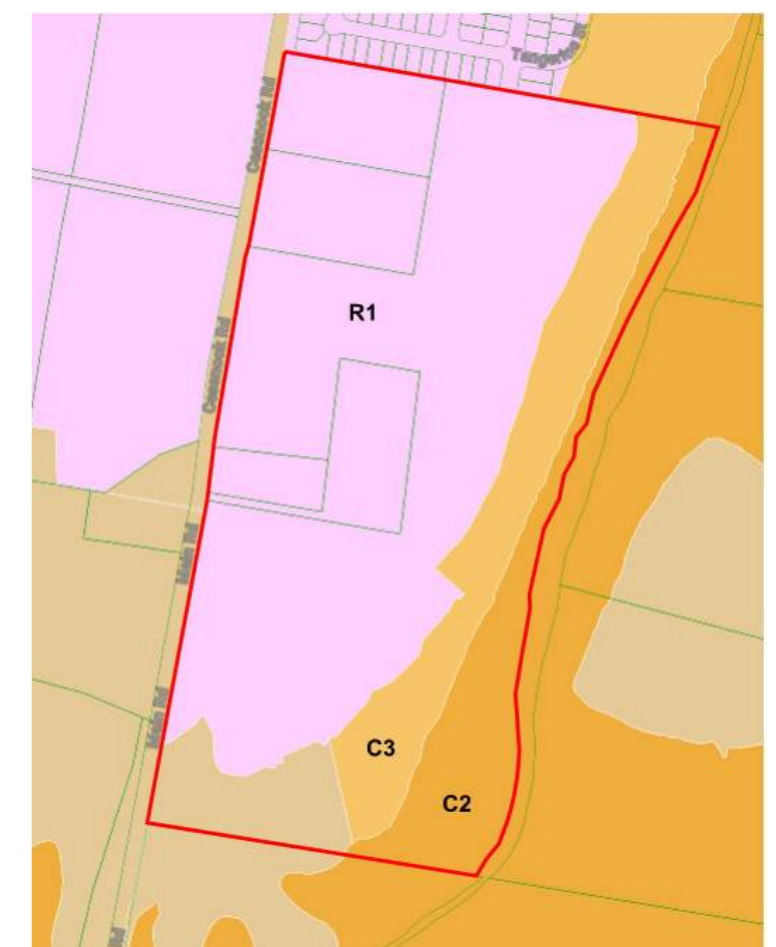
Urban Release Areas

Urban Release Area



Minimum Lot size (sqm)

G 450
 AB3 40 ha



Zone

C2 Enviro. Conservation R1 General Residential
 C3 Enviro. Management RU2 Rural landscape

2.2 URBAN CONTEXT

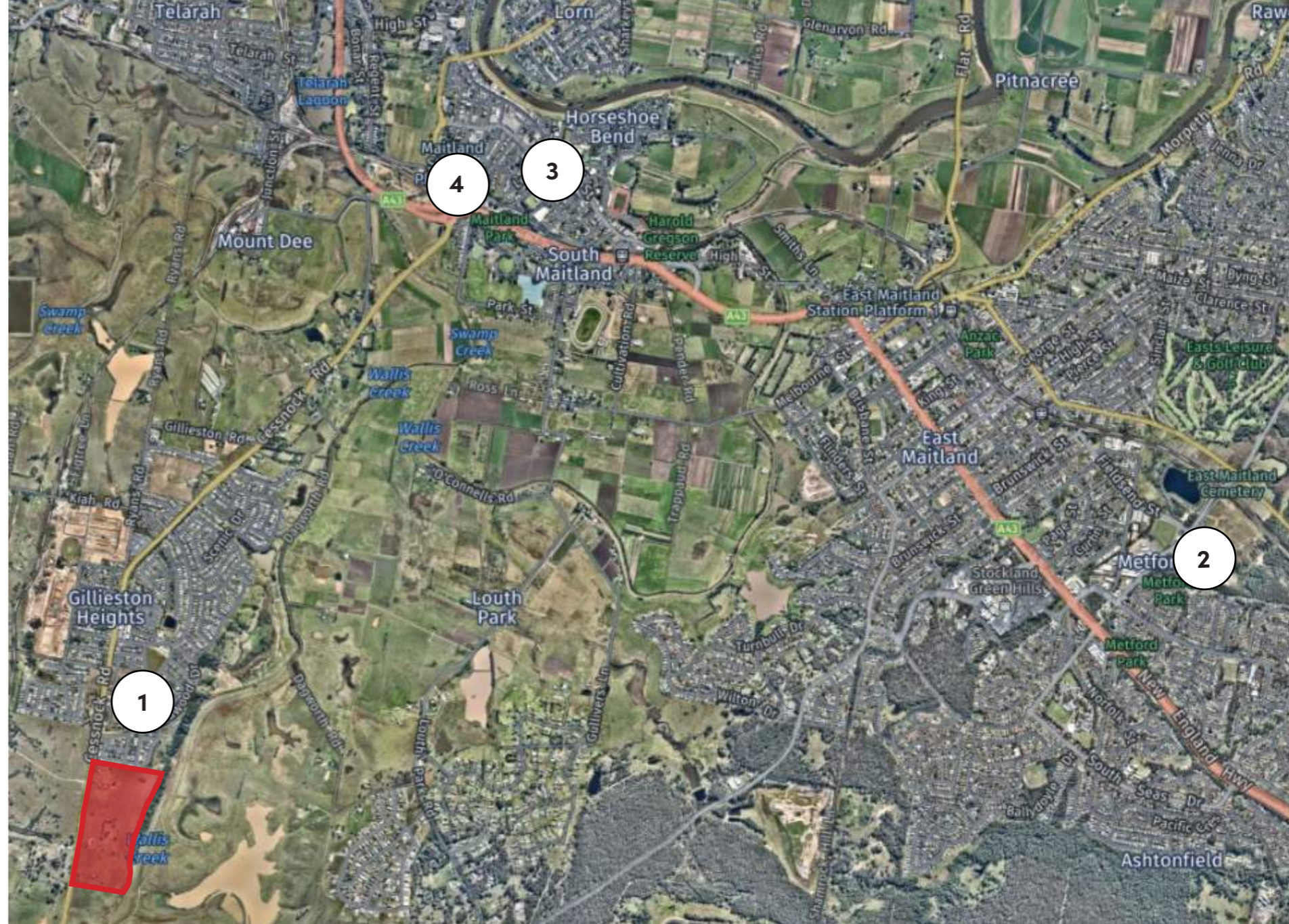
2.2.1 EXISTING AMENITY

Gillieston Heights is a developing suburb located south of Maitland and north of Kurri Kurri, within the Hunter region.

Gillieston Heights features a mix of both established and new homes built to suit the modern family's lifestyle.

Positioned on the Cessnock Road corridor provides ease of access to the Hunter Expressway and the New England Highway. Gillieston Heights has been developed with the natural environment in mind and the design has included ample footpaths for residents to enjoy an active lifestyle. Due to the growth of families in the area, Gillieston Heights features a number of estate purpose-built parks and playgrounds with a focus on:

- Prioritising family-friendly community and housing density and diversity
- Delivering housing in the right location with access to natural amenity, services and transport
- Connecting the community to natural amenity by providing improved access and links to green spaces



Urban Context Plan



Wallis Creek residential development



Recently completed Maitland hospital



City of Maitland



Maitland train station

2.3 SITE ANALYSIS

2.3.1 THE EXISTING SITE

The approximately 43.57 hectares site comprises five rural allotments located within the City of Maitland LGA approximately abutting Wallis Creek to the east and south, the recently completed 'Wallis Creek' residential development to the north and Cessnock Road to the west.

The site is predominantly made up of pastureland located is currently occupied by five residences with associated sheds and landscaping separated by open paddocks, undisturbed stands of planted vegetation and overgrown pasture grass. The site contains a natural ridge line running north to south along the eastern portion of the site that overlooks Wallis Creek, with gullies along the western boundary broken up intermittently by man-made dams.



2.3.2 TOPOGRAPHY

OBSERVATION

The site is located along a ridge line perched above the adjacent Wallis Creek. There is a level change of approximately 45m across the site typically falling north to south.

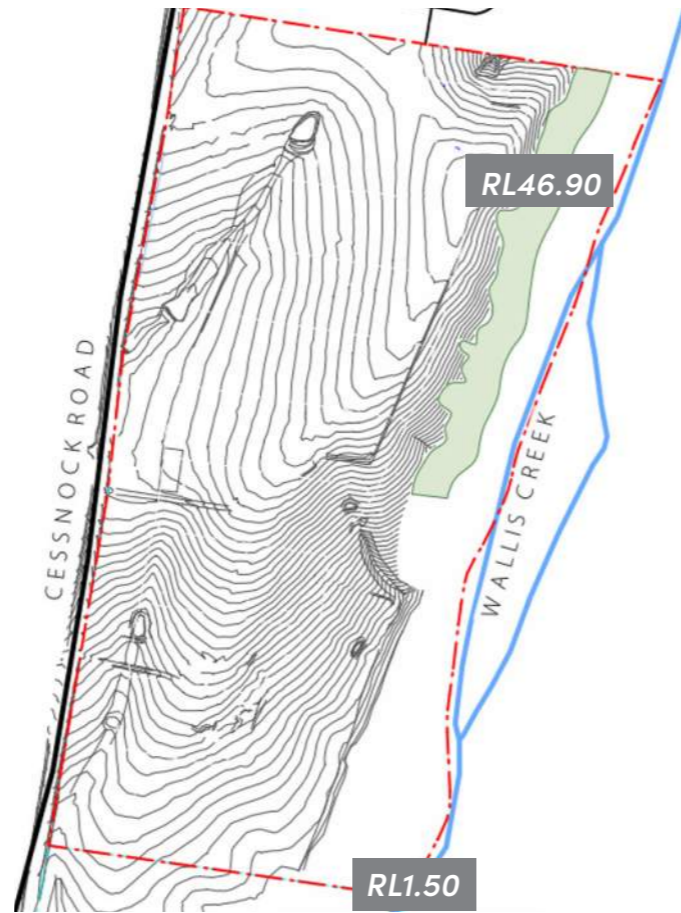
The eastern edge of the site is characterised by a steep slope down to Wallis Creek with a more subtle although still contextually steep slope to the south and south-west.

The highest point is approximately RL46.90 at the north eastern portion of the site, with the lowest point at approximately RL1.50 in the south eastern corner abutting Wallis Creek.

Within the proposed development footprint the natural topography falls approximately 32m north to south and 16m east to west.

DESIGN CONSIDERATION

The propose subdivision layout responds to the topography to establish a ground plane that is suitable for residential occupancy and achieves compliant and viable road gradients and site benching whilst minimising retaining walls to Council infrastructure and battering into C3 zoned land. Flat, useable open spaces were prioritised to provide valuable amenity to the future residents.



Legend

- - - Site Boundary
- Existing Site contour
- Wallis Creek
- Existing Dry Rainforest vegetation

2.3.3 EXISTING VEGETATION

OBSERVATIONS

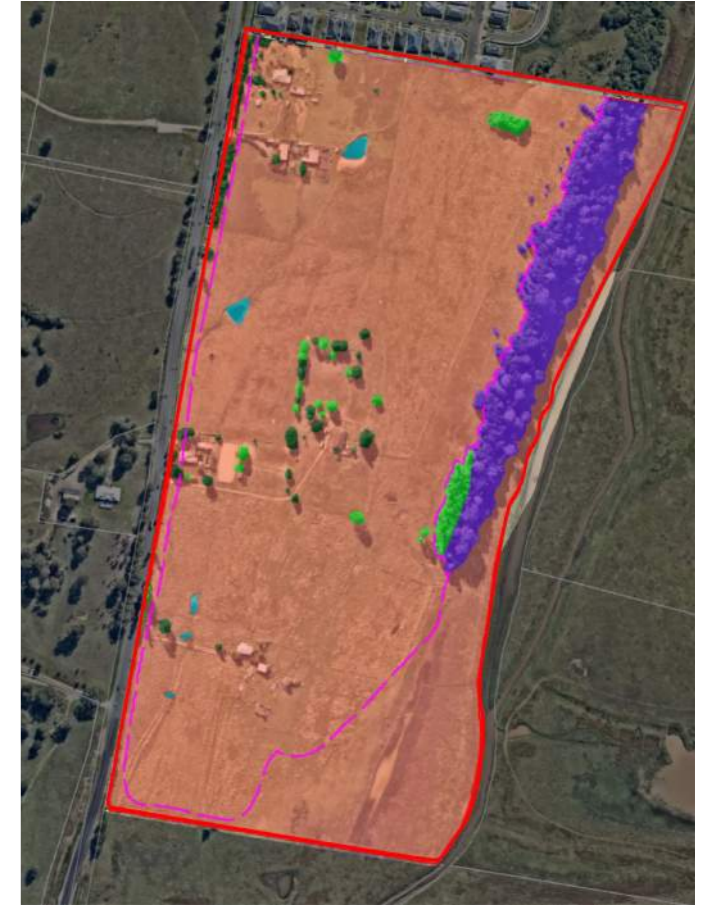
The site is predominately cleared rural landscape with a handful of scattered planted vegetation introduced by land owners to provide privacy and delineate land holdings. There is a strip of native vegetation along the eastern boundary of site which is located outside of the developable footprint and wholly within the C3 and C2 zoned land.

No threatened fauna species have been identified on site.

DESIGN CONSIDERATIONS

All efforts have been made to minimise impact on the native vegetation strip located on the eastern boundary with the associated bush fire Asset Protection Zone set off this vegetation to avoid and minimise any impact while providing the required fire hazard break to proposed dwellings.

Due to the steep nature of the site and the 12.5m land dedication along the interface of Cessnock Road for future road upgrade by others, the planted vegetation will be cleared and replaced by dense planting of flora species endemic to the area to mitigate any heat island effect and create a visually stunning aesthetic.



Legend

- Site Boundary
- - - Development Impact Extent
- Dry Rainforest PCT
- Forest PCT
- Planted landscape
- Grassland

2.3.4 WATERWAYS

OBSERVATIONS

The site is part of the Lower Hunter – Maitland catchment

In addition the major watercourse in Wallis Creek that abuts the east and southern boundaries of the site, the site also contains two mapped first order streams: one in the north-western portion of the site and the beginning of another along the northern boundary. However, the stream banks observed are heavily degraded from cattle grazing and overgrown pastures grasses and no longer meet the definition of a watercourse.

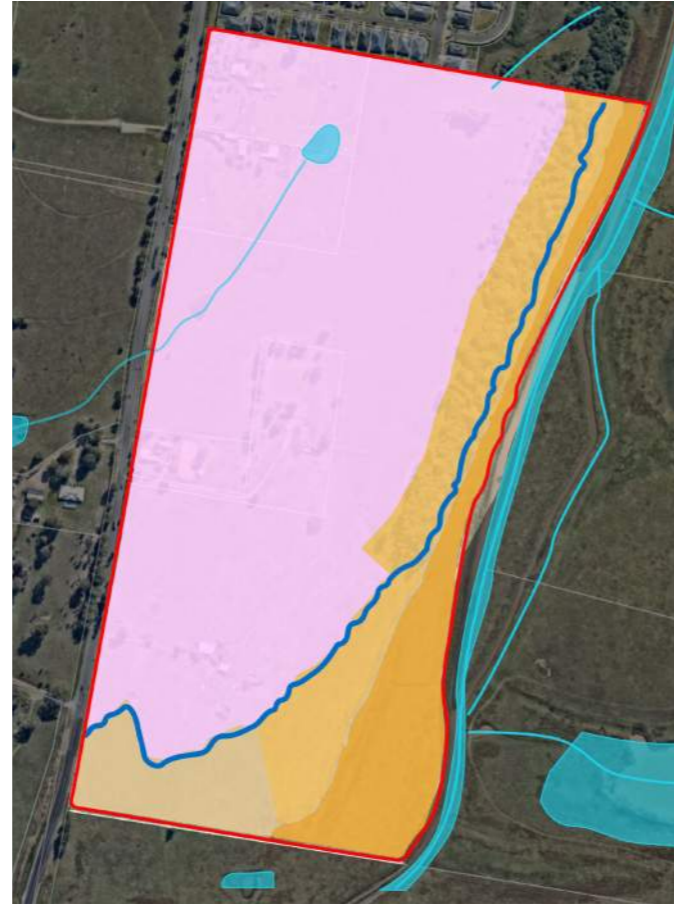
There are four man-made dams located onsite which will be filled in to allow for suitable residential development.

A portion of the subject site is identified as being flood prone land. The rezoning used the 100-year flood line to determine the R1 General Residential zoning extent.

DESIGN CONSIDERATIONS

The 100-year flood line was a driving factor in determining the General Residential (R1) zoning boundary and in identifying the developable footprint extent.

Battering below the flood line has been largely avoided to mitigate any impact to the flood storage capacity of Wallis Creek. Any incursion is considered negligible and the result of transitioning suitable road and lot grades to the existing site's naturally steep topography.



Legend

- Site Boundary
- Existing Waterways
- 1 in 100 year flood line
- C2 Environment Conservation
- C3 Environment Management
- R1 General Residential
- RU2 Rural landscape

2.3.5 BUSHFIRE PROTECTION

OBSERVATIONS

Bush fire risk on this site is noted as minimal/minor. The proposed Asset Protection Zone (APZ) establishes a fuel reduced area between the retained, remnant native vegetation strip and the development.

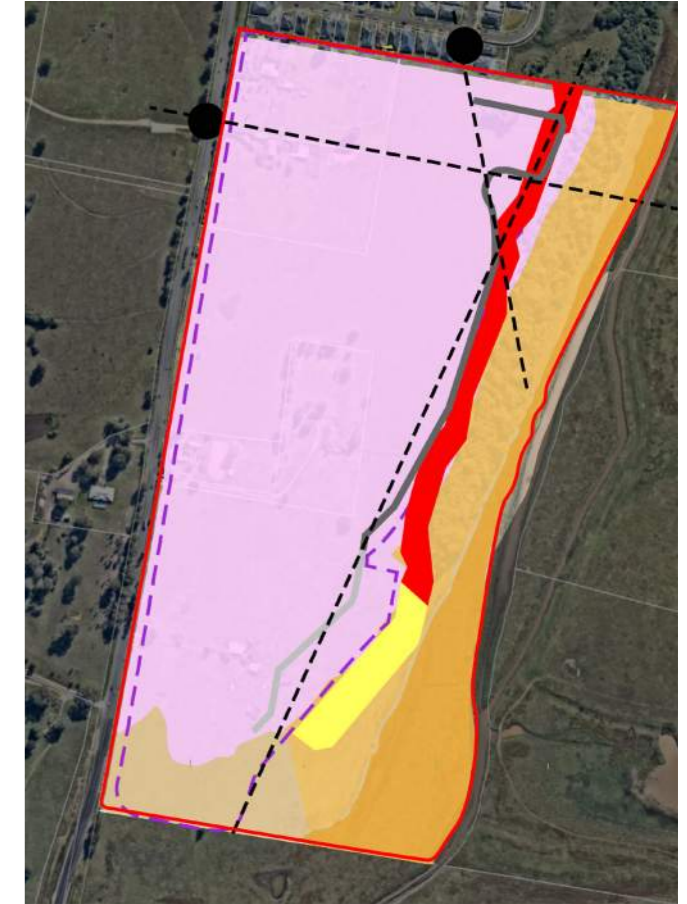
The APZ is set off the remnant vegetation strip mapping. Relevant buildings, internal roads and services has been designed to comply with Planning for Bush Fire Protection 2019 guidelines and expert advice.

DESIGN CONSIDERATIONS

Mitigating bush fire risk is a major consideration and implementing a perimeter road fronting the bushfire hazard is a beneficial strategy for enhancing the APZ.

Where topography prohibits a perimeter road in the south eastern corner, lots are proposed with a 50m APZ to the grasslands, as well as readily available access for maintenance.

Landscape design and species selection are in accordance with PBP 2019 guidelines contributing further to mitigating bush fire risk.



Legend

- Site Boundary
- - - Development Extent
- Minimum Asset Protection Zone
- Enforced Asset Protection Zone
- Entry Points
- Perimeter Road
- - - Fixed Road Network points
- C2 Environment Conservation
- C3 Environment Management
- R1 General Residential
- RU2 Rural landscape

2.3.6 TRANSPORT AND MOVEMENT

OBSERVATIONS VEHICLE ACCESS & MOVEMENT

Existing private dwellings on site have direct access off Cessnock Road via four residential driveways. The recently completed 'Aspen Drive' road in the 'Wallis Creek' development ceases at the northern boundary of site in anticipation future extension as part of the proposed development

Cessnock Road is a TfNSW road that has been earmarked for future widening to accommodate the areas growing population. Maitland Council's Urban Release Area DCP (the DCP) dictates that a 12.5m setback is required to be dedicated as public road to facilitate the future road widening and will form part of the State VPA. A 2.5m landscape buffer is proposed within the 12.5m setback that will screen the development and its residents from Cessnock Road.

The previous iteration of the masterplan prior to the acquisition of 457 and 463 Cessnock Road proposed a three-way intersection in accordance with the DCP. However, with the support of TfNSW, a consolidated four-way signalised intersection is proposed for future site connection

BUS STOP

The area is currently serviced by the 164 and 166 bus routes that operate between Maitland and Cessnock via Kurri Kurri. Bus stops are located along Cessnock Road and within existing 'Wallis Creek', with services running frequently Monday to Sunday. There is an existing bus stop in close proximity to site at 501 Cessnock Road, with a future bus route nominated to circulate the site

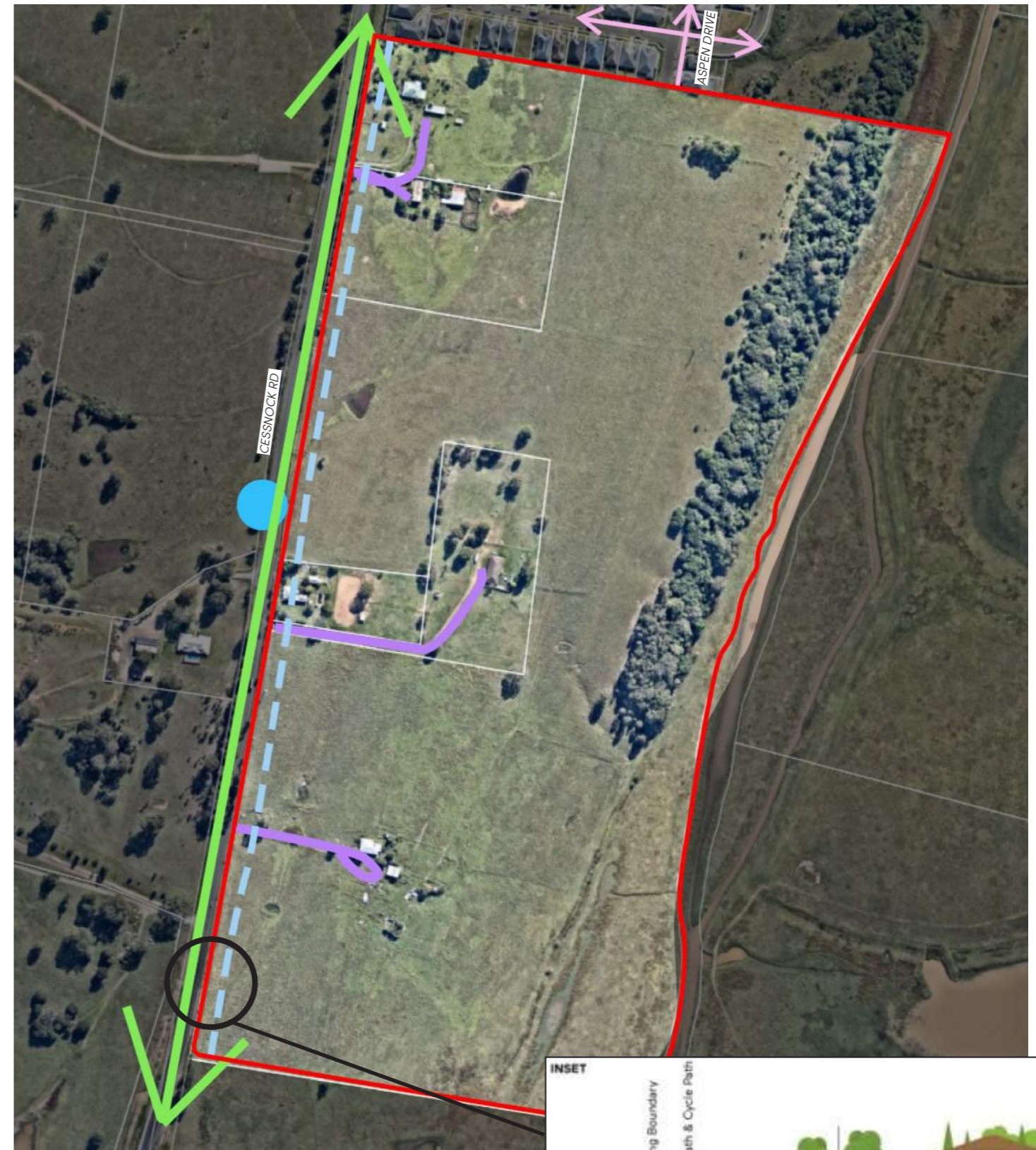
WALKING/PEDESTRIAN CONNECTIVITY

There is currently no pedestrians or cycle paths as it is private residential land.

DESIGN CONSIDERATIONS

The new street network is shaped by the existing Cessnock Road, the four-way signalised intersection location, the existing Aspen Drive connection point and the perimeter road along the eastern ridge line as far as topography and R1 zoning will allow.

The internal road network was then mapped out in an efficient grid-like manner accompanied by extensive pedestrian footpaths, greenlinks and shared paths to provide ample connectivity for emergency access to and within the site as well as efficient vehicular and pedestrian circulation.



Legend

- Site Boundary
- 12.5m Setback for future road widening
- Current connectivity / access to the site
- Cessnock Road Interface
- Aspen Drive Connection
- Bus Stop location



DCP Figure 22 extract. Future road widening section of Cessnock Road

2.3.7 MAITLAND DCP PART F - URBAN RELEASE AREA 2011

OBSERVATIONS EASTERN PRECINCT PLAN

Maitland City Council Urban Release Area DCP Eastern Precinct Plan that applies to the site formed part of the original masterplan layout proposal. However, with the acquisition of the 457 and 463 Cessnock Road, the masterplan was reworked to promote the orderly and economic use and development of land.

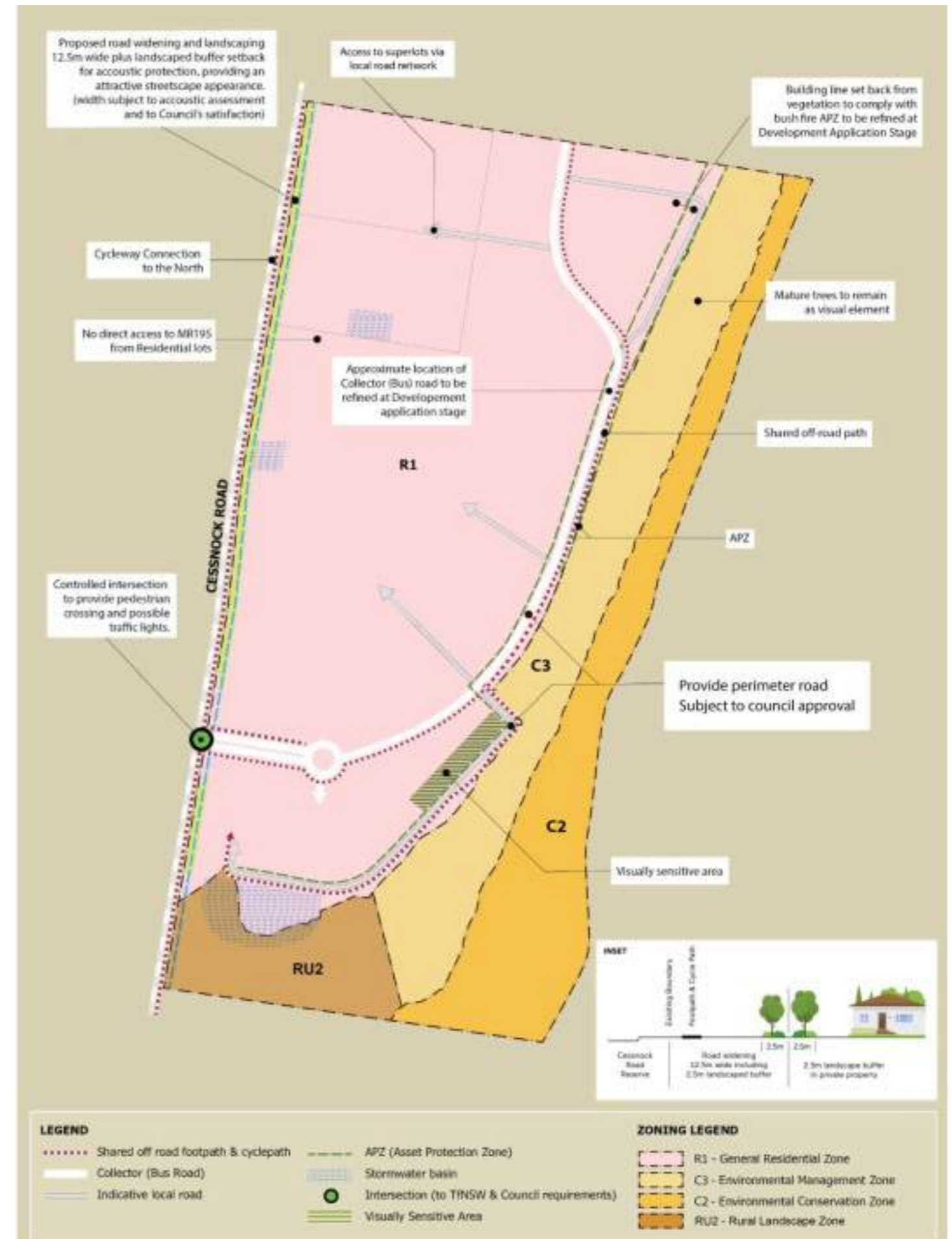
VISUALLY SENSITIVE AREA

The identification of the visually sensitive area within the DCP has been carefully considered and addressed with the Development Application proposal supported by a Visual Impact Assessment (VIA).

DESIGN CONSIDERATIONS

This resulting masterplan layout responds to the proposed four-way signalised intersection with Cessnock Road and the development across the road, supported by TfNSW, to provide a more considered and efficient layout that will reduce traffic 'red time' on the main thoroughfare in Cessnock Road.

In response to the VIA recommendation to introduce an endemic planting palette and materials that reflect the rural character of the area, the masterplan creates an interface buffer that mitigates visual impact from the surrounding landscape.



Maitland City Council DCP Part F - Urban Release Areas Figure 22 extract

2.4 EVOLUTION OF THE MASTERPLAN

1. Topography

Existing site conditions were assessed for adaptive repurposing of the site from rural land use comprising of steep topography and rolling grassland plains to provide a family-friendly residential masterplanned layout consisting of complaint road grades, flat useable private allotments and public open spaces, and good pedestrian connectivity to promote a healthy lifestyle.



2. Existing Vegetation

Where ecological values were identified on site, priority was given to these areas as evident with the rainforest that runs north to south in the north-eastern portion of the site abutting Wallis Creek.

Retention of these trees was made a priority to maintain existing fauna habitat corridors providing an established landscape aesthetic that acts as a natural visual barrier and transitions the bulk and scale of development down to the rural landscape to the east.



3. Waterways

Establishing and respecting the 100-year flood plain was of upmost importance in determining the layout. All dwellings are sited above the 100-year flood level with minimal incursion on the expansive, natural flood basin of Wallis Creek to ensure resident safety.

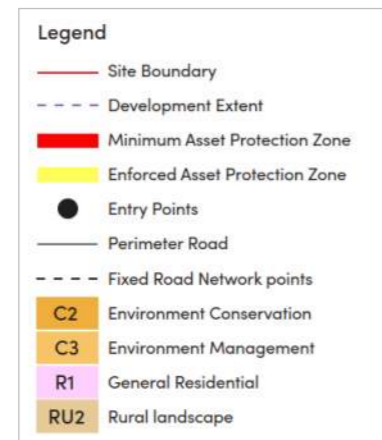
Identifying and groundtruthing the first order creeks and dams onsite ensured an appropriate stormwater strategy was implemented across the development.



4. Bushfire

A perimeter road has been established between the minor bush fire hazard and the residents.

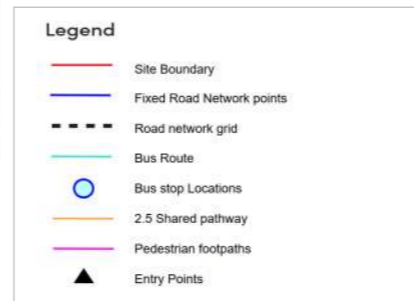
Where the topography proved too challenging for a perimeter road in the south eastern corner on the edge of R1 zoning, lots were implemented instead to transition the steep grades in this area combined with landscaping to address visual impact concerns.



5. Transport and Movement

Connection to the proposed four-way intersection, the extension of Aspen Drive from the 'Wallis Creek' development and the requirement for a perimeter road informed the street network layout. The road network provides plenty of continuous connection and clear sightlines for pedestrian safety and ease of wayfinding.

There is an abundance of foot-paths, shared paths and greenlinks provided throughout the masterplan for good connectivity and to promote an active lifestyle.



6. Maitland DCP part F - Urban Release Area 2011

While every effort is made to adhere to the South Gillieston Heights East Precinct Plan layout, when taking into account the above considerations some deviation was required to achieve the most desirable and efficient layout.

The result is a compelling family friendly masterplan that strikes the appropriate balance between much needed yield for the Maitland areas growing population combined with prioritising importing natural elements of the site with an abundance of amenity and connectivity.



SUMMARY

Walker are proud to propose the result of a carefully considered and balanced view of all the key considerations for the site that respects the natural beauty and rural character of the area.

The result is a masterplan layout that sets itself apart via a compelling family-friendly residential estate providing a seamless connection to the surrounding natural landscape, and a diversity of lot sizes and arrangements

The focus on dense endemic planting, the use of high-quality natural materials, ample community amenity and pedestrian connectivity will ensure, upon completion, that this development will set a new benchmark for masterplanned communities in the area.

