### Heddon Greta – Cliftleigh Corridor Structure Plan

PLANNING FOR OUR PEOPLE OUR PLACE OUR FUTURE



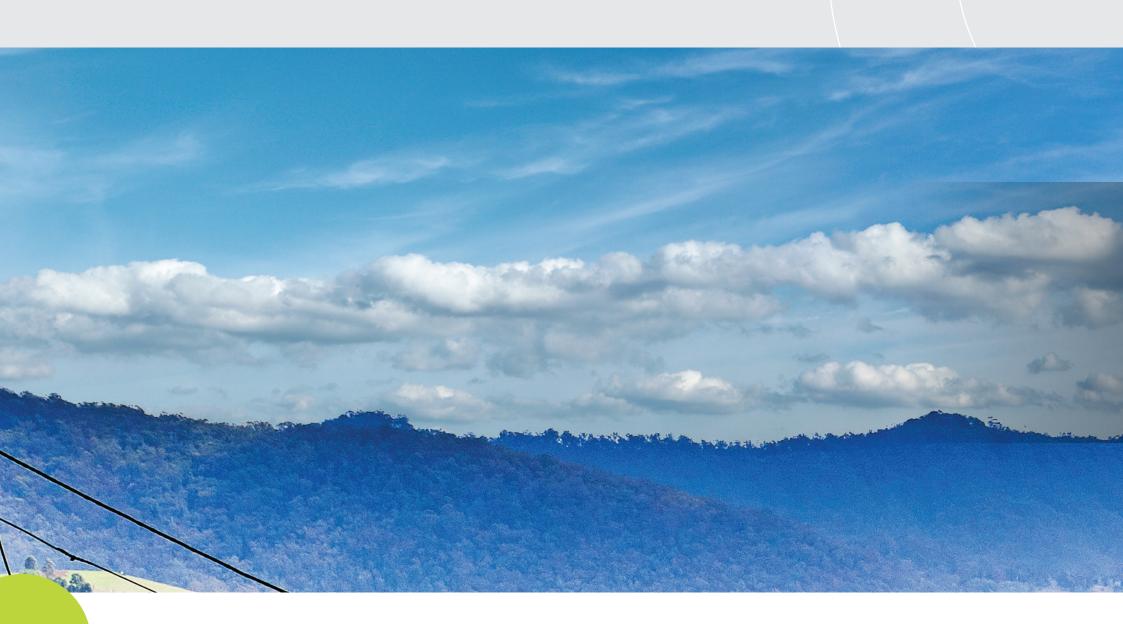




# Page of **Contents**

Acknowledgement Of Country	5
Introduction	6
Background	. 7
Strategic Planning Context	8
Project Objectives1	12
Existing Conditions1	14
Demography1	14
Development And Land Uses1	١6
Constraints	37
Connectivity	13
Servicing4	14

Opportunities & Options	47
Investigations Areas	47
Open Space & Community Facilities	
Connectivity	62
Public Domain	65
Servicing	
Implementation Plan	67
Appendix 1: Planning Agreement Requirements	82



# Acknowledgement of Country

Cessnock City Council acknowledges that within its Local Government Area boundaries are the Traditional Lands of the Wonnarua people, the Awabakal people and the Darkinjung people.

We acknowledge these Aboriginal peoples as the traditional custodians of the land on which our offices and operations are located, and pay our respects to Elders past and present.

We also acknowledge all other Aboriginal and Torres Strait Islander people who now live within the Cessnock Local Government Area.

### Introduction

### HEDDON GRETA -CLIFTLEIGH URBAN CORRIDOR

The Heddon Greta – Cliftleigh Urban Corridor (the Corridor) lies within a broader corridor between the strategic centres of Kurri Kurri (within the Cessnock Local Government Area (LGA) and Maitland within the Maitland LGA.

The Corridor extends from the edge of Kurri Kurri (Lang Street), east across the Hunter Expressway (HEX), incorporating the Main Road (MR195)/HEX Interchange and surrounding land, to the east and north along MR195, across Testers Hollow, concluding at the Cessnock/Maitland LGA boundary. The Corridor includes the suburbs of

Heddon Greta, Cliftleigh, and portions of the suburbs of Loxford (west of Heddon Greta and Cliftleigh) and Buchanan, west of the Wallis Creek floodplain. Most land within

the Corridor is located within the Kurri Kurri to Maitland Corridor Contribution Plan (CP) area.

The Corridor is approximately 1,420ha in area.

The Corridor does not include the HEX Interchanges of Hart Road nor Buchanan. Further, it does not extend to the inclusion of the proposed employment lands within the Hydro Planning Proposal (PP). Future place strategies will be required for any land beyond the current Corridor Study Area.

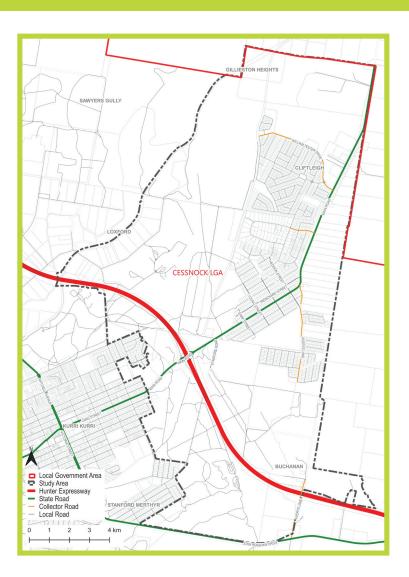


Figure 1: Heddon Greta - Cliftleigh Urban Corridor Study Area

### Background

### BACKGROUND

The Heddon Greta – Cliftleigh Corridor has experienced substantial population growth in the last decade.

The HEX opened in mid-2014, and provides an east-west connection between Newcastle and the Lower Hunter. The HEX was designed to accommodate long-term development and growth in the Hunter Region in the coming decades (TfNSW 2019)<sup>1</sup> with the primary purpose being to facilitate the movement of freight. It is also heavily utilised by commuters.

The opening of the HEX stimulated growth along the Heddon-Greta – Cliftleigh Corridor. It provides ready and fast connections to key employment nodes, including coal mines and supporting industry in the Upper Hunter, as well as large employment precincts in Thornton and Beresfield, with further connections to Newcastle and surrounding suburbs.

Within the Cessnock LGA, there have been three Urban Release Areas (URAs) that have contributed to housing supply and population growth in the locality:

- Cliftleigh
- Heddon Greta
- Avery's Village

There has also been extensive growth to the north of the Corridor within the Maitland LGA, including the URAs of:

- Gillieston Heights North; and
- Gillieston Heights Stages 1 and 2.

The nature of development however has been somewhat ad-hoc, and has not been delivered in a coordinated manner. This has meant that the supply and delivery of supporting infrastructure and services have not necessarily been provided where and when required.

There is no cross LGA boundary plan that supports a coordinated approach to development or infrastructure delivery.

Other land in the Corridor is currently being investigated for development purposes. The Hydro Aluminium site west of the Corridor (and located within both the Maitland and Cessnock LGA), is currently being rezoned, with an extensive area of residential land proposed in both LGAs.

<sup>1</sup> TfNSW, 2019, The Hunter Expressway, https://roads-waterways.transport.nsw.gov.au/projects/the-hunter-expressway/index.html, accessed 11 November 2021

## **Strategic Planning Context**

### STRATEGIC PLANNING CONTEXT

Regional and local strategic planning strategies provide guidance and principles for the Heddon Greta – Cliftleigh Corridor as summarised below.

### State Government Planning Framework

#### Hunter Regional Plan 2036 (2016)

The Hunter Regional Plan 2036 (HRP 2036) includes the Heddon Greta – Cliftleigh Corridor within the Greater Newcastle Metropolitan Area. The Corridor links Kurri Kurri to Maitland, through Heddon Greta, Cliftleigh and Gillieston Heights. The HRP 2036 nominates the corridor as a growth area and as a connection to be strengthened.

Local Government priorities within the HRP in relation to the Corridor include:

- Leveraging the proximity of the Corridor to the HEX and existing significant industrial land; and
- · Delivering existing URAs at Cliftleigh and Averys Village.

#### Greater Newcastle Metropolitan Plan (2018)

The Greater Newcastle Metropolitan Plan (GNMP) identifies Heddon Greta as having infill housing opportunities, coupled with nominating Cliftleigh as a Housing Release Area.

The GNMP also requires all Lower Hunter councils to contribute to an overall 60% infill target for delivery of new housing.

It nominates the Corridor (and wider connection between Kurri Kurri and Central Maitland) for the delivery of "Faster Transport Connections" or Improved Future Connectivity.

Local Government priorities within the GNMP in relation to the Corridor include:

- Protection of land around the HEX for employment growth
- Work with Maitland City Council and infrastructure providers to coordinate housing and infrastructure development occurring between Maitland and Kurri Kurri including the upgrade of Cessnock Road to support growth in Cessnock and Kurri Kurri
- A rapid transport connection from Cessnock and Kurri Kurri to Maitland and the metro core will become more important; investigate potential park and ride facilities near the HEX.

The Plan also recognises the need to improve blue/green grid connection within the locality.

The plan proposes a Special Infrastructure Contribution (SIC).

#### Greater Newcastle Future Transport Plan 2056 (2018)

The Greater Newcastle Future Transport Plan 2056 identifies the Corridor as a secondary feeder corridor to the New England Highway and the HEX, and recognises the need for strengthened connections between the strategic centres of Kurri Kurri and Central Maitland (and Cessnock).

Higher speed connections between these strategic centres are nominated, in addition to the extension of regional cycleways along the existing corridor, and John Renshaw Drive.

#### Draft Hunter Expressway Strategy (2020)

The Draft HEX Strategy identifies the corridor and surrounding land as an Interchange Growth Area, extending from Sawyers Gully to Buchanan, being a logical extension to the Kurri Kurri Strategic Centre and Heddon Greta.

The plan requires local strategies to be prepared and agreed between Council and NSW government to identify and establish future land uses within the Growth Area, prior to rezoning occurring.

The intent of the Growth Areas is have an employment focus, reinforced by directing additional housing outside interchange growth areas which would:

- enable the creation of a regionally significant area creating critical mass and trading hub, and
- renewal of Hydro site and links to Kurri Kurri TAFE and URAs within Kurri Kurri corridor.

#### Draft Hunter Regional Plan 2041 (2021)

The Draft Hunter Regional Plan identifies land within the Corridor as an "Interchange Growth Area" to accommodate long-term urban growth.

The plan identifies that the Kurri Kurri and Loxford Interchanges have the potential to operate as one Interchange Growth Area.

The intent is that Councils will use Interchange Growth Areas to define the land available to investigate for release within local strategies. Detailed assessment will be required and land capability may identify the unsuitability of some areas for more intensive development. Other uses compatible with the Hunter Expressway Principles and that respond to constraints may be considered after this detailed local planning has occurred.

The Plan states that "no further rezoning for residential or rural residential development, other than land in a current proposal or future endorsed local strategy, will be permitted to commence in the interchange growth areas", beyond those proposals with existing Gateway Determinations.

The plan goes further to state that the "development of bulky goods, 'big box' superstores and factory outlet style retailing are to be located outside of the Interchange Growth Areas" and that "opportunities provided by the Hunter Expressway will require land for certain categories of development, namely intermodal, freight and logistics".

The plan identifies that the Kurri Kurri and Loxford Interchange have the potential to operate as one Interchange Growth Area. Whilst this may be possible in a future state, they are proposed to be treated separately at this point in time.

A substantial degree of investigation and supporting studies are required to further inform the desired future land use for land in Loxford/Sawyers Gully (including but not limited to biodiversity, flooding, odour, traffic etc.). These investigations are out of scope for the Heddon Greta - Cliftleigh Corridor Structure Plan, which seeks primarily to focus on development within the vicinity of Main Road 195 (MR195).

## **Strategic Planning Context**

### Local Government (Cessnock) Planning Framework

#### Community Strategic Plan (2022)

The Community Strategic Plan (CSP) seeks to identify the community's main priorities and aspirations for the future (over a 10 year planning horizon) and to identify strategies for achieving these goals.

Key Objectives of the CSP that relate to the Corridor include:

- · Objective 1.2: Strengthening community culture;
- · Objective 1.3: Promoting safe communities;
- Objective 3.1: Protecting and enhancing the natural environment and rural character of the area;
- · Objective 3.2: Better utilisation of existing open space;
- · Objective 4.1: Better transport links; and
- Objective 4.2: Improving the road network.

### Local Strategic Planning Statement (2020)

The Local Strategic Planning Statement (LSPS) establishes the guiding Planning Priorities for land use planning over a 20 year planning horizon within the LGA.

The LSPS seeks to implement the actions of the HRP and GNMP that are relevant to this, and the Council's own priorities as set out in the CSP and other adopted strategies and actions.

The LSPS includes actions directly relevant to the Corridor, including inter alia the preparation of "a corridor plan for the Cliftleigh - Heddon Greta Corridor to ensure the area is adequately serviced and new growth is integrated with the existing residential area".

### Urban Growth Management Plan (2021)

The Urban Growth Management Plan (UGMP) complements the Planning Priorities established by the LSPS. It establishes guiding principles for the maintenance of a 10 – 15 year supply of zoned land for future urban development, for residential, commercial and employment purposes, including its sequencing for delivery.

The pipeline for residential land supply caters for the release of three lifestyle categories to cater for a variety of people, providing a greater diversity of housing stock. At present, there is adequate supply of land in the Corridor, and future investigation areas have been identified for consideration once supply in the category dips below 15 years.

Whilst there is adequate industrial land, the UGMP provides "in principle" support for additional employment lands in proximity to the Hunter Expressway and near the major interchange at Main Road (subject to merit tests in terms of traffic impacts, environmental impacts, noise separation, visual impacts and buffers and need).

### Cessnock Housing Strategy (2021)

Cessnock Housing Strategy identifies Council's role in supporting the delivery of housing to meet the needs of a diverse community. Most greenfield developments primarily produce land for detached dwellings.

The Housing Strategy seeks to support the principles of the GNMP to promote the supply of new housing within existing urban areas, through infill development. Infill development tends to be more diverse and include secondary dwellings, dual occupancies and medium density development.

#### Cessnock LGA Traffic and Transport Strategy (2018)

The Cessnock LGA Traffic and Transport Strategy is a comprehensive integrated transport masterplan for the LGA to guide decision making for a 25 year planning horizon.

The Strategy highlights requirements for new or improved road infrastructure and provides guidance on the provision for new or improved public transport and active transport facilities.

The Strategy recommends implementation of upgrades to MR195 in the form of four lanes (two lanes in each direction) between the HEX and Cliftleigh URA prior to 2031. Additionally, it also recommends a Weston Bypass which would connect to the Hart Road/HEX Interchange.

This Strategy is currently subject to review. The review will include consideration of those measures outlined above, in addition to work being undertaken by Transport for NSW (TfNSW) which may have a bearing on the Corridor

### **Objectives**

### **PROJECT OBJECTIVES**

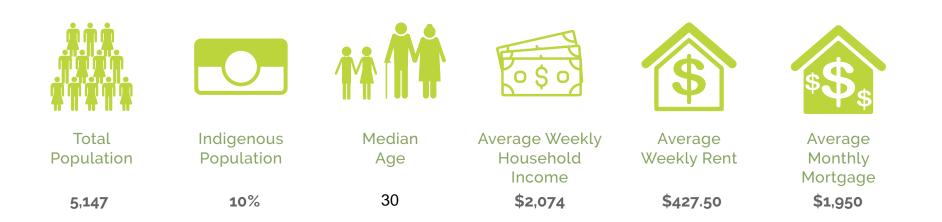
The objectives of the Heddon Greta – Cliftleigh Urban Corridor project are to:

- identify the infrastructure and servicing needs of existing and future potential population in the Corridor;
- identify any gaps in infrastructure and servicing supply;
- identify whether any planned improvements of commitments under Planning Agreements will address these gaps;
- identify infill development capacity within the established areas;
- identify any land within the Corridor / general locality which may be suitable as an investigation areas for a future URA, and incorporation of any future potential population of such land within the above considerations;
- develop and implement a project plan, with a supporting funding and implementation strategy, to delivery any missing infrastructure and/or services; and
- · identify public domain improvements within the study area.



### DEMOGRAPHY

A summary of key demographic information relating to the population within the Corridor is outlined below<sup>2</sup>.



<sup>2</sup> ABS 2021 Census Community Profiles, Heddon Greta and Cliftleigh, 2021, https://www.abs.gov.au/census/find-census-data/community-profiles/2021/SAL11895, https://www.abs.gov.au/census/find-census-data/community-profiles/2021/SAL10931, accessed 1 July 2022. Statistics are an average of the values for both Heddon Greta and Cliftleigh



Household Types

66% couples with children



Housing Tenure

34% rented 45%mortgaged



Average No. People Per Dwelling

2.90



Average No. **Bedrooms Per** Dwelling

3.75



Dwelling Types

94% separate (detached) dwellings

### **DEVELOPMENT AND LAND USES**

Land uses within the Corridor are a mix of urban (residential and commercial), infrastructure, rural, conservation and recreation purposes.



Figure 2: Land Use Category

#### Residential

The MR195 acts to bisect the Corridor between the east and west. In both localities, subdivision is grid-like comprising lots of regular shapes.

Most urban land adjoining the MR195 corridor and URAs is zoned R2 low density residential. The objectives of this zone are:

- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.

Land zoned R2 has a Minimum Lot Size (MLS) of 450m<sup>2</sup>. There are no development standards for maximum Height of Buildings (HOB) nor Floor Space Ratio (FSR).

Residential allotments within the R2 Low Density Residential zone range from around 450m<sup>2</sup> to 2,000m<sup>2</sup>. The average lot size is approximately 650m<sup>2</sup>. Residential density within the R2 Low Density Residential zone is approximately 8.9 dwellings/ha.

Dwelling constructions range from weatherboard/fibro cottages of the 1960's and 70's to contemporary brick and tile/colourbond project homes.

A portion of land within the Corridor around Forbes and Errol Crescents is zoned R5 Large Lot Residential. The R5 zone objectives are:

- To provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality.
- To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future.
- To ensure that development in the area does not unreasonably increase the demand for public services or public facilities.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.

Land zoned R5 within the Corridor has a MLS of 2,000m<sup>2</sup>. There are no development standards for HOB nor FSR.

Residential allotments within the R5 Large Lot Residential zone range from around 1,800m<sup>2</sup> to 7,700m<sup>2</sup>. The average lot size is approximately 4,000m<sup>2</sup>. Residential density within the R5 Large Lot Residential zone is approximately 2.3 dwellings/ha<sup>2</sup>.

Dwellings within the R5 Large Lot Residential zone are predominantly large contemporary project homes with large front setbacks.

Most dwellings in both the R2 and R5 zoned lands are detached single dwellings, however, there is evidence that dual occupancy development has and is occurring within the Corridor. Higher density urban forms (such as multi dwelling housing or residential flat buildings are not permissible within either zone.

Based on the average lot size, there is additional potential for infill development to occur through the supply of dual occupancies. However, given that most land is developed, this will required demolition of existing dwellings.





Plate 1: (top) Dwelling examples within the R2 zone Plate 2: (bottom) Dwelling examples within the R5 zone

### Urban Release Areas

URAs are areas which have been rezoned for urban development purposes using the prescribed format of the Standard Instrument (Local Environmental Plans Order 2006 (SILEP). URAs are often supported by site specific development controls (Development Control Plans – DCPs) and Planning Agreements (PAs) or new Contribution Plans (CPs) between the Proponent and State and/or Local Governments to ensure the supply and/or provision of public infrastructure to support the incoming population of the release area.

There are three areas URAs within the Corridor:

- Cliftleigh
- Heddon Greta
- Avery's Village

Table 1 summarises the area of zoned residential land, number of residential lots with development and subdivision consent, the average dwelling density and remaining residentially zoned land for each of the above URAs.



Figure 3: Urban Release Areas

Table 1: Summary of URA residential lot yields, density & remaining available land<sup>3,4,5</sup>

URA	Zoned Residential Land (ha)	Residential Lots with Development Consent	Residential Lots with Subdivision Consent	Average Density (dwellings / ha)	Remaining Zoned Residential Zoned Land (ha)
Heddon Greta (R2)	20.5	50	42	7.5	15.2
Heddon Greta (R5)	3.5	5	5	3.2	0
Cliftleigh	95	1,022	961	11.9	4.4
Averys Village	176.4	803	349	9.7	30.6
TOTALS / AVERAGES	295.4	1,880	1,357	8.1	50.2

<sup>3</sup> As at 4 February 2022

<sup>4</sup> Zone boundaries in certain instances do not correlate with cadastral boundaries. Densities have been calculated based on the area of land the subdivision occupies, as opposed to zone boundaries.

<sup>5</sup> Density has been calculated by dividing number of lots created by area of residentially zoned land occupied, including half roads and areas required for servicing infrastructure etc.

#### Cliftleigh

The Cliftleigh URA is located at the northern end of the Corridor, west of MR195, and east of the South Maitland Railway Corridor. It comprises an area of approximately 141.8ha.

The site was rezoned from a rural zone (former Zone No 1 (a) (Rural "A" Zone under Cessnock Local Environmental Plan, 1989 – CLEP 1989) and came into effect in November 2008. The rezoning was supported by a one-off payment to the (then) Office of Environment and Heritage (OEH) towards the development of a conservation management plan for the Kurri Sand Swamp Woodland Threatened Ecological Community (TEC), which was located on the land.

The rezoning enabled development of the land for residential and open space purposes, in addition to listing relics of the former Ayrfield No 1 Colliery at Cliftleigh as items of the environmental heritage.

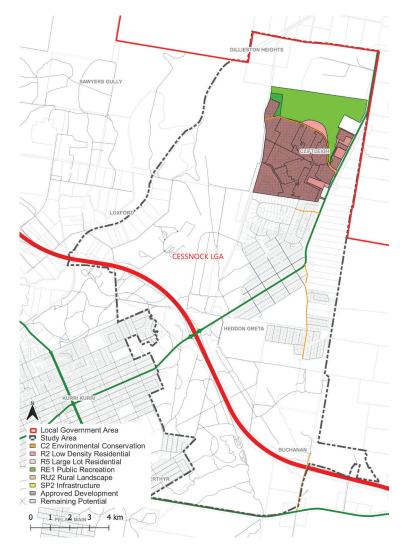
Approximately 95ha of the URA is zoned R2 Low Density Residential, with a further 46ha zoned RE1 Public Open Space – most of which is Testers Hollow.

Residential lot yield estimates at the time of rezoning were in the order of 977 lots.

To date, development consent to create 1,022 residential lots has been granted<sup>6</sup>. Subdivision Certificates (SC) have not yet been granted for all lots (refer to Table 1 for the breakdown of residential lots yields, average densities and remaining residentially zoned land for all existing URAs).

<sup>6</sup> This figure does not include any additional lots created by further subdivision of the land, post granting of the initial consent, i.e. it does not include additional lots created by dual occupancy developments.

Figure 4: Cliftleigh URA



Subdivision pattern within this URA is generally grid-like, however does incorporate curved road alignments to respond to topographical and drainage features, which has produced some irregular shaped allotments.

Residential allotments within this URA range from 450m<sup>2</sup> to approximately 2,500m<sup>2</sup>. The average lot size is approximately 570m<sup>2</sup>.

The URA is subject to a PA. This requires the payment of contributions for the city wide infrastructure (including library services, Kurri Kurri Aquatic Centre, Performing Arts Centre, cycleways etc.) and infrastructure, including dedication and embellishment of land for local and district open space reconstruction of local roads and pedestrian and shared pathways. The extent of works/land dedication required for each URA is detailed in Appendix 1.

The URA has not been subject to Special (state) Infrastructure Contributions (SIC).



Plate 3: Cliftleigh Subdivision Example



Plate 4: Testers Hollow District Open Space

#### Heddon Greta

The Heddon Greta URA is located in Heddon Greta at the southern end of the Corridor, west of MR195 and east of the South Maitland Railway Corridor. It comprises an area of approximately 32.6ha.

The site was rezoned from a rural zone (former Rural (1) – Rural "A" zone under Cessnock Local Environmental Plan 1989) and came into effect in December 2011. Land west of the South Maitland Railway Corridor (approximately 28.2ha) was concurrently rezoned to a conservation zone (now C2 Environmental Conservation)

Residential lots yields at the time of rezoning were estimated at approximately 130 lots.

Approximately 23.4ha of the URA is zoned for residential purposes (including 19.9ha zoned R2 Low Density Residential, and 3.5ha zoned R5 Large Lot Residential). Remaining land within the URA is zoned C2 Environmental Conservation (2.8ha) and RU2 Rural Landscape (4.4ha).

Residential subdivision within the R2 Low Density zoned land of this URA comprises generally regular shaped allotments, of areas approximately between 432m<sup>2</sup> and 1,300m<sup>2</sup>. The average lot size is approximatel 830m<sup>2</sup>

To date, development consent to create 55 residential lots has been granted<sup>7</sup>. Subdivision Certificates (SC) have not yet been granted for all lots (refer to Table 1 for the breakdown of residential lots yields, average densities and remaining residentially zoned land for all existing URAs).

<sup>7</sup> This figure does not include any additional lots created by further subdivision of the land, post granting of the initial consent, i.e. it does not include additional lots created by dual occupancy developments.

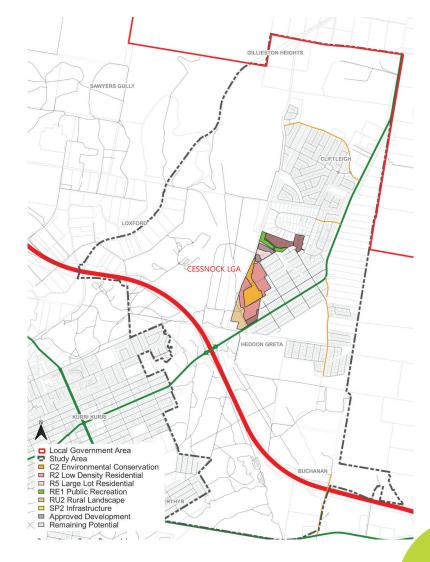


Figure 5: Heddon Greta URA

Within the R5 Large Lot Residential zoned land of this URA, alotments comprise areas of between approximately 2,000m<sup>2</sup> and 8,200m<sup>2</sup>, with an average lot szie of approximately 3,700m<sup>2</sup>.

The URA is subject to a PA. This requires the transfer of approximately 5,000m<sup>2</sup> of land to Council for a local playground on the release of the Construction Certificate (CC) for the 50th lot. Land located south of Madeline Street, zoned RE1 Public Open Space has been transferred for this purpose, though provides a drainage function and remains unembellished.

The PA also requires the payment of contributions for the city wide infrastructure (including library services, Kurri Kurri Aquatic Centre, Performing Arts Centre) and local infrastructure, including reconstruction of local roads and pedestrian and shared pathways.

The extent of works/land dedication required for each URA is detailed in Appendix 1.

SIC levies have also been applied against development of the URA in accordance with PAs with the State Government



Plate 5: Heddon Greta Subdivision example



Plate 6: Madeline Street Reserve

#### Averys Village

Averys Village is located on the eastern boundary of the Corridor (adjoining the Wallis Creek floodplain), east of MR195 and north of the HEX. It comprises an area of approximately 118.5ha.

The site was rezoned from RU2 Rural Landscape to R2 Low Density Residential and came into effect in October 2013.

At the time of rezoning, land west of the URA (approximately 57.3ha) was concurrently zoned for conservation (C2 Environmental Conservation). Approximately 47ha of this land is subject to a Conservation Agreement between the Developer and the Minister administering the National Parks and Wildlife Act, 1979. The Agreement was entered into to satisfy a commitment to secure a biodiversity offset as made under a Planning Agreement relating to the land rezoning. In addition, a contribution for environmental purposes was also required.

The Agreement operates in perpetuity and requires specific management actions in relation to the land. No further development of the subject land is permitted by the Agreement.

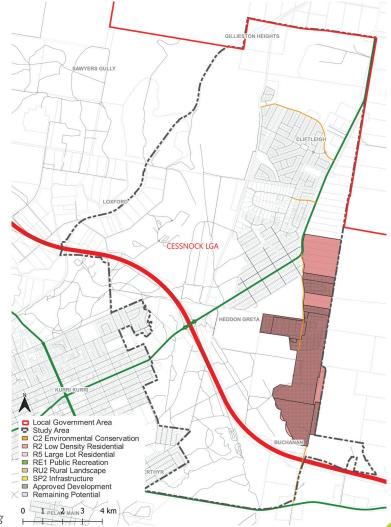
Residential lots yields at the time of rezoning were estimated at approximately 960 lots.

To date, development consent to create 803 residential lots has been granted<sup>8</sup>. Subdivision Certificates (SC) have not yet been granted for all lots (refer to Table 1 for the breakdown of residential lots yields, average densities and remaining residentially zoned land for all existing URAs).

Residential subdivision within this URA is generally grid-like and comprises regular shaped allotments, ranging from approximately 300m<sup>2</sup> to 3,000m<sup>2</sup>in area, and an average size of approximately 610m<sup>2</sup>.

<sup>8</sup> This figure does not include any additional lots created by further subdivision of the land, post granting of the initial consent, i.e. it does not include additional lots created by dual occupancy developments.

Figure 6: Averys Village URA & current zoning



In lieu of a PA, a site specific Section 94 (now Section 7.11) CP was prepared to ensure the provision of infrastructure to service the needs of the additional population.

The CP required the payment of contributions for city wide infrastructure including the Cessnock Performing Arts Centre, Kurri Kurri Aquatic Centre, a local child care centre and a local multi-purpose community space, and contributions towards sportsfields. Dedication of land within the subdivision for open space purposes is also required by the plan, however embellishment thereof is to be funded by Development Contributions.

Local infrastructure funded by the plan includes the upgrade of the intersection of MR195 and Heddon Street to traffic signals, construction of Averys Lane to John Renshaw Drive (and intersection upgrade), provision of off-road cycleways as well as reconstruction of kerb and drainage on multiple existing roads.

The contents of this CP have since been incorporated into the City Wide Infrastructure Contributions Plan, 2020. Many of the applicable works have been and are subject to Works In Kind (WIK) agreements between the Developer and Council.

The extent of works/land dedication required for each URA is detailed in Appendix 1.

SIC levies have also been applied against development of the URA in accordance with PAs with the State Government.



Plate 7: Averys Village Subdivision example

### **Planning Proposals**

Two Planning Proposals (PPs) are currently under assessment within the Corridor. These include the Hydro PP and a PP south of the Averys Village URA.

#### Averys Lane South

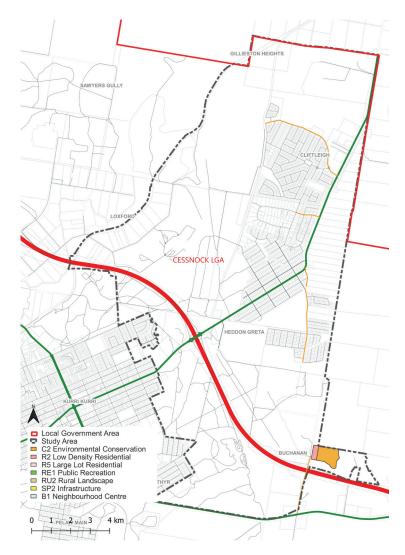
The Averys Lane South proposal would connect and utilise the road and service infrastructure delivered for the Averys Village URA, subject to augmentation where required. Access would be provided from Averys Lane to both MR195 (via Heddon Street) and John Renshaw Drive.

Whilst the current land owner seeks only a two lot subdivision, it has been determined that there is strategic merit in enabling low density residential development on the site (only in the area between Averys Lane and the Wallis Creek floodplain), given its proximity to the Averys Village URA.

The estimated residential lot yield from the Averys Lane south proposal is approximately 18 – 20 lots.

This proposal has been submitted to the Department of Planning and Environment (DP&E) seeking a Gateway Determination to proceed with the rezoning.

*Figure 7: Averys South Planning Proposal and Proposed Zoning* 



### Hydro

The Hydro proposal extends across both the Maitland and Cessnock LGAs. Only the areas proposed for residential development are included within the Corridor. The estimated residential lot yield from the Hydro Proposal is approximately 1,435 lots.

Employment land in and around the former Hydro Aluminium Smelter is also proposed, but is presently located outside the nominated Corridor.

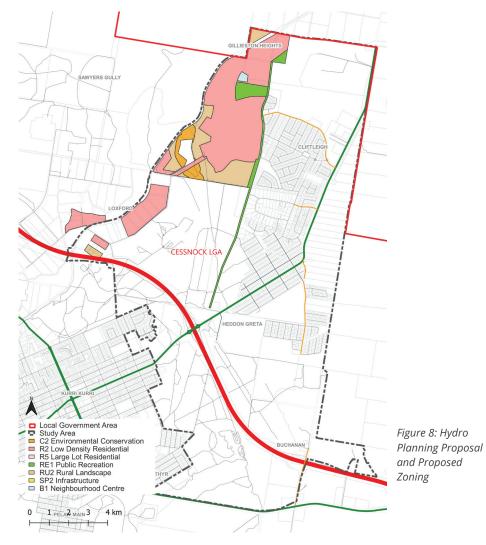
Traffic studies (undertaken by Transport for NSW (TfNSW) indicate that residential traffic will predominantly utilise MR195 for access to the HEX and Maitland, whilst the employment lands traffic will utilise the Hart Road/HEX Interchange. Given the impact this will have on the state road network, in particular the HEX/MR195 Interchange, it would be a reasonable requirement for an internal link road be established between the employment lands and the residential lands to alleviate the pressure on the MR195/HEX Interchange.

An extension of William Tester Drive to the Hydro development area will provide an access to MR195 as will a new signalised intersection on MR195 within the Maitland LGA.

The proposal identifies the delivery of approximately 6.6ha of open space for the purposes of District Playing fields and a multi-purpose centre (with land acquisition and construction to be funded by Development Contributions).

Extensive service (water & sewerage) infrastructure, including internal roads will also be required to be delivered.

The rezoning of the land is imminent, having been supported by Council at its meeting of 13 July 2022.



### Commercial

One parcel of land within the Corridor is zoned B1 Local Centre which supports local businesses, including a bakery, two takeaway food and drink premises, two beauty premises and a liquor shop.

Other commercial activity exists within the Corridor, however the zoning for these premises is generally R2 Low Density Residential. Other commercial activity within the Corridor includes:

- a pub and takeaway food and drink premises located on opposite corners of MR195 and Young Street
- Service stations located on the corner of MR195 and Earp Street, Heddon Greta and MR195 Cliftleigh, and a Service Centre, located at the southern end of the corridor, which supports a service station and takeaway food and drink premises;
- A medical centre (health consulting rooms), located on the corner of MR195 and Stanford Street. A medical centre on 85 MR195 has also been granted development consent in November 2019.

Outside of the Corridor, commercial premises including supermarkets, grocery stores, takeaway food and drink premises, child-care facilities, medical centres etc. are located to the south in the centre of Kurri Kurri. A recently established commercial centre in Gillieston Heights within the Maitland LGA supports similar types of commercial activity to the north of the Corridor.



Plate 8: B1 Local Centre Businesses on MR 195





Plate 9: (left) Takeaway Food and Drink Premises Plate 10: (right) Heddon Greta Hotel

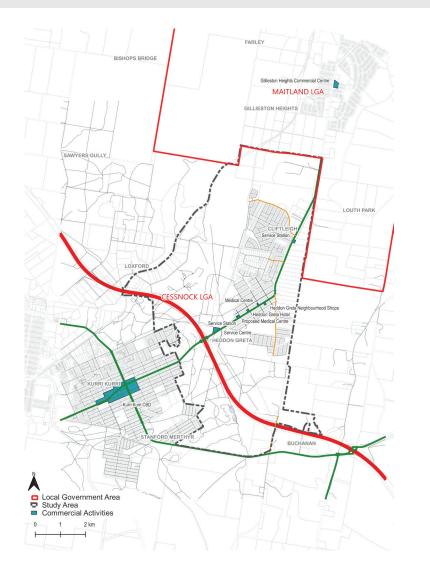




Plates 11 - 14: (left to right) Service Stations & Service Centre on MR195







### Rural

Much of the remaining land within the corridor is zoned RU2 Rural Landscape. The objectives of this zone are:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To maintain the rural landscape character of the land.
- To provide for a range of compatible land uses, including extensive agriculture.
- To enable other forms of development that are associated with rural activity and require an isolated location or support tourism and recreation.
- To ensure that the type and intensity of development is appropriate in relation to the rural capability and suitability of the land, the preservation of the agricultural, mineral and extractive production potential of the land, the rural environment (including scenic resources) and the costs of providing services and amenities.
- To maintain and enhance the scenic character of the land.
- To ensure that development does not create unreasonable or uneconomic demands for the provision or extension of services.
- To minimise the visual impact of vegetation clearing in order to be consistent with the rural character of the locality.
- To minimise disturbance to the landscape from development through clearing, earthworks, access roads and construction of buildings.
- To ensure development does not intrude into the skyline when viewed from a road or other public place.

Land zoned RU2 within the Corridor has a MLS of 40ha. There are no development standards for maximum HOB nor FSR.

Figure 9: Locations for Commercial Activity/Premises

Land uses within this zone include Kurri Kurri TAFE, rural-residential development (detached single dwellings) and the Heddon Greta Golf course. Land within this zone is heavily vegetated in some locations.



Plate 15 - 16: Rural Residential Development (zoned RU2) and Heddon Greta Golf Course

### Conservation

There are limited areas of dedicated conservation zoned land within the study area, however, much of the vegetated land within the corridor comprises high biodiversity value.

Land zoned for conservation (C2 Environmental Conservation) within the corridor has a MLS of 80ha. There are no development standards for maximum HOB nor FSR.



Plate 17: Kurri Kurri TAFE

### Open Space, Public Domain & Community Facilities

Pockets of recreation land exist within the corridor and include both formal open space facilities (e.g. Testers Hollow), but also include riparian corridors, road reserves and flood affected land.

Land zoned RE1 does not have a MLS, nor HOB or FSR development standards.

An inventory of the embellishments of existing Council owned / managed open space areas within the Corridor is provided in Table 2.



Plate 18: Testers Hollow, Cliftleigh

Site	Suburb	Hierarchy	Improvements
Cliftleigh Meadows District Park	Cliftleigh	District Park	<ul> <li>Walking loop</li> <li>Football goals</li> <li>Play equipment</li> <li>Sheltered picnic areas/tables</li> <li>Fixed outdoor gym equipment</li> </ul>
Glen Ayr Drainage Reserve	Cliftleigh	Drainage Reserve	Sheltered picnic table
Cliftleigh Hilltop Park	Cliftleigh	Local Park	<ul> <li>BBQ</li> <li>Sandstone seating</li> <li>Informal kick-about space</li> </ul>
Forbes Crescent Drainage Reserve	Heddon Greta	Drainage Reserve	• Nil
Hedleigh Park	Heddon Greta	Local Park	<ul> <li>Bench seat</li> <li>Playground</li> <li>Sheltered picnic bench and table</li> </ul>
Madeline Street Reserve	Heddon Greta	Passive Local Open Space	• Nil
Kurri Kurri Golf Course	Heddon Greta	Private	<ul><li>Golf Course</li><li>Club House</li></ul>
Main Road Reserve	Heddon Greta	Road Reserve	• Nil
Birralee Park	Kurri Kurri	District Sportsground / Local Park	<ul> <li>Amenities buildings</li> <li>Bench seating</li> <li>Fencing</li> <li>Irrigation</li> <li>Public toilet</li> <li>Tiered seating</li> <li>1 grass athletics track</li> <li>3 soccer fields</li> <li>Bench seat</li> <li>Fencing</li> <li>Playground</li> </ul>
Crown Land Reserve	Stanford Merthyr	Vegetation	• Nil

Table 2: Corridor Open Space Embellishments<sup>9</sup>

Cessnock City Council recreation and Open Space Strategic Plan, 2019



#### Regional Level Facilities

There are no regional level facilities located within the Corridor. The regional facilities located within the broader Kurri Kurri Planning Area cater for the supply requirements for this level of facility.

#### District Level Facilities

A District level playing field and playground is located at Cliftleigh Meadows - Testers Hollow.

The Roy Jordan Oval, located within the Gillieston Heights URA (West Precinct)<sup>10</sup> off Fanning Street is a District Level facility, which supports a range of different sports, including baseball and cricket. A co-located playground with play equipment is also provided at this site.

There are currently no Council community centres within the Corridor.

Plate 19: Hedleigh Park

<sup>10</sup> Maitland Development Control Plan 2011, Part F Urban Release Areas, Gillieston Heights, https://www.maitland.nsw.gov.au/file/91241/ download?token=H2QFuM-J, accessed 17 February 2022

#### Local Level Facilities

Local open space within the Corridor include Hilltop Park, Cliftleigh (passive recreation), Hedleigh Park, Heddon Greta, and a two local parks within the Averys Village URA. The Madeline Street reserve was also dedicated for the purposes of local open space.

Some dedicated open space land is not fit for purpose, as it has other constraints or functions, such as flooding (e.g. Playing Fields at Cliftleigh Meadows – Testers Hollow) or drainage/riparian corridors (e.g. Madeline Street Reserve). Additionally, the southern portion of Hedleigh Park is currently being utilised as a compound for equipment and machinery during construction works associated with the Averys Village URA.

Local open space is also located at Gillieston Heights, which serves the need of the local residents within the URAs of the Maitland LGA.

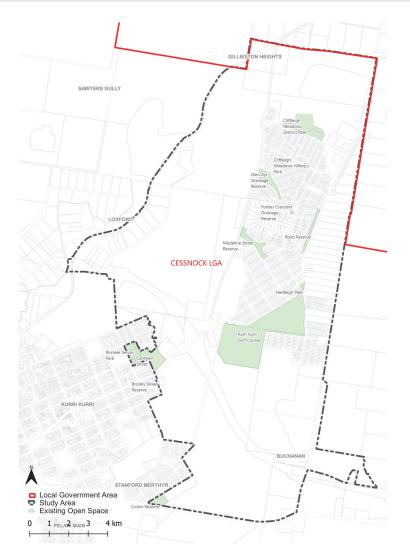
An inventory of the embellishments of existing open space areas within the Corridor is provided in Table 2.

#### **Private Recreation**

Private open space, in the form of Kurri Kurri Golf Club is located in Heddon Greta between the Averys Village URA and MR195. The golf course could be considered a District-level facility.

### **Education Establishments**

The Heddon Greta - Cliftleigh Corridor does not comprise any primary or secondaryschools, however is an intake area for Gilleston, Kurri Kurri and Weston Primary Schoolsand Kurri Kurri High School.Figure 10: Existing Open Space Areas



# CONSTRAINTS

### Flooding

The Heddon Greta – Cliftleigh Corridor is in an elevated area located between tributaries of Swamp Creek (west of the Corridor), Wallis Creek (east of the Corridor) and Testers Hollow (north of the corridor). The impacts of flooding are therefore relevant considerations for the planning of the Corridor.

During the 1% Annual Exceedance Probability (AEP) Event, the lower lying areas to the north, east and west of the Corridor become inundated. In the past, this has affected the movement of goods and people, particularly as MR195 / Cessnock Road access across Testers Hollow is lost.

Development and subdivision patterns are affected by this issue, with many of the new subdivisions within the URAs requiring dedicated riparian corridors, as well as stormwater detention and retention infrastructure to manage both stormwater quantity and quality from the adjacent development, in an effort to mimic pre-development flows.

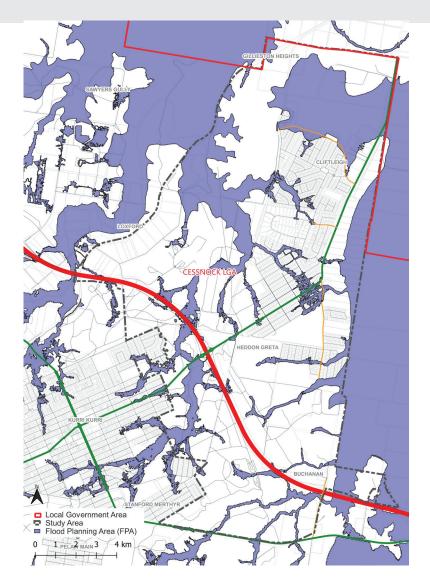


Figure 11: Floodprone land within/surrounding the Corridor

# **Existing Conditions**



Plate 20: Stormwater Management Infrastructure Example

#### Vegetation

Much of the undeveloped land within the Corridor (excluding floodplains) is heavily vegetated. Much of this vegetation comprises high biodiversity value and is sensitive to impacts from development and clearing.

This vegetation includes Threatened Ecological Communities (TECs). TECs represented include Kurri Sand Swamp Woodland, Central Hunter Ironbark-Spotted Gum – Grey Box Forest, Lower Hunter Spotted Gum – Ironbark Forest, Lower Hunter Red Gum – Paperbark Forest and the Lower Hunter Lowland Ironbark-Paperbark Forest.

Much of the land that comprises these TECs is also mapped on the NSW Biodiversity Values Map. This includes riparian corridors within the urban development footprint,

as well as some land zoned for development (zoned R2 Low Density Residential), such as undeveloped land within the Heddon Greta and Averys Village URAs.

Development of land to which this map applies automatically triggers a requirement for a Development Application to be supported by a Biodiversity Development Assessment Report (BDAR). Such a report must demonstrate how impact to the vegetation is proposed to be avoided in the first instance, then mitigated or managed.

Within the urban footprint of the corridor, vegetation cover is sparse. Within Heddon Greta, approximately 14% of the urban zone comprises canopy cover (most of which is located in the undeveloped area of R2 Low Density Residential land within the Heddon Greta URA), whilst approximately only 7% of the urban zone in Cliftleigh comprises canopy cover.

Limited urban canopy cover creates a "heat island" effect meaning that it is often hotter than areas comprising higher levels of vegetation cover. This can affect the rates of morbidity and mortality of a population, particularly in areas with a higher proportion of elderly people.

Increased vegetation cover has beneficial effects, resulting in generally cooler temperatures, which reduces demand on artificial cooling (i.e. air conditioning), but also has visual amenity benefits, as well as providing refuges for animals, and people during hot weather events.

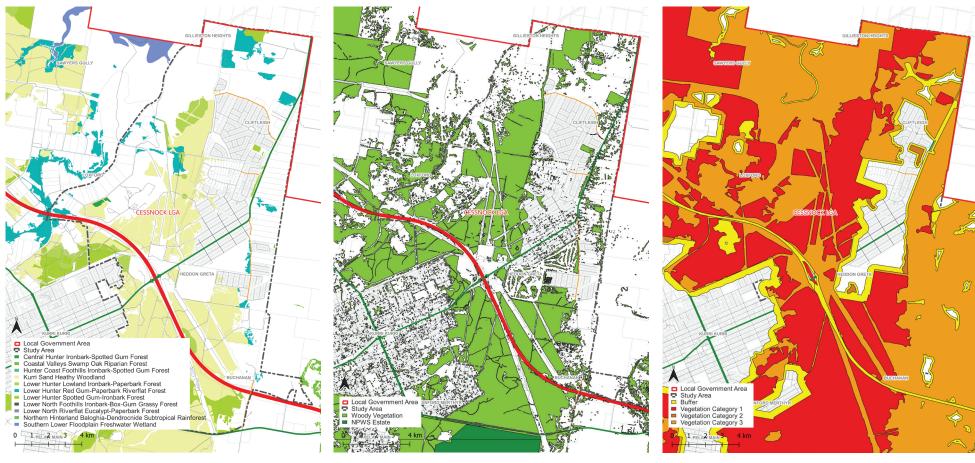


Figure 12 (Left): Mapped TECs within the Corridor

Figure 13 (Right): Canopy Cover within the Corridor

Figure 14: Bushfire Prone Land Vegetation Mapping

# **Existing Conditions**

#### **Bushfire**

The central core of the urban corridor is not mapped as being subject to bushfire risk, however the developed areas on the outer edge of subdivisions are a buffer area to bushfire prone vegetation.

Category 1, 2 and 3 bushfire prone vegetation surrounds existing developed areas<sup>11</sup> as well as undeveloped areas zoned for residential development, i.e. within the Heddon Greta URA.

Development within buffer and mapped vegetation areas requires additional levels of protection to minimise the risk of bushfire and ember attack, such as the construction of perimeter roads at the outer extents of subdivisions, as well as fixture treatments to individual dwellings, such as metal fly screens etc. Mitigation and management treatments are prescribed by Planning for Bushfire Protection (PBP) 2019.

### Heritage

Heritage items within the Corridor relate to operation of the former Ayrfield No. 1 Colliery and the South Maitland Railway Corridor which served many other coal mining operations within the LGA.

<sup>11</sup> Bushfire Prone Vegetation Mapping is currently being revised and which will remove some land from being subject to bushfire risk as a result of recent vegetation removal.

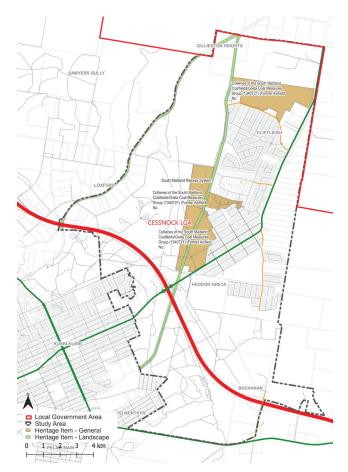
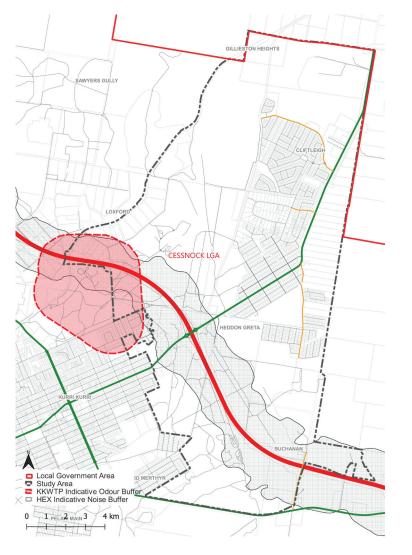


Figure 15: Heritage within the Corridor



#### Odour

Whilst located outside the Corridor, the potential or indicative odour buffers from the Kurri Kurri Wastewater Treatment Plan (being approximately 400m from the operational areas of wastewater treatment plant) intrude into the Corridor.

#### Noise

Located on the southern boundary of the Corridor, the HEX is a source of noise which can impact the amenity of adjoining development. An indicative noise buffer is outlined below, however additional, site specific monitoring and modelling may further define the actual area affected by the HEX operation. Additional treatments and mitigation measures are require for some dwellings located in close proximity to the HEX to ameliorate the noise impacts.

Figure 16: Indicative Kurri Treatment Plan Odour Contours and HEX Noise Buffer Extent

# **Existing Conditions**

# CONNECTIVITY

The road network within the Corridor comprises the HEX, MR195 (Cessnock Road) and a series of local collector roads and local streets.

Road access to the Corridor from the south (Kurri Kurri) is via Lang Street across/ through the HEX Interchange, or from the eastern or northern exits ramps on theHEX. Access from the north is via Cessnock Road from Gillieston Heights within theMaitland LGA.

Four-way T-intersections with full turning movements (with MR195) controlled by give-way signs operate at Earp Street, Young Street and Stanford Street. The Heddon Street/MR195 intersection currently operates with restricted left-in/left-out movements whilst construction works to install traffic signals are being undertaken. The traffic lights are expected to be operational by early 2023.

T-Junctions with left and right turning movements controlled by give-way signs exist with MR195 and Trenchard Street. The Traders Way intersectionpermits left turns only onto MR 195 via a seagull treatment.

Traffic signals on the William Tester Drive/MR195 intersection permit left and right turning movements to the north and south.

Many existing dwellings have direct access and driveways located along the extent of MR195. In some instances, this access is restricted to left-in/left-out movements, particularly in the northern extent of the corridor.

Local streets are generally orientated in a grid-like pattern, providing high levels of permeability. However the MR195 acts as a barrier to movement between the east and west of the Corridor, given its high traffic volume, which includes heavy freight. Access to key attractors within the corridor (including commercial premises and open space facilities) are affected by this barrier.

Footpaths (paths less than 2,500mm in width) and cycleways/shared paths (greater than 2,500mm in width)are provided in fragmented sections along the MR195 corridor.

Footpaths exist on some roads within the Cliftleigh URA. Shared Pathways are located along the primary/collector roads. Pedestrian movement on many roads within the subdivision is reliant on the road pavement or grassed verges.

Footpaths are provided on most local streets within Averys Village. There are no footpaths or shared pathways within the Heddon Greta URA or older subdivisions within the Corridor.

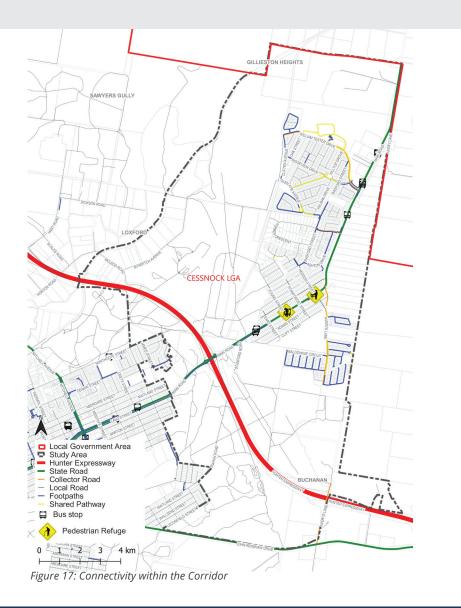
An informal car park is located adjacent to MR195/Stanford Road opposite the service centre located on southern end of MR195, utilised by commuters and car poolers. An informal car park is also located on the corner of Young Street/MR195 opposite theHeddon Greta Hotel.

Bus stops are located along the length of the MR195, on both the eastern and western sides of the road.

Bus services operate between Cessnock and Maitland (Route 164)<sup>12</sup>, including Maitland Train Station and Greenhills Shopping Centre generally at hourly intervals from 5:50am during the weekdays and similarly on weekends and public holidays commencing at 7:35am. Bus connections are available to Newcastle via John Renshaw Drive, however require transit to bus stops in Kurri Kurri (Rotary Park)<sup>13</sup>.

<sup>12</sup> Transport for NSW Timetable, Route 164, 166, 171 & 172, https://www.rovercoaches.com.au/ client\_images/2199050.pdf, accessed 14 February 2022

<sup>13</sup> Transport for NSW Timetable, Route 160 & 163, https://www.rovercoaches.com.au/client\_ images/2199048.pdf, accessed 14 February 2022



# SERVICING

#### Water and Sewer

The existing urban areas of the corridor are serviced by a network of water supply and sewerage management infrastructure.

This network is gradually expanding within the URAs. It is generally a requirement of development consent for the provision of essential services prior to the registration of subdivision.

The Corridor falls within the Hunter Water Kurri Kurri Wastewater Treatment Catchment, operated and managed by Hunter Water. The treatment works are located west of the HEX, on McLeod Road.

The plant services the populations of the towns/villages of Abermain, Weston, Kurri Kurri, Stanford Merthyr, Pelaw Main, Heddon Greta and Cliftleigh. Its current operational capacity is for a population of 21,500 people<sup>14</sup>.

An odour buffer exists around the treatment plant, within which, residential development is unsuitable.

There are a few localities within the Corridor which rely on On-Site Sewage Management Systems (OSSMs) to manage and disposal of wastewater and sewage. These areas include the large lot residential area of Cliftleigh East (located east of MR195), and land south of the Averys Village URA.

Water supply is also provided by Hunter Water from the Chichester Dam. Supply is made available to the locality from via a reservoir, located in Buttai, supported by a pumping station located at the northern end of Averys Lane.

<sup>14</sup> Kurri Kurri Wastewater Treatment Works, 2022, https://www.hunterwater.com.au/our-water/ wastewater-systems/wastewater-treatment-plants/kurri-kurri-wwtw, accessed 24 February 2022

# **Existing Conditions**

### Stormwater and Drainage

Formal stormwater management infrastructure is limited within the existing areas of Heddon Greta. Most infrastructure including detention/retention basins are provided within the newer subdivision areas around Forbes Crescent and within the Heddon Greta URA. More formal stormwater management infrastructure in the forms of kerb and guttering and retention/detention basins are located throughout the URAs of Cliftleigh and Averys Village.

#### Internet and NBN<sup>15</sup>

Fixed line NBN connectivity is available within the existing urban areas of the Corridor, including the Heddon Greta URA. Portions of the Cliftleigh and Averys Village URA also have access to the NBN network The fixed line network is being expanded and will be available to the rest of the Averys Village and Cliftleigh URA.

Areas outside of the urban area have access to the fixed wireless network. This includes land subject to current planning proposals, and land located west of MR 195.

### Gas and Electricity

The Corridor is located within the Ausgrid distribution area<sup>16</sup> for electricity supply, and within the coverage area of the Jemena NSW supply<sup>17</sup>.

Ausgrid have advised that there will be continued support for ensuring capacity within the electricity supply networks for the Corridor growth.

The northern extent of the corridor is within the proposed location of a gas supply pipeline from the existing Jemena supply network to service the gas-fired power generator to be located on the former Hydro Aluminum site.

### Street Lighting

Street lighting is provided at regular intervals throughout the Corridor extent.

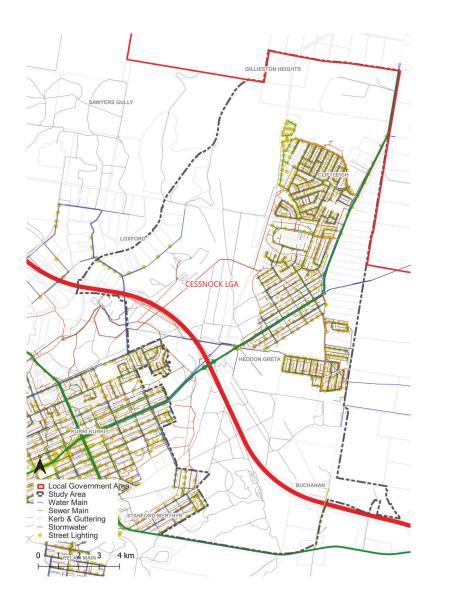


Figure 18: Servicing Infrastructure within the Corridor

<sup>15</sup> NBNCo Service Availability, 2022, https://www.nbnco.com.au/learn/rolloutmap?lat=-32.7881714&Ing=151.5182627&addressString=William%20Tester%20 Drive,%20Cliftleigh%20NSW,%20Australia&addressCategory=HOME&zoom=16, accessed 18 February 2022

<sup>16</sup> Ausgrid Network Area Check, 2020, https://www.ausgrid.com.au/Connections/ Network-area-check, accessed 18 February 2022

<sup>17</sup> Jemena Gas Networks (NSW) Ltd Service and access information for JGN's gas network, map, June 2021, https://jemena.com.au/documents/gas/jgn-service-andaccess-information/jgn-report\_pipeline-services-and-usage\_19072019\_ma.aspx, accessed 18 February 2022

# **INVESTIGATIONS AREAS**

There are a number of locations and areas within the Corridor that warrant further investigation. Not all areas would be suitable for future urban development, but some areas require a review of current zoning. In some cases, the zoning is inconsistent or anomalous given the existing uses or functions of the land.

#### Main Road North

This area is located on the northern end of the Corridor, and located north of Testers Hollow. It includes Lots 21 and 22 DP 1181574 and Lot 2 DP 1249763, being 504, 528 and 532 Main Road, Cliftleigh. Small portions of Lots 21 and 22 are located within the Maitland LGA.

Parts of the site are constrained and not be suitable for development.

The western portion of the site is constrained by TECs, including Lower Hunter Red Gum-Paperbark Riverflat Forest and Lower Hunter Spotted Gum-Ironbark Forest. The southern portion of the site is constrained by flooding and is unsuitable for development. Additionally, the western boundary of Lot 22 adjoins the South Maitland Railway Corridor.

The remaining area equates to approximately 25ha and may be suitable for investigation for a future URA..

#### Access

Modelling to date has identified the need to limit the number of intersections on MR195 for performance and safety reasons.

Direct access to and/or from the site off MR195 is not supported. The site will be reliant on future connections proposed to be established to MR195 by the Hydro Proposal, and the internal road network thereof.

#### Servicing

Whilst water is connected to the site, sewerage infrastructure is not. Confirmation from Hunter Water would be required to identify available capacity and augmentation or upgrade requirements to service residential development; in addition to a capacity and capability analysis for water supply.

An analysis of existing connections and opportunities for augmentation or extension for gas, electricity, internet/NBN is also required.

#### Biodiversity

Biodiversity Certification of the site in accordance with the provisions of the Biodiversity Conservation (BC) Act, 2016 be undertaken concurrently within any proposed rezoning.

#### Flooding

Modelling of flood events and impacts pre and post development, up to and including the 1% AEP and Probable Maximum Flood (PMF) event, plus a range of flood events/ scenarios which consider climate change.

#### Traffic Impact

Analysis of current, background and future growth, including consideration, resolution and mitigation impacts associated within the development on existing and proposed road, pedestrian and alternative transport infrastructure.

#### Open Space and Community Facilities

Analysis of the existing open space and community facilities within the Kurri Kurri Planning Areas (and the relevant Planning Area within the Maitland LGA), including resolution and supply of additional open space and community infrastructure.

At minimum, it would be expected that one area of functional and usable open space for the purposes of a local play space be provided within the development footprint in accordance with the standards of the ROSSP. Further, it would be expected that connectivity to other development within the locality through a series of shared cycleways be provided, as well as providing opportunities for passive recreation.

Additional contributions toward the provision of LGA wide, Regional and District Level facilities is also likely to be required.

Opportunities for a shared pathway route along the South Maitland Railway Corridor, with linkages and connections to similar pathways within the Maitland LGA and Richmond Vale Railway routes should also be investigated.

#### Heritage

Assessments of cultural and other heritage items should be undertaken using contemporary assessment and engagement methodologies. In particular, assessments should identify and make recommendations for the management and future use of the South Maitland Railway Corridor.

#### Noise

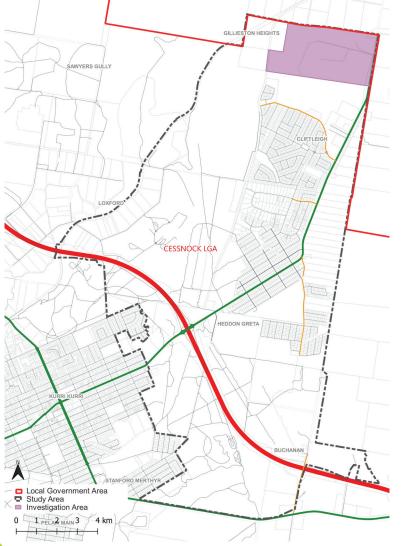
Assessment of noise impacts from the operation of MR195 should be assessed to determine any necessary treatments or setbacks required for residential development to attenuate traffic noise.

#### Bushfire

Identification and analysis of existing bushfire prone vegetation, with development within the future subdivision not exceeding Bushfire Attack Level (BAL) 29, and all Asset Protection Zones (APZs) located within any residentially zoned land. A perimeter road is likely to be required.

#### Gas Supply Pipeline

Identification of the route/location for the gas supply pipeline to the Snow Hydro gas-fired power generator and its proximity to proposed residential development is required. Consultation with the pipeline owner and a risk assessment is required which considers the "Draft Guidelines for Planning Proposals n**ear** High Pressure Dangerous Goods Pipelines" prepared by the Department of Planning and Environment, dated April 2022 (or as updated).



#### Recommendation

It is recommended that this site be included within UGMP as an investigation area for immediate investigation given the activity that is occurring within the corridor (and this site is a logical extension of that development activity) and the immediate need to integrate this site with the Hydro Development and the southern extension of the Gillieston Heights URA in Maitland.

A Proponent-led Planning Proposal would be required to rezone the land.

Given the constraints of the site, any proposal to rezone the land would need to be supported by investigative studies which addressed the following matters (at minimum). Additionally, consultation with relevant stakeholders, including but not limited to DP&E, TfNSW, Maitland City Council, Rural Fire Service (RFS), Hunter Water andHeritage NSW would be required to be undertaken.

Figure 19: Main Road North Investigation Area

#### Main Road East

Main Road East is a triangular area within located in the north of the Corridor, between MR195, the Wallis Creek floodplain and the Averys Village URA.

This area is zoned RU2 Rural Landscape and comprises two distinct areas or development characters.

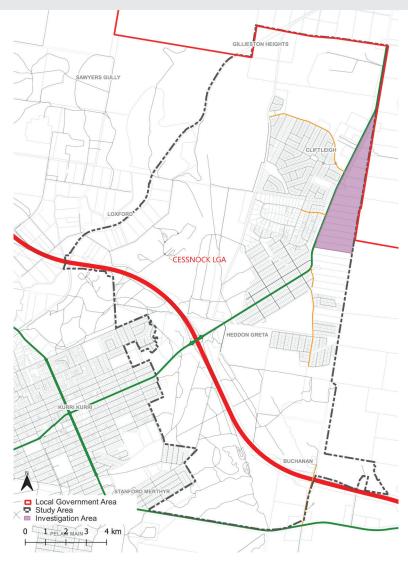
The first comprises predominantly low density residential development along the frontage of MR195. The second comprises large lot residential development. The small lots are in the order of approximately 930m<sup>2</sup>, whilst the larger are an average of approximately 2.4ha.

The service station in Cliftleigh on MR195 is the approximate point for differentiation between the two residential characters. Development in both areas are predominantly single dwellings.

Both localities have direct access to/from MR 195, however, this is restricted to left-in, left-out turning movements for the smaller lot residential area. Whilst right hand turn movements are generally available in the large lot residential area, the volume and speed of traffic, as well as poor sight lines, make this movement unsafe.

Analysis from TfNSW indicates that duplication of MR195 will be required. This will affect the large lot residential development area (as MR195 north of the service station already comprises four lanes), and some land acquisition for this purpose may be required. Further consideration of opportunities for laneway or service roads for access to private dwellings along this stretch of MR195 should be given during the design phase for the duplication, supported by an urban design plan.

Figure 20: Main Road East Investigation Area



Much of the rear of the large lot residential properties is affected by flooding during the 1% (and smaller) AEP events. Section 9.1 Ministerial Directions prohibit the rezoning of flood affected land for residential purposes. Therefore, a more appropriate zone, reflective of the characteristics of the land should be applied to this area.

Through the comprehensive review of residential zonings and provisions of CLEP 2011, consideration should be given to rezoning the area to a more suitable urban zone, reflective of the existing residential character. An R2 Low Density Residential zone should be considered for the northern area of this locality, whilst a split R5 Large Lot Residential zone/ Conservation zone or a C4 Environmental Living zone should be considered for the southern area. This should be considered concurrently with the range of permissible land uses and minimum lot sizes within each zone to avoid further unplanned subdivision and land fragmentation.

Additionally, any rezoning should have regard for any proposed rezoning proposed by the implementation of Council's Environmental Zoning Framework.

Subject to further consultation with Hunter Water, investigations should be undertaken to enable the connection of large lot residential areas to the reticulated sewerage network.

#### Stanford Road

There are opportunities to further investigate the land around the proposed commuter car park at Stanford Roadand MR195 in consultation with landowners and TfNSW.

Small scale food and drink premises (cafes) may be suitable in this location. This should be considered with opportunities to improve public domain to promote an active street frontage (such as paving, pedestrian crossings, plantings etc.)

Figure 21: Stanford Road Investigation Area



#### Kurri Kurri TAFE & Surrounds

Kurri TAFE is located in a bushland setting between Bowditch Avenue and the tributaries of Swamp Creek. Access is via McLeod Road across the HEX from Northcote Street, Kurri Kurri. It is currently zoned RU2 Rural Landscape.

The TAFE is an Educational Establishment providing vocational training opportunities across a broad range of sectors, including plant and machinery, hospitality, horticulture, turf management, viticulture and animal welfare (veterinary nursing)<sup>18</sup>.

The TAFE grounds include an administrative centre, auditorium, student accommodation, nursery, classrooms and industrial buildings. The grounds also provide areas for active learning opportunities for viticulture and turf management.

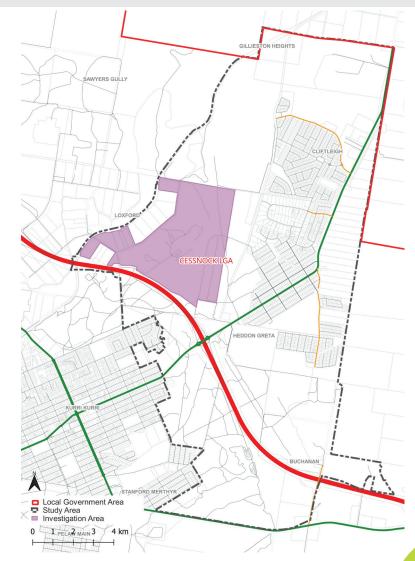
Despite its location in a bushland setting, and being a permissible use within the RU2 Rural Landscape zone, the range of land uses and activities undertaken within the grounds are not necessarily compatible with the objectives of the zone, particularly when considered in the context of the RU2 zone application across the wider LGA.

Through the comprehensive review of rural and/or special purpose zonings and provisions of CLEP 2011, investigation of an alternate zoning which retains opportunities for continued operation and growth of the TAFE operations, (such as an SP2 Special Purpose Zone), should be considered. This should also have regard for any proposed rezoning proposed by the implementation of Council's Environmental Zoning Framework.

Subject to the finalisation of the District Level playing field and community facilities, further opportunities exist for exploring partnerships with TAFE in this regard.

<sup>18</sup> TAFE NSW, Kurri Kurri, https://www.tafensw.edu.au/locations/hunter-central-coast/kurri-kurri, accessed 16 February 2022.

Figure 22: Kurri TAFE & Surrounds Investigation Area



#### **Averys Lane South Extension**

The Averys Lane South Extension investigation area is located south of the Averys Village URA, north of the HEX and west of Averys Lane. It also adjoins the land subject to the Averys Lane South Planning Proposal.

It comprises four parcels of land and is zoned RU2 Rural Landscape.

There is an opportunity to consider a rezoning of this site to enable some form of residential development, in conjunction with the Averys Lane South Proposal, should it proceed. Landowner discussions and additional investigations and relating to noise and servicing are likely to be required if this occurs. Such a proposal should also consider the application and land reservation requirements and Special Purpose zonings in the locality, in consultation with TfNSW.

In addition to the zones of sites identified above, there are a number of other sites within the Corridor that are zoned anomalously.

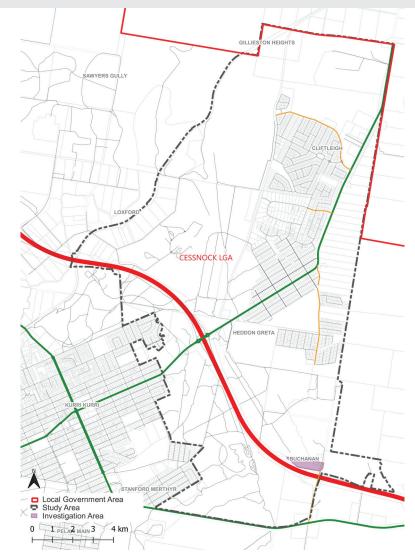


Figure 23: Averys Lane South Extension Investigation Area

#### Kurri Kurri Golf Course

The Kurri Kurri Golf Course investigation area is located within Heddon Greta with a primary frontage along Clift Street.

The Golf Course adjoins an established urban area, and the Averys Village URA. The Golf Course provides district level private recreation opportunities.

There is an opportunity to investigate future ancillary land use opportunities for the Kurri Kurri Golf Course. Activation of such uses would require enabling additional permitted uses on a site specific basis through an amendment to the Local Environmental Plan.

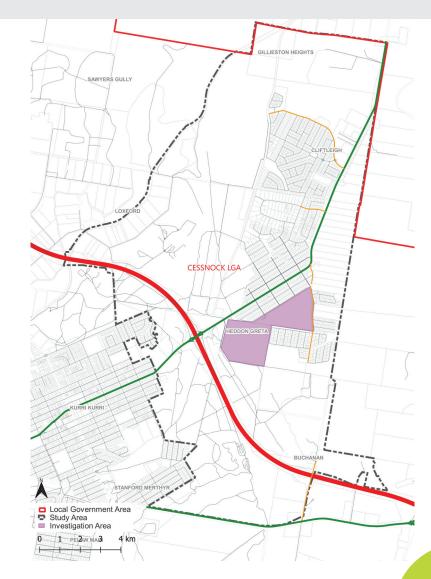


Figure 24: Kurri Kurri Golf Course

# **OPEN SPACE & COMMUNITY FACILITIES**

The requirements for the supply and provision of land or open space depend on the hierarchy (i.e. Regional, District or Local) and type of the open space (e.g. Sportsgrounds or Parks). This is calculated by a rate per person, as well as by proximity, based on the standards prescribed by the Recreation and Open Space Strategic Plan (ROSSP) 2019. Tables 3 & 4 outline these rates per hierarchy and type.

Table 3: Open Space and Recreation Provision	n Standards by Hierarchy <sup>19</sup>
--	--

Tier	Recreation Parks	Sportsgrounds
Local	0.5ha/1,000 people	N/A
District	0.6ha/1,000 people	0.9ha/1,000 people
Regional	0.2ha/1,000 people	0.6ha/1,000 people
Total	1.3ha/1,000 people	1.5ha/1,000 people

Table 4: Open Space and Recreation Catchments by Hierarchy<sup>23</sup>

Tier	Park	Sportsground
Local	500m	N/A
District	5km	5km
Regional	15km	15km

<sup>19</sup> Cessnock City Council Recreation and Open Space Strategic Plan 2019

### Regional Level Sportsground

The planned extension of Weston Bears Park and the retention of Varty Park will enable the establishment of two additional sporting fields. Combined, these facilities will provide the necessary level of infrastructure required for regional level sports facilities within the Kurri Kurri Planning Area.

### **Regional Level Parks**

Chinaman's Hollow Park is the Regional Level Park relevant to the Corridor Study Area.

The future projected population of the area which the park serves is projected to be approximately 31,100 persons in 2041<sup>20</sup>. At this projected population, an area of approximately 6.2ha is required for a Regional Level Park. The Park at Chinaman's Hollow comprises an area 7.33ha, meaning there is currently a surplus in supply for the projected future population. The Park is also located within 15km of most residents within the Corridor Study Area.

#### Table 5: Predicted Demand & Supply- District Sportsgrounds<sup>21</sup>

Tier	FUTURE (2041)						
	Population	Required	Supply	Surplus / Deficit			
		(ha)	Site	Area	(ha)		
District	13004	11.70	Hydro	3.88	-1.63		
			Birralee	6.20			
TOTAL	13004	11.70	N/A	10.08	-1.63		

#### District Level Sportsgrounds

Based on the projected population with the Corridor, there is a demand for approximately11.7ha of District Level Sportsgrounds (as per the standards of Council's Recreation and Open Space Strategic Plan, 2019). Table 5 outlines the available/ projected supply for District Level Sportsground facilities within the Corridor Study Area.

Whilst a District Level Sportsground is located at Cliftleigh Meadows - Testers Hollow, the locality is not ideal and is subject to flooding. Consequentially, access and utilisation is affected. This facility has therefore been excluded from assessing the future demands / supply of District Level Sportsgrounds.

The Hydro proposal identifies the provision of 6.6ha of land for the purposes of a District Level Sportsground and Playground.

Approximately 3.88ha of this land will be required for the provision of District Level Sportsgrounds, inclusive of areas required for circulation, landscaping, amenities and parking.

In combination with Birralee Park (sportsground component), the inclusion of the District Level Sportsground within the Hydro development, there remains a deficit in supply in the order of 1.6ha. If the utilisation of Cliftleigh Meadows did provide some level of supply (in the order of approximately 3ha during good weather), there would be surplus supply of District Level Sportsgrounds.

Notwithstanding the area deficit, the location of both Birralee Park and the Hydro facilities is such that there are no gaps within the corridor for the supply of District level Sportsgrounds, in terms of service catchments (i.e. within 5km of most residents).

<sup>20</sup> based on a consolidation of the population projections for the small areas of the Central Kurri Kurri Townships, Neath - Abermain-Weston & Surrounds, and the Kurri Kurri - Maitland Corridor. https://forecast.id.com.au/cessnock

<sup>21</sup> Cessnock City Council Population Forecast, September 2021, https://forecast.id.com.au/cessnock/about-forecast-areas?WebID=190, accessed 23 February 2022

#### **District Level Parks**

Based on the projected population with the Corridor, there is a demand for approximately 7.8ha of District Level Parks. Table 6 outlines the available/ projected supply for District Level Parks within the Corridor Study Area.

Table 6: Predicted Demand & Supply- District Level Parks<sup>22</sup>

Tier		FUTURE (2041)					
	Population	Required	Supply	Surplus / Deficit			
		(ha)	Site	(ha)			
District	13004	7.80	Cliftleigh Meadows	4.62	-0.60		
			Hydro	2.58			
TOTAL	13004	7.80		7.20	-0.60		

The Hydro proposal identifies the provision of 6.6ha of land for the purposes of a District Level Sportsground and Playground.

Approximately 2.58Ha of this land will be required for the provision of district level playing fields, inclusive of areas required for circulation, landscaping, amenities and parking.

In combination with the Cliftleigh Meadows District Park, the inclusion of the District Level Playground within the Hydro delivers a deficit of this category of Playground in the order of 0.6ha within the Corridor.

Council's recreation and Open Space Strategic Plan requires that District Level Parks comprise a minimum area of 2ha. The projected deficit is currently below this area, therefore an additional location for a District Level Playground is not required until this deficit area threshold is reached.

Further, the location of the existing and proposed Playground facilities is such that there are no gaps within the corridor for the supply of District Level Playgrounds, in terms of service catchments (i.e. within 5km of most residents).

### **District Community Facilities**

There are currently no District Community Facility provided within th Corridor Study Area. The current and (and draft) City Wide Contribution Plan is collecting funds for the provision of a Multipurpose Centre within the Kurri Kurri District (which incorporates the Kurri Kurri to Maitland Catchment, inclusive of the Corridor Structure Plan area).

The remaining land (of the 6.6ha) to be dedicated to Council within the Hydro Development will be sufficient to cater for the co-location of a district Multipurpose centre.

# District Level Sportsground and Parks Opportunities

Opportunities exist to promote connectivity between, and usage of, existing and future District Level Sportsgrounds, Parks and Community Facilities including:

- Creation of a shared pathway along the Glen Ayr / Ayrfield Spur line, with extension to connect to Maitland Station and to the Richmond Vale Trail head at Pelaw Main.
- Undertake additional planting of vegetation to increase canopy cover in existing District Level Parks.



Plate 21: Cliftleigh Meadows Play area

<sup>22</sup> Cessnock City Council Population Forecast, September 2021, https://forecast.id.com.au/cessnock/about-forecast-areas?WebID=190, accessed 23 February 2022

### Local Level Parks

Based on the projected population with the Corridor, there is a demand for approximately 7.8ha of Local Level Parks. Table 7 outlines the available/ projected supply for District Level Playgrounds within the Corridor Study Area.

Table 7: Current & Predicted Demand & Supply- Local Level Parks<sup>23</sup>

Tier	FUTURE (2041)					
	Population	Required	Supply		Surplus / Deficit	
		(ha)	Site	Area	(ha)	
Local	13004	6.50	Hedleigh Park	0.39	-2.02	
			Birralee Park	0.48	]	
			Hilltop Park (passive)	Hilltop Park (passive) 0.33		
			Cruden Circuit	Cruden Circuit 0.49		
			Buchanan Ridge	0.23		
			Hydro	2.15		
			Main Road North	0.41		
TOTAL	13004	6.50		4.48	-2.02	

Whilst the Madeline Street Reserve has been dedicated for the purposes of a Local Level Park, it is unsuitable for active play, therefore has been excluded from assessing the future demands / supply of Local Level Parks. The future provision of Local Level Parks within the Hydro development has been estimated to comprise an area of approximately 2.15ha, and 0.41ha within the nominated future investigation area of Main Road North.

There is a deficit of Local Level Parks within the Corridor approximately 2ha. The figure considers new and existing supply of Local Level Parks within the Corridor (including Birralee Park).

The gaps in supply are at the southern end of the Corridor, and centrally within the Corridor, between Forbes Crescent and MR195.

There are no outstanding requirements under existing Planning Agreements and Contribution Plans for the Heddon Greta and Averys Village URAs for the supply and embellishment of land for Local Level Parks.

<sup>23</sup>Cessnock City Council Population Forecast, September 2021, https://forecast.id.com.au/cessnock/about-forecast-areas?WebID=190, accessed 23 February 2022

### Local Level Park Opportunities

Opportunities exist for Council to negotiate additional land for Local Level Parks should the developer of the Heddon Greta URA pursue further subdivision of the remaining residentially zoned land within the URA.

Further development of this URA, and potential for supply of land for additional Local Level Parks will be contingent on the resolution of biodiversity issues.

Remaining options to reduce the deficit of local open space would rely on land being purchased from the open market. The retrospective supply of land for open space for existing deficits is difficult to achieve, particularly when the land required needs to be free of constraints and fit for purpose.

Generally, such land is already zoned for development purposes, therefore cost can be a prohibitive factor in making new areas of open space available.

Vacant residential land within the existing URAs comprising an area of approximately 600m<sup>2</sup> has a current market value of approximately \$420,000. To supply 2ha of land for open space purposes, land costs would be in the order of \$14 million, plus expenses and embellishment. In addition, the purchase of land in a single location would not meet the locational criteria of the ROSSP, i.e. for local level parks, land would need to be located within a 500m radius of all dwellings.

Further investigation of the feasibility to purchase developed land within the Forbes Crescent locality might be worth investigation, as land in this locality will address the supply gap. However, dwelling values in this locality could be in the order of \$1m -\$1.5m per lot, plus costs, demolition and embellishment.

In lieu of the ability to purchase additional land for Local Level Parks, an emphasis on strengthening connections to areas of existing local open space areas, and promoting embellishment of existing public owned land should be prioritised.

Opportunities exist to promote connectivity between, and usage of, existing and future Local Level Facilities including:

- Construction of shared pathways within the original areas of western and eastern Heddon Greta existing urban footprint, with connectivity to MR195 and local spaces west of the MR195 in the north of the Corridor;
- Creation of nature/walking trails along riparian corridors and the Wallis Creek floodplain;
- Seek opportunities for the embellishment of existing Local Level Parks (e.g. play equipment or similar, bicycle parking infrastructure etc.); and
- Undertake additional planting of vegetation to increase canopy cover in existing Local Level Parks.

Opportunities exist to provide areas for passive recreation, including:

- Establishing seating and tree plantings within stormwater detention/retention areas to provide opportunities for passive recreation (including Forbes Crescent, Cliftleigh and Averys Village URAs); and
- Seek opportunities to create or strengthen the green grid connections within the corridor.

### Education Establishments

Population growth within the corridor is likely to generate additional demand for primary and secondary school asset and non-asset infrastructure.

A school site has been identified within the masterplan prepared for the Hydro Planning Proposal locality, and Secretarys Environmental Assessment Requirements (SEARs) have been issued for a private school development in Gilleston Heights in order for the preparation of an Environmental Impact Statement (EIS) for the development.

Figures 26a (left) & 26b (right): Potential Public Domain Improvements



### CONNECTIVITY

A number of upgrades have been recommended to both the state and local road network through investigations undertaken by TfNSW and Council, in addition to conditions of development consent granted for development within the Corridor. These include infrastructure to support alternative transportation.

The timing for the delivery of the identified upgrades to the state road network is contingent upon a number of factors.

Additional modelling as a result of early land releases and some changes to development assumptions may alter the the timing for delivery of works.

Notwithstanding the above, it is definitive that the MR195 Corridor within the Heddon Greta – Cliftleigh Corridor will require duplication. TfNSW are currently working on an Integrated Plan and Strategic Business Case to further plan/program for the upgrade of MR195.

Many upgrades to the local road network are being undertaken in accordance with conditions of development consent, and/or WIK Agreements between Council and Developers. Others are funded by the City Wide Infrastructure Contribution Plan. The extent to which WIKs are being undertaken is outlined in Appendix 1.

### HEX (Main Road Interchange)

The following proposed upgrades are identified by TfNSW:

- Extension of the two lane interchange approach from Lang Street, and the eastern (Newcastle) and western (Branxton) exit ramps from the HEX;
- Additional left turn slip lane from the western exit ramp and acceleration lane on MR195
- Signal control of Main Road Interchange, located on the Lang Street approach and eastern exit ramp from the HEX (from Newcastle), and coupled with line marking to permit double lane right turns into Lang Street.

## MR195

The following proposed upgardes are identified to occur within the Cessnock LGA (listed by locality from the Cessnock LGA Boundary southward to the HEX) as identified by TfNSW:

- Construction of a shared pathway for the length of the MR195 on the southern
- side;
- Construction of a footpath for the length of the MR195 on the northern side;
- New two lane road, one lane in each direction with two metre shoulders, around 900 metres long between Gillieston Heights and Cliftleigh built alongside the existing Cessnock Road to improve flood immunity (Testers Hollow);
- (No change to intersection geometry at MR195/Averys Lane);
- (No change to signalised intersection at MR195/William Tester Drive);
- Seagull intersection at MR195/Traders Way. Ban on right turning movements (as per current conditions);

- Left-in/Left-out at MR195/Trenchard Street;
- Signalised intersection at MR195/Heddon Street with right turning lane on both north and south approaches and pedestrian crossing (under construction – Heddon Street is currently left-in/left-out while construction is being completed);
- · Left-in/Left-out at MR195/Stanford Street;
- Left-in/Left-out at MR195/Young Street;
- Left-in/Left-out at MR195/Earp Street;
- Signalised intersection at MR195/Stanford Road with right turning lane on both north and south approaches and pedestrian crossing; and
- Formalised Commuter Car Park at MR195/Stanford Road (south of MR195)

This plan proposes the following amendments to those intersection treatments identified by TfNSW, however, implementation will be dependent on the outcomes of additional modelling being undertaken for MR195 and TfNSW:

- Retention of the existing Cessnock Road at Testers Hollow permitting four lane (2 directional) travel north and south with the ability to run contra-flow on the new road in the event of future flood events;
- Full seagull intersection at MR195/Traders Way, permitting both left and right turning movements; and
- Signalised intersection at MR195/Young Street with right turning lane on both north and south approaches and pedestrian crossing.

The following proposed upgrades are identified within the Maitland LGA (in close proximity to the Corridor extent - listed by locality from the Cessnock LGA boundary northward towards Maitland):

- New two lane road, one lane in each direction with two metre shoulders, around 900 metres long between Gillieston Heights and Cliftleigh built alongside the existing Cessnock Road (Testers Hollow);
- New signalised T-Junction with Cessnock Road/Gillieston Heights South URA with left turn lane from northern approach and right turn lane from the southern approach; and
- New signalised T-Junction with Cessnock Road/Hydro Access with dual right turn lanes from the northern approach and left turn lane from the southern approach.

### Hydro

• A new major traffic link from Hart Road at the HEX to MR195/Cessnock Road at Gilleston Heights with support from Council for this road to be considered a future possible state road alternative link between Kurri Kurri and Maitland.

### John Renshaw Drive

• Upgrade of John Renshaw Drive/Averys Lane intersection to cater for a channelised right hand turn movement from the western approach, and auxiliary left hand acceleration lane from Averys Lane.

### Averys Lane

- Extension of Averys Lane to connect through Averys Village URA to John Renshaw Drive;
- Provision of eight bus stops within the URA;
- Reconstruct Averys Lane from Clift Street to Subdivision to a 9m wide carriageway;

- Installation of traffic calming device at Averys Lane northern connection to subdivision;
- Reconstruct Averys Lane to John Renshaw Drive to rural standards from southern end of subdivision;
- Construct a single lane roundabout at Averys Lane southern connection to subdivision;
- New off-road shared path along Averys Lane within the Averys Vil lage URA;

### Other Local Roads

- Upgrade Heddon Street from Main Road to Clift Street to a 9m wide carriageway;
- Reconstruction of Young Street (400m) including pavement rehabilitation and kerb and guttering;
- New off-road path along Main Road (Heddon Greta) Heddon Street to Earp Street;
- · Adams St Heddon St to Young Street reconstruct road with kerb and drainage;
- Stanford St Main Rd to Adam Street reconstruct road with kerb and drainage;

### South Maitland Railway Corridor

The South Maitland Railway Corridor and spur lines provides an excellent opportunity to provide greater levels of connectivity within the Corridor but also within the broader Planning Area and LGA.

Opportunities to improve connectivity within the corridor utilising the South Maitland Railway System include:

- Reactivation and refurbishment of the main line of the South Maitland Railway and platforms to provide passenger services to Maitland Station (and greater connection to the Hunter line). Broader connections beyond the Corridor Study Area (e.g. to Kurri Kurri) might also be explored;
- Creation of a shared pathway along the Glen Ayr / Ayrfield Spur line, with extension to connect to Maitland Station and to the Richmond Vale Trail head at Pelaw Main; and
- Providing a secondary collector road to connect to Maitland Station, to reduce pressures on MR195.

## **PUBLIC DOMAIN**

Many public domain improvement opportunities will be closely aligned with the proposed upgrades to the state and local road networks, as well as the opportunities relating to the provision and embellishment of open space.

It will be important for Council to continue to work with TfNSW to identify opportunities for improvement to the public domain along and promote the principles of Movement and Place adjoining the MR195 corridor. Opportunities for further discussion with TfNSW include:

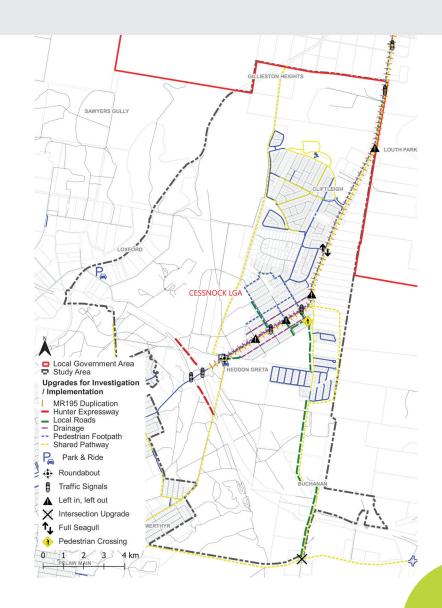
- Establishment of natural features and planting along the corridor to soften hard infrastructure, including potential opportunities for vegetation which provides canopy cover;
- Provision of bicycle parking facilities at the proposed Commuter Car Park, and in localities close to businesses;
- Alternative pavement treatments to shared pathways and/or footpaths, particularly in areas proximate to local businesses;
- Ensuring there are adequate opportunities and refuges for pedestrian crossings of the corridor in safe locations; and
- Introduction of fencing or barriers at strategic locations to restrict pedestrian movement across the corridor in dangerous or unsafe locations.

### SERVICING

Access to service infrastructure within the Corridor is generally available and provided prior to the release of residential allotments within URAs.

However, there are opportunities to improve drainage within the existing urban areas of the Corridor. Works are planned in this regard for Clift Street in Heddon Greta Further opportunities to improve the quality of wastewater entering riparian corridors exists and should be subject to further investigation.

Further consultation with Hunter Water should be undertaken to determine the feasibility of connection of large lot residential areas to the reticulated sewerage network.



*Figures 25: Potential Opportunities* 

# HEDDON GRETA – CLIFTLEIGH CORRIDOR STRUCTURE PLAN

#### **Revised Recommendations Timeframes**

Intermediate: 0-2 Years

Short: 3-5 Years Medium: 5-10 Years

Long: 10+ Years

Category	Work/Item/Proposal	Dependencies	Key Partner/s	Priority	Funding Source
District Level Parks and Sportsgrounds	Undertake additional planting of vegetation to increase canopy cover in existing District Level Parks.	Tree Strategy Funding In-house resource capacity	Open Space and Recreation	Short to medium	Future Operational Budget and / or grants
	<ul> <li>Seek opportunities for the embellishment of Cliftleigh Meadows Park to provide: <ul> <li>Toilets / Amenities</li> <li>BBQs</li> <li>Bicycle parking infrastructure</li> <li>Practice Hoops</li> <li>Additional shade structures</li> <li>Fencing</li> <li>Additional lighting</li> <li>Passive and active surveillance</li> <li>Skate Park</li> <li>Off leash dog area</li> </ul> </li> </ul>	Amenities Review Outcomes Funding In-house resource capacity	Open Space and Recreation	Intermediate	Future Operational Budget and / or grants
Local Level Parks	If opportunity arises, investigate the purchase of land in/around Forbes Crescent for a future local park.	Land availability Funding	Open Space and Recreation Property	Long	Future Operational Budget and / or grants
	Provide in principle support for the negotiation of a local level park within are new subdivision which occurs within the Heddon Greta URA.	Funding	Strategic Planning Open Space and Recreation	Short to medium	In-house Planning Agreement and /or Development Contributions

Category	Work/Item/Proposal	Dependencies	Key Partner/s	Priority	Funding Source
Local Level Parks (cont.)	<ul> <li>Seek opportunities for the embellishment of Hedleigh Park to provide:</li> <li>Toilets / Amenities</li> <li>Bicycle parking infrastructure</li> <li>Practice hoops</li> <li>Shade structures</li> <li>Fencing</li> <li>Additional Lighting</li> <li>Passive and active surveillance</li> </ul>	Amenities Review Outcomes Funding In-house resource capacity	Open Space and Recreation	Short to medium	Future Operational Budget and / or grants
	Undertake additional planting of vegetation to increase canopy cover in Hill Top Park and Hedleigh Park.	Tree Strategy Funding In-house resource capacity	Open Space and Recreation	Short to medium	Future Operational Budget and / or grants
Passive & Informal Recreation	Creation of nature/walking trails along riparian corridors and the Wallis Creek floodplain.	Funding In-house resource capacity	Open Space and Recreation	Medium to long	Future Operational Budget and / or grants
	Investigate opportunities to provide seating and tree plantings within stormwater detention/retention areas to provide opportunities for passive recreation (e.g. Forbes Crescent, Cliftleigh and Averys Village URAs) and improve stormwater management.	Existing Plans of Management Funding In-house resource capacity	Open Space and Recreation	Short to medium	Future Operational Budget and / or grants

Category	Work/Item/Proposal	Dependencies	Key Partner/s	Priority	Funding Source
Community Infrastructure	Undertake discussions with emergency service agencies (e.g. Fire and Rescue, SES, Ambulance NSW etc.) to identify the need for location of such services within the Corridor	N/A	Strategic Planning	Intermediate	In-house
	Develop concepts and plans for the delivery	Hydro Development	Strategic Planning	Medium to long	Development
	of the multi-purpose community facility within the Hydro development.	timing	Community Planning		Contributions and
		Funding	Open Space and		Future Operational
		In-house resource capacity	Recreation		Budget and / or grants
			Hydro		
Connectivity	Through revisions to the Traffic & Transport Strategy, investigate opportunities to provide for improved internal pedestrian / cycleway connectivity within the existing (original) urban areas of Heddon Greta through the strategic location of pedestrian/shared pathways on local roads.	Revised Traffic and	Strategic Planning	Short to medium	Future Operational
		Transport Strategy (Alternative Transport Plan)	Open Space and Recreation		Budget and / or grants
		Pedestrian Access and Mobility Plan	Traffic and Transport		
		Cycling Strategy			
		Funding			
		In-house resource capacity			

Category	Work/Item/Proposal	Dependencies	Key Partner/s	Priority	Funding Source
Connectivity (cont.)	Investigate opportunities to reactive the main South Maitland Railway line for passenger services to connect to Maitland Station.	MR 195 Strategic Business Case	TfNSW Traffic and Transport	Long	State Government
		Revised Traffic and Transport Strategy (Alternative Transport Plan)			
		Pedestrian Access and Mobility Plan			
		Cycling Strategy			
		Funding			
	Investigate opportunities for the creation of a shared pathway along the Glen Ayr /	MR 195 Strategic Business Case	Traffic and Transport Open Space and Recreation	ace and	Future Operational Budget and / or grants
to N	to Maitland Station and to the Richmond Vale Trail head at Pelaw Main.	Revised Traffic and Transport Strategy (Alternative Transport Plan)			
		Pedestrian Access and Mobility Plan			
		Cycling Strategy			
		Funding			
		In-house resource capacity			

Category	Work/Item/Proposal	Dependencies	Key Partner/s	Priority	Funding Source
Connectivity (cont.)	Investigate an additional Park and Ride	In-house resource	Strategic Planning	Medium to long	Future Operational
	Commuter hub on McLeod Road	capacity	Traffic and Transport		Budget and / or grants
	Provision of bicycle parking facilities at	MR 195 Strategic	TfNSW	Medium to long	State Government
	the proposed Commuter Car Park, and in localities close to businesses within the	Business Case	Traffic and Transport		Future Operational
	Corridor	Revised Traffic and Transport Strategy (Alternative Transport Plan)			Budget and / or grants
		Pedestrian Access and Mobility Plan			
		Cycling Strategy			
		Funding			
		In-house resource capacity			
Natural features & Character	Through the comprehensive review of residential zonings and provisions of CLEP 2011, seek to ensure that any future subdivision within Heddon Greta appropriately responds to natural features of the land and existing character of adjoining development by providing for lot sizes comparable with the existing character of development in which they are located.	In-house resource capacity	Strategic Planning	Short to medium	In-house

Category	Work/Item/Proposal	Dependencies	Key Partner/s	Priority	Funding Source
Public Domain	Establishment of natural features and	MR 195 Strategic	Strategic Planning	Medium to long	State Government
	additional planting along the corridor to soften hard infrastructure, including	Business Case	Traffic and Transport		Future Operational
	vegetation which provides canopy cover		TfNSW		Budgets and / or grants
	Alternative pavement treatments to shared pathways and/or footpaths, particularly in areas proximate to local businesses				
MR 195	Utilise the proposed intersection treatments	MR 195 Strategic	Strategic Planning	Short	In-house
	identified in this plan to inform further discussions with TfNSW through the MR195 Working Group.	Business Case	Traffic and Transport		
	Consider introducing laneways or service roads for access to private dwellings along MR195, supported by an urban design plan.		TfNSW	Medium to long	State Government
	Ensure there are multiple safe pedestrian crossing opportunities of MR 195 at accessible locations within the Corridor.				
Local Roads and	Investigate options (such as additional speed	Revised Traffic and	Traffic and Transport	Short to medium	Future Operational
Drainage	signage and traffic calming devices and pedestrian crossings) to improve road safety	Transport Strategy		Dependant on available	Budgets and / or grants
	within the local roads within the Corridor.	Funding		funding and resources.	
		In-house resource capacity			
	Investigate the suitability of connection of Clift Street to Stanford Road	Revised Traffic and Transport Strategy	Traffic and Transport	Short to medium	Future Operational Budgets and / or grants
		Funding			
		In-house resource capacity			

Category	Work/Item/Proposal	Dependencies	Key Partner/s	Priority	Funding Source
Local Roads and Drainage (cont.)	Design an investigation program (with potential for expansion across the LGA) to assess current local road and drainage infrastructure and identify and prioritise upgrades to improve existing conditions.	Revised Traffic and Transport Strategy Funding In-house capacity	Traffic and Transport Roads Infrastructure	Long	Future Operational Budgets and / or grants
	Through the review of CDCP 2010, review design standards for local roads, including carriageway and pavement widths, and kerb types.	In-house capacity	Strategic Planning Development Assessment Traffic and Transport	Short to Medium	In-house
Servicing	Undertake discussions with Hunter Water to determine the capability/feasibility of connecting existing large lot residential areas to the reticulated sewerage network.	N/A	Strategic Planning Hunter Water	Intermediate	In-house
Investigation Areas	Main Road North During the next review of the UGMP, identify the Main Road North Investigation Area described by this plan as a URA for immediate investigation.	UGMP Review process	Strategic Planning	Short	In-house
	Main Road East Through the comprehensive review of residential zonings and provisions of CLEP 2011, consideration be given to rezoning the area to a more suitable urban / conservation zone, reflective of the existing residential character.	CLEP 2011 Review process	Strategic Planning	Short	In-house

Category	Work/Item/Proposal	Dependencies	Key Partner/s	Priority	Funding Source
Investigation Areas	Stanford Road South	MR 195 Strategic	Strategic Planning	Short to medium	State Government
(cont.)	Consider opportunities to permit small scale food and drink premises (cafes) on the corner of Stanford Road and MR195 in consultation with landowners and TfNSW. This should be considered with opportunities to improve public domain (such as paving, pedestrian crossings, plantings etc.).	Business Case In-house resource capacity	TfNSW		Future Operational Budget and / or grants
	Averys Lane South Extension Subject to progression of the Averys Lane South Planning Proposal, and in consultation with landowners, consider a rezoning to enable a residential zone.	Landowner	Strategic Planning	Short to medium	In-house
	Kurri Kurri TAFE & Surrounds Through the comprehensive review of CLEP 2011 and in consultation with Kurri Kurri TAFE, consideration be given to rezoning the area to a more suitable zone, reflective of the existing land uses.	Landowner CLEP 2011 Review process	Strategic Planning	Short to medium	In-house
	Kurri Kurri Golf Course Provide in principle support for the investigation of ancillary land use opportunities for Kurri Kurri Golf Course, subject to amendments to the LEP to enable such uses.	Landowner CLEP 2011 Review process	Strategic Planning Landowner	Short to medium	Landowner

# Appendix 1 Planning Agreement Requirements

URA	City Wide Contributions				Local Contributions		Land	Open Space	Pedestrian	Bus Stops	Road / Drainage
	Kurri Indoor Sports Facilities	Kurri Aquatic Centre	Performing Arts Centre	Library	Child Care Centre	Multi- purpose centre	Acquisition / Dedication	Embellishment	/ Shared Pathways		/ Environmental Works
Heddon Greta <sup>28</sup>	•	•	•	•	N/A	N/A	5,000m² for local	Embellishment of local playground	Financial contribution	Financial Contribution	Reconstruction of Young Street (400m)
							playground		towards pedestrian pathway on MR95 from Trenchard to Earp Street	to external bus	including pavement rehabilitation and kerb and guttering
									Construction of 0.9km of pedestrian / cycle pathway on Young Street	-	

<sup>28</sup> Contributions for DA/8/2015/106/1 were levied incorrectly against the City Wide Infrastructure Contribution Plan and did not reflect the contributions agreed to within the PA.

URA	City Wide Contributions		Local Con	tributions	Land Open Space		Pedestrian	Bus	Road / Drainage / Environmental		
	Kurri Indoor Sports Facilities	Kurri Aquatic Centre	Performing Arts Centre	Library	Child Care Centre	Multi- purpose centre	Acquisition / Dedication	Embellishment	/ Shared Pathways	Stops	Works
Averys Village							Dedication of land zoned C2 land to Minister for Environment	N/A	Pedestrian path along Averys Lane and Heddon Street	8 bus stops within the	Staged construction of MR195 intersection upgrade, including land acquisition, service relocation, pedestrian refuges and installation of signals
							for inclusion within NPWS Estate		Pedestrian path along MR195 between Heddon and Stanford Streets		Upgrade Heddon Street from Main Road to Clift Street to a 9m wide carriageway
									Off-road path along Averys Land from/		Reconstruct Averys Lane from Clift Street to Subdivision to a 9m wide carriageway
									within the URA to Main Road		Installation of traffic calming device at Averys Lane northern connection to subdivision
											Reconstruct Averys Lane to John Renshaw Drive to rural standards from southern end of subdivision
											Construct a single lane roundabout at Averys Lane southern connection to subdivision <sup>29</sup>

<sup>29</sup> Provision/Design may alter subject to further refinement of Development Applications

# Appendix 1

# **Planning Agreement Requirements**

URA	City Wide Contributions			Local Cont	tributions	Land	Open Space Pedestrian Bus			Road / Drainage / Environmental	
	Kurri Indoor Sports Facilities	Kurri Aquatic Centre	Performing Arts Centre	Library	Child Care Centre	Multi- purpose centre	Acquisition / Dedication	Embellishment	/ Shared Pathways	Stops	Works
Cliftleigh							46.84 ha Testers Hollow Open Space 1,000m <sup>2</sup> Open		Financial contribution towards external cycleway Financial		Testers Hollow Wetland Construction, rehabilitation works and Maintenance (5 years) Financial contribution to pedestrian
							Space at William Tester Drive	Embellishment of	contribution to cycle link to Kurri Kurri		Financial contribution to rationalizing
							Recreation Facilities	kick-about space			MR195 access
							local park	Hilltop Park			Streetscape / Parking
							space adjacent to existing open space and recreational facility on				
							William Tester Drive				



