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FEBRUARY 2023

CLIENT

Parkes Shire Council

PROJECT

**Parkes Housing Strategy
Release Area Masterplanning**

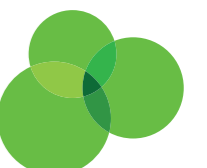
DOCUMENT TITLE

Middleton Urban Masterplan

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**PARKES HOUSING STRATEGY
RELEASE AREA MASTERPLANNING
MIDDLETON URBAN MASTERPLAN**

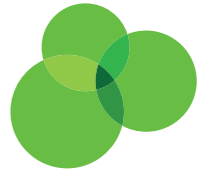
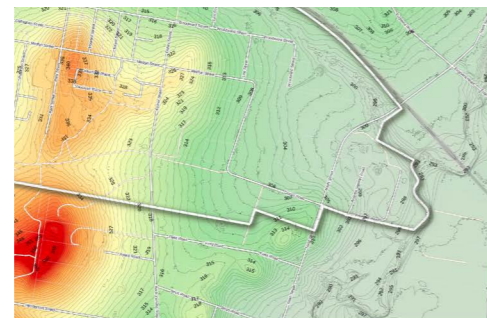
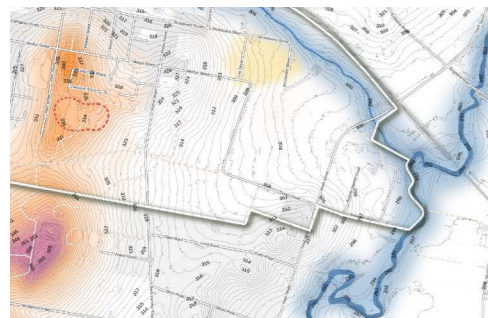
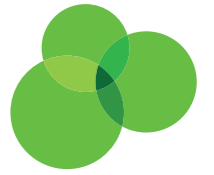


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PROJECT INTRODUCTION 01

1.1 SITE LOCATION

Middleton is located on the southern area of Parkes and is bound by the Orange Broken Hill Railway Line to the north, Goobang Creek to the east, Newell Highway (Forbes Road) to the west and the Morrissey Way (southern ring road corridor) to the south.

Map 1 shows the location of Middleton in relation to the Parkes Urban Area.

1.2 SITE HISTORY

Middleton was named after Parkes local war hero Rawdon Hume Middleton VC, who sacrificed his life for the sake of others during WWII. The area comprises existing residential housing estates, Middleton Public School, industrial and commercial land-uses, open spaces and areas of vacant residential zoned land.

1.3 SITE DESCRIPTION

Existing residential housing areas comprise detached single storey late 19th and 20th Century dwellings as well as dwellings of more recent origin, including Suburban Moderne, Austerity and Contemporary (70s) styles. The majority of residential parcels are just under the typical quarter acre lots and a 6-metre building line predominates. Typically, 'open' front fences have mostly been constructed on the property line which are generally open and low (less than 700mm in height with some as low as 200mm) and are generally of timber, wrought iron and masonry construction.


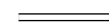
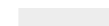

The eastern edge of Middleton has been partly developed with large lot residential parcels with houses, sheds and small farms. The precinct contains a mix of brick, fibro, weatherboard and transportable dwellings ranging from housing built in the 1950s through to modern brick dwellings. Substantial building lines predominate with mostly stock proof fences and landscaping. Large vacant parcels (some with native vegetation) are interspersed throughout the large lot residential precinct with open drains and minimal street infrastructure.

Middleton includes the elongated open space area of Pac Park, which is characterised by open grassed areas and a landscaped riparian channel that drains to the Goobang Creek further to the south-east.

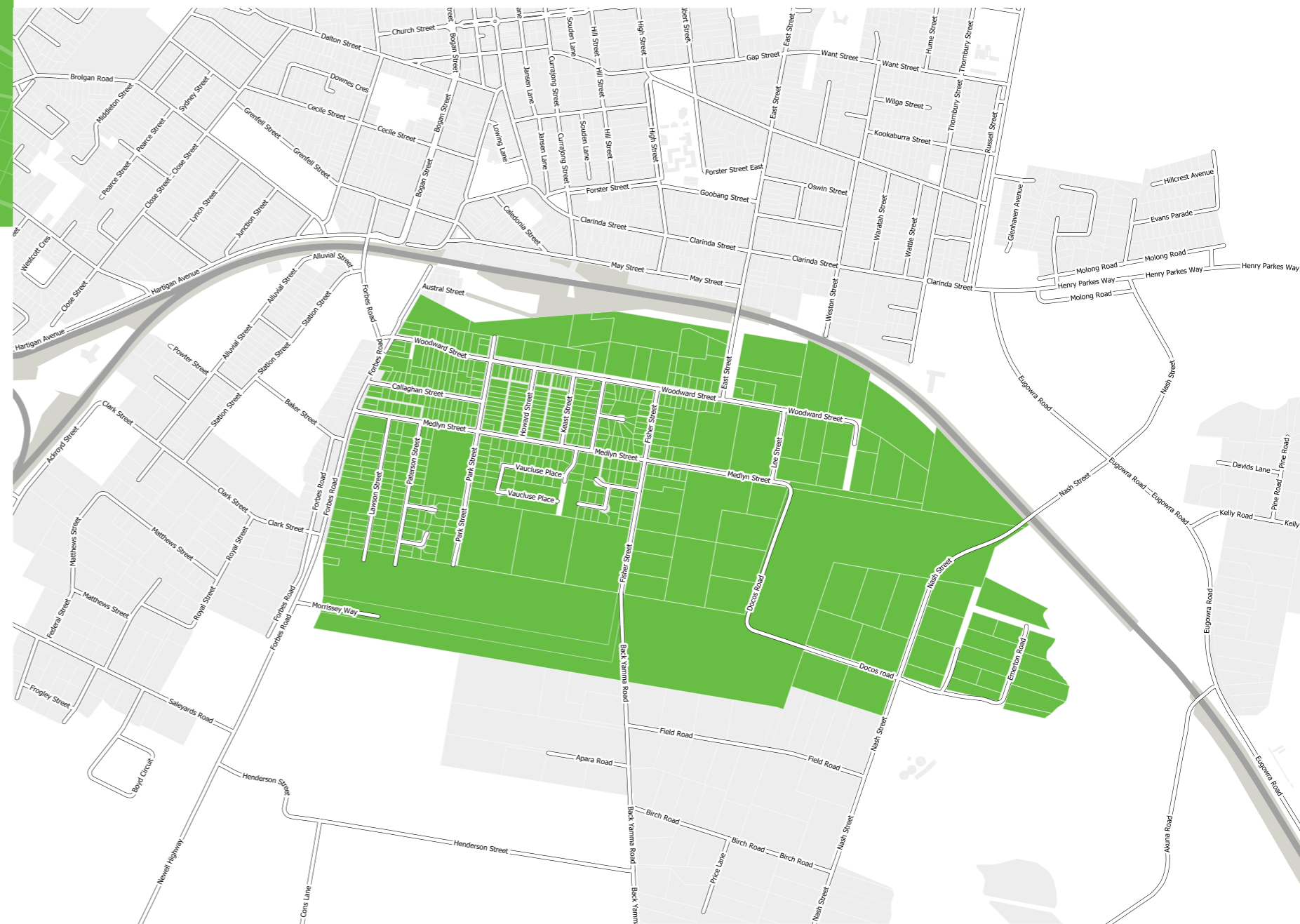
Existing industrial land-uses are confined along the northern side of Woodward Street which interface with detached housing south of Woodward Street as well as Pac Park and railways to the north.

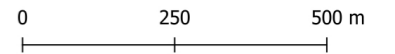
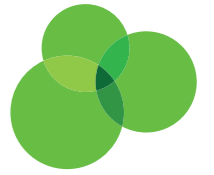
The Parkes Hospital is a new public facility constructed in 2016 on the western border of Middleton on the corner of Morrissey Way and the Forbes Road.

Large areas of Crown Land border the southern edge of the rail corridor as well as southern edge of Middleton. Historically, these areas have served as the Travelling Stock Route around the southern edge of Parkes and have more recently been identified as an infrastructure road corridor for a southern ring road.

-  Orange to Broken Hill Railway
-  Local Road Network
-  Existing Urban Land-use
-  Middleton

MAP NO. 1 - SITE LOCATION MAP





MAP NO. 2 - PROJECT STUDY AREA



1.4 PROJECT BRIEF

The Parkes Shire Housing Strategy 2021 identifies areas of Parkes for future residential housing development, with Middleton shown as Stage 1 residential release, due to its proximity to infrastructure services and the urban area of Parkes.

Parkes Shire Council at its Ordinary Meeting held on 15 March 2022, resolved to progress the development of a housing Masterplan for Middleton.

The development of the Middleton Masterplan has been undertaken by Parkes Shire Council in three key stages:

1. Site investigation - to inform the key directions for design, physical constraints and opportunities.
2. Vision - to determine desired outcomes in relation to infrastructure, public spaces, aesthetics and other issues.
3. Masterplan - to set clear strategy for urban growth, with a coordinated approach to the staging of infrastructure.

Community stakeholders have been consulted in relation to Stages 1 and 2, with the feedback received informing the brief for the preparation of a Draft Middleton Masterplan by Currajong Pty Ltd.

1.5 STUDY SCOPE

The Middleton Masterplan presents a plan which covers the entire Middleton area, bordered by the Orange Broken Hill Railway Line to the north, Forbes Road to the west, Morrissey Way (southern ring road corridor) to the south and Goobang Creek to the east.

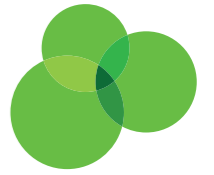
The Middleton Masterplan provides a vision for optimal use of the urban land resource while ensuring protection of the environment and enhancing the lifestyle of residents already living in the area. The Masterplan also provides a framework for new development, which will guide developers and Council in decision making around the provision of infrastructure and staging of development.

Middleton Masterplan will support a future Planning Proposal to rezone land from R5 Large Lot Residential to R1 General Residential.

The primary focus of the Masterplan is to:

- + ensure that any new development is carried out in a coordinated and sustainable manner
- + Providing opportunities for the new development either by existing landowners or by other stakeholders with necessary capacity.

Map 2 shows the scope of the Middleton study area.



STRATEGIC CONTEXT 02

2.1 PARKES LOCAL ENVIRONMENTAL PLAN 2012

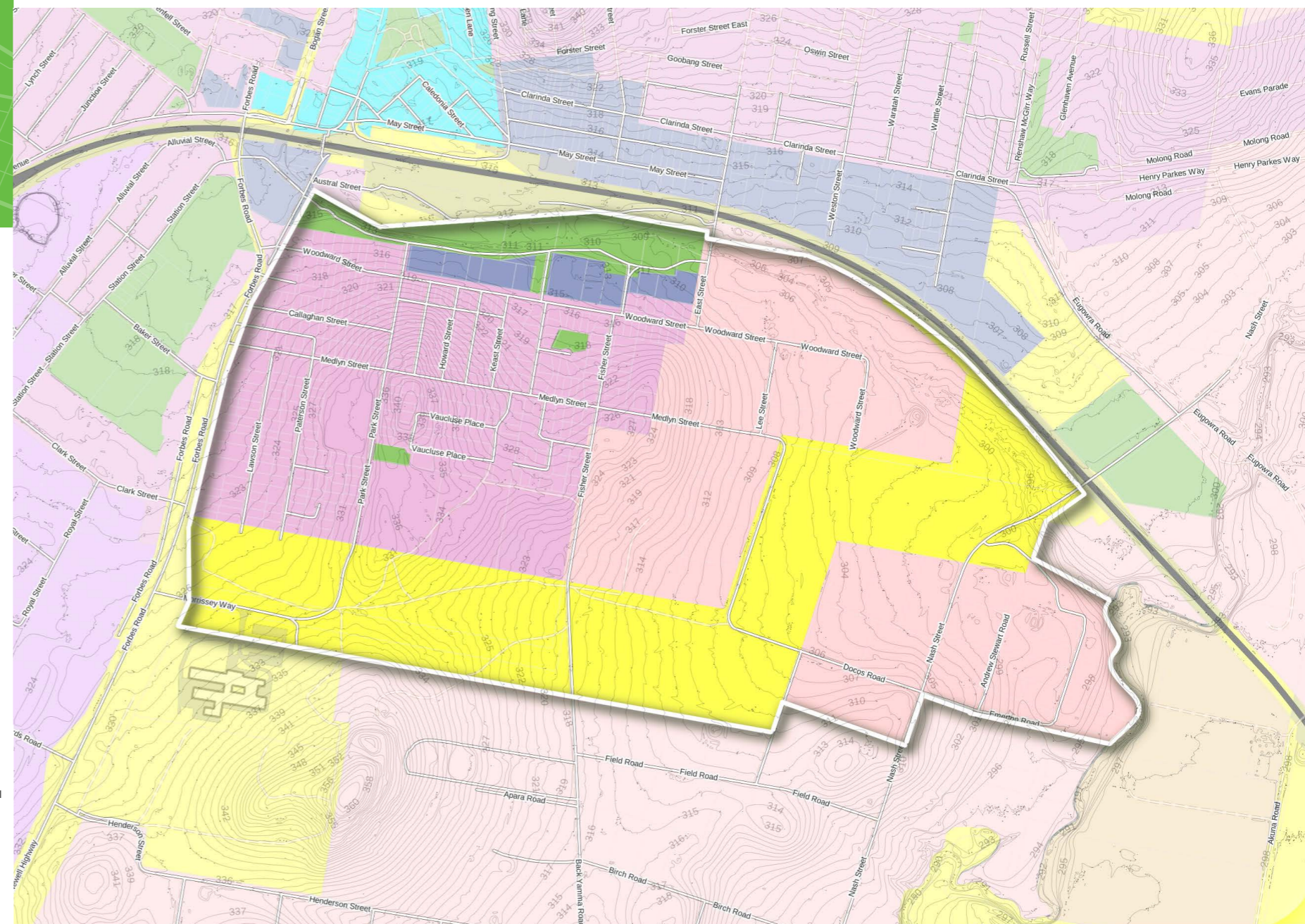
The Middleton study area comprises land that is predominantly zoned R1 General Residential and R5 Large Lot Residential. Land zoned SP2 Infrastructure is located along the southern fringe of Parkes, which accommodates the Parkes Hospital and the first stage of Morrissey Way which is intended to eventually link to Back Yamma Road and then further onto Nash Street. Open space areas are zoned RE1 Public Recreation and include Pac Park bordering the Orange to Broken Hill Railway and comprising riparian areas draining south-east to the Goobang Creek.

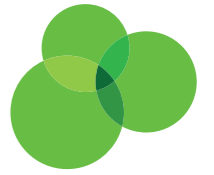
Map 3 shows the current zoning in the Middleton area.

B1 Neighbourhood Centre	IN2 Light Industrial
B2 Local Centre	R1 General Residential
B3 Commercial core	R2 Low Density Residential
B4 Mixed Use	R3 Medium Density Residential
B5 Business Development	R5 Large Lot Residential
B6 Enterprise Corridor	RE1 Public Recreation
B7 Business Park	RE2 Private Recreation
E2 Environmental Conservation	RU1 Primary Production
E3 Environmental Management	RU5 Village
E4 Environmental Living	SP2 Infrastructure
IN1 General Industrial	SP3 Tourist

MAP NO. 3 - EXISTING LAND ZONING MAP

0 250 500 m





2.2 PARKES SHIRE LOCAL STRATEGIC PLANNING STATEMENT 2020-40

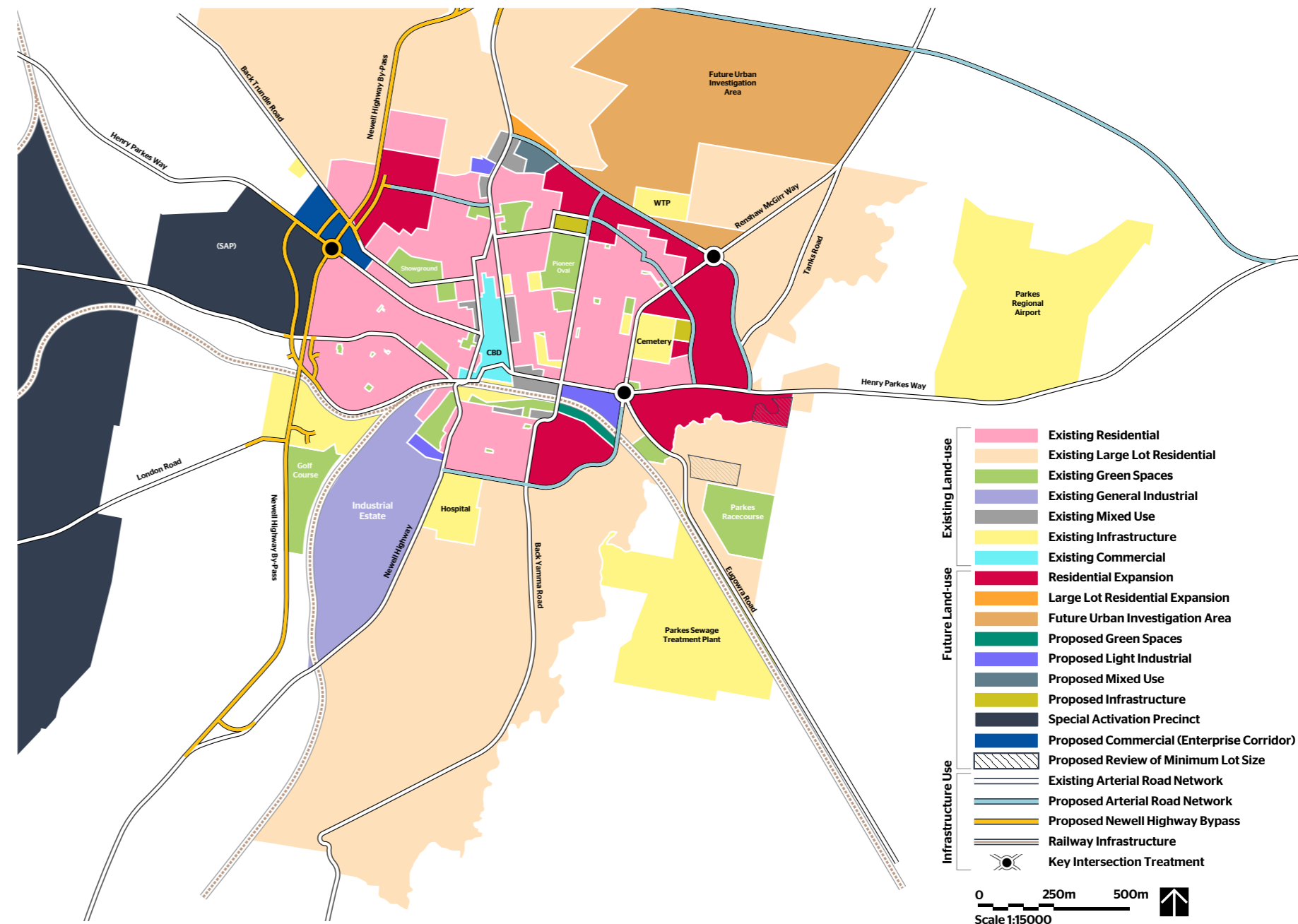
The Parkes Shire Local Strategic Planning Statement (Parkes LSPS) was adopted by Parkes Shire Council in 2020 to identify the following:

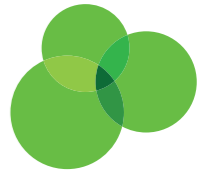
1. The basis for strategic planning in the area, having regard to economic, social and environmental matters.
2. The planning priorities for the area, consistent with any strategic plan applying to the area and any applicable community strategic plan under Section 402 of the NSW Local Government Act 1993.
3. The actions required for achieving those planning priorities.
4. The basis on which Council is to monitor and report on the implementation of those actions.

The Parkes LSPS identified areas of land for future residential development, which requires further investigation to determine future demand, constraints and opportunities, infrastructure and servicing requirements, lot sizes and housing types and the logical release of serviced land for residential development. The Middleton area was identified as an area with potential for further residential development and expansion in the Parkes LSPS.

Map 4 shows the Parkes LSPS Framework Map for the Parkes Urban Area.

MAP NO. 4 - PARKES LSPS URBAN FRAMEWORK MAP





2.3 PARKES SHIRE HOUSING STRATEGY 2021

The Parkes Shire Housing Strategy (PSHS) was adopted by Parkes Shire Council in 2021 to set the vision for sustainable growth within the residential expansion areas identified in the Parkes LSPS. The housing strategy identified the key areas for residential expansion through existing undeveloped residential zoned land as well as the residential expansion areas.

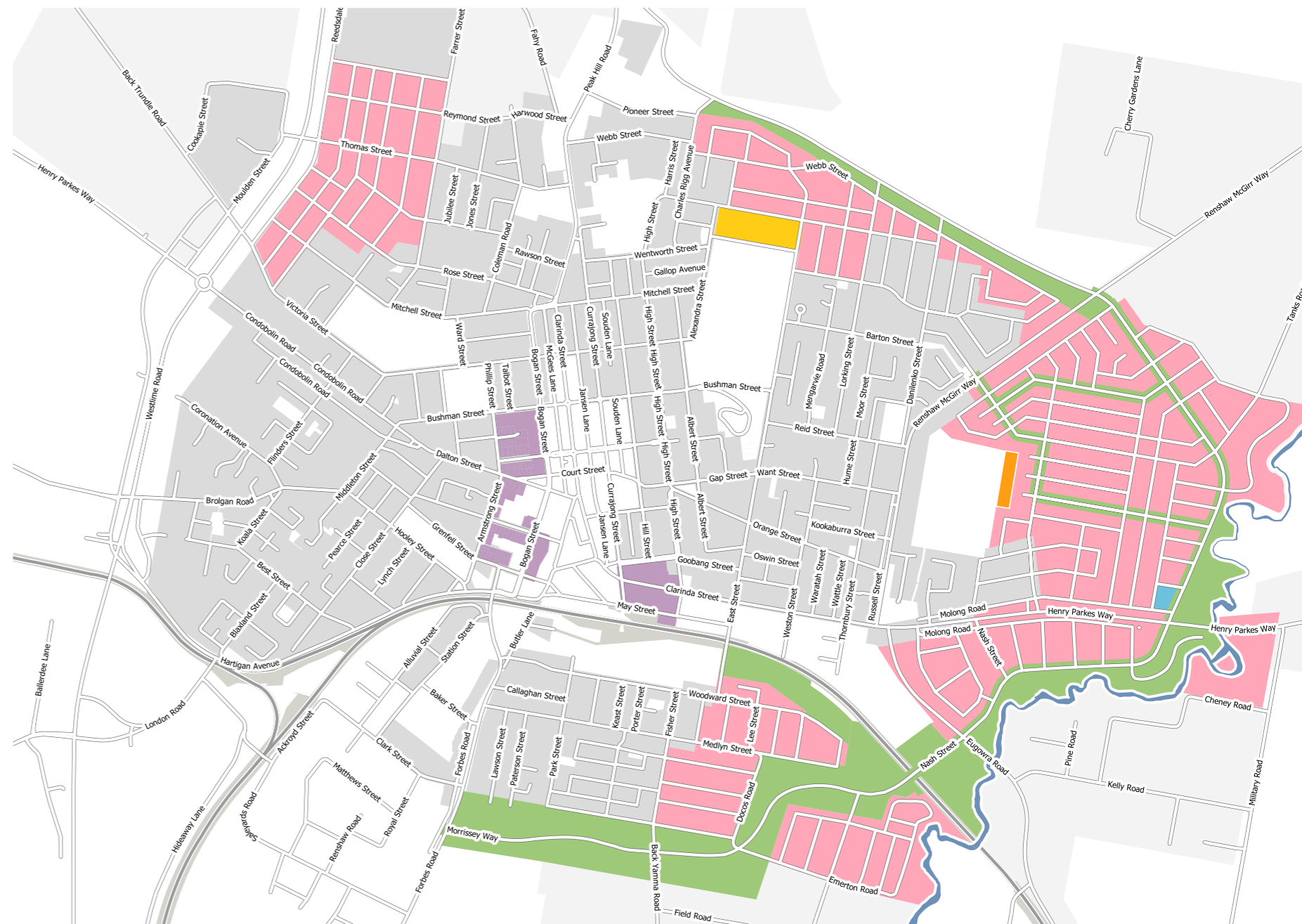
The Middleton area was identified as the first urban release area in the PSHS due to its ability to be efficiently serviced by infrastructure and utilities, including reticulated water and sewerage.

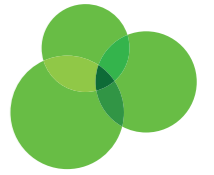
Maps 5 and 6 shows the PSHS Parkes Urban Area Framework and Staging Framework which prioritises Middleton as a Stage 1 Release Area.



MAP NO. 5 - PARKES HOUSING STRATEGY STAGING FRAMEWORK MAP

MAP NO. 6 - PARKES HOUSING STRATEGY URBAN FRAMEWORK MAP





SITE ANALYSIS 03

3.1 ROADS AND TRANSPORT

3.1.1 Parkes Urban Roads Network

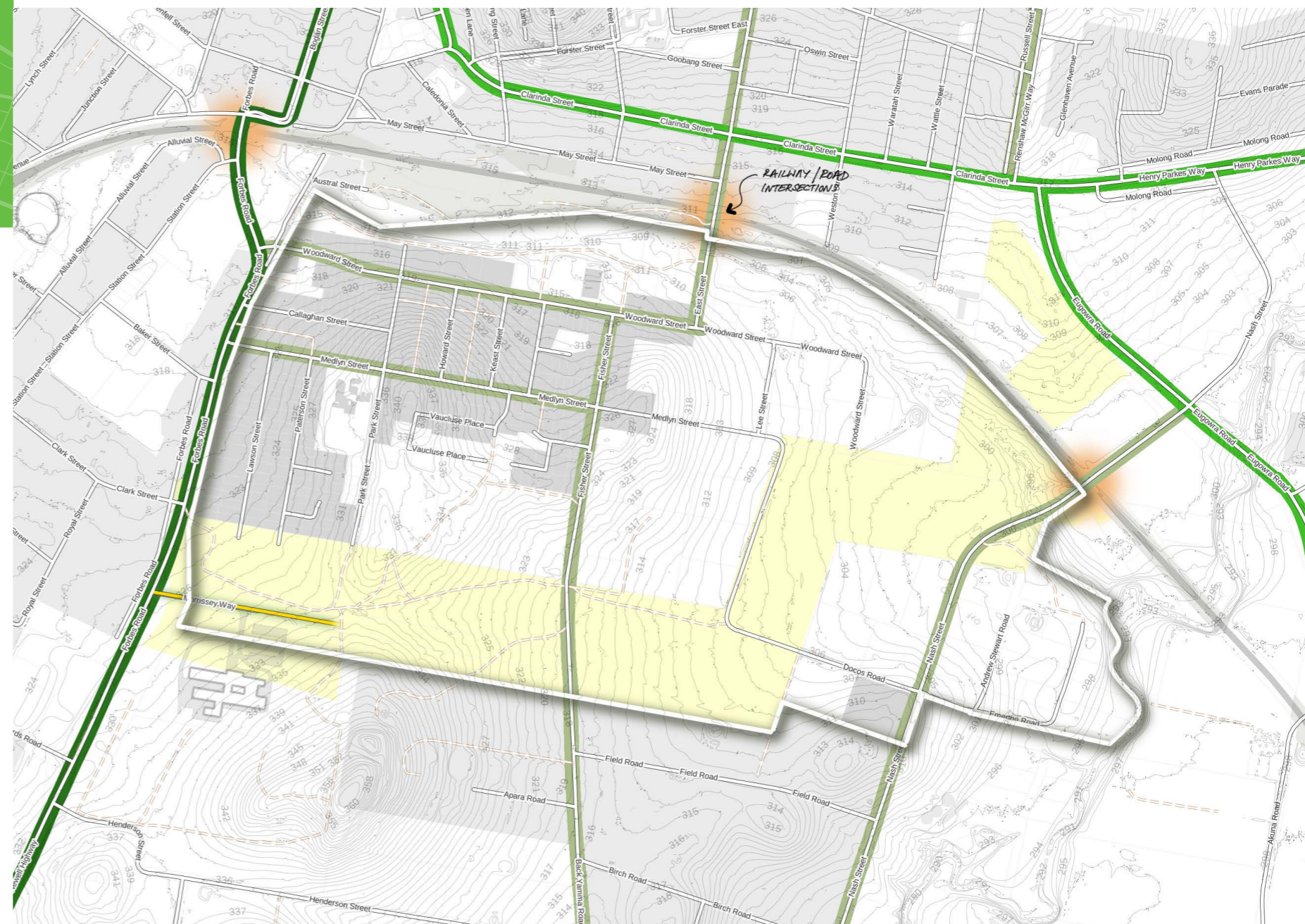
Roads continue to be a primary focus of Council's long-term transport plan.

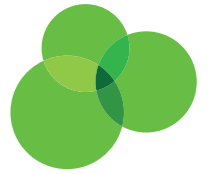
The Parkes roads network has historically been characterised by several main roads radiating from the centre of Parkes in a 'star-like' pattern to the wider region. While providing direct routes to the Parkes CBD, this network of main roads has presented traffic issues and land-use challenges for urban growth and development.

A long-term transport plan has been developed by Parkes Shire Council which has reserved a ring road system to support the movement of heavy traffic away from the Parkes CBD. Implementation of the Newell Highway Bypass was facilitated by the reservation of a western ring road corridor around Parkes in the early 2000's. A southern ring road was also reserved at this time, with the first stage of this road (Morrissey Way) already constructed to provide access to the New Parkes Hospital.

Under the Parkes LSPS 2020-40, Council has developed a robust integrated planning framework requiring consideration of transport planning principles and objectives when making strategic planning and land-use planning decisions.

MAP NO. 7 - PARKES URBAN ROADS NETWORK MAP





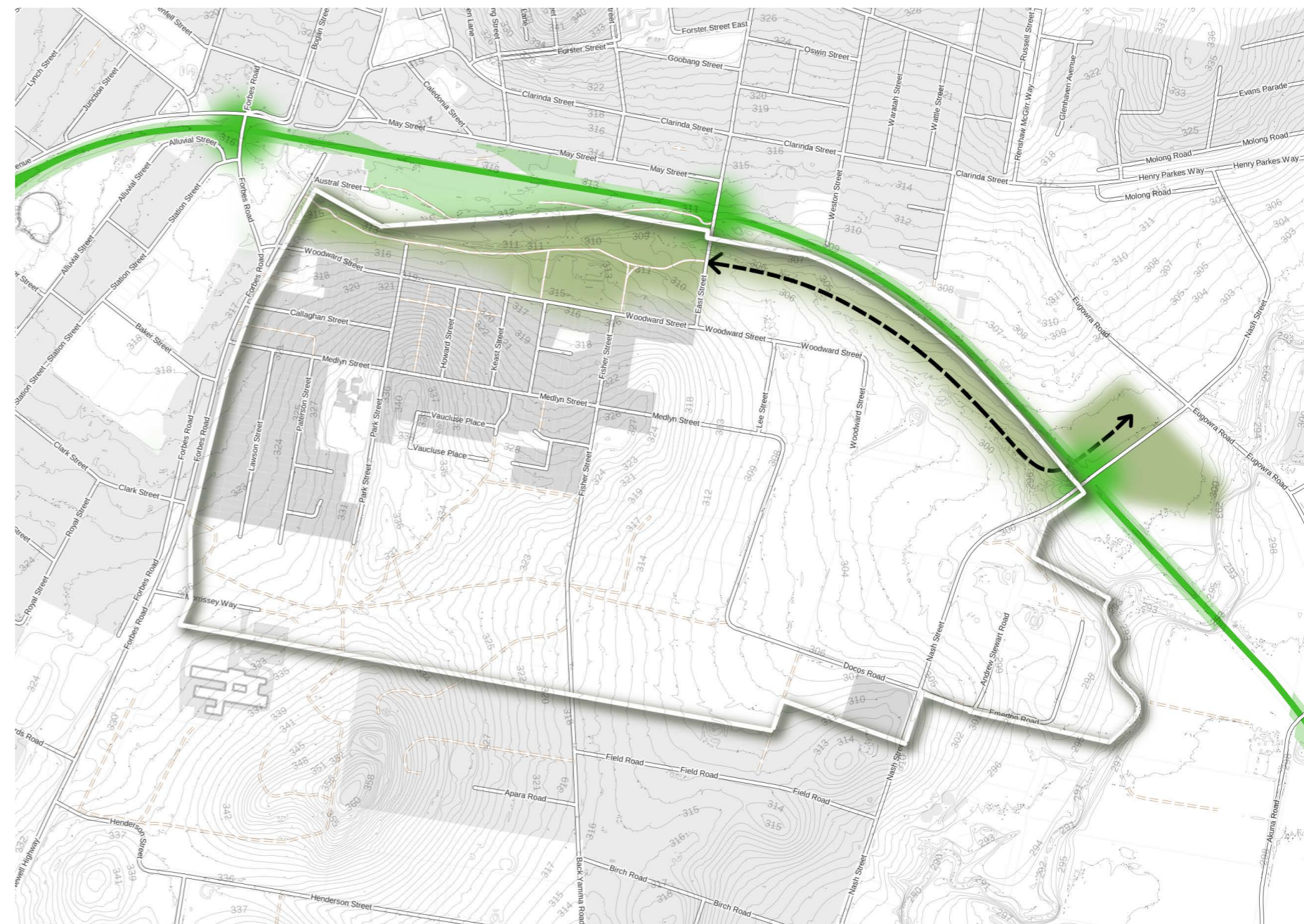
3.1.2 Parkes Railways


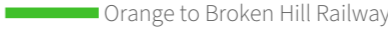

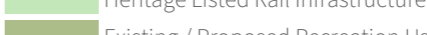


Parkes sits at the centre of the Inland Railway, Australia's largest freight rail project to connect Melbourne and Brisbane via an inland route through regional NSW. The Transcontinental Railway (Sydney to Perth) also runs through Parkes, which provides potentially significant opportunities for change, growth and development opportunities in the area.

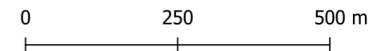
The Orange to Broken Hill Railway runs through the Parkes Urban Area on the northern boundary of Middleton. The railway is an important connection between the eastern seaboard and the Parkes Railway Station, Inland Railway and the Parkes Special Activation Precinct. There are three level crossings of the railway that must be negotiated by vehicular traffic, pedestrians and bike riders in close proximity to Middleton. Several buildings / precincts within the railway corridor are identified as State Heritage Items.

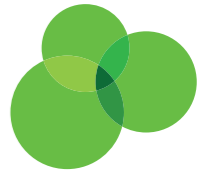
Under the Parkes LSPS 2020-40, the central railway and drainage area from Pac Park to Harrison Park has been identified as an area for open space and passive recreation activity, drainage and a buffer between railway, industrial and residential land-uses.

MAP NO. 8 - PARKES RAILWAYS MAP



-  Railway / Road Intersections
-  Orange to Broken Hill Railway
-  Pac Park to Harrison Park Recreation Link
-  Heritage Listed Rail Infrastructure
-  Existing / Proposed Recreation Uses
-  Existing Road Infrastructure





3.1.3 Public Transport

Public transport options remain limited in Parkes, largely due to the lack of population and density that underpin viable public transport services. A connected system of school bus services is established mornings and afternoons (weekdays) and a town bus service also runs during weekdays. Taxi services provide the mainstay of local trip transport services, with the majority of movements between residential areas and the Parkes CBD.

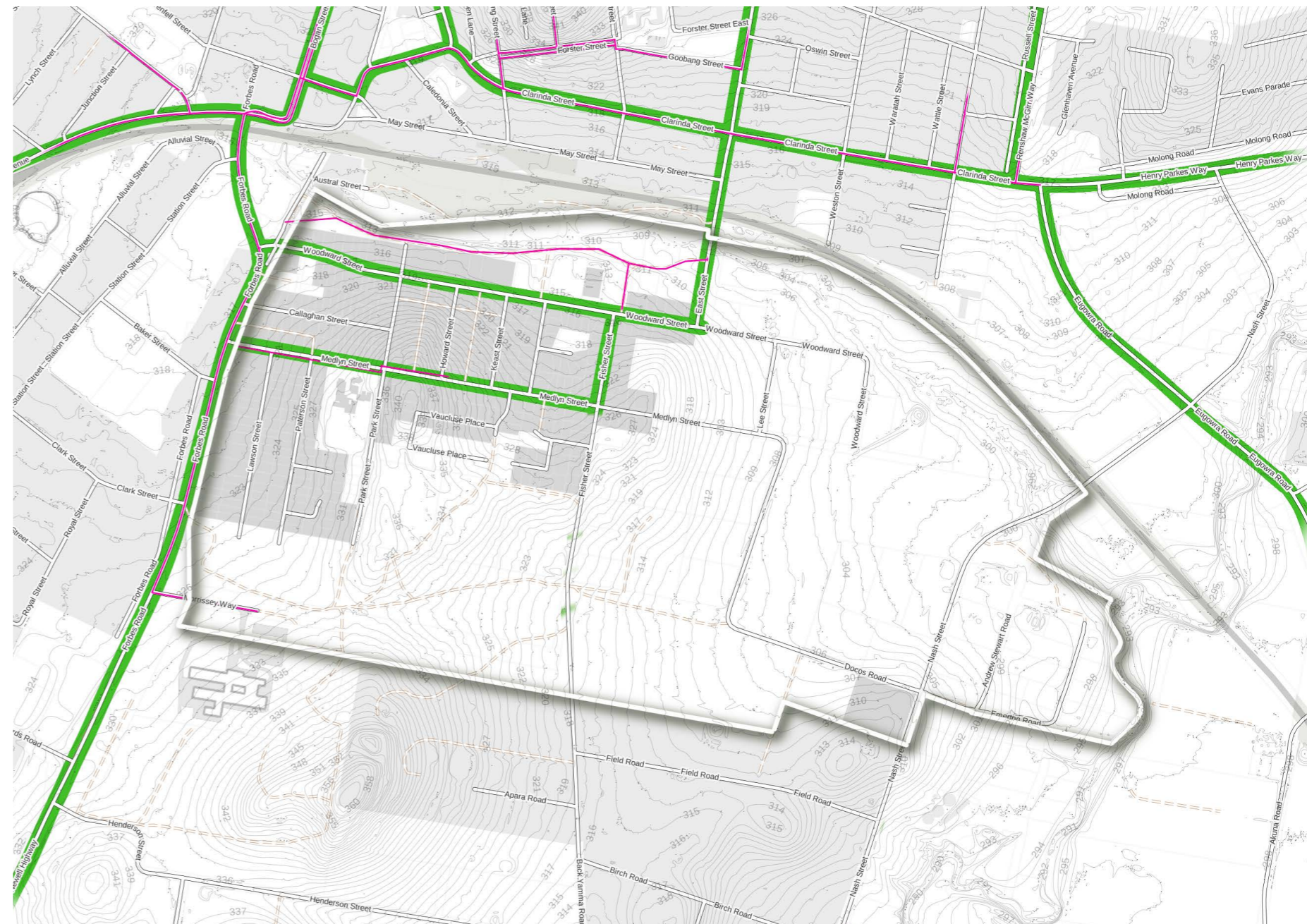
3.1.4 Active Transport

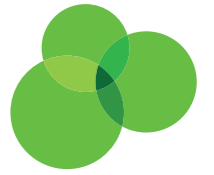
Parkes Shire Council continues to provide active transport facilities through the implementation of the Parkes Shire Pedestrian and Cycling Strategy 2016. Pedestrian paths are found within the more established areas of Parkes, as well as along recently established shared paths located in the northern and eastern parts of the Parkes Urban Area.

The Middleton area is currently not provided with a comprehensive network of pedestrian shared paths. Existing infrastructure is limited to an existing shared path on Forbes Street (linking to the CBD to the Parkes Hospital) and existing paths on Medlyn Street and Woodward Street which connect into Pac Park. There are gaps in the existing network linking residential areas in Middleton to other important attractors in the area such as the Middleton Public School, Parkes Skate Park and Harrison Park sporting precinct.

Map 9 shows the location of existing active transport infrastructure in the area.

MAP NO. 9 - PUBLIC AND ACTIVE TRANSPORT CONNECTIONS MAP





3.1.5 Trip Patterns and Behaviour

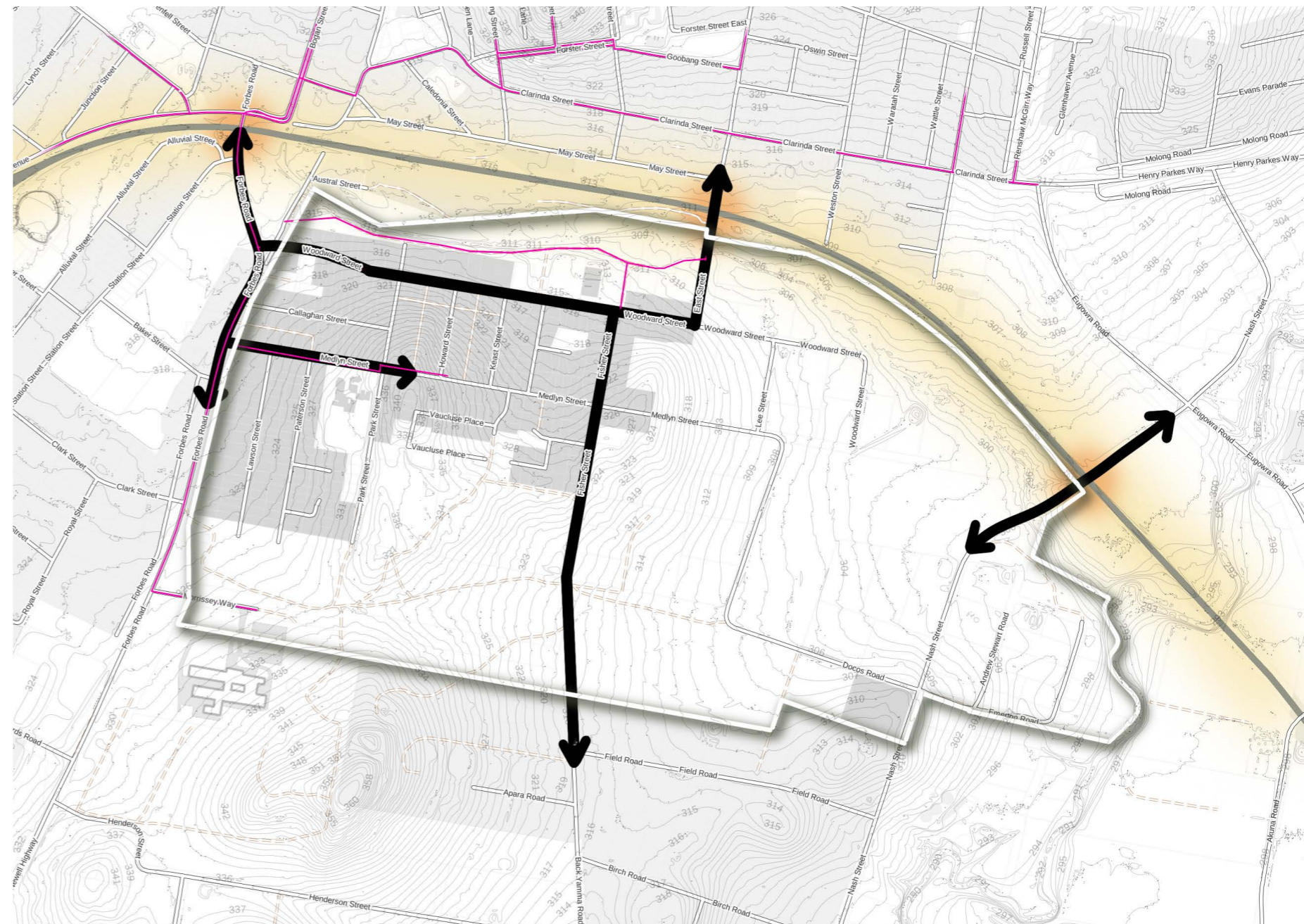
Fisher Street and Back Yamma Road have traditionally served as the entry into Parkes from a collection of large lot residential housing and larger farms south of Parkes. At present, traffic generated south of town travels through Fisher Street and Woodward Street, which comprises residential housing and a primary school. Issues around traffic volumes, vehicle speed, road geometry and through traffic impacts on residential amenity are challenges for the area.

The Orange to Broken Hill Railway runs east-west through the Parkes Urban Area and along the northern boundary of Middleton. Railways continue to present noise, vibration, traffic, drainage and amenity challenges for urban growth and development.

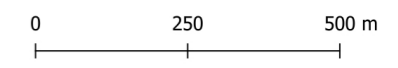
Many walking trips are generated where public transport options are not available, often late at night when pedestrians are less visible to road traffic and potentially vulnerable to other risks such as crime and antisocial behaviour.

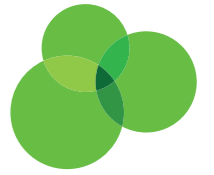
Maps 10 shows the existing vehicle / pedestrian facilities in the area, as well as the primary trip patterns and behaviour.

MAP NO. 10 - TRIP PATTERNS BEHAVIOUR MAP



- Primary vehicle transport routes
- Primary active transport routes
- Existing urban land-use
- Existing urban land-use (Middleton)
- Existing Road Infrastructure





3.2 OPEN SPACE AND RECREATION

3.2.1 Active Recreation

Middleton is adjacent to Cheney Park and McGlynn Park to the west and Harrison Park to the east. The sporting facilities (e.g. hockey, soccer, cricket, netball, baseball and basketball) at these parks are highly valued and well utilised by the community. Connections from the Middleton area to public recreation areas (including the Parkes Skate Park on Armstrong Street) presents some challenges for residents (particularly younger children and older residents) due to traffic on the Newell Highway (west), the Orange to Broken Hill Railway (east), and the need for more pathway connections and crossing points, as suggested in preliminary community engagement on the Middleton Stage 1 release.

3.2.2 Passive Recreation

Pac Park serves as an important area of passive open space and green relief on the northern edge of Middleton. A major drainage line along the northern edge of Pac Park has been upgraded in recent years, using water sensitive urban design principles and planting endemic riparian vegetation to form wetlands and water features. A system of shared paths run through Pac Park that connect parts of Middleton to other areas of Parkes, such as the Parkes CBD and Parkes High School. Existing shared paths could be expanded further along the riparian area towards Harrison Park to achieve a more connected active transport network. Pac Park currently has no facilities to support the community using the space as a meeting place and for families to have a lunch or host a party, similar to the popular barbecue facilities at Lions Memorial Park.

The balance of open spaces in Middleton are small 'pocket parks' that are spread across existing residential neighbourhoods. Inspection of Lions Play Park, Bernard Maguire Park and a small area reserved for open space at Vacluse Place shows these spaces have limited facilities and appear to be underutilised.

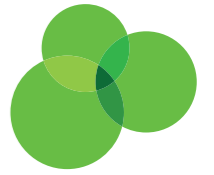
Middleton Public School also has areas of open space available for student play, outside education and sports.

The Crown Reserve corridor located along the southern edge of Middleton is also used for passive recreation and unstructured play, such as walking and exploring and bike riding. This area has also been used for less desirable activities in the past, such as illegal rubbish dumping and unregistered motorbike riding.

Maps 11 shows the existing open spaces in and around the Middleton area.

MAP NO. 11 - OPEN SPACE AND RECREATION MAP





3.3 TOPOGRAPHY AND DRAINAGE

3.3.1 Flooding

Parts of Middleton are elevated above the adjoining Parkes Urban Area to the west, north and east.

The Middleton area is not identified as flood prone land on any environmental planning instrument or flood study. Temporary flooding can be experienced along roads and in some private landholdings in severe storm events, which can lead to property and urban infrastructure and asset damage.

3.3.2 Stormwater Drainage

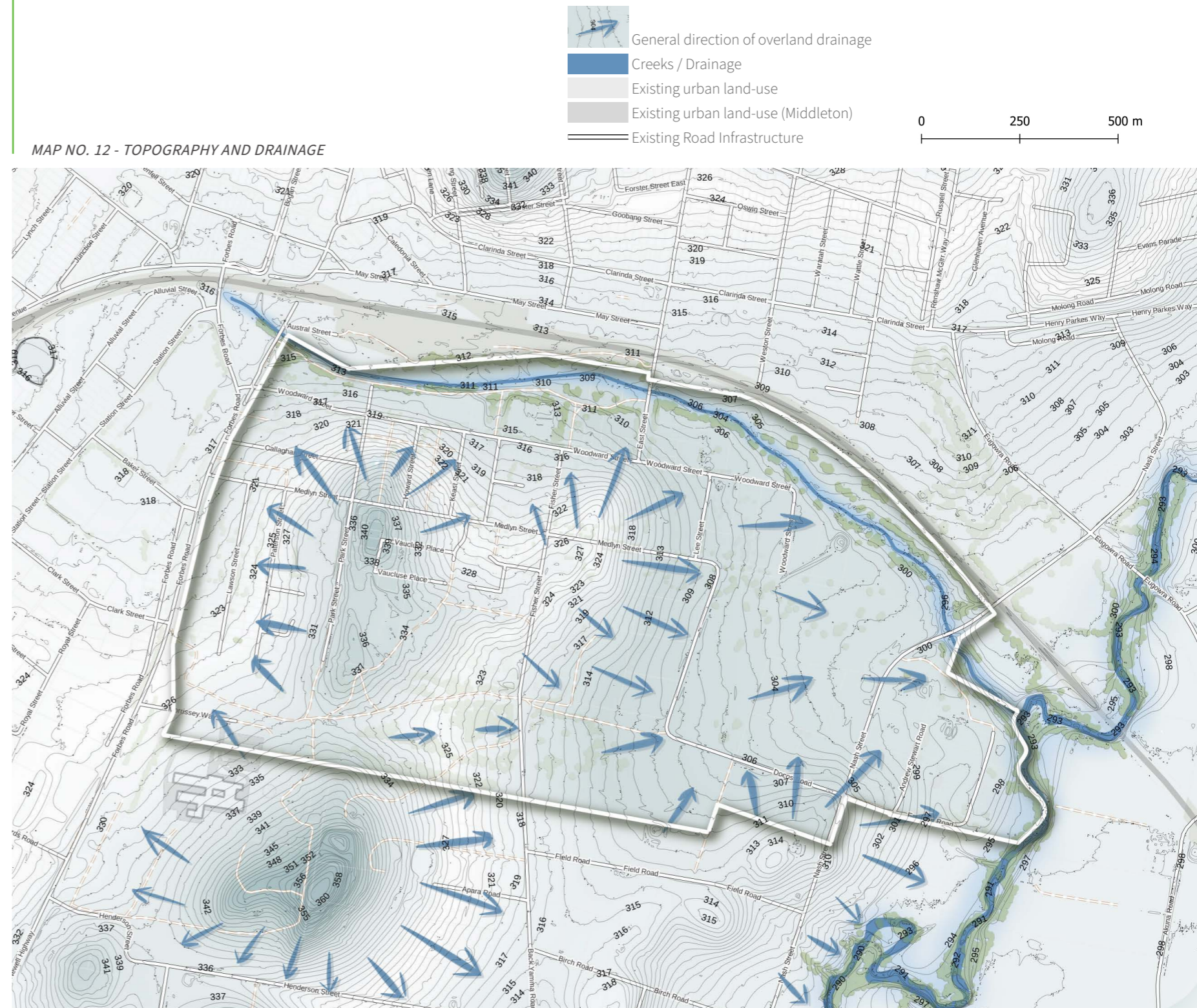
The Middleton area drains north and north-east to Pac Park, which then drains mostly south-east to Goobang Creek. The southern area of Middleton, including proposed new residential areas and the southern ring road corridor, drains overland to the Goobang Creek where there is minimal formal drainage infrastructure. Parts of Middleton also drain west to the Newell Highway.

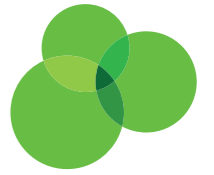
The riparian area along Pac Park is an important drainage facility for the wider Parkes Urban Area Drainage System as well as an attractive area of open space.

The south-eastern area of Middleton includes areas that are prone to waterlogging in prolonged wet periods. These areas form part of the existing R5 Large Lot Residential zone. Conditions could be improved with urban drainage and augmentation of sewerage and reticulated water supply and careful control of development density in this sub-precinct.

Maps 12 shows the existing drainage characteristics and the main stormwater management facilities in and around the Middleton area.

MAP NO. 12 - TOPOGRAPHY AND DRAINAGE





3.4 SLOPE AND LANDFORM

3.4.1 Landform

Parts of Middleton are elevated above the adjoining Parkes Urban Area to the west, north and east. From its highest elevation near Vauclose Place, the area slopes down to the north and north-east and south-east to the Goobang Creek. The southern area of Middleton, including proposed new residential areas and the southern ring road corridor, slopes down to the south and south-east.

The existing timbered galleries of native vegetation on the elevated areas of Middleton and along the southern ring road corridor provide green relief and aspect as well as limited habitat for flora and fauna on the fringe of town. The riparian area along Pac Park is an important drainage facility for the wider Parkes Urban Area drainage system as well as an attractive area of open space.

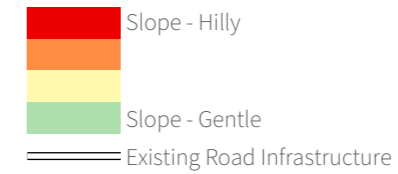
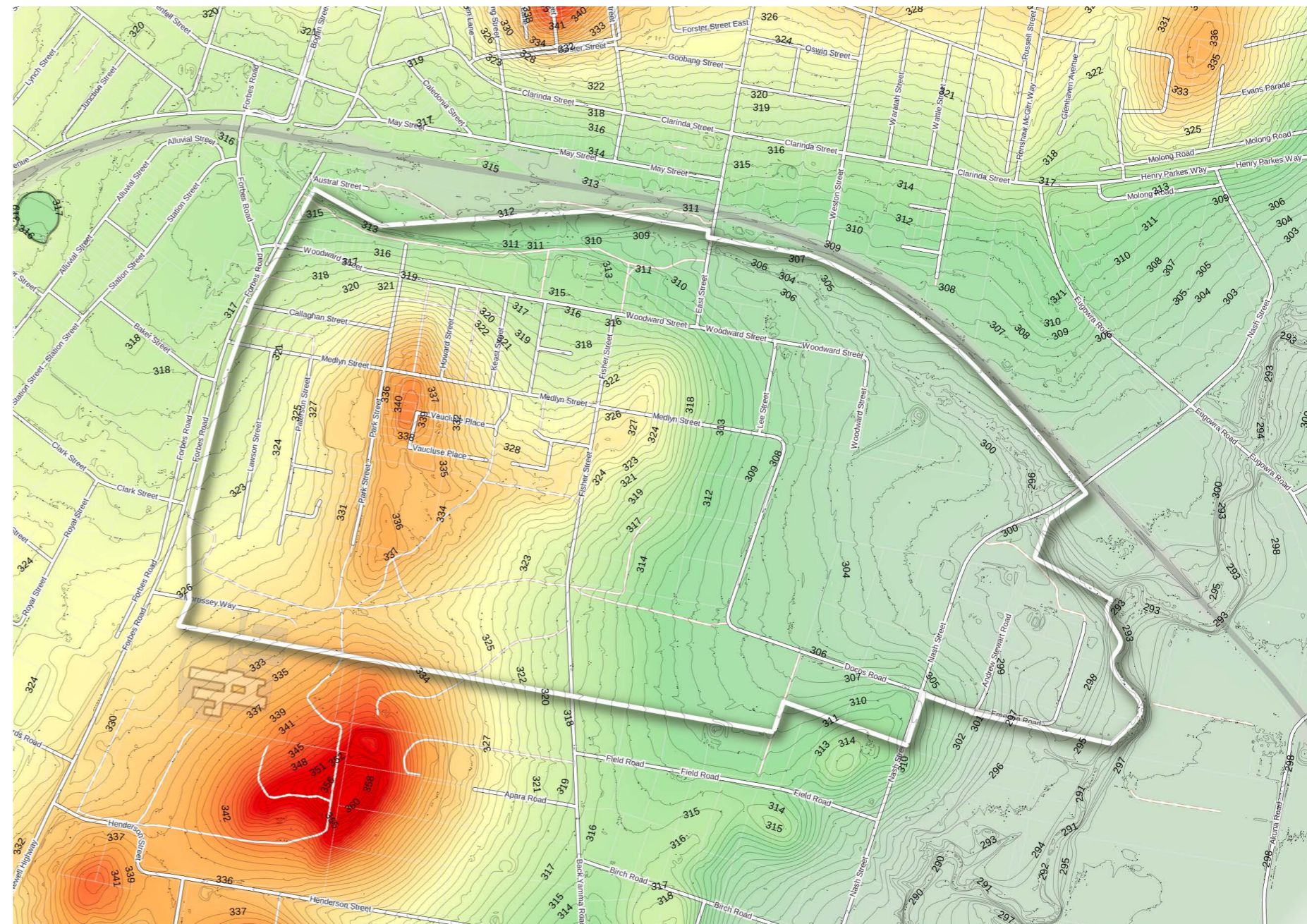
3.4.2 Slope Analysis

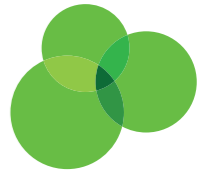
The elevation, grade and aspect afforded by the natural slope of the land in Middleton are key opportunity elements underpinning the establishment of quality residential neighbourhoods. The slope of the land is also highly conducive to augmentation of reticulated sewerage and water supply, as well as the provision of drainage infrastructure.

Slopes over 5% exist over some elevated areas, which may require some earthworks and the battering of finished land surfaces as well as construction of retaining walls. Other areas have gentle slopes of less than 5% and are considered readily available for residential development without need for substantial earthworks.

The eastern area of Middleton includes flat areas that are prone to waterlogging in prolonged wet periods. These areas form part of the existing R5 Large Lot Residential zone. Conditions could be improved with urban drainage and augmentation of sewerage and reticulated water supply and careful control of development density in this sub-precinct.

MAP NO. 13 - SLOPE AND LANDFORM MAP





3.5 VEGETATION + BIODIVERSITY

3.5.1 Vegetation

Middleton sits in the context of surrounding urban land-use on the southern periphery of Parkes township.

The area comprises pockets of native vegetation confined to the travelling stock route traversing the southern edge of Parkes and other vegetation confined to elevated timber galleries on undeveloped residential land, parklands, street trees and landscaped private blocks within Middleton, comprising planted native and exotic species typical of Central West towns.

The drainage line within Pac Park would have been a small creek prior to European settlement, however all remnant vegetation has been removed due to past gold mining, railway and settlement activity. There are no natural watercourses within Middleton or areas of remnant riparian vegetation or wetlands. Recent environmental rehabilitation programs at Pac Park have re-established endemic vegetation along the drainage corridor. The Goobang Creek (south-east) provides habitat for the nearest significant remnant of riparian vegetation.

Map 14 shows native vegetation existing in the Middleton area.

3.5.2 Biodiversity

A southern section of land zoned R1 General Residential and the southern ring road corridor zoned SP2 Road Infrastructure Facilities are identified on the Terrestrial Biodiversity Map under the Parkes Local Environmental Plan 2012.

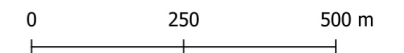
Desktop and field assessment confirms the presence of pockets of native vegetation characteristic of PCT76: Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions. This plant community type is listed as a threatened community under the NSW Biodiversity Conservation Act 2016 and endangered under the Environment Protection Biodiversity Conservation Act 1999.

Preliminary assessment of the condition of native vegetation reveals generally poor habitat environments for native flora and fauna species. A 'test of significance' under Section 7.3 of the Biodiversity Conservation Act 2016 indicates that a significant effect is unlikely on any threatened species or ecological community as a result of further development within the urban zoned land holdings in Middleton. Similarly, the EPBC Act assessments of significance and assessment under the MNES: Significant Impact Guidelines 2013 indicates a high level of certainty that impacts to threatened biodiversity are unlikely to be significant.

No Areas of Outstanding Biodiversity Value are recorded to occur on or around Middleton, as defined under the Biodiversity Conservation Regulation 2017.

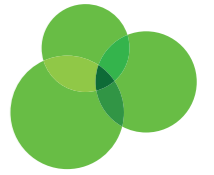
The low biodiversity values present within the area are largely due to the highly disturbed nature of the urban development and long-term sustained pressures on areas of remnant native vegetation, due to tree clearing, vehicle movements, soil erosions and sedimentation, invasive weeds, fires and stock movement.

Map 14 shows the main areas of biodiversity value in and around the Middleton area.



MAP NO. 14 - VEGETATION AND BIODIVERSITY MAP





3.6 WATER RESOURCES

3.6.1 Groundwater

The eastern part of the southern ring road corridor is identified as Groundwater Vulnerable, due to the need to protect the sandy aquifer system underlying the Goobang Creek.

The south-eastern area of Middleton includes areas that are prone to waterlogging in prolonged wet periods. These areas form part of the existing R5 Large Lot Residential zone.

Groundwater conditions would be improved within the eastern areas of Middleton through the provision of urban drainage, augmentation of sewerage and reticulated water supply and careful control of development density in the sub-precinct.

3.6.2 Surface Water

Most of the residential areas in Middleton are elevated above the adjoining drainage system in Pac Park. There are no permanent watercourses or water bodies within the area, other than a constructed wetland area in Pac Park, directly west of East Street. There are no major flooding issues, and the majority of the catchment drains north and north-east to Pac Park via the local road and drainage system, which then drains south-east to Goobang Creek.

The southern area of Middleton, including proposed new residential areas and the southern ring road corridor, drains overland to Goobang Creek where there is minimal formal drainage infrastructure. Surface water drainage would be improved towards the eastern parts of Middleton, through the implementation of road drainage infrastructure and onsite detention ponds within the southern ring road corridor.

3.6.3 Riparian Areas

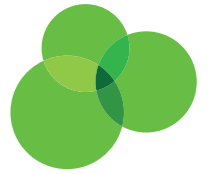
The Goobang Creek to the east of Middleton comprises high value riparian areas. Stormwater from the Parkes Urban Area drains through Middleton via Pac Park, the Orange to Broken Hill Railway and the southern ring road corridor before being released into the Goobang Creek. Riparian areas would be improved through the implementation of catchment management principles in an environmental management plan. Recent environmental rehabilitation programs at Pac Park provide guidance on how environmental improvements can be implemented, including the following:

- + Clean up and rehabilitation of public lands.
- + Implementation of onsite detention to manage pinch / intercept points in the drainage system.
- + Establishment of endemic flora species along the drainage corridor.
- + Installation of active transport paths and rest points along riparian areas.

Map 15 shows the water resources in and around the Middleton area.

MAP NO. 15 - WATER RESOURCES MAP





3.7 VIEWS, VISTAS + LANDSCAPES

3.7.1 View Corridors

Middleton is elevated above the adjoining Parkes Urban Area. There are views to the north and east over other parts of town and to the south over the vegetated southern ring road corridor and the Goobang Creek. From its highest elevation near Vauluse Place, there are views of the surrounding rural landscape and the Goobang National Park (further to the east).

3.7.2 Landscape Features

The existing timbered galleries on the elevated areas of Middleton and along the southern ring road corridor provide green relief and aspect. The riparian area along Pac Park is also an attractive area of open space.

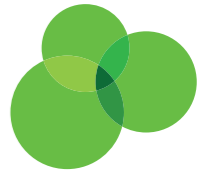
The landscape does not contain specific features which might constrain future residential development such as rocky outcrops.

The soil profile is mainly comprised of clay loams.

Map 16 shows the elevated areas of Middleton and the main views from the area.

MAP NO. 16 - VIEWS AND VISTAS MAP





3.8 ENVIRONMENT HAZARDS

3.8.1 Bushfire

Middleton and surrounds are not shown as Bushfire Prone Land on the NSW Rural Fire Service website mapping tool.

3.8.2 Flooding

Middleton and surrounds are not shown as Flood Prone Land in any known study or mapping data made available from Parkes Shire Council. However, low lying areas adjacent to the Goobang Creek are likely to experience some localised flooding issues, particularly below the 297 AHD contour.

3.8.3 High Wind Area

Middleton and surrounds are not identified as a high wind area in any known study or mapping data made available from Parkes Shire Council. Parts of Middleton are elevated above the surrounding landscape and could be expected to receive wind gusts, particularly in dry summer months and during storm events. Wind rose data from the nearby Parkes Regional Airport continues to be referenced when determining the design of new buildings and structures under the National Building Code.

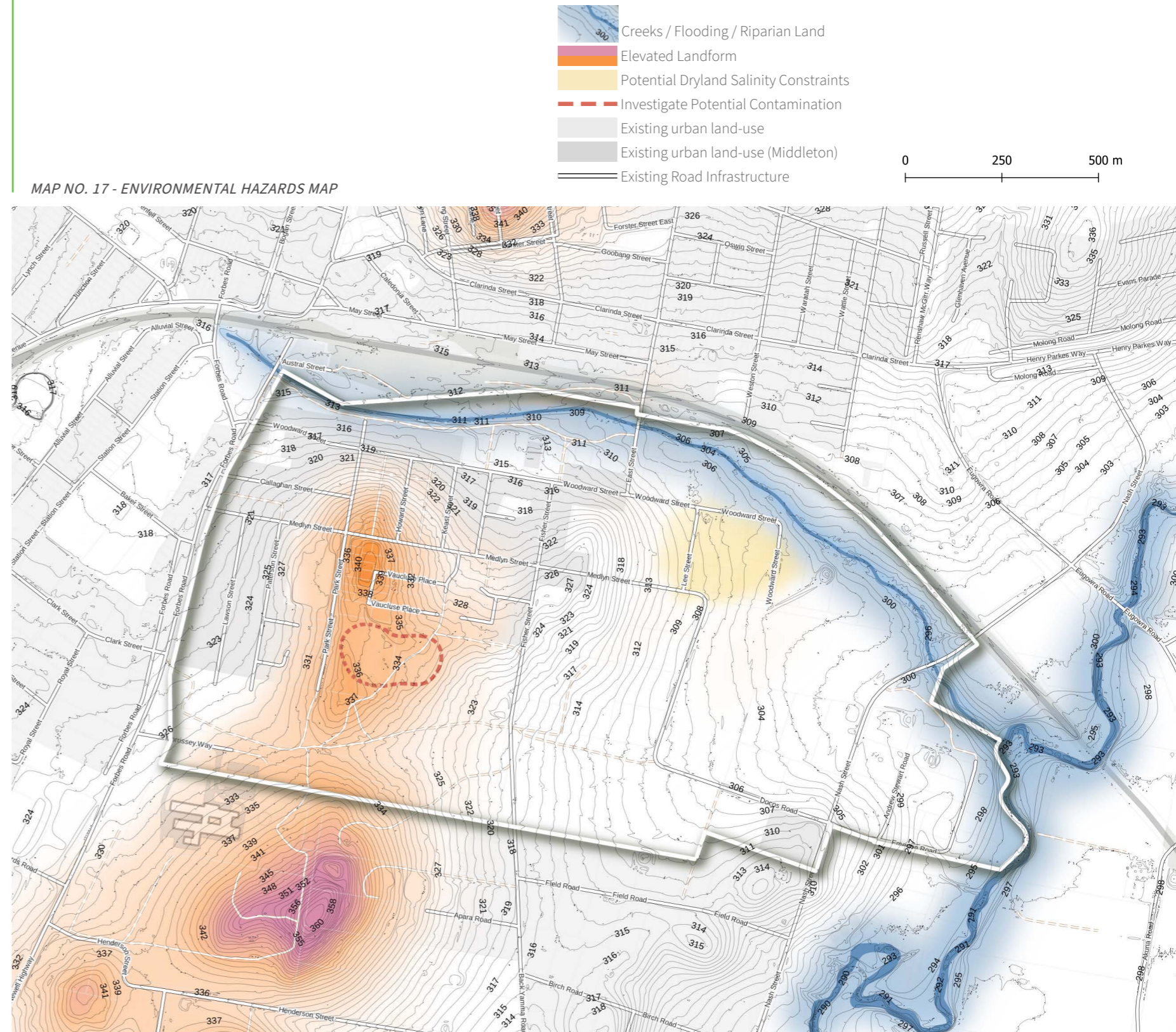
3.8.4 Dry land salinity

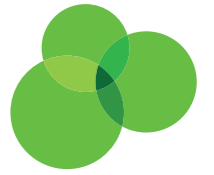
Parts of Middleton area are known to be impacted by dry land salinity issues, particularly in the north east parts of the study area. Whilst issues are not widespread, a planning response may be required as part of the masterplanning exercise to manage land-use change and/or settlement density in affected locations.

3.8.5 Other Potential Hazards

Parkes Shire Council has developed a register of known contaminated sites, based on past use of land. Several parcels of land have been identified as potentially contaminated land, which would need further investigation and possible remediation.

MAP NO. 17 - ENVIRONMENTAL HAZARDS MAP





3.9 HERITAGE

3.9.1 Aboriginal Cultural Heritage

The National Parks and Wildlife Act 1974 provides the basis for the legal protection and management of Aboriginal sites within NSW. Sections 86, 90 and 91 of the NPW Act provide statutory protection for any physical / material evidence of Aboriginal occupation of NSW and places of cultural significance to the Aboriginal community.

Middleton has been the subject of early mining, railways and settlement since the 19th Century. Existing urban areas are generally observed to comprise 'disturbed land' as defined under National Parks and Wildlife Regulation 2019, with the potential for the discovery of Aboriginal sites and artefacts considered to be low. There is moderate potential for Aboriginal sites and artefacts in the elevated timbered galleries, southern ring road corridor and the riparian area between Pac Park and the Goobang Creek.

Parkes Shire Council has undertaken an AHIMS Search and is aware of items of Aboriginal Heritage in and around the study area. Further Aboriginal due diligence assessment of the whole study area is proposed to ensure Aboriginal cultural heritage sites are identified and protected.

3.9.2 Non-Aboriginal Heritage

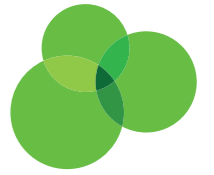
The Heritage Act 1977 provides for the conservation of environmental heritage defined as places, buildings, works, relics, moveable objects, and precincts, of State or local heritage significance which are at least 50 years old. The Act applies to non-Aboriginal relics only, as Aboriginal relics are protected under the National Parks and Wildlife Act 1974.

Assessment of historic and built heritage is open for assessment, based on the matters for consideration under Section 4.15 of the Environmental Planning and Assessment Act 1979.

Desktop assessment reveals no sites within the study area are listed on the State Heritage Register or under Schedule 5 of the Parkes Local Environmental Plan 2012, other than parts of the adjoining Orange to Broken Hill Railway which are not proposed for development under this Masterplan.

MAP NO. 18 - HERITAGE VALUES MAP





3.10 UTILITIES + SERVICES

Parts of Middleton have been established since the development of the railways in the 19th Century and have benefit of urban services and road connections. Other areas of Middleton have not been developed for residential or other urban purposes, in part due to a lack of urban services and infrastructure to these areas.

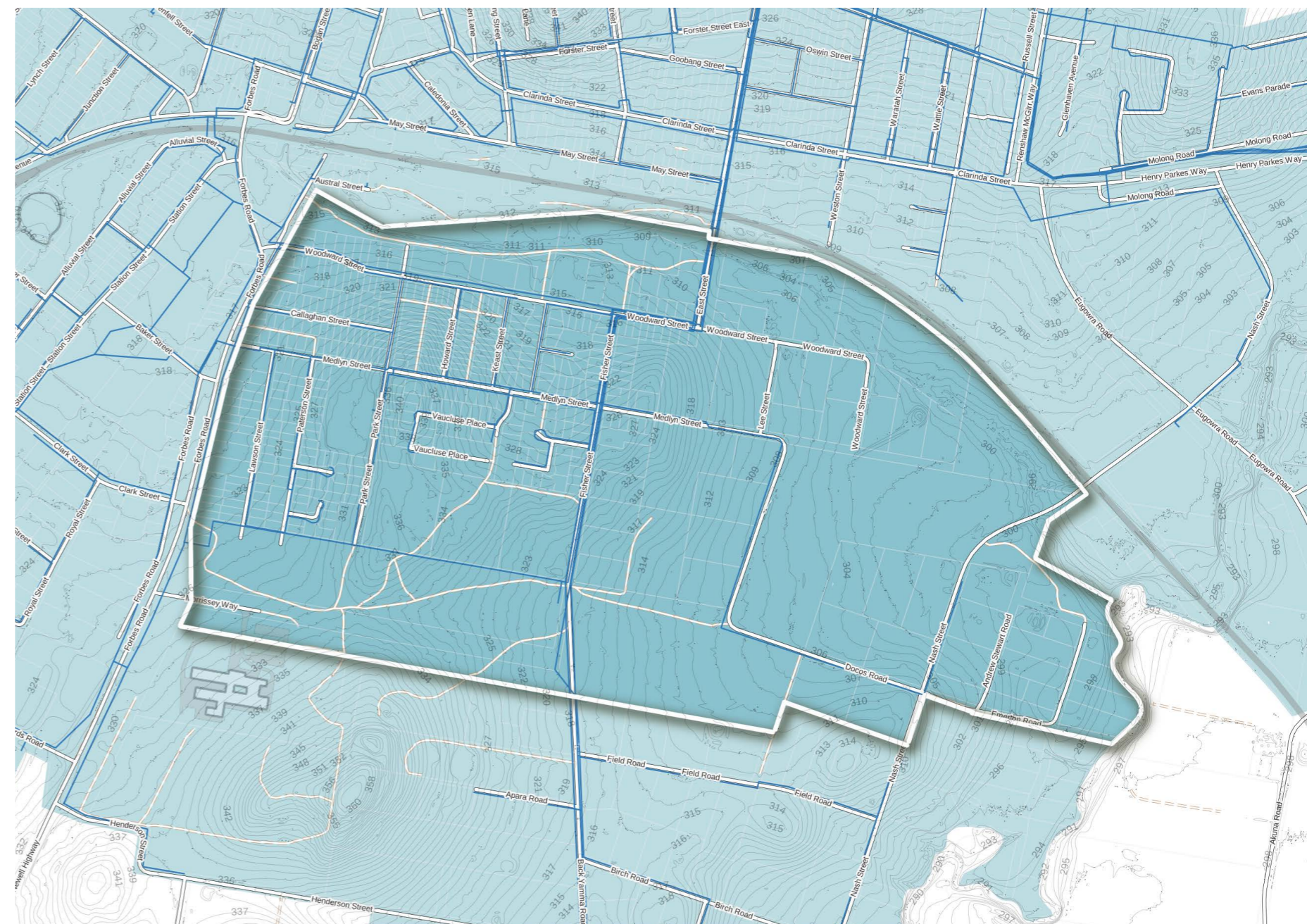
3.10.1 Reticulated Water

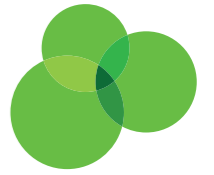
The extent of the Parkes Reticulated Water Supply System is shown on Map 19 as a blue line (depicting water mains). In general, most existing allotments in Middleton that have urban development improvements, are connected to the Parkes Reticulated Water Supply System.

Parkes Shire Council has sufficient capacity in the Parkes Reticulated Water Supply System to supply potable water to the whole of the Middleton area, including future residential lots and supporting land-use. Augmentation of suitably sized water mains is required to greenfield areas to allow further urban development.

Parkes Shire Council has developed concept reticulated water supply plan for the whole of Middleton, which is being used to inform the Middleton Masterplan.

MAP NO. 19 - WATER SUPPLY CATCHMENT MAP





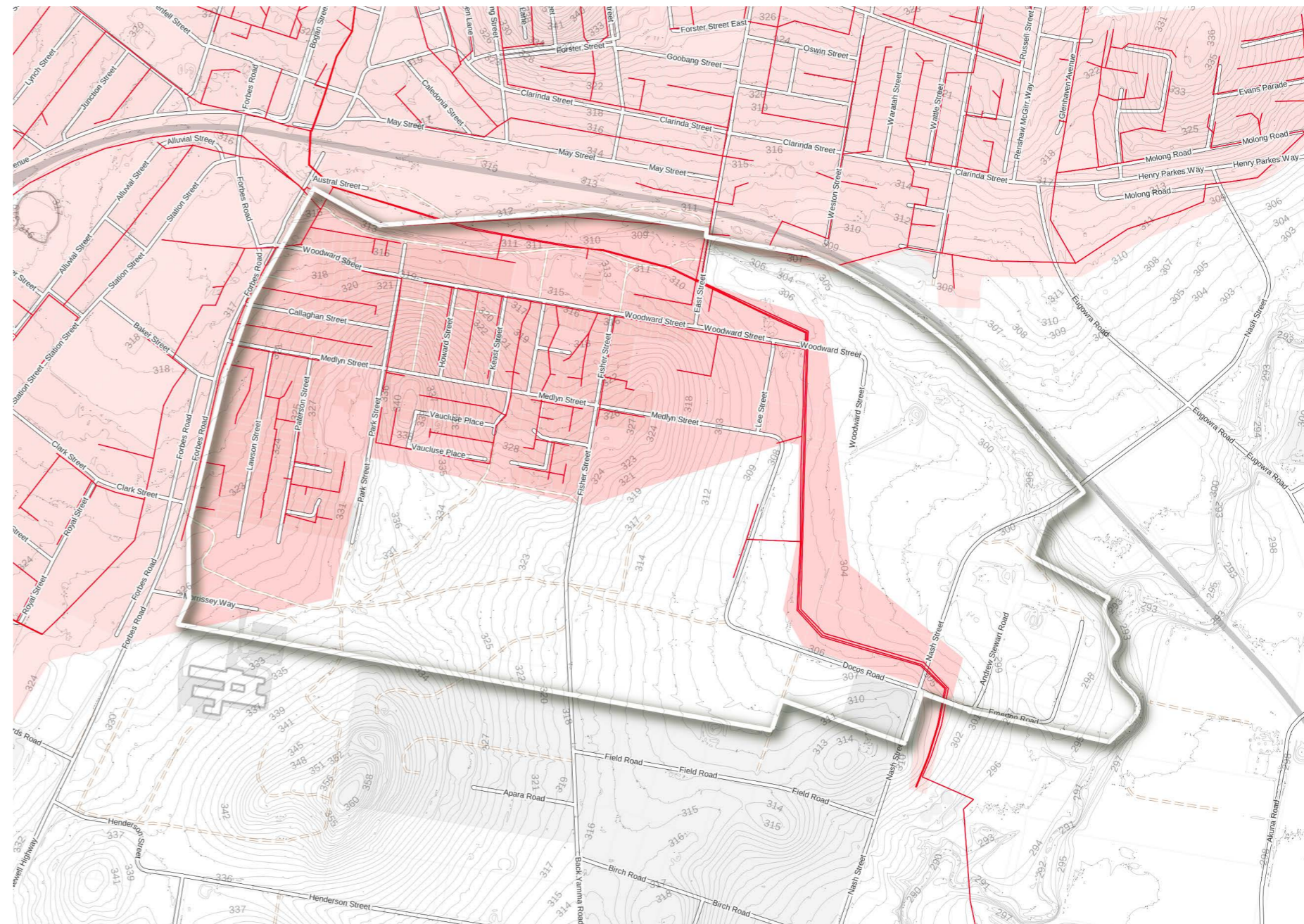
3.10.2 Reticulated Sewerage

The extent of the Parkes Reticulated Sewerage System is shown on Map 20. In general, most existing residential lots in Middleton are connected to sewer. However, there are a number of outlying houses on larger lots that operate onsite wastewater management systems.

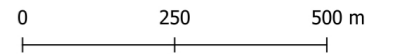
Parkes Shire Council has sufficient capacity in the Parkes Reticulated Sewerage System to treat wastewater from the whole of the Middleton area, including future residential lots and supporting land-use. Augmentation of suitably sized sewer mains is required to greenfield areas to allow further urban development.

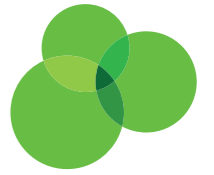
Parkes Shire Council has developed concept sewerage augmentation plan for the whole of Middleton, which is being used to inform the Middleton Masterplan.

MAP NO. 20 - SEWER SUPPLY CATCHMENT MAP



- Reticulated Sewer Supply Main Location
- Reticulated Sewer Supply Catchment - Parkes Generally
- Reticulated Water Supply Catchment - Middleton
- Existing Road Infrastructure





3.10.3 Stormwater Drainage Map

Located on the fringe of the Parkes Urban Area, the provision of stormwater management infrastructure involves a mix of complex urban drainage structures within road reserves and public reserves as well as simpler overland flow controls, such as contour banks, swales and dams.

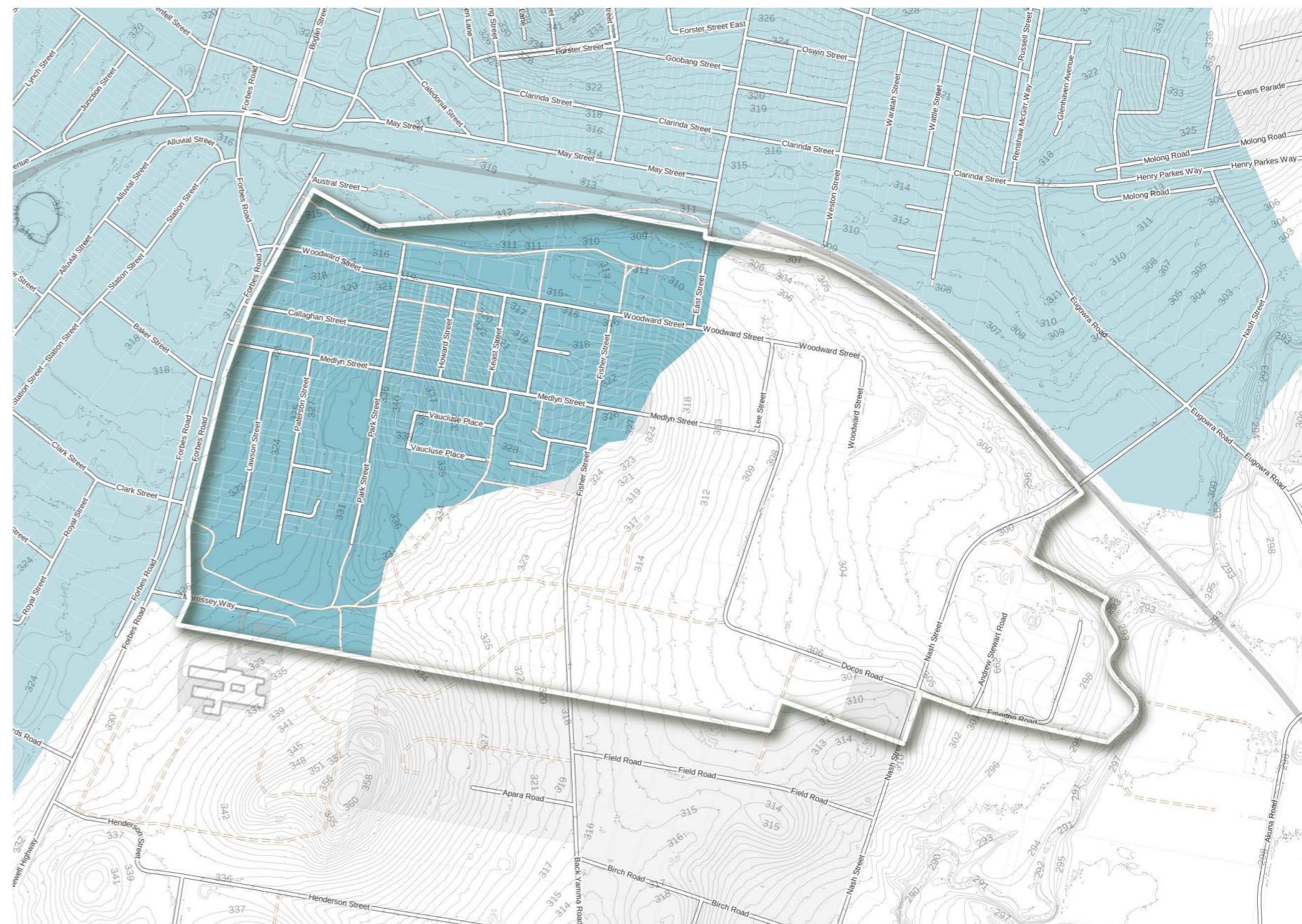
The extent of the formal stormwater management system is shown on Map 21.

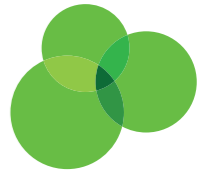
In general, most existing residential lots in Middleton are connected to the street stormwater management system or drainage reserve. However, there are a number of outlying houses on the low-lying areas that have difficulty disposing all of their stormwater in prolonged wet weather periods. In addition, the existing drainage infrastructure servicing development along Woodward Street is known to be operating at full capacity.

The public land at Pac Park and the southern ring road corridor provides opportunities to manage stormwater flows before entering the Goobang Creek.

Parkes Shire Council has developed concept stormwater management plan for the whole of Middleton, which is being used to inform the Middleton Masterplan.

MAP NO. 21 - STORMWATER DRAINAGE CATCHMENT MAP





3.10.4 ELECTRICITY SUPPLY

The extent of the electricity supply System is broadly shown on Map 22. In general, most existing allotments in Middleton that have urban development improvements, are connected to the electricity supply grid system.

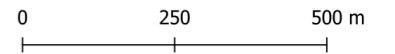
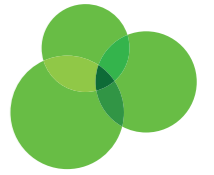
Essential Energy is positioned to augment electricity supply and upgrades to ensure sufficient capacity of supply for the whole of the Middleton area, including future residential lots and supporting land-use. Augmentation of suitably transformers and supply lines would be undertaken as part of subdivision works.

3.10.5 Other Utilities and Services

Reticulated gas and telecommunications are available to the whole of Middleton upon customer request.

MAP NO. 22 - ELECTRICITY + OTHER UTILITY SERVICES MAP





3.11 LAND OWNERSHIP

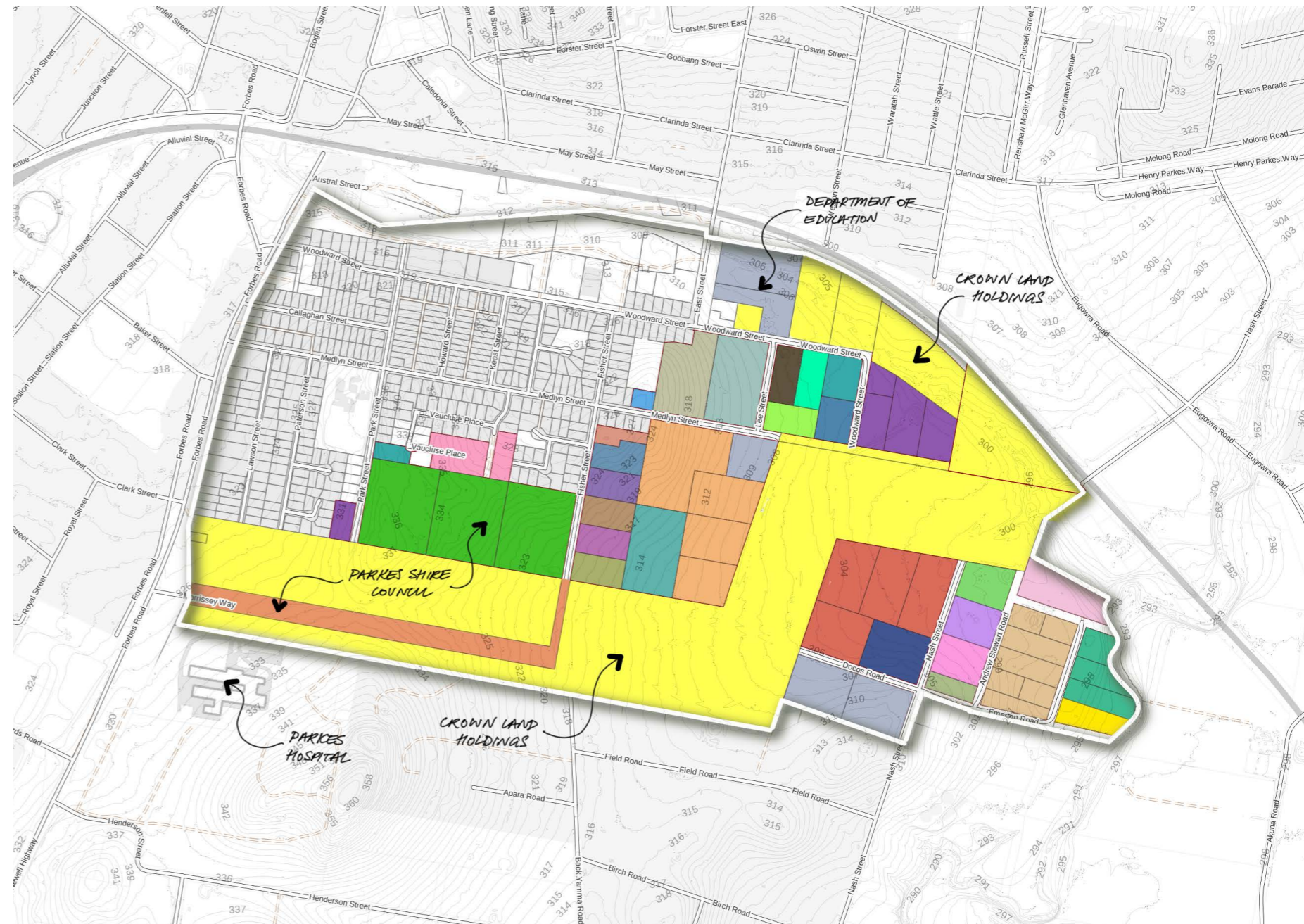
3.11.1 Ownership Status

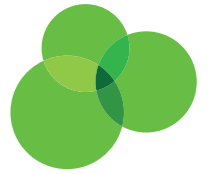
Private land ownership in Middleton is predominantly made up of private landholders, generally held under Torrens Title and used predominantly for private residential housing. Some public housing is provided within some established neighbourhoods. Some holdings zoned R1 General Residential are currently vacant of housing, including land owned by Parkes Shire Council to the south of Vacluse Place.

Private land adjoining the northern side of Woodward Street comprises mixed business land-use, including storage, mechanical repairs and light industry operations.

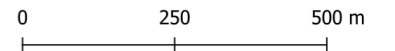
Large areas of land within Middleton are also held under government control, including the Parkes Hospital, several parklands, roads and drainage reserves and the southern ring road corridor. Redevelopment of the underutilised Lions Play Park and the Vacluse Place open space area for residential purposes is proposed, in favour of resources being directed towards the management of larger / more popular areas of open space within Middleton.

MAP NO. 23 - LAND OWNERSHIP MAP

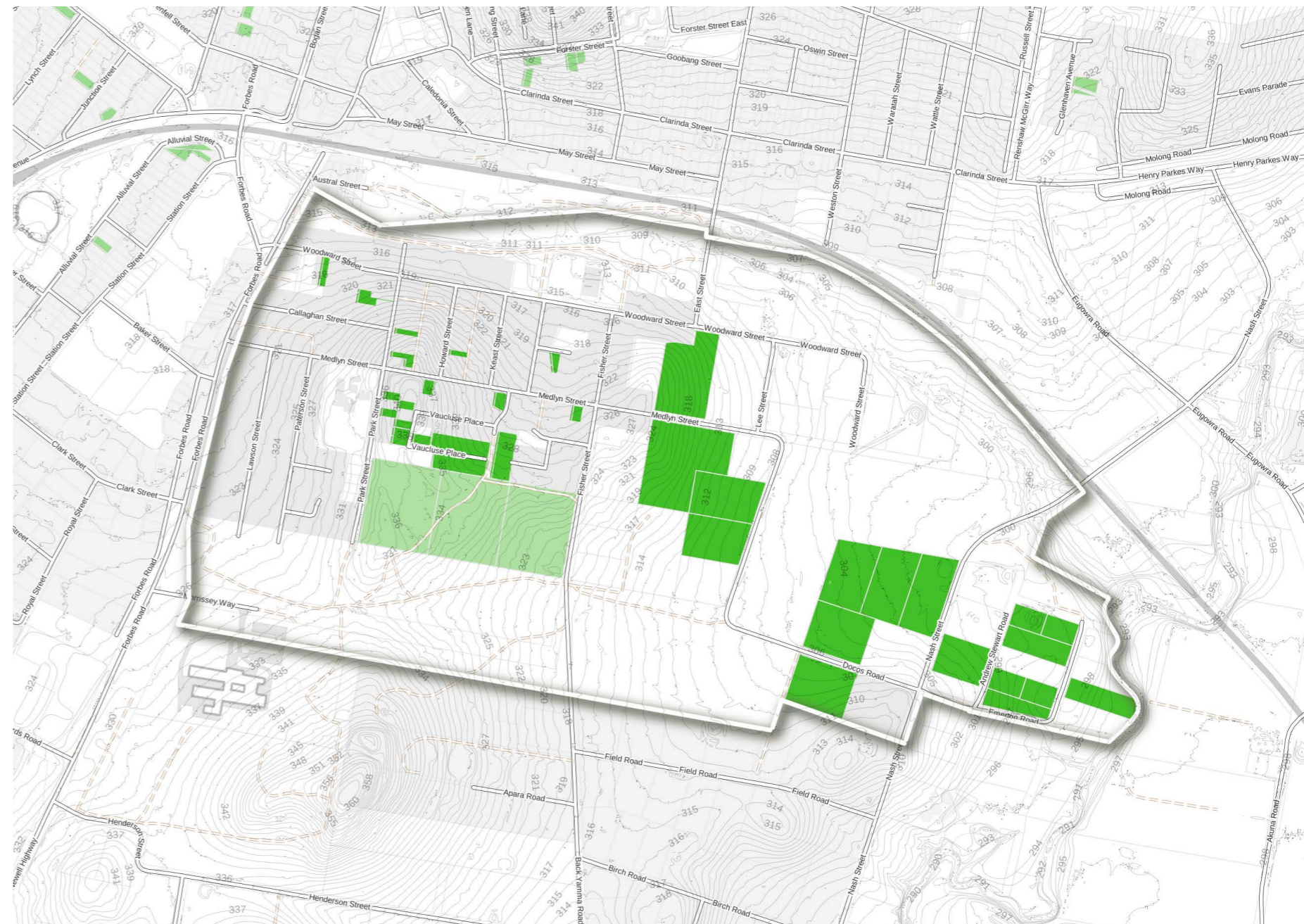




- Vacant Lots / Holdings
- Parkes Shire Council Holding
- Existing urban land-use
- Existing urban land-use (Middleton)
- Existing Road Infrastructure



MAP NO. 24 - VACANCY ANALYSIS MAP

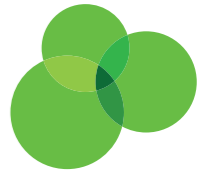


3.11.2 Vacancy Analysis

Private land ownership in Middleton is predominantly made up of private landholders, generally held under Torrens Title and used predominantly for private residential housing. Some public housing is provided within some established neighbourhoods. Some holdings zoned R1 General Residential are currently vacant of housing, including land owned by Parkes Shire Council to the south of Vaucluse Place.

Private land adjoining the northern side of Woodward Street comprises mixed business land-use, including storage, mechanical repairs and light industry operations.

Large areas of land within Middleton are also held under government control, including the Parkes Hospital, several parklands, roads and drainage reserves and the southern ring road corridor. Redevelopment of the underutilised Lions Play Park and the Vaucluse Place open space area for residential purposes is proposed, in favour of resources being directed towards the management of larger / more popular areas of open space within Middleton.



CONSTRAINTS + OPPORTUNITIES ANALYSIS 04

4.1 SITE CONSTRAINTS

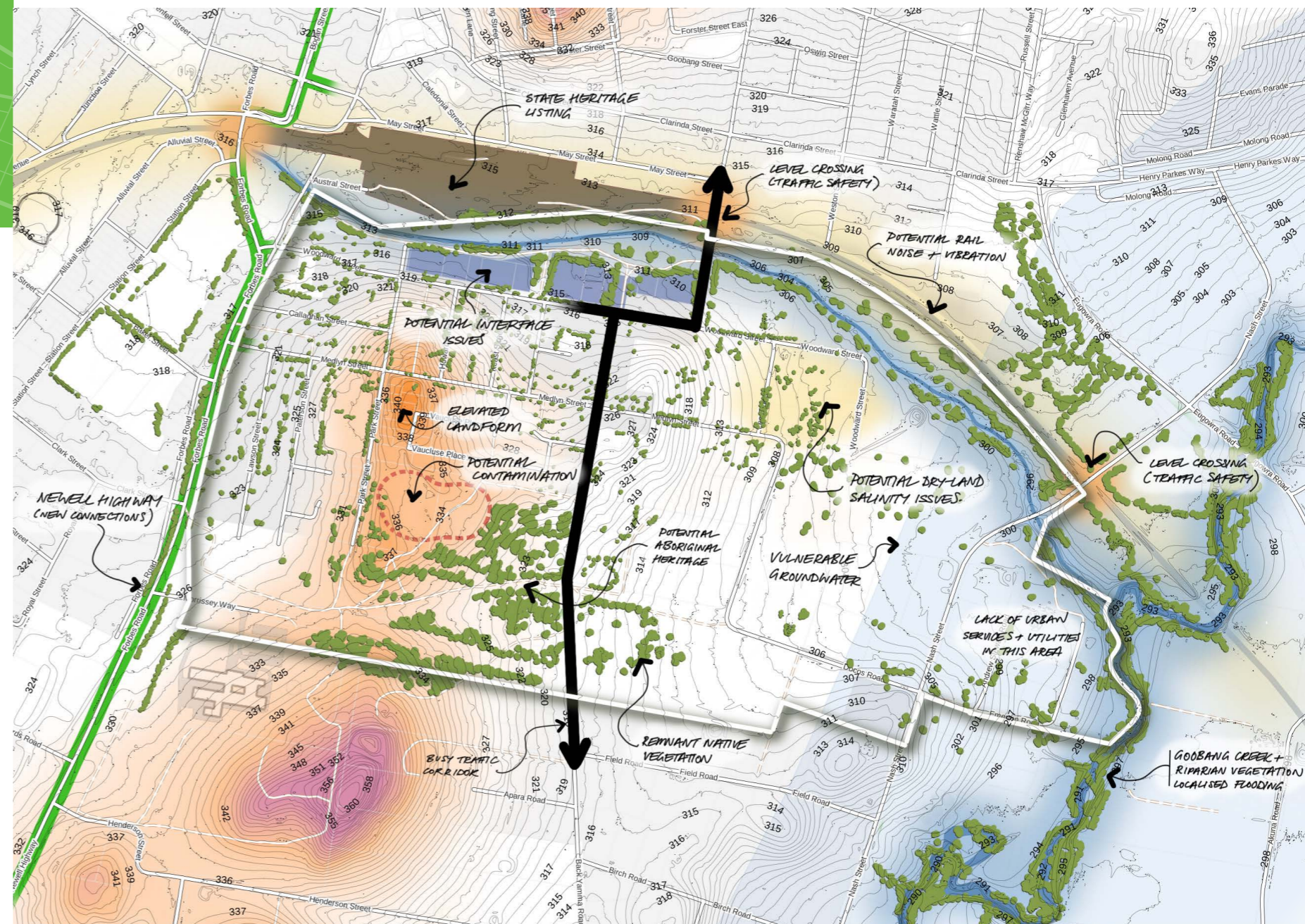
Map 25 shows the main site constraints in Middleton, as a result of the combined consideration of site analysis issues in Section 3.

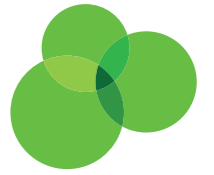
Key site constraints are as follows:

- + Goobang Creek to the east.
- + Groundwater vulnerable areas to the east.
- + Remnant native vegetation on elevated areas and along the southern ring road corridor.
- + Potential for undiscovered Aboriginal cultural heritage sites / artefacts on the elevated timbered galleries, southern ring road corridor and the riparian area between Pac Park and the Goobang Creek.
- + State Heritage Listing of parts of the Orange to Broken Hill Railway, and potential rail interface issues.
- + Railway noise and traffic issues associated with level crossings.
- + Newell Highway traffic and the lack of intersections conducive to Middleton traffic entering and leaving the National Highway and pedestrian crossing points.
- + Traffic issues associated with through-traffic along residential streets with houses, such as Fisher Street, and ongoing utilisation of unformed tracks.
- + Lack of urban utilities and infrastructure towards the southern and eastern sections of Middleton.
- + Lack of drainage facilities towards the southern and eastern sections of Middleton.
- + Mixed businesses adjoining the north side of Woodward Street, presenting potential interface and amenity issues.
- + Potential contaminated land.
- + Parts of Middleton are known to be affected by dry-land salinity.

MAP NO. 25 - MIDDLETON CONSTRAINTS MAP

0 250 500 m





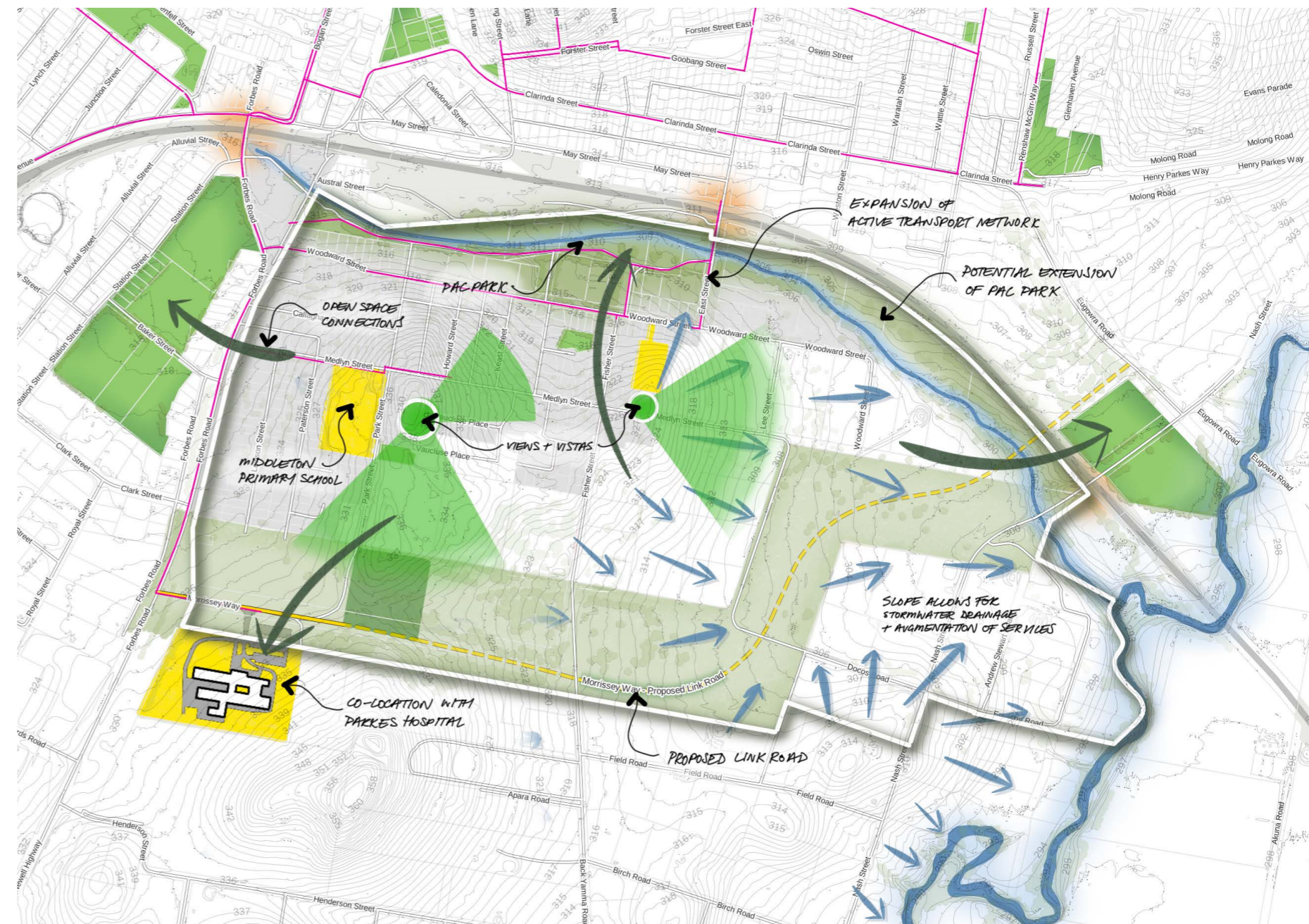
4.2 SITE OPPORTUNITIES

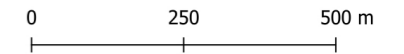
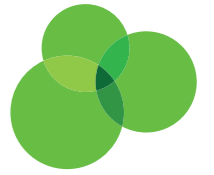
Map 26 shows the main opportunities for Middleton, as a result of the combined consideration of site analysis issues in Section 3. Key site opportunities are as follows:

- + Unconstrained by bushfire prone land, flood prone land, steep slopes and landslip.
- + Views and vistas are available to Parkes (north) and wider rural landscapes to the east and south.
- + Slope allows for augmentation of gravity fed water supply mains, sewerage and stormwater drainage.
- + Parkes Hospital is a major attractor and provides opportunity for a health-related precinct and / or neighbourhood shops.
- + Middleton Primary School has a good reputation for quality education and community services.
- + Pac Park is a quality parkland space and provides opportunity for further expansion of open space facilities.
- + Potential to extend Pac Park further east to allow for public management of the riparian corridor to the Goobang Creek.
- + Potential to expand the active transport network.
- + Potential to manage local traffic and minimise impacts on residential neighbourhoods through extension of Morrissey Way to Nash Street and intersection /level crossing upgrades.
- + Availability of land area to provide a large-scale park.
- + Opportunity to provide accommodation to support worker and visitors to the nearby Parkes Hospital.

MAP NO. 26 - MIDDLETON OPPORTUNITIES MAP

0 250 500 m





4.3 IMPROVING LIVEABILITY IN MIDDLETON

Liveable communities are regarded as "safe, attractive, socially cohesive and inclusive, and environmentally sustainable with affordable housing linked via public transport, walking and cycling to employment, education, public open space, local shops, health and community services, and leisure and cultural opportunities." (Place, Health and Liveability, Melbourne University).

Improving the liveability of an area through urban planning allows the creation of environments that enhance the wellbeing of the community.

The economic, social, environmental and health co-benefits of urban liveability are now recognised by all levels of government in Australia and across the world. Indicators of liveability vary between levels of government in Australia, but common themes amongst them all include:

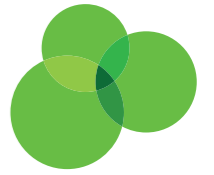
- + Environment and open space, such as large parks or grassed areas and gardens that support the congregation of people for active and passive recreation.
- + Economy, e.g. local businesses that provide for daily needs.
- + Movement, such connectivity of local roads and transport infrastructure to support the ease of driving and parking and walking/jogging/bike paths that connect housing to communal amenity, employment, education, shops and services.
- + Housing and development, such as investment in public infrastructure to support to support housing development, as well as affordable housing.
- + Social facilities and services, such as childcare facilities, schools, community centres and sporting facilities.
- + Community connection, such as facilities or places to support community interaction and shared interests.

The Middleton Masterplan seeks to improve the liveability of this area by the following:

- + A connected path network for connection to social services and active recreation opportunities.
- + A large park for active recreation.
- + Shops to provide for daily needs
- + A range of lot sizes to support different types and cost of new housing
- + New road connections to support ease of driving and connectivity to social services.
- + Environmental management and enhancement through stormwater management and vegetation regeneration.

MAP NO. 27 - MIDDLETON LIVEABILITY MAP





PRELIMINARY COMMUNITY CONSULTATION FINDINGS 05

5.1 Consultation Process

The Middleton Masterplan has been supported by a preliminary engagement phase during March and April 2022, which involved the following:

- + Community briefing on the Middleton Masterplan and invitation for feedback on Council's 'Have Your Say' online community hub (webpage) from 1 March 2022 to 24 April 2022.
- + Your Say Parkes - Middleton Masterplan Survey focusing on gaining community feedback on utility infrastructure, transport, open space, landscaping, public facilities, hazards and constraints and neighbourhood commercial uses. A total of 46 visitors completing the online survey.
- + Your Say Parkes - Middleton Map It Tool, with 163 visitors mapping sites and areas of interest.
- + Meetings with landowners of land zoned R5 Large Lot Residential in the Middleton Masterplan study area with further development potential if zoned R1 General Residential or for higher urban land-uses.
- + Preliminary discussions with service authorities with infrastructure assets in the Middleton Masterplan study area to determine any special requirements or considerations.

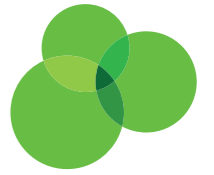
5.2 Key Findings

General support for the progression of the Middleton Masterplan was received from the preliminary consultation phase. Common themes from the community / stakeholder feedback included:

- + Continue Morrissey Way to at least Back Yamma Road/ Fisher Street to increase general connectivity in the area and to the Parkes Hospital in emergency situations.

- + The need to upgrade East Street
- + The need to extend the shared paths network to increase connectivity around town as well as specific areas such as a new footpath in Medlyn Street, as it is currently a hazard for school children. Footpaths in Fisher Street, East Street, Nash Street (to soccer fields), roads adjoining the school, Woodward Street were also highlighted.
- + The need for open space and a community garden.
- + The need for improved street lighting for safety and security.
- + The need for off street parking and enhancement of PAC Park.
- + The need to augment urban services and utilities to the area to support residential subdivisions below current minimum lot sizes.
- + The need to balance road connectivity and residential amenity.
- + Some property holding owners expressed concerns with the masterplan design requiring shared responsibility for new road constructions. Locating new roads in locations that enable subdivision of property holdings independently of neighbours was preferred for some areas of Middleton.
- + Some property holding owners expressed concern with Council rezoning the entire area with resulting increases in land rates.
- + Some property holding owners expressed no interest in developing land for residential purposes.

The findings of community consultation have been included in the Parkes Shire Council Middleton Masterplan Preliminary Community Consultation Findings Report which includes a Project Report on the Your Say Parkes - Middleton Masterplan Plan and a Survey Response Report of the Middleton Masterplan Survey.



MASTERPLANNING APPROACH 06

6.1 Relevant Guidelines

Middleton currently comprises land that is predominantly zoned R1 General Residential and R5 Large Lot Residential as well as land zoned SP2 Infrastructure and RE1 Public Recreation under the Parkes Local Environmental Plan 2012.

The following documents have informed the development of the Middleton Masterplan:

6.1.1 Regional Guidelines

- + Austroads Guide to Road Design 2017.
- + Australian Rainfall and Runoff 2019.
- + NSW Central West and Orana Regional Plan 2036.
- + NSW Local Housing Strategy Guidelines 2018.
- + NSW Affordable Housing Guidelines 2021.
- + NSW Draft Greener Places Design Guide - NSW Government Architect

6.1.2 Local Guidelines

- + Parkes Shire Community Strategic Plan 2030.
- + Parkes Shire Local Strategic Planning Statement 2020-40.
- + Parkes Shire Housing Strategy 2021.
- + Parkes Pedestrian and Cycling Strategy 2016.
- + Parkes Shire Council Stormwater Asset Management Plan 2012.
- + Parkes Shire Council Transport Asset Management Plan 2015.

- + Parkes Shire Development Control Plan 2021.
- + Parkes Shire Council Engineering Design Minimum Standards for Subdivision and Development 2021.
- + Parkes Shire Council Roadside Vegetation Management 2019.

6.2 Masterplan Objectives

The objectives of the Middleton Masterplan are to:

- + Minimise impacts on residential land-use and natural areas to the greatest extent practical.
- + Inform the 'release' of Stage 1 of the Parkes Shire Housing Strategy with a Masterplan for Middleton.
- + Identify the mix of housing required / appropriate for Middleton.
- + Improve intersections and level crossings traffic conditions within residential streets.
- + Create stronger links between Middleton and nearby attractors - Parkes Hospital, Middleton Primary School, Pac Park, Cheney Park, McGlynn Park, Harrison Park and the Parkes CBD.
- + Improve streetscape conditions along Woodward Street.
- + Maintain / enhance existing native vegetation where practical to provide green relief and habitat for native flora and fauna.
- + Augment drainage, sewerage and reticulated water supply infrastructure to land zoned R1 General Residential and to the low-lying eastern area to residential redevelopment and expansion.
- + Develop the southern ring road corridor through the extension of Morrissey Way to Nash Street.
- + Identify areas for strategic street tree planting.
- + Apply onsite detention principles and water sensitive urban design principals to create practical / attractive drainage corridors and facilities, including the design of expansive waterbodies with native vegetation landscaping and shared paths.
- + Consider ways to reduce urban drainage impacts, including strategies to address water quality, drainage velocity and the discharge point to the Goobang Creek.
- + Protect native vegetation, groundwater vulnerable areas and nearby heritage sites from inappropriate development.
- + Maintain views and vistas to Parkes and wider rural landscapes.
- + Develop a health-related precinct and / or neighbourhood shops.
- + Extend Pac Park further east to allow public management of the riparian corridor to the Goobang Creek.
- + Apply the Parkes Shire Development Control Plan 2021 to all new development proposals.

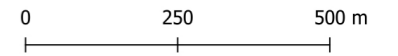
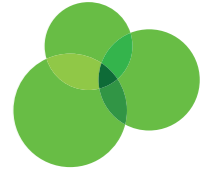
PRELIMINARY MASTERPLAN 06

7.1 MASTERPLAN OVERVIEW

The Middleton Masterplan provides a vision for optimal use of the urban land resource while ensuring protection of the environment and enhancing the lifestyle of those living in the area. The Masterplan also provides a framework for development, which will guide developers and Council in decision making around the provision of infrastructure and staging of development. Map 28 presents the Middleton Masterplan.

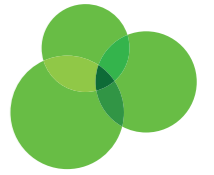
The Middleton Masterplan is supported by a series of other plan which seek to demonstrate key aspects of the design. These are presented in the following sections.

-  Proposed Active Recreation Precinct
-  Existing Recreation Precincts
-  Existing Mixed Use
-  Existing / Proposed Commercial Uses
-  Existing / Proposed Community Uses
-  Existing Residential Zoned Land
-  Proposed Residential Zoned Land
-  Existing Large Lot Residential Zoned Land
-  Stormwater Treatment locations
-  Key Intersections for Potential Improvement
-  Existing Vegetation / Vegetation Enhancements
-  Protection / Enhancement of Riparian Vegetation
-  Existing / Proposed Street Tree Enhancements
-  Proposed Active Transport Network
-  Existing Active Transport Network
-  Proposed Southern Link Road
-  Proposed Road Network



MAP NO. 28 - MIDDLETON MASTERPLAN





Park Edge - Medium Density Housing



Park Edge - Compact Housing on smaller lots



Large Lot Living

7.1.1 Lot size mix and location

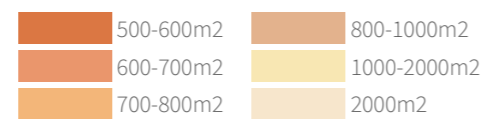
The Masterplan aims to provide a mix of lot sizes and typologies to deliver a diverse range of housing opportunities. In preparing the masterplan, the following guiding principles have been adopted to help achieve the right balance between lot size, mix and location:

- + Smaller lots in locations that benefit from close proximity to existing and planned areas of active and passive open space.
- + Larger lots in areas that are environmentally constrained and where lower residential densities would assist Council and landowners in achieving environmentally sustainable development outcomes.
- + A mix of lot sizes generally on the urban edge where lifestyle and residential amenity considerations are likely to be key attractors for new residential development.

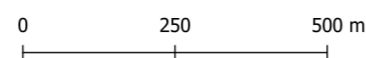
The proposed masterplan layout shows that it may be possible to achieve a total yield of approximately 500 new lots from the expansion of Middleton.

A breakdown of the approximate lot yields achieved by the masterplan is included as follows:

- + 62 lots between 500-600m².
- + 31 lots between 600-700m²
- + 170 lots between 700-800m²
- + 100 lots between 800-1000m²
- + 78 lots between 1000-2000m²
- + 51 lots with areas over 2000m²



Existing Development



MAP NO. 29 - LOT SIZE MIX MAP






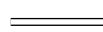




7.1.2 Middleton Transport Plan

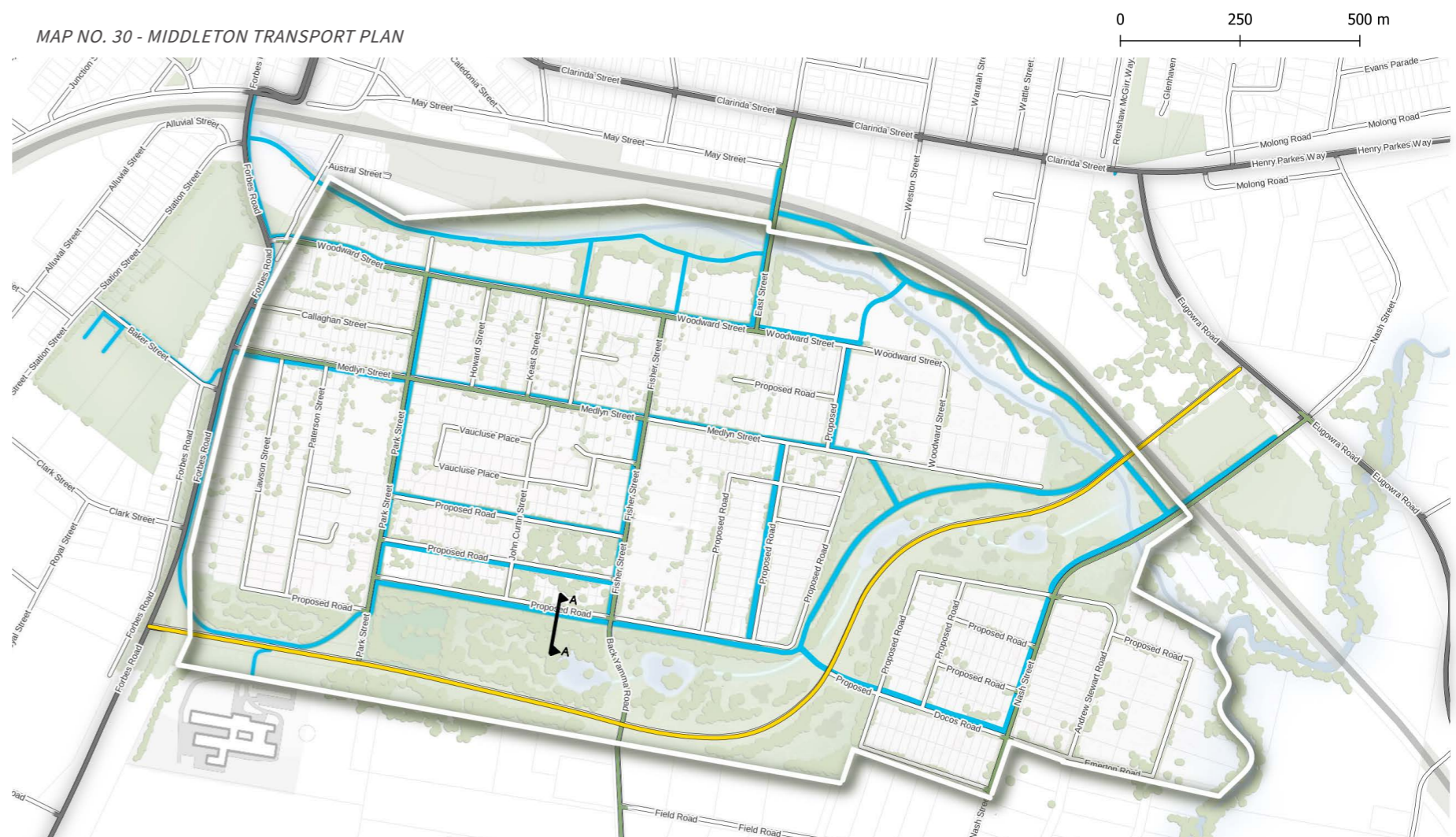
Traffic analysis of the Middleton area has been undertaken to ensure the precinct is connected / complementary to the wider transport network. Maps 30 shows the proposed transport plan treatments for Middleton in the wider context of the Parkes Urban Area Transport Network.

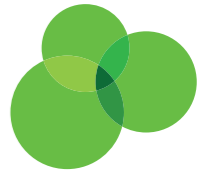
Key features of the Middleton Transport Plan are as follows:

- + Rationalisation of collector roads within the southern areas of the Parkes Urban Area to reduce the volume of traffic in residential areas of Middleton.
- + New road hierarchy plan to ensure high levels of residential amenity and connectivity to key attractors, including the Parkes Hospital, Middleton School and open space areas and the Parkes CBD.
- + Extension of Morrissey Way to Nash Street. This road alignment will become the southern link road for the Township of Parkes. The alignment purposefully avoids Harrison Park.
- + Upgrades to Back Yamma Road, Morrissey Way and several intersections.
- + Proposed new local roads servicing new residential areas.
- + Pedestrian and cycling paths along main collectors and to main attractors.
- + Perimeter roads around the new urban area to enable a controlled transition from residential land-use to passive recreation. The graphic above shows a typical section through a proposed road on the urban edge adjoining the crown reserve.

-  Existing Arterial / Sub-Arterial Roads
-  Proposed Collector Roads
-  Collector Road Network
-  Local Road Network
-  Southern Link Road Alignment
-  Active Transport Network

MAP NO. 30 - MIDDLETON TRANSPORT PLAN





7.1.3 Transport Infrastructure Staging Plan

It is expected that urban expansion within Middleton will occur in a staged manner.

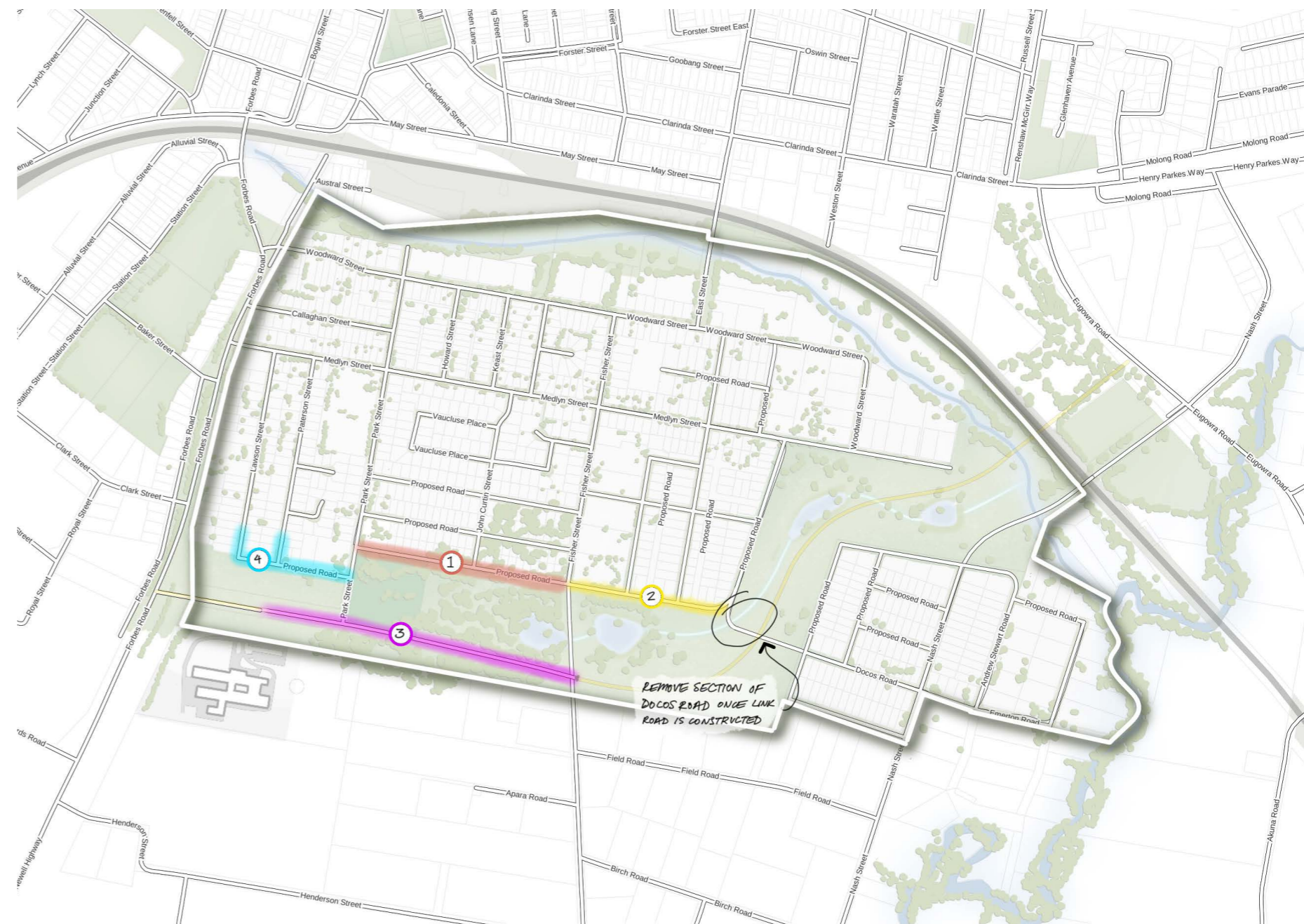
The masterplanning process has identified that priority enabling road infrastructure will be required to support the staged development of land in Middleton.

A description of this priority enabling infrastructure is included as follows and shown in Map 31.

1. A new road connecting Fisher Street to Park Street, with southern connection to Morrissey Way.
2. A new road connecting Docos Road to Fisher Street.
3. Extension of Morrissey Way to Back Yamma Road.
4. A new road connecting Lawson and Patterson Street to Park Street.

MAP NO. 31 - ROAD INFRASTRUCTURE STAGING MAP

0 250 500 m





7.1.4 Middleton Open Space Plan

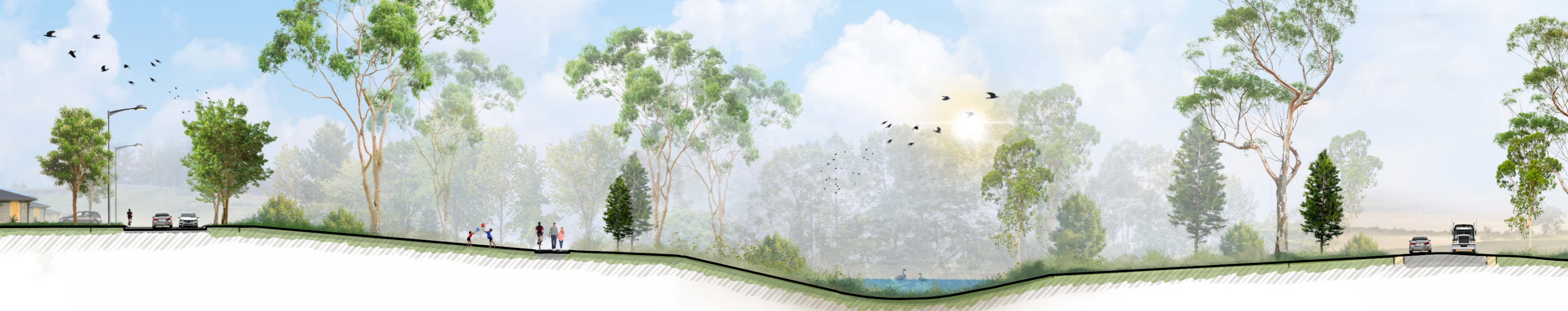
An open space plan has been developed for Middleton, based on observed behaviours and analysis of resident needs for open space and recreation. At the forefront of the open space plan is the expansion and further develop Pac Park for a wider variety of passive recreation activities. Key features of Pac Park would include:

- + Expansion of Pac Park south-east of East Street to Nash Street and Harrison Park. An area of predominantly Crown Land and some privately owned land located north of the existing urban drainage channel and south of the Orange to Broken Hill Railway is proposed to be acquired by Council.
- + Expansion of the environmental rehabilitation of the riparian area adjacent to the Orange to Broken Hill Railway, down to its junction with Goobang Creek to the south-east.
- + Provision for barbecue facilities at Pac Park in convenient proximity to existing attractors within the park (play equipment and, water features) and a new carpark from Woodward Street.
- + Extension of the shared path network from East Street to Nash Street and Harrison Park, to allow further connections to the Eugowra Road shared path network back into the eastern area of Parkes.
- + The expansion of Pac Park would achieve a central spine of green relief adjoining the Orange to Broken Hill Railway, with benefits for Middleton residential as well as the wider Parkes community.
- + Other open space initiatives under the Middleton Masterplan are as follows:
 - + Environmental rehabilitation, treelined buffer areas and landscaping along those areas of the Crown Land Road Corridor not to be used for road purposes.
 - + New road crossings of the Newell Highway and East Street to link Pac Park and its shared path network to Cheney Park, McGlynn Park and Harrison Park.
 - + New shared paths linking to attractors in the area.
 - + Redevelopment of the underutilised Lions Play Park, Bernard Maguire Park and the Vaucluse Place open space area for residential purposes.

Map 32 shows the proposed open space plan treatments for Middleton in the wider context of the Parkes Urban Area.

MAP NO. 32 - MIDDLETON OPEN SPACE PLAN





7.1.5 Middleton Stormwater Management Plan

A high-level concept stormwater management plan has been developed for Middleton to indicate the broad intent of the macro-stormwater management system, as defined by Australian Rainfall and Runoff 2019.

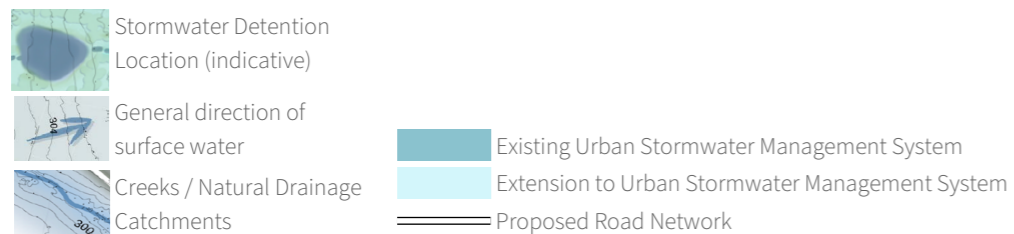
Key objectives for the management of stormwater in the Middleton Masterplan are as follows:

- + Use and rely on Pac Park as a critical drainage reserve for Parkes Urban Area drainage and stormwater management.
- + Create a subdivision design that limits the need for on-site detention and maximises the use of water sensitive urban design in both the public and private domain.
- + Minimise impacts on residential land-use and natural areas to the greatest extent practical.
- + Consider ways to reduce urban drainage impacts, including strategies to address public safety, water quality, drainage velocity and the discharge point to the Goobang Creek.

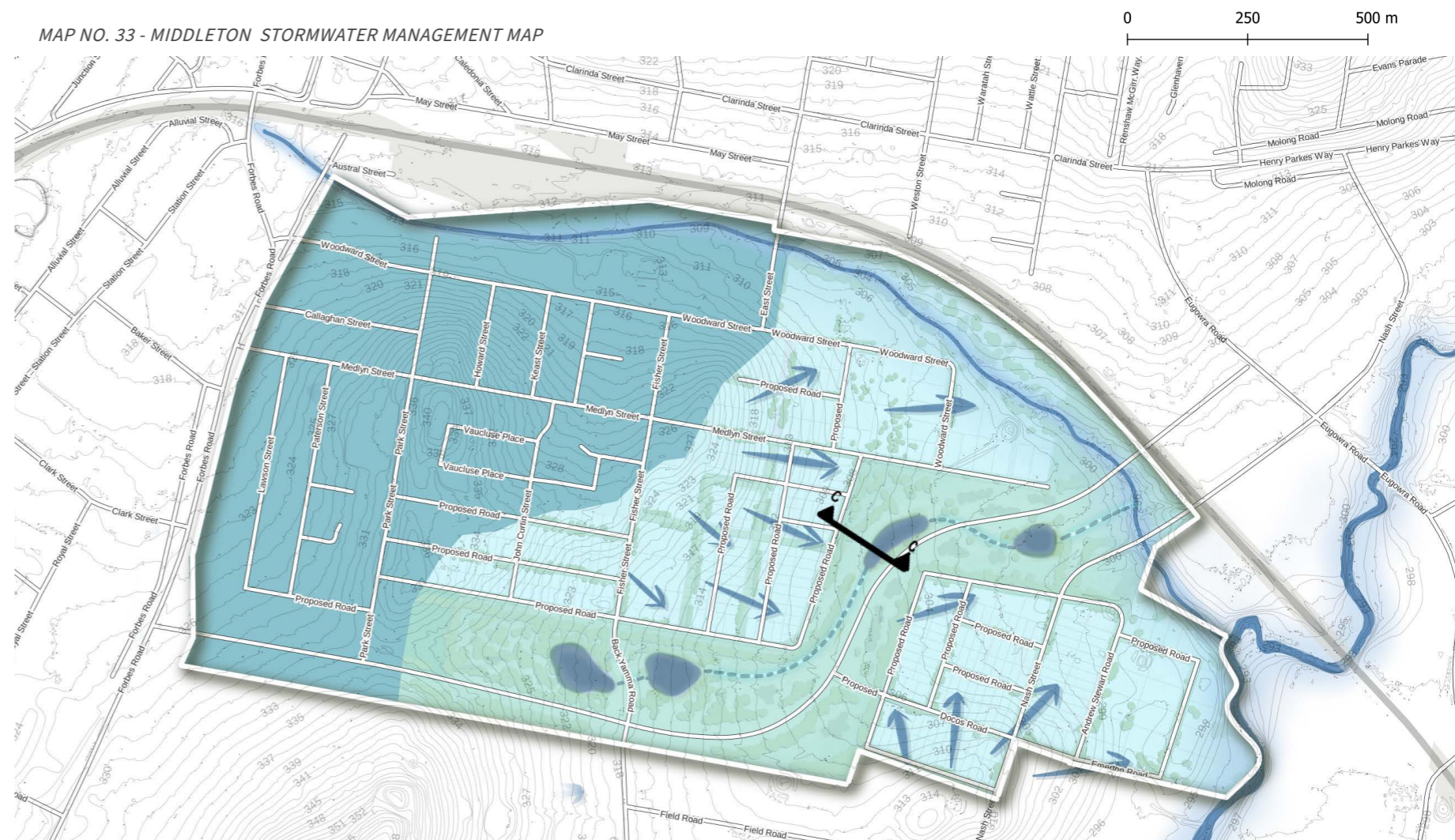
Key features of the Stormwater Management Plan are as follows:

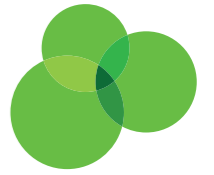
- + Expansion of the environmental rehabilitation program of the riparian area adjacent to the Orange to Broken Hill Railway, down to its junction with the Goobang Creek.
- + Develop a series of interconnected onsite detention basins within the southern ring road corridor to slow the movement of stormwater entering downstream infrastructure, rural properties and the Goobang Creek.

Map 33 shows the proposed stormwater management plan for Middleton in the wider context of the Parkes Urban Area.



MAP NO. 33 - MIDDLETON STORMWATER MANAGEMENT MAP





7.1.6 Middleton Environmental Management Plan

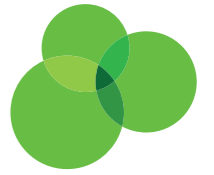
A plan has been developed as part of the Middleton Masterplan to preserve environmental assets and values and set standards for the management of these assets and construction phases of new subdivisions and development.

Key features of the plan are as follows:

- + Connecting isolated stands of vegetation to larger areas of native vegetation, including the Goobang Creek riparian areas and larger pockets of bushland along the Eugowra Road and the Orange to Broken Hill Railway.
- + Maintaining and enhancing existing timbered galleries on the elevated areas, along the southern ring road corridor and along the Pac Park riparian corridor in order to provide green relief and habitat for native flora and fauna.
- + Implementing an environmental management plan for redevelopment areas in order to minimise impacts on areas of high biodiversity value as well as lift performance in the management of soil movement and sedimentation, weeds, unauthorised vehicle movements and illegal dumping on public lands.
- + Implementation of the Parkes Shire Council Roadside Vegetation Management within the southern ring road corridor, including the following:
 - Limit mowing and slashing to one slasher width, do not slash beyond the table drain Grade only the minimum road width required for safe clearance.
 - In areas where vegetation needs to be pruned or cleared, ensure all material is chipped and mulched on site.
 - Retain hollow logs for habitat.
 - Mulch should be spread on weeds and bare areas, not on native vegetation.

MAP NO. 34 - MIDDLETON ENVIRONMENTAL MANAGEMENT PLAN



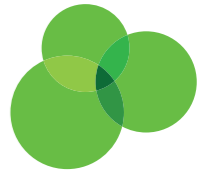


7.1.7 Middleton Servicing Plan

A plan has been developed as part of the Middleton Masterplan (see Map 35) to show the preferred location of trunk water and sewer mains. The map does not show the locations of utilities (including those which are the responsibilities of other authorities), however these would generally be aligned with augmentation from lead sewer, water, roads and lot layouts.

MAP NO. 35 - MIDDLETON SERVICING PLAN





7.1.8 Water and Sewer Staging Plan

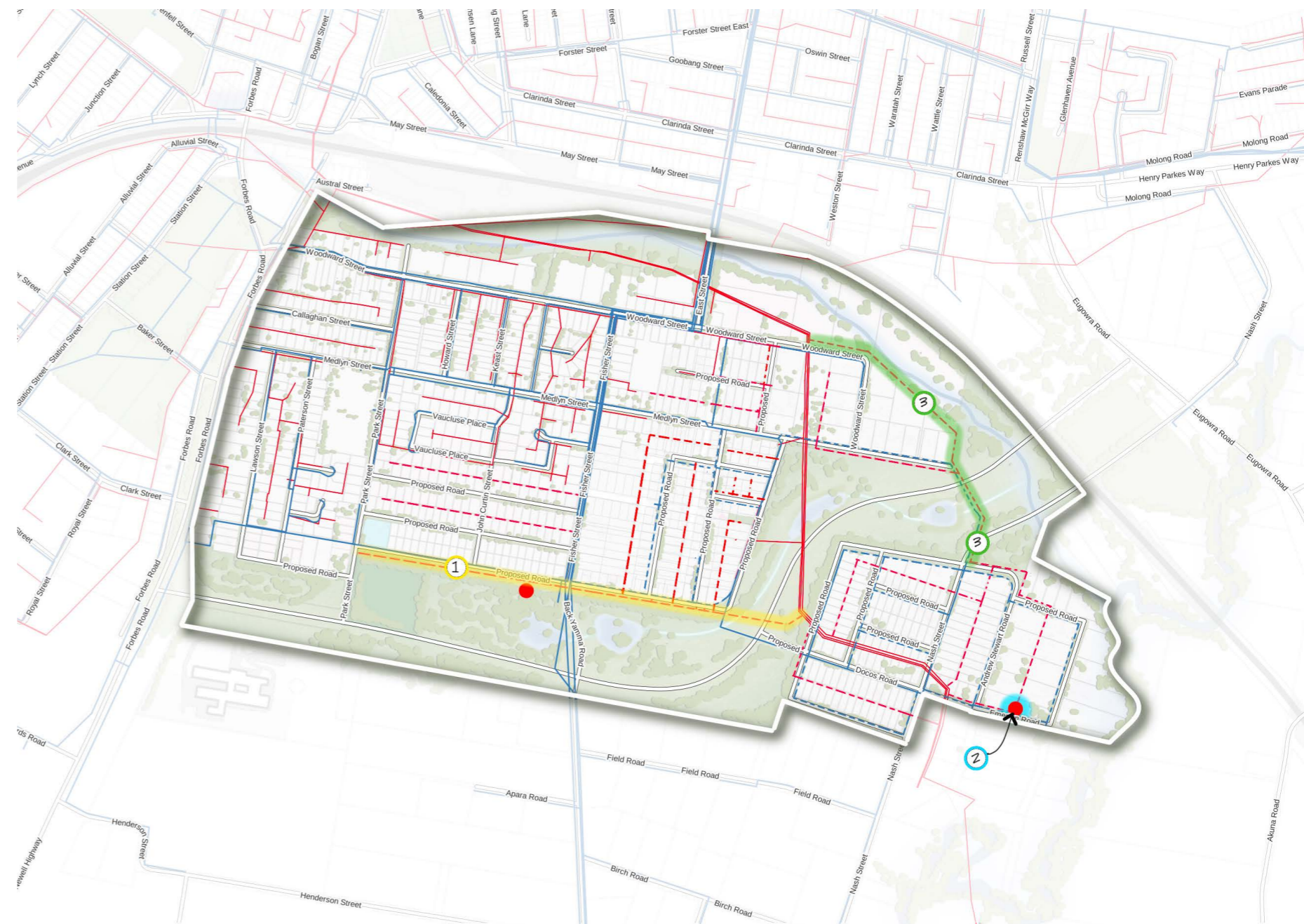
It is expected that urban expansion within Middleton will occur in a staged manner.

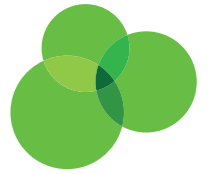
The masterplanning process has identified that priority enabling water and sewer infrastructure will be required to support the staged development of land in Middleton.

A description of this priority enabling infrastructure is included as follows and shown in Map 36.

1. Sewer trunk main from Park Street to Docos Road
2. Pump station on Emerton Road
3. Extension of reticulated water main from Woodward Street to the Nash Street / Emerton Road precinct.

MAP NO. 36 - WATER AND SEWER STAGING PLAN





THE NEXT STEPS 08

The preparation of the Middleton Masterplan is being undertaken in a number of steps, as follows:

- + Preliminary Findings from Community Engagement - feedback from stakeholder engagement has been considered in the development of the draft Middleton Masterplan, which has been workshopped with Council and is now ready for public exhibition.
- + Public Exhibition of the draft Middleton Masterplan - the draft Middleton Masterplan will be placed on public exhibition, inviting further comments from relevant government agencies, stakeholders involved in the housing sector, community groups and individuals. Council's website will provide access to download the Middleton Masterplan as well as other general information on the plan making process.
- + Finalisation of the Middleton Masterplan - the finalised Middleton Masterplan will be reported to Council for adoption, along with a review of all submissions received.
- + Update of the Parkes Shire Development Control Plan 2021, consistent with any amendments to the Parkes Local Environmental Plan 2012.
- + Update of the Parkes Shire Pedestrian and Cycling Strategy 2016.
- + Contributions Plan outlining upgrades to community facilities and services, costs and timing.
- + Preparation of a Street Tree Strategy to properly inform the selection and placement of street trees throughout existing and proposed urban areas.

The adoption of the Middleton Masterplan will provide the basis for the preparation of further plans and studies, including:

- + More detailed environment and heritage study of the area.
- + More detailed infrastructure servicing plans.
- + Planning Proposal for changes to the Parkes Local Environmental Plan 2012, generally in accordance with Masterplan findings / recommendations.

