



East Leppington

LIVERPOOL GROWTH CENTRE PRECINCTS DCP
SCHEDULE 3 EAST LEPPINGTON

March 2022

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Tables

Table 1-1: Structure of this Schedule1

1 Introduction

1.1 Name and application of this Schedule

This schedule forms part of the Liverpool Growth Centre Precincts Development Control Plan (also referred to as the 'Main DCP').

This schedule applies to all development on the land shown in **Figure 1-1** being that portion of the East Leppington Precinct located within the Liverpool Local Government Area (LGA). This schedule and related amendments to the Main DCP give effect to the provisions of the DCP for land within the East Leppington Precinct as shown on the Land Application Map.

1.2 Structure of this Schedule

This schedule should be read in conjunction with the Main DCP and is in addition to the Main DCP. In the event of an inconsistency between this Schedule and the Main DCP, this Schedule prevails.

Table 1-1 summarises the structure of this Schedule – East Leppington Precinct.

Table 1-1: Structure of this Schedule

Part	Summary
1 – Introduction	Identifies the land to which the Schedule applies.
2 – Subdivision Planning and Design	Establishes an overall vision and Indicative Layout Plan (ILP) for the East Leppington Precinct and supports the development controls in Parts 2, 3 and 4 of the Main DCP.
3 – Centres Development Controls	Provides specific objectives and controls that apply to land within the East Leppington neighbourhood centre, identified on the Indicative Layout Plan for the East Leppington Precinct. These controls are in addition to those in Part 5 of the Main DCP.
4 – Site Specific Controls	Outlines specific objectives and controls for development in certain parts of the Precinct, including land affected by electricity and gas easements, heritage, and land adjacent to the Upper Canal, Denham Court Road, Camden Valley Way and open space.

Additional notes to readers are provided throughout this document. These notes are not part of the formal provisions of the DCP, but are intended to provide additional guidance and explanation of the provisions.

If further guidance is required on the interpretation of provisions in the Main DCP, readers should refer to the definitions within the Main DCP and State Environmental Planning Policy (Sydney Growth Centres) (also referred to as the Growth Centres SEPP).

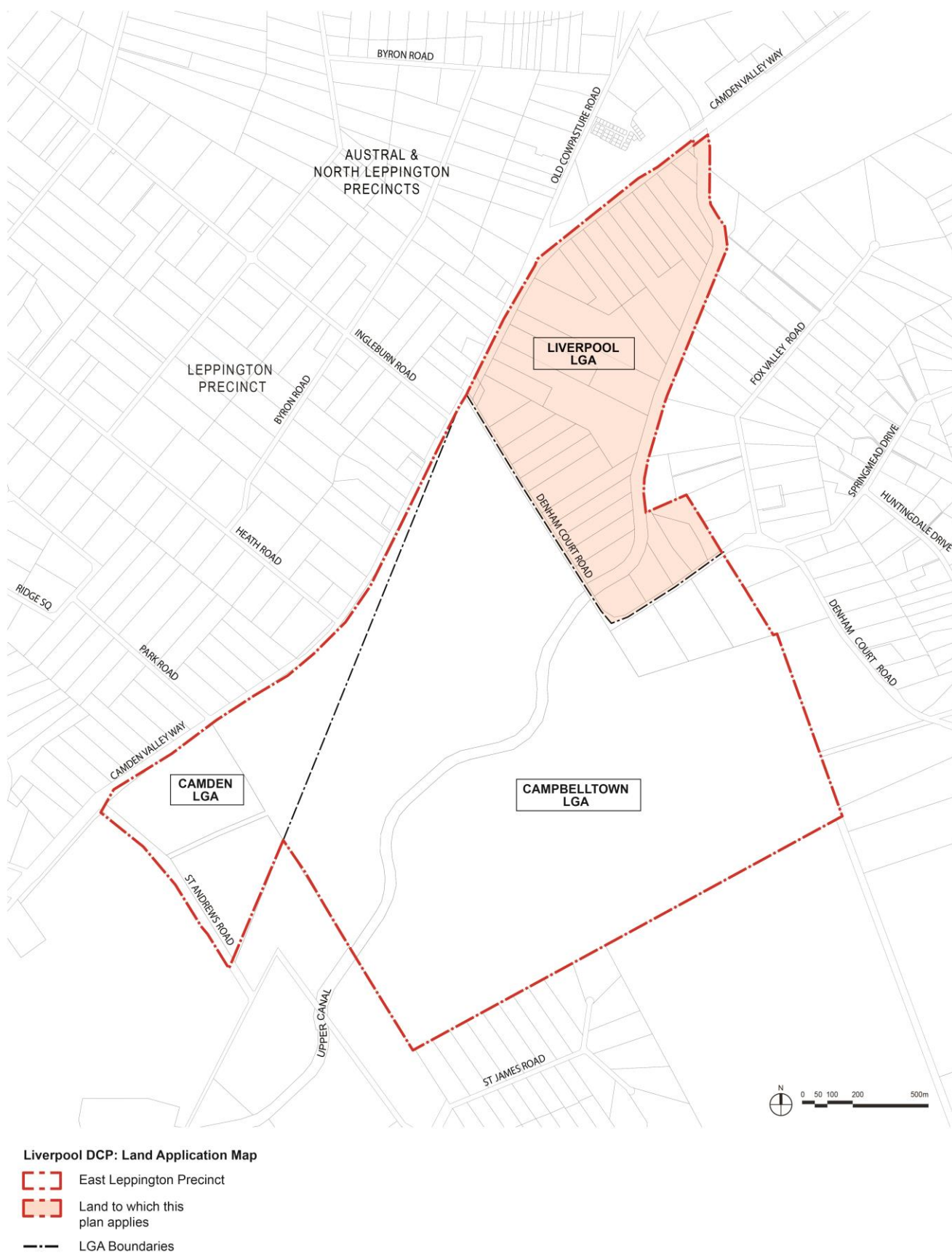


Figure 1-1: Land Application Map

2 Subdivision Planning and Design

2.1 East Leppington Precinct Vision

The vision for East Leppington Precinct is to develop a series of new walkable residential neighbourhoods supported by local retail, community and recreation facilities in an environmentally sustainable manner.

The Precinct as a whole will provide for:

- A range of residential densities, housing types and affordability options to meet the needs of a diverse and growing community.
- Detached housing comprising the majority of residential development, with medium density development located close to the Centres and along bus routes with areas of higher amenity with larger lots on the periphery of the Precinct.
- A Local Centre in the south providing a mix of retail, commercial and community services to cater for the needs of local residents in the Campbelltown part of the precinct. Located off Camden Valley Way it will be highly accessible and surrounded by medium density residential and mixed use development.
- A Neighbourhood Centre to the north serve the daily needs of the local community in the Liverpool part of the Precinct.
- A public domain that will include for the Liverpool part precinct:
 - passive recreation opportunities maximised along the Bonds Creek riparian corridor;
 - where possible, remnant vegetation retained in public parks; and
 - open space close to medium density housing and the neighbourhood centre.
- For the Campbelltown part precinct a public domain that will include:
 - conservation of areas containing endangered ecological communities;
 - special places focused on important landscape and cultural features including the Leppington House archaeological site;
 - sporting fields for active recreation opportunities; and
 - protection of the visual and landscape quality of the Scenic Hills.
- The incorporation of principles of ecological sustainability and measures to ensure that the important historic, environmental and visual elements of the Precinct are recognised and protected for future generations.

2.2 Referenced Figures

The figures included in this section are those referenced in the following parts of the Main DCP:

- Part 2 Precinct Planning Outcomes;
- Part 3 Neighbourhood and Subdivision Design;
- Part 4 Development in the Residential Zones; and
- Part 5 Centres Development Controls.

2.3 Cross references between Schedule and Main DCP

For ease of reference the following table identifies the figures in this Schedule with the Main DCP. Both the Main DCP and this Schedule apply to the development of land and need to be read together.

Table 2-2: Cross References

Referenced Figures in this Schedule	Related Section in Liverpool Growth Centres DCP (Main DCP)
Figure 2-1 – Indicative Layout Plan	Section 2.2 of Main DCP
Figure 2-2 – Flood Prone Land	Section 2.3.1 of Main DCP
Figure 2-3 – Key Elements of Water Cycle Management and Ecology Strategy	Section 2.3.2 of Main DCP
Figure 2-4 – Areas of Potential Salinity Risk	Section 2.3.3 of Main DCP
Figure 2-5 – Aboriginal cultural heritage	Section 2.3.4 of Main DCP and Section 4.1 of this Schedule
Figure 2-6 – European cultural heritage	Section 2.3.4 of Main DCP
Figure 2-7 – Bushfire Risk and Asset Protection Zone Requirements	Sections 2.3.5 and 2.3.6 of Main DCP
Figure 2-8 – Location of easements (electricity & gas)	Section 2.3.8 of Main DCP
Figure 2-9 – Odour	Section 2.3.10 of Main DCP
Figure 2-10 – Potential noise attenuation measures	Section 2.3.9 of Main DCP
Figure 2-11 – Residential Structure	Section 3.1 of Main DCP
Figure 2-12 – Precinct Road Hierarchy	Section 3.3.1 of Main DCP
Figure 2-13 – Pedestrian and Cycleway Network	Section 3.3.6 of Main DCP
Figure 3-2 – Desired Future Layout of the Centre	Section 5.3.1 of Main DCP

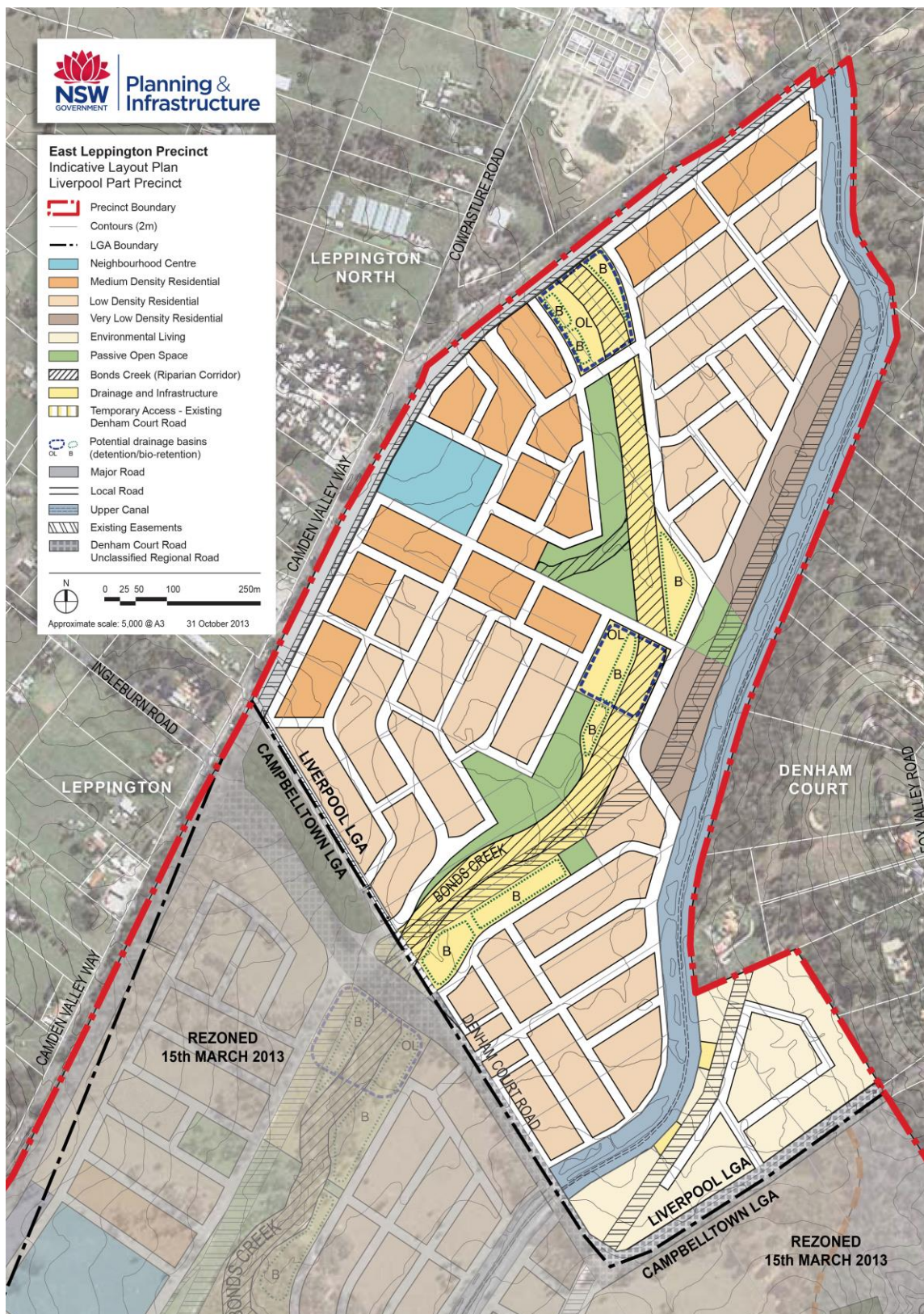


Figure 2-1: Indicative Layout Plan

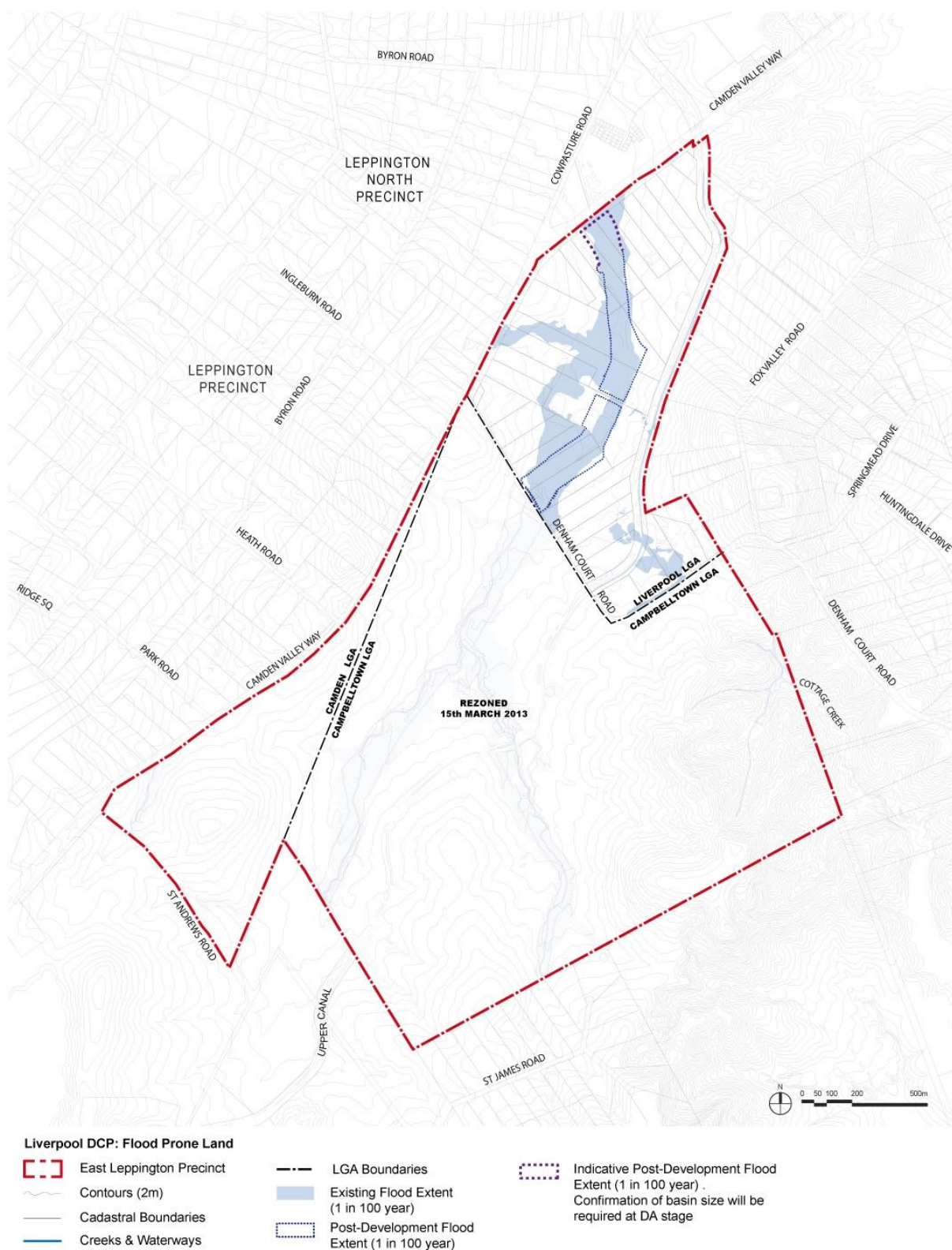


Figure 2-2: Flood prone land

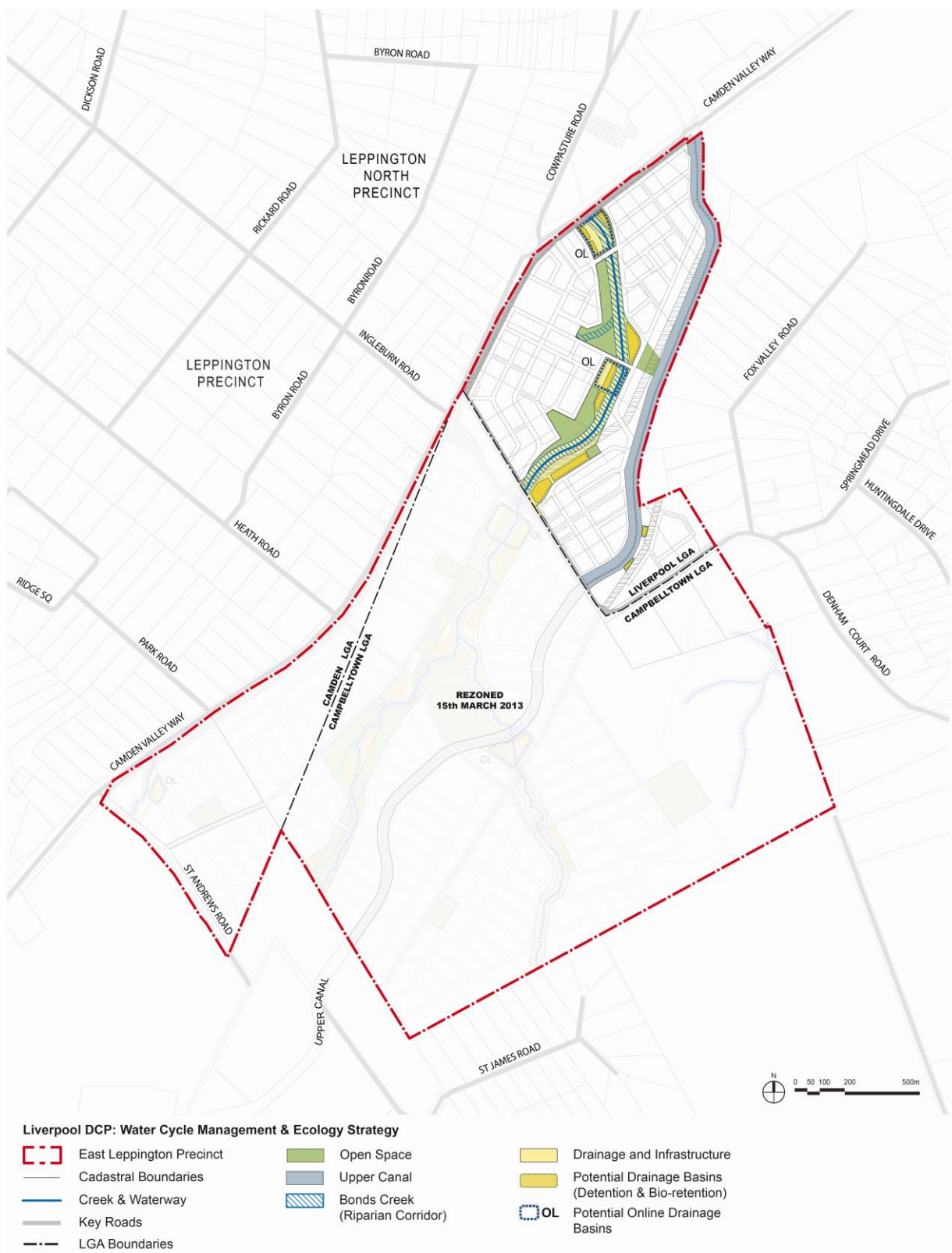


Figure 2-3: Key elements of water cycle management and ecology strategy

Note: Refer to the Water Cycle Management Report for East Leppington June 2013.

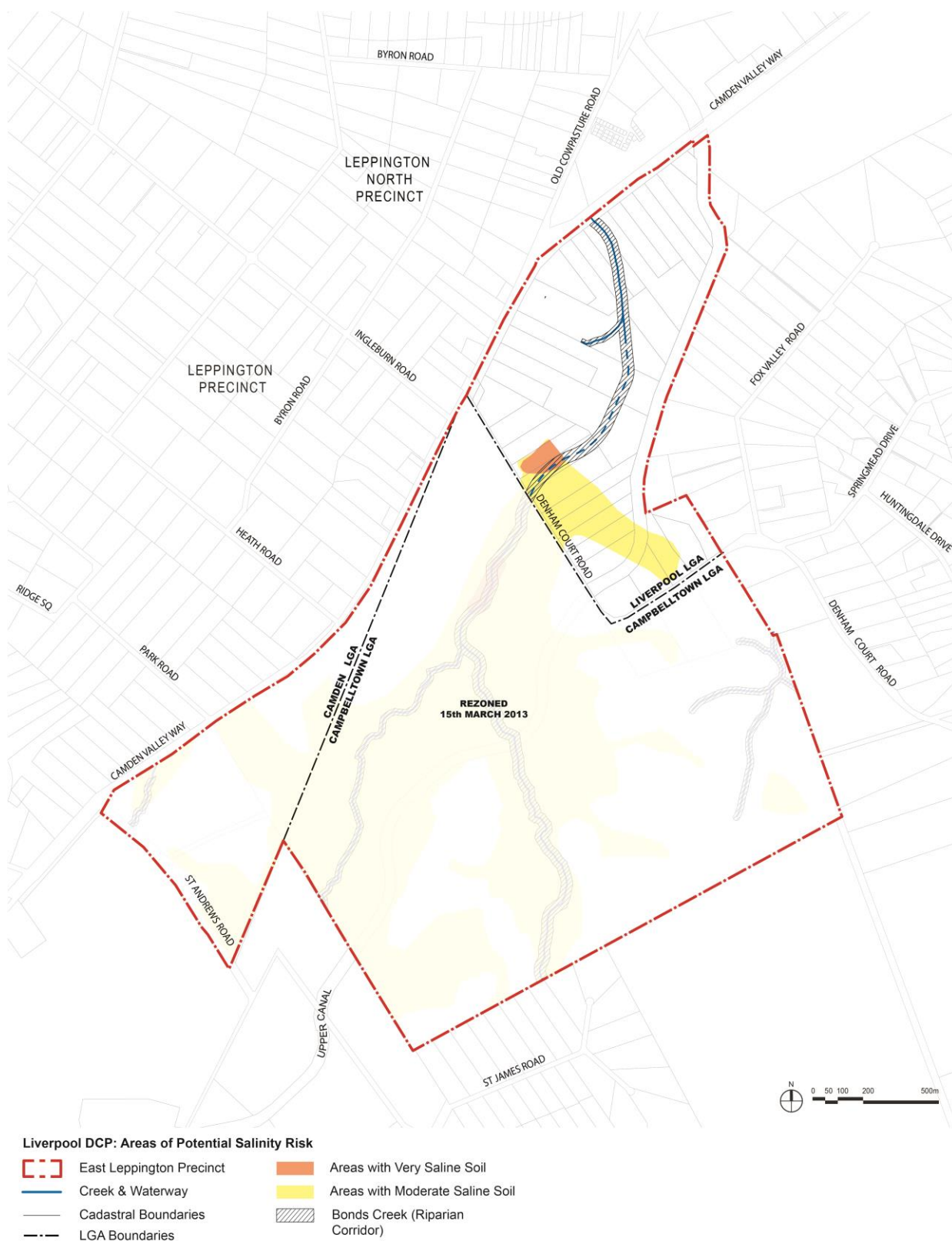


Figure 2-4: Areas of potential salinity risk

Note: Refer also to the *East Leppington Preliminary Environmental Site Assessment 2012* by JBS for additional information on salinity and potential contamination risk ranking figure.

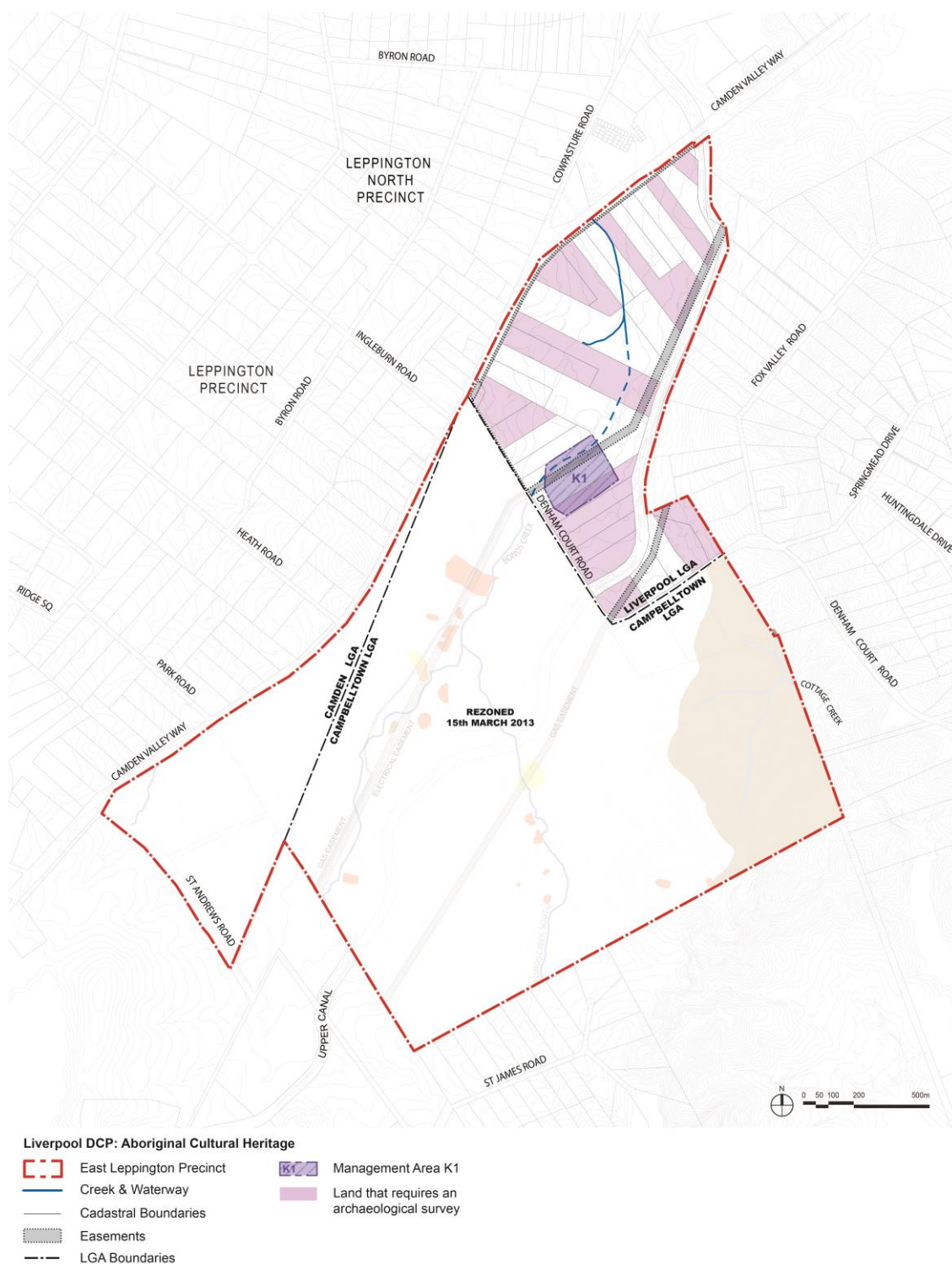


Figure 2-5: Aboriginal cultural heritage

Note: Refer to East Leppington Precinct Planning Indigenous and Non-Indigenous Heritage Assessment report dated June 2012. Specifically to Appendix D East Leppington Lands North of Denham Court Road – Aboriginal Archaeological Technical Report.

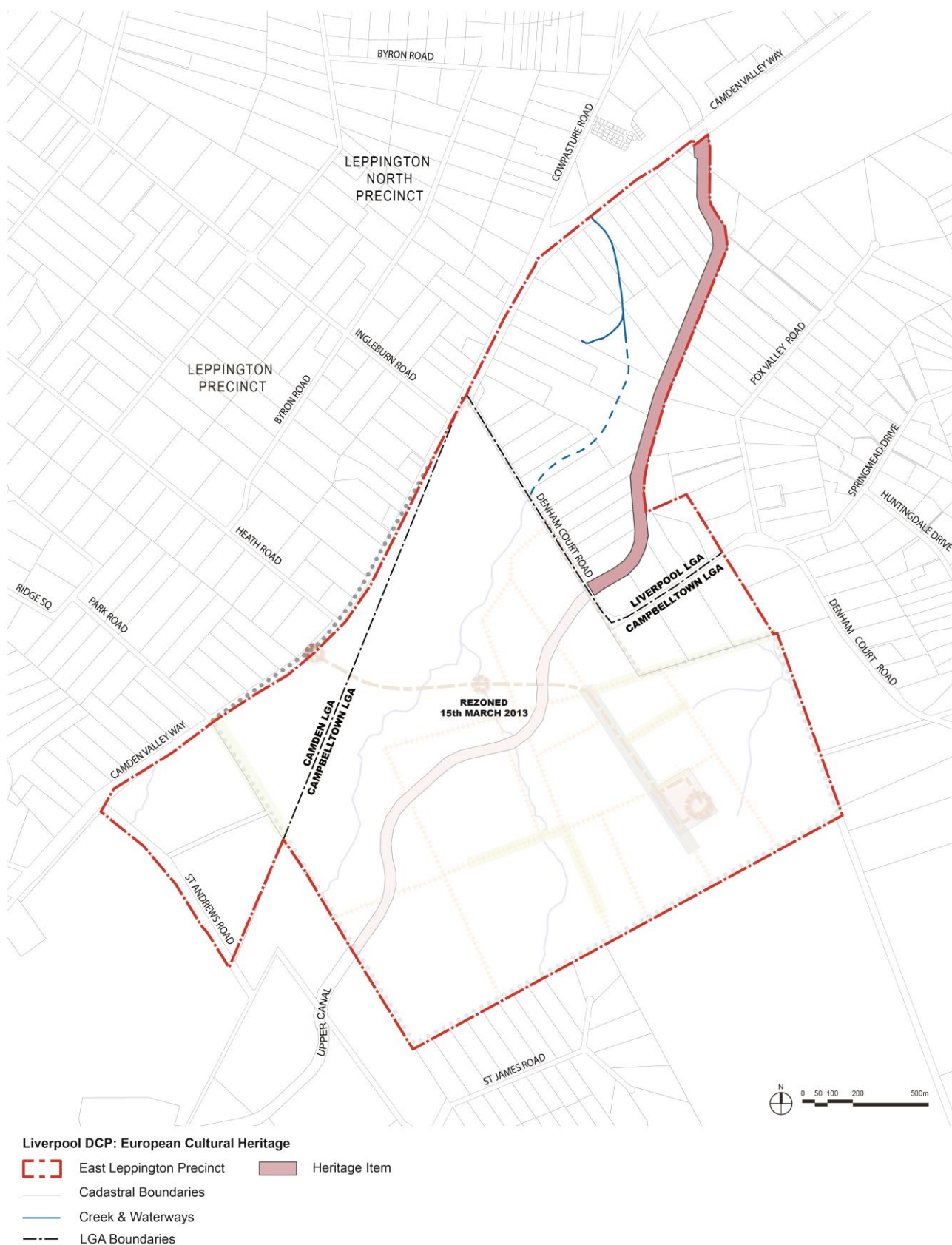


Figure 2-6: European cultural heritage



Figure 2-7: Bushfire Risk and Asset Protection Zone Requirements

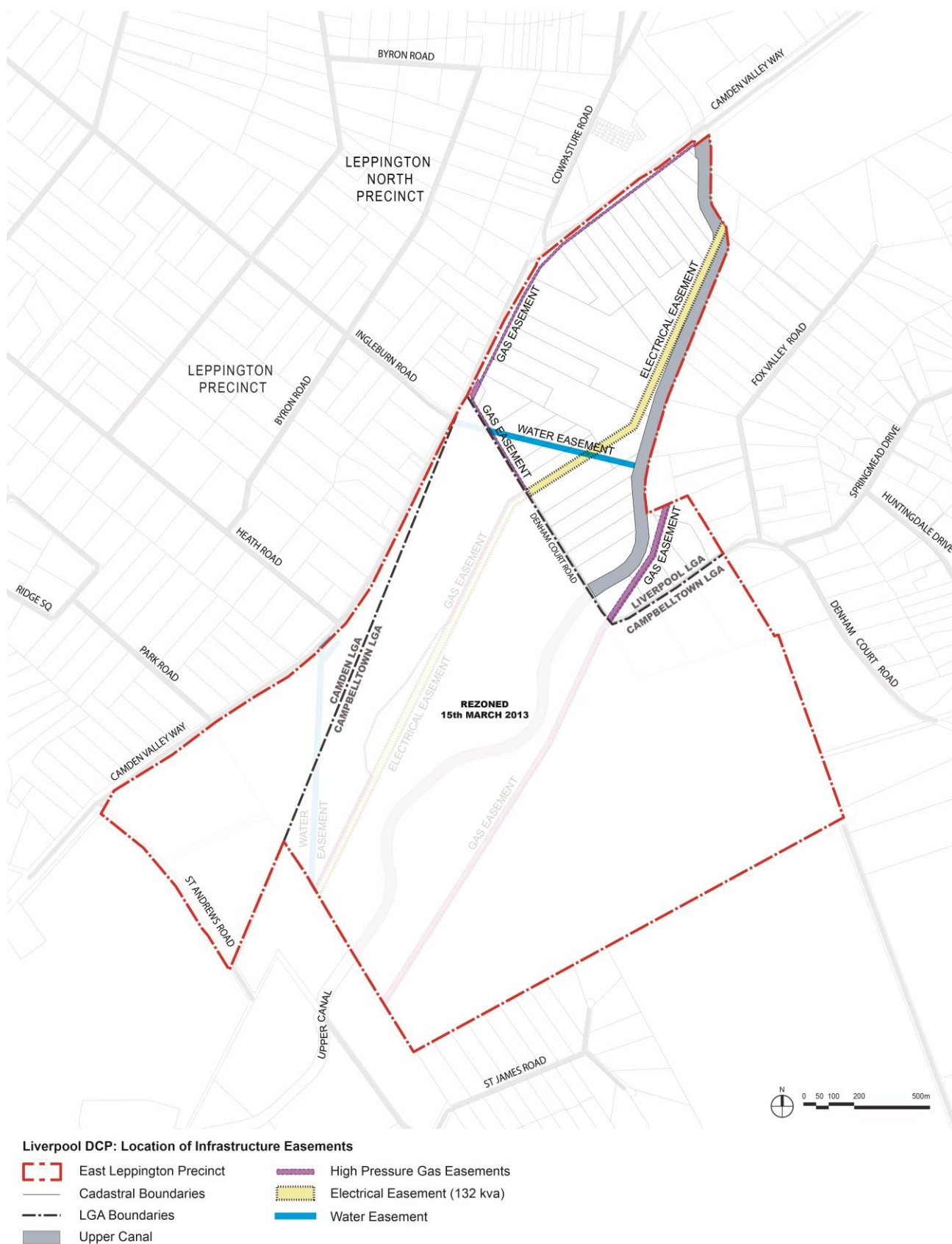


Figure 2-8: Location of easements (electricity, gas and water)

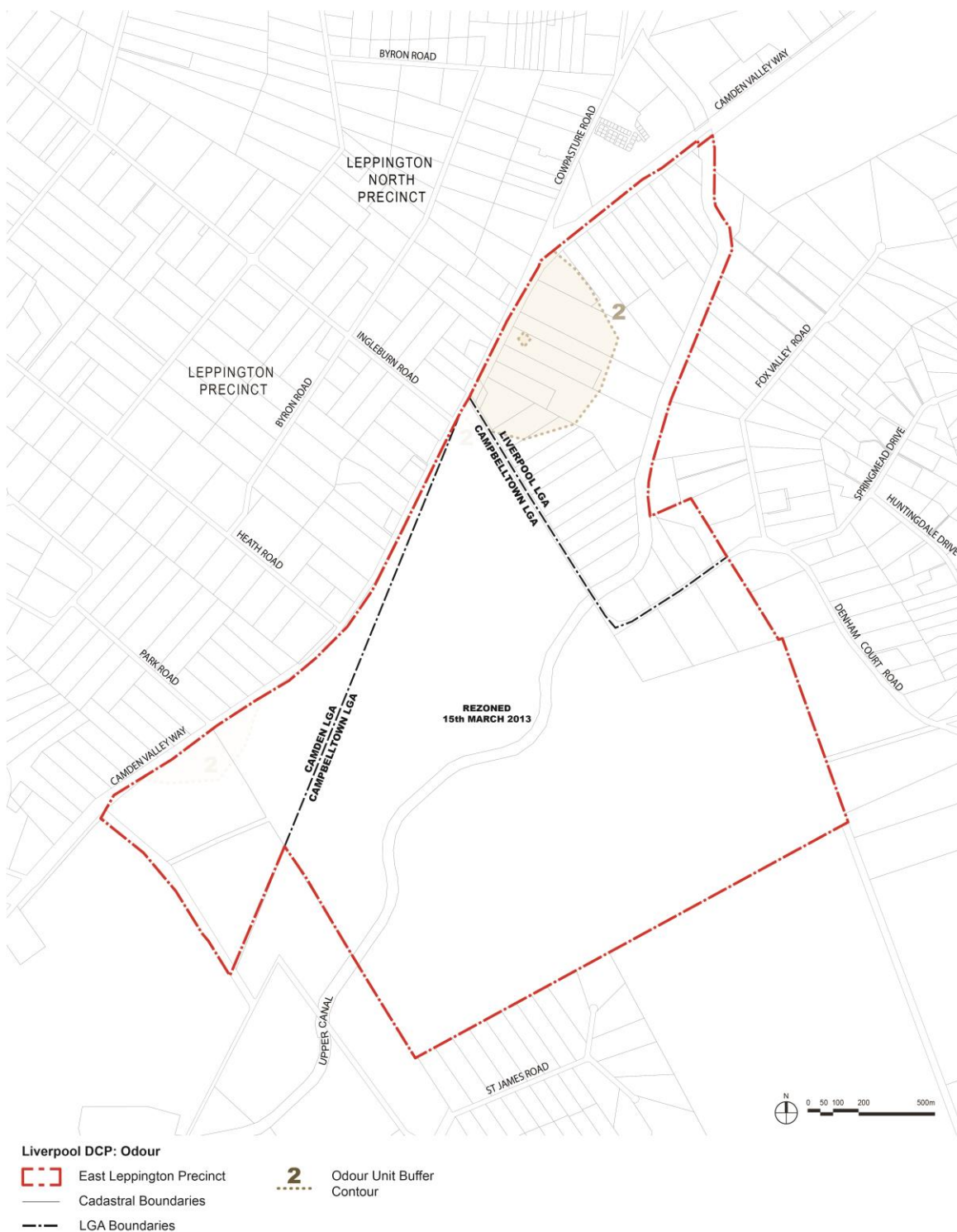


Figure 2-9: Odour

Note: The odour performance criteria for proposed development is 2 OU(odour threshold) which requires that odour levels be complied with 99% of the time, meaning that odour levels can only be exceeded for a time equivalent to 1% of the year.

The 2 odour unit assessment criterion should be applied to a residential development in the Precinct. Refer to the technical study Preliminary Odour Impact Assessment by JBS 2011.

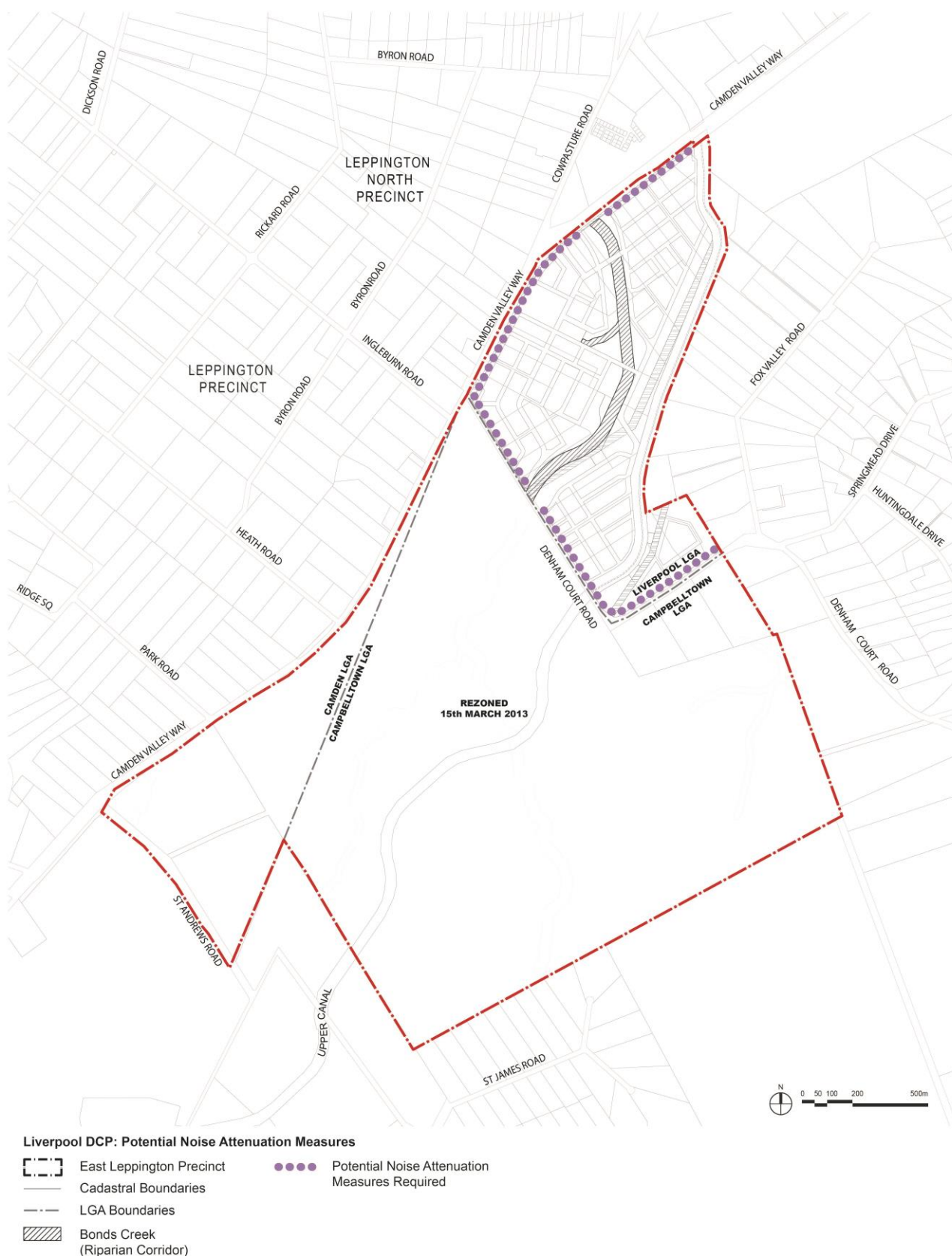


Figure 2-10: Potential noise attenuation measures



Figure 2-11: Residential structure

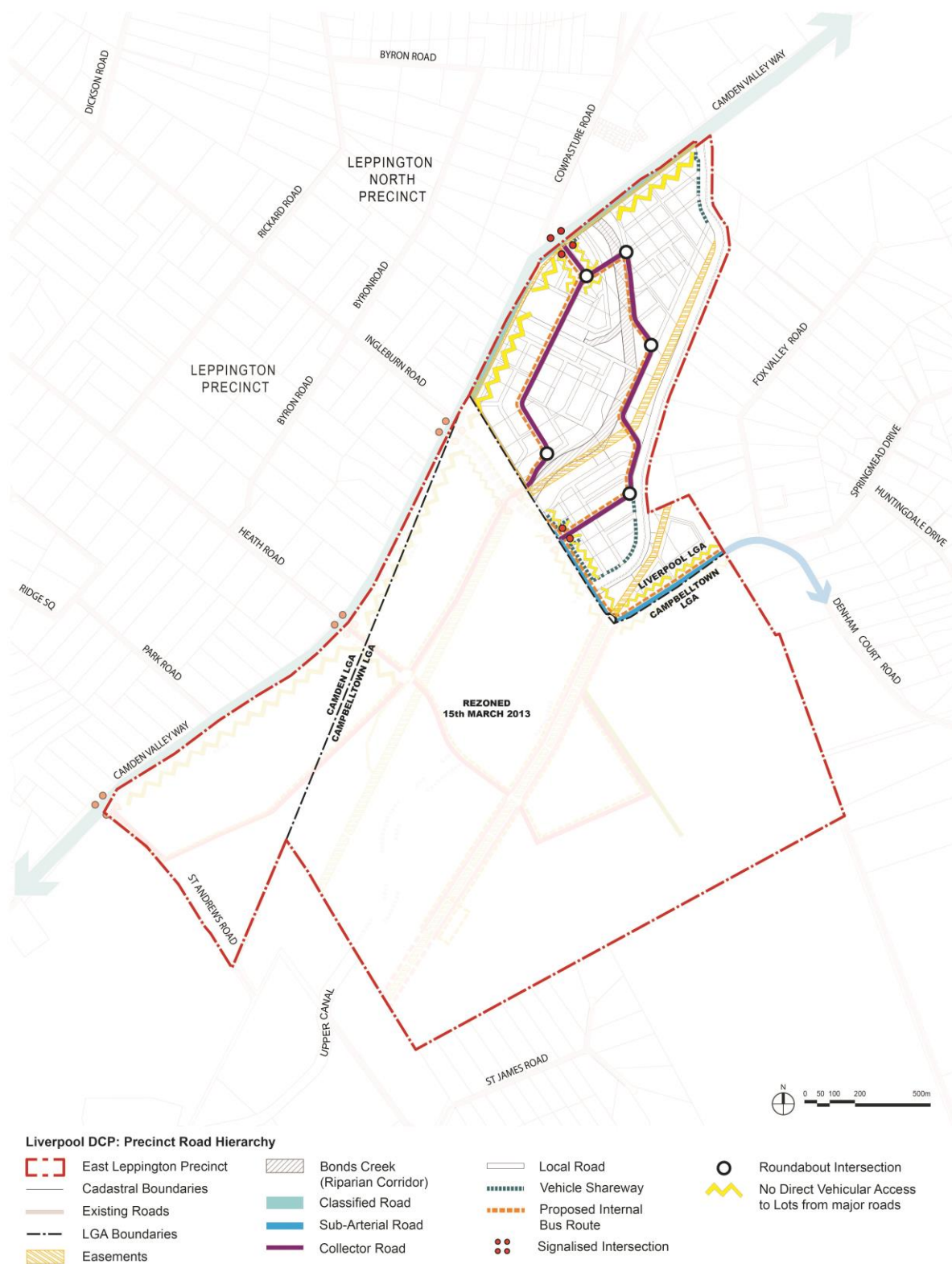


Figure 2-12: Precinct road hierarchy

Note 1: The proposed bus routes in Figure 2-12 are indicative only. Bus routes will be determined as development proceeds based on the Precinct road hierarchy and demand.

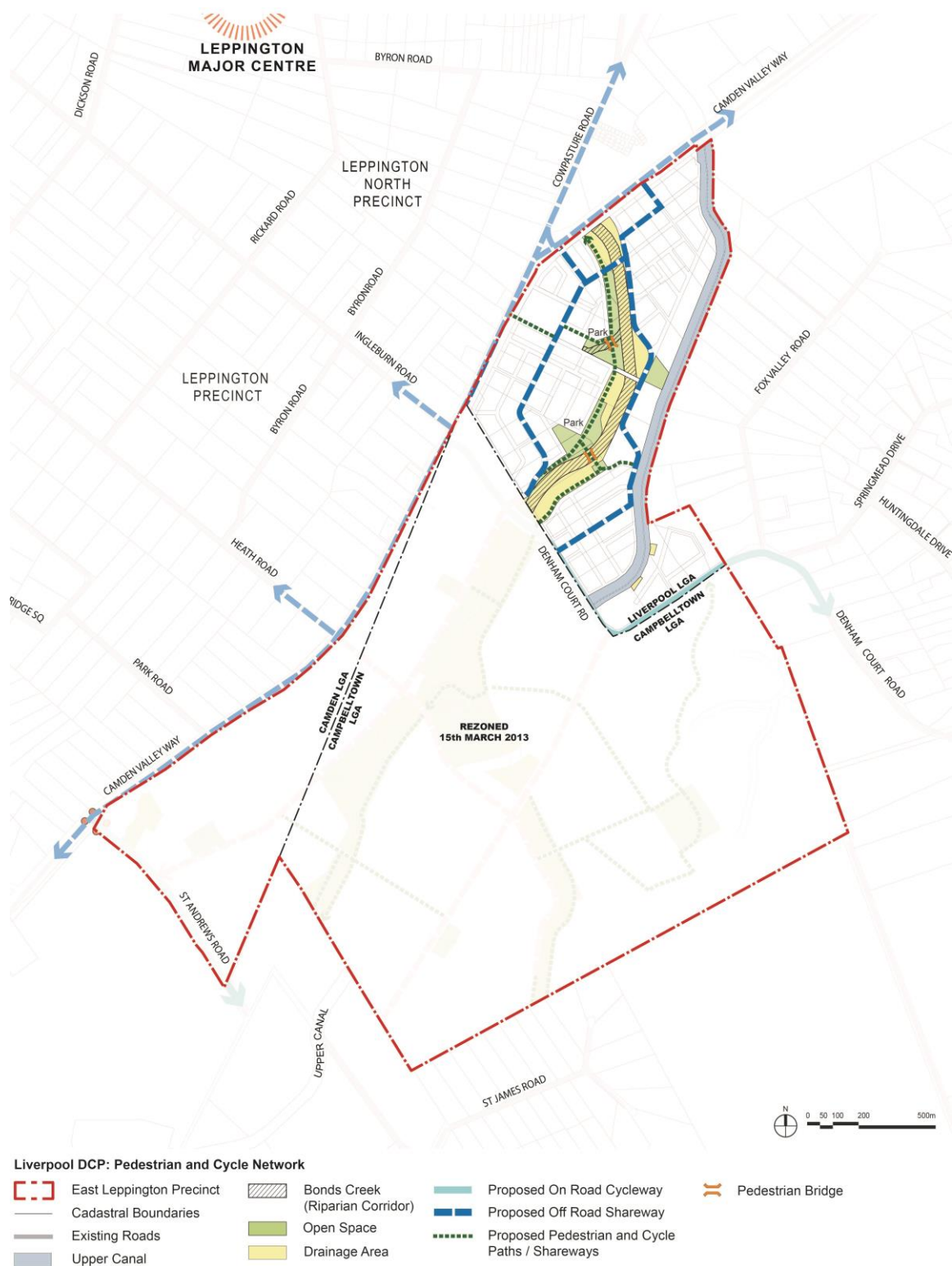


Figure 2-13: Pedestrian and cycleway network

2.4 Street Network and Design

Note: The objectives and controls of this section must be read in conjunction with Section 3.3.1 of the Main DCP.

Objectives

- a. To ensure the street network in the East Leppington Precinct provides clear, safe and convenient access within and beyond the Precinct.
- b. To enable road design and construction to respond to particular site constraints or opportunities.
- c. To ensure that road construction on land adjoining gas easements or that may cross the easement considers potential impacts on the integrity and safety of the gas pipeline.
- d. To ensure reasonable standards of public amenity and a high quality public domain in the Precinct.
- e. To support a hierarchy for the road system and identified connections to Camden Valley Way and Denham Court Road.

Controls

1. The design and construction of streets is to be consistent with the road layout in **Figure 2-12**, the relevant typical designs in the Main DCP, and Council's Engineering Design Guide.
2. The locations of road intersections connecting to Camden Valley Way and Denham Court Road are to be consistent with the ILP and the Precinct road hierarchy **Figure 2-12** and are to include relative provision for turning lanes on these roads.
3. A local street or accessway is to separate residential development from Camden Valley Way and Denham Court Road. Typically these streets run parallel and adjacent to Camden Valley Way and Denham Court Road as indicated on the ILP.
4. The local street or accessway separating development and Camden Valley Way is to be designed in accordance with **Figure 2-14** which encourages a wider landscape buffer (providing for tiering of vegetation) to improve visual amenity for residential lots facing Camden Valley Way. The dimensions within this street corridor are flexible and can be varied to respond to localised conditions to the satisfaction of Council.
5. The design and location of the roads and of the acoustic or landscape treatment adjacent to Camden Valley Way and parts of Denham Court Road are to take into account the existing underground gas pipelines and easement. Refer to Section 4.3 of this DCP Schedule.
6. Where rear lane access is provided it is to be in accordance with the minimum dimensions of **Figure 2-15**.
7. Significant individual trees may be incorporated within appropriate setbacks on individual lots.
8. The upgrading and re-alignment of Denham Court Road must consider the Water Cycle Management Report East Leppington June 2013 and manage drainage impacts.

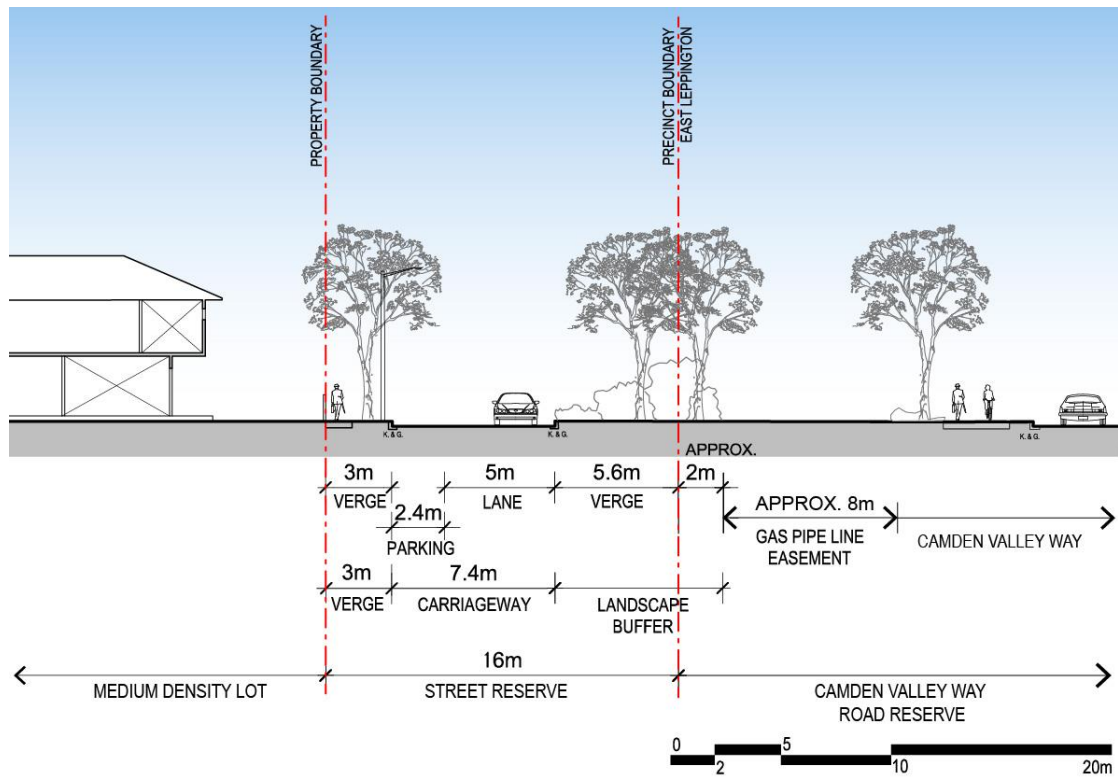


Figure 2-14: Street reserve to Camden Valley Way

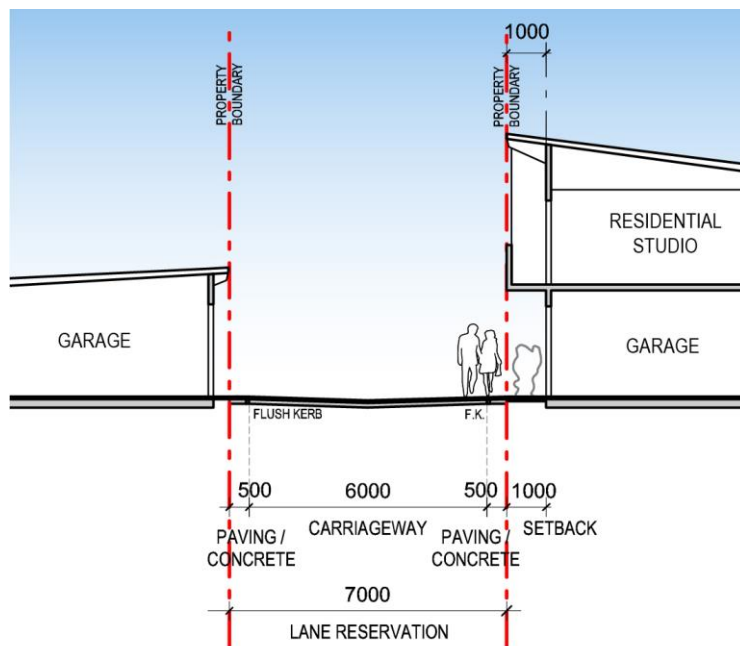


Figure 2-15: Indicative rear laneway

2.5 Noise attenuation measures

This section supplements Section 2.3.9 Noise and 3.3.1 Street network and design of the Main DCP and sets out controls for particular streets as shown in **Figure 2-10**. Future collector roads may carry larger volumes of traffic thereby requiring noise attenuation measures. The Main DCP requires an acoustic report where traffic volumes are predicted to exceed (or currently exceed) 6,000 vehicles per day.

Objectives

- a. To enable road design and construction to respond to particular site constraints or opportunities.
- b. To ensure reasonable standards of public amenity and a high quality public domain in the Precinct.

Controls

1. Noise attenuation measures are to incorporate a suite of measures such as subdivision layout, road layout, dwelling density, location and design, facade treatment etc as noise walls are not preferred. Refer to **Figure 2-16** for how these indicative measures can be applied.
2. In extenuating circumstances, where noise attenuation includes a structure, in addition to screening with vegetation, the use of natural materials including gabions, stone, timber or similar is preferred. See **Figure 2-17**.
3. Noise attenuation structures are to be appropriately screened by native, low maintenance, landscape planting and are to be maintained for a period of time following construction as specified by Council.
4. The design of any noise wall should consider scale, rhythm, proportion in collaboration with urban designers, noise consultants and engineers. Refer to the 'Noise wall design guideline' prepared by RMS (formerly RTA) dated February 2007 for detailed consideration.
5. Noise levels within the development are to comply with the Noise Criteria in Table 3.1 of *Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning 2008)*. Possible design solutions to minimise the impact of traffic noise for dwellings include:
 - i) Locating noise sensitive areas such as bedrooms and living rooms away from the noise source and less sensitive areas such as bathrooms, laundries, kitchens and storage closest to the noise source.
 - ii) Providing mechanical air ventilation to eliminate the need for opening windows to achieve adequate ventilation.
 - iii) Providing laminated or double-glazed windows with acoustic seals.
 - iv) Minimising the number of doors and windows on the noisy side of the dwelling.
6. Noise attenuation measures, where required, shall be in place prior to the occupation of the dwelling affected by the noise.
7. Alternative noise attenuation options based on Acoustic Consultant recommendations may be considered by Council provided that they meet the noise criteria objectives.

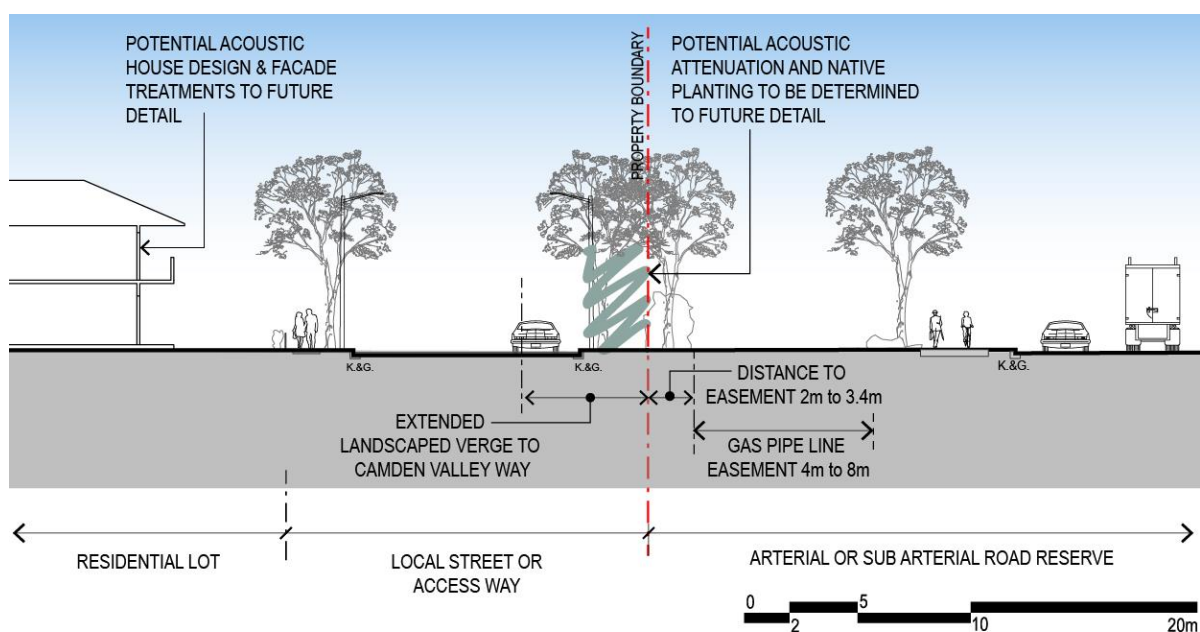


Figure 2-16: Noise attenuation measures Camden Valley Way & Denham Court Road.

Refer also to Section 4.4 for specific controls relating to Camden Valley Way and Denham Court Road.



Figure 2-17: Indicative rock gabion and timber acoustic wall.

2.6 Existing Native Vegetation and Open Space Network

This section is supplementary to Section 2.3.5 of the Main DCP and provides further guidance for the retention of areas of native vegetation within East Leppington Precinct.

Objectives

- a. To incorporate the retention of areas of native vegetation within the urban layout and the open space network to improve amenity and urban development outcomes.
- b. To facilitate the integration of native vegetation with the urban fabric for the Precinct.
- c. To establish an open space network focused on the Bonds Creek corridor that provides for the recreation needs of the local community and encourages informal physical activities to promote an active lifestyle.
- d. To establish a public domain that responds to key environmental features of the Precinct.
- e. To establish a public domain that respects and interprets Aboriginal cultural heritage and European cultural heritage of the Precinct.

Controls

1. Areas of native vegetation should be considered for retention by:
 - i) Adopting larger lot sizes, to allow trees to be retained within larger setbacks.
 - ii) Retaining trees within open spaces where good quality vegetation exists. Refer **Figure 2-18**.
 - iii) Retaining large trees within the verges of new roadways.



Figure 2-18: Example of the retention of trees in a local park

2. Within land that is shown as either Open Space or Riparian Corridor in **Figure 2-13**:
 - all existing native vegetation is to be retained and rehabilitated, except where clearing is required for essential infrastructure such as roads, footpaths, cycleways and drainage; and
 - native vegetation is to be conserved and managed in accordance with the Guidelines for Riparian Corridors 2012 prepared by the NSW Office of Water.
3. Development within the open space network shown in **Figure 2-13** shall be connected via a network of pedestrian, jogging and cycle links to encourage active play and optimise opportunities for public recreation.
4. The design of parks are to be consistent with the following:
 - i) All new plantings shall be in accordance with Council's Prescribed Trees and Preferred Species list contained in Appendix C of this DCP, except where remnant native vegetation may require indigenous plant stock.
 - ii) Landscape materials and design should respond to an identified landscaping schedule as specified and approved by Council.
 - iii) Street furniture, lighting, paving etc. should be contemporary and reflect the local environmental character of the Precinct as well as interpretation initiatives (where appropriate).
 - iv) Where Aboriginal objects or places of heritage significance or European heritage items, conservation areas or archaeological sites are associated with the open spaces their appropriate interpretation and management is required.

Note: Refer to the *Water Cycle Management Report East Leppington June 2013* for details relevant to the provision of drainage and open space lands.

2.7 Residential Density – Areas of very low density

This section applies to all new development in areas of Very Low Density Residential and Environmental Living in the East Leppington Precinct (Liverpool part) as shown on the ILP. These areas adjoin the Sydney Catchment Authority's heritage-listed Upper Canal and include easements for electricity or gas. A sensitive development response to these easements and the adjoining Upper Canal is required. To respond to these parameters and provide for the future desired character, minimum lot sizes are specified under the Growth Centres SEPP.

Objectives

- a. To provide for housing within a very low density residential environment.
- b. To encourage residential housing on large lots within a landscape setting while preserving heritage and minimising impacts on nearby infrastructure resources (gas, electricity and water supply).
- c. To ensure suitable lot configurations for development while minimising impacts on adjoining and nearby infrastructure.
- d. To provide a streetscape character that is suited to and fits with the locality, surrounding built environment and open space/drainage corridors.
- e. To provide a transition from adjoining rural residential land to a more dense urban development.

Controls

1. Subdivision design and housing location are to consider the environmental and infrastructure constraints of the locality while providing an efficient road and pedestrian network. The capability of the land to accommodate housing and the safe and efficient operation of infrastructure resources is to be demonstrated in the subdivision development application.
2. Restrictions apply to development within or adjoining gas and electricity easements and the water supply canal and the written approval of the relevant infrastructure agency is required. Refer to sections 4.2, 4.3 and 4.5 of this Schedule for more detail.
3. Wherever possible driveways are not to cross over easements.
4. Development in the E4 Environmental Living zone, and the R2 Low Density Residential zone on land identified as very low density residential on the Residential structure **Figure 2-11**, shall consider the following matters:
 - i. building location, design and response to constraints from infrastructure corridors such as electricity lines, gas easements and the Sydney Catchment Authority's Upper Canal.
 - ii. the relationship of the development to adjoining land uses including public open space and drainage infrastructure.
 - iii. avoiding impacts on Existing Native Vegetation and other remnant native vegetation.

5. Development is to be generally consistent with **Figures 2-19** and **2-20** which provide a desired future subdivision layout for development. These are indicative layouts – refer to control 2 above.

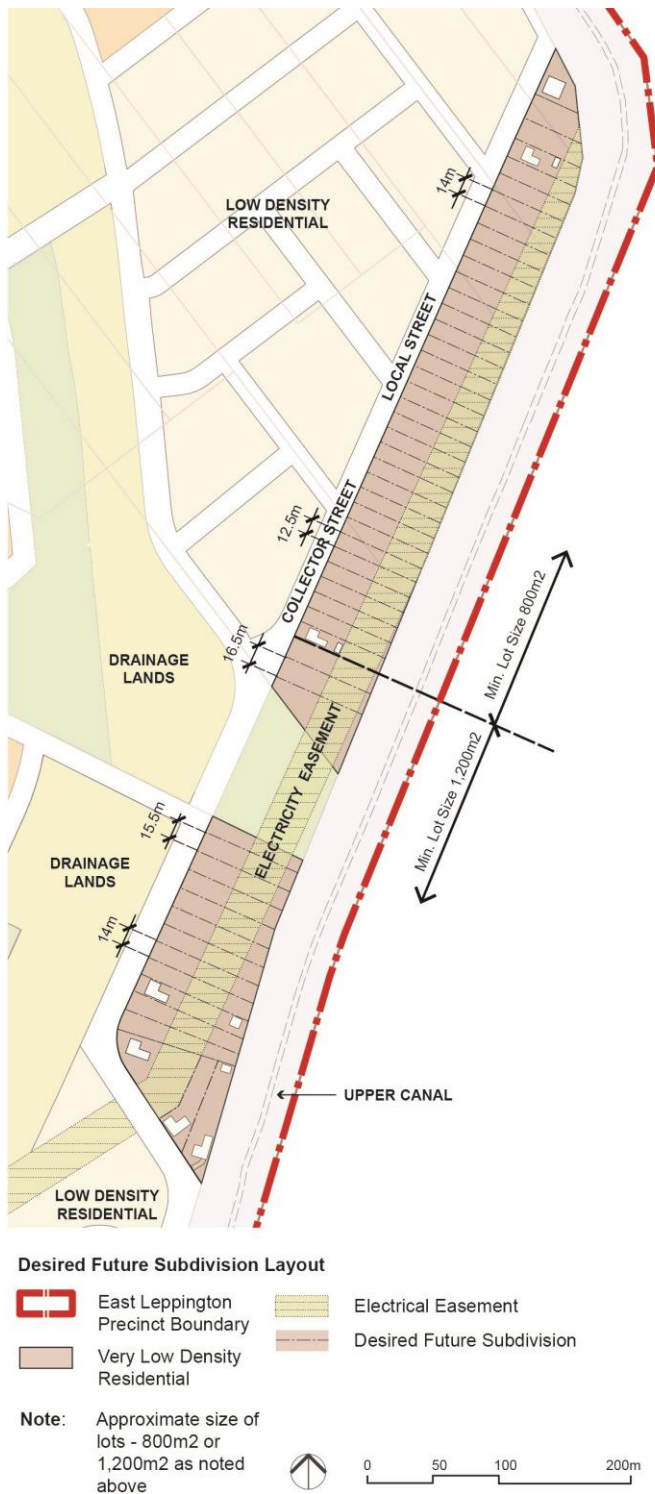


Figure 2-19: Desired future subdivision layout – Very Low Density Residential – Upper Canal



Figure 2-20: Desired future subdivision layout – Environmental Living – Denham Court Road

3 Centre Development Controls

3.1 East Leppington Neighbourhood Centre

This section outlines specific development objectives and controls relating to the design, development and operation of the Neighbourhood Centre identified in the Indicative Layout Plan at **Figure 2-1**.

This section provides specific controls which are additional to the Centre controls in Section 5 of the Main DCP. Under the Liverpool Growth Centre Precinct Plan a maximum gross floor area of 4,800m² applies to retail premises within the Neighbourhood Centre. The location of the Neighbourhood Centre is shown in **Figure 3-1**.

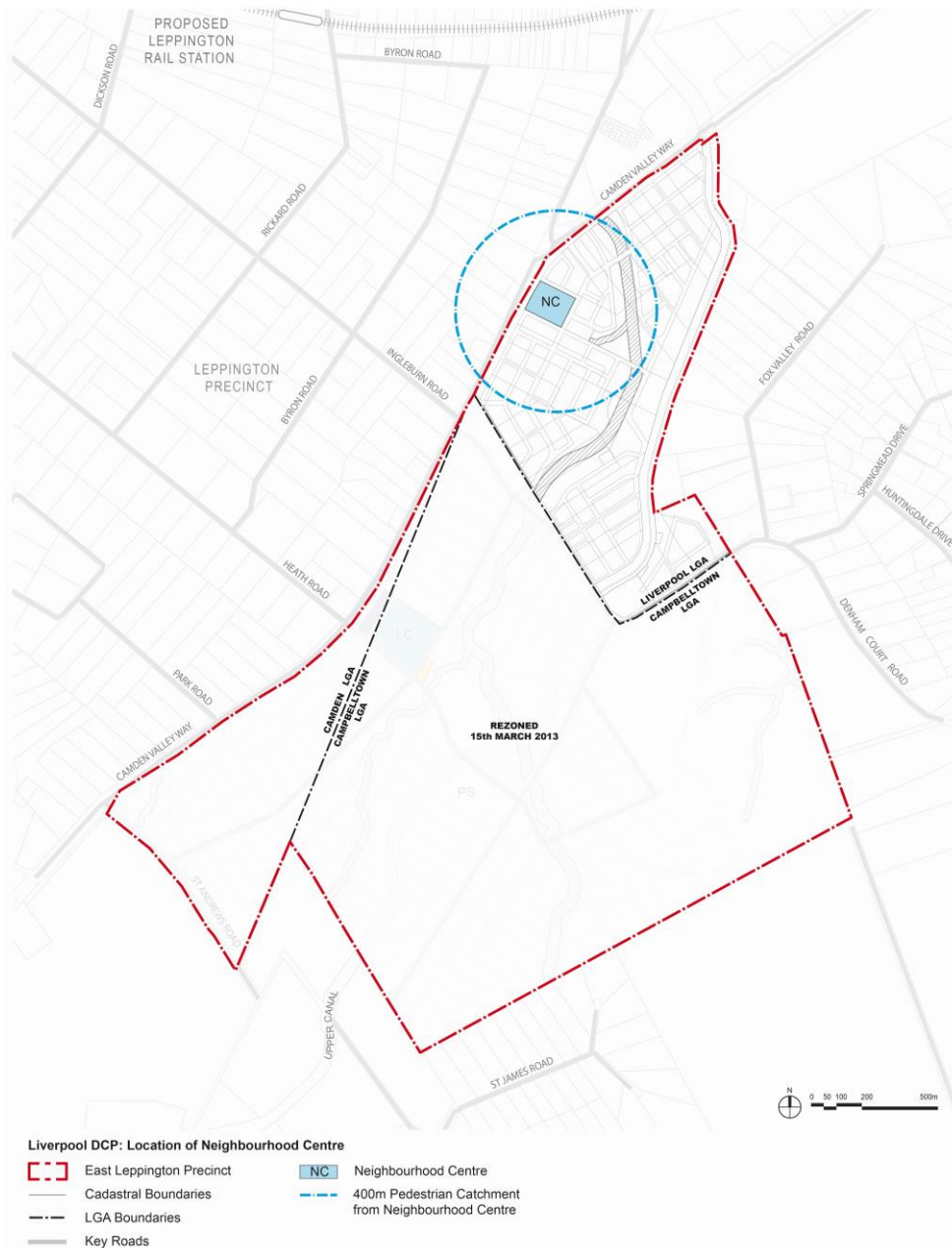


Figure 3-1: Location of Neighbourhood Centre

Objectives

- a. To create a vibrant, mixed use Neighbourhood Centre with a range of small-scale retail, commercial and community uses for convenience shopping, employment and services for people living and working in the surrounding neighbourhood.
- b. To encourage a high standard of development and an attractive environment within the Neighbourhood Centre.
- c. To ensure active street frontages and a centre connected to public transport, walking and cycling routes.
- d. To encourage centre design that responds to and addresses the open space adjacent to the east of the Neighbourhood Centre.
- e. To promote a sense of place and focal point for the local community.

Controls

Note: Refer to Section 5.3.1 of the Main DCP. A Masterplan is required for all development in the centre.

1. Development is to be consistent with the Desired future layout of the Neighbourhood Centre as shown in **Figure 3.2**. **Note:** This is an indicative scheme for the site based on urban design principles to achieve a high level of amenity, public domain and quality design outcomes.
2. Where proposed development varies from the Desired future layout, the applicant is to demonstrate consistency with the development principles in clause 5.2 of the Main DCP and the following controls and design principles for this Precinct.
3. The masterplan for the centre is to include a public domain landscape and urban design plan which establishes:
 - i. Preferred materials, colours and finishes for paving and footpaths and other public spaces;
 - ii. Preferred street tree species;
 - iii. Specifications for street furniture including seating, lighting, signage, bike facilities; and
 - iv. Public art.
4. Subsequent development will need to accord with the public domain landscape and urban design plan unless it is a significant advancement of the plan and fulfils the development principles of the DCP.

Built Form and Land Use

5. In addition to providing active frontages along local streets (**Figure 3-2**), provide active frontages to the local square and other suitable areas within the centre to create a lively, safe and attractive environment.
6. Provide a safe and attractive “green” link for pedestrians, cyclists and users of the centre between Camden Valley Way, the retail centre, the local park and the Bonds Creek corridor.

7. Despite section 3.3.1 of the Main DCP, the design and construction of the street (tree lined boulevard) that connects the Neighbourhood Centre with the local park and Bonds Creek corridor, are to be consistent with Figure 3-3, Council's Engineering Design Guide and Austroads.
8. Weather protection via awnings or verandahs is required to retail frontages, together with sun shading to the east facing facades toward the collector road.
9. Design quality is encouraged via the use of quality, durable and sustainable external materials.

Transport, Access and Parking

10. Loading bays/areas are to be located behind buildings and not be visible from parks, wherever possible.
11. Loading areas that are adjacent to land zoned for residential uses are to include visual and acoustic screening to protect the amenity of residents.
12. Vehicular access into and out of the Highway Service Centre on Camden Valley Way is to be left in and left out only.
13. Vehicular access from the Highway Service Centre on Camden Valley Way into the retail centre¹ is permitted in one direction only. All traffic into and out of the retail centre is to be via local streets and the collector road. Vehicular access back onto Camden Valley Way is via the traffic lights at the intersection with Camden Valley Way, the new collector road and Cowpasture Road.
14. No vehicular access is permitted from the retail centre back into the Highway Service Centre and onto Camden Valley Way.
15. Site service areas and car parking viewed from public streets and residential areas are to be effectively screened with landscaping or other measures while still enabling reasonable surveillance of these spaces.

Public Domain

16. Provide a small local square (minimum of 200m²) as the focus for retail activity with active edges and access to sunlight and views across the Main Street to open space and the Bonds Creek corridor.
17. North facing footpaths are to allow for widening or increased building setbacks, to maximise solar access and opportunities for outdoor retail activities (such as outdoor cafes and dining).
18. Street tree planting may include appropriate use of exotic species in key locations (e.g. local square) to provide contrast to the native tree character established elsewhere throughout the Precinct and to allow for sunlight access in winter and shade in summer.
19. Street furniture, lighting, paving, planting and the like is to be provided in the public domain in accordance with Council's "Streetscape and Parking Guideline".

¹The consent of the Roads and Maritime Service (RMS) is required for vehicular access to Camden Valley Way.

Note: The desired future layout for the Neighbourhood Centre is provided in Figure 3-2. Refer also to Section 5.3 of the Main DCP.

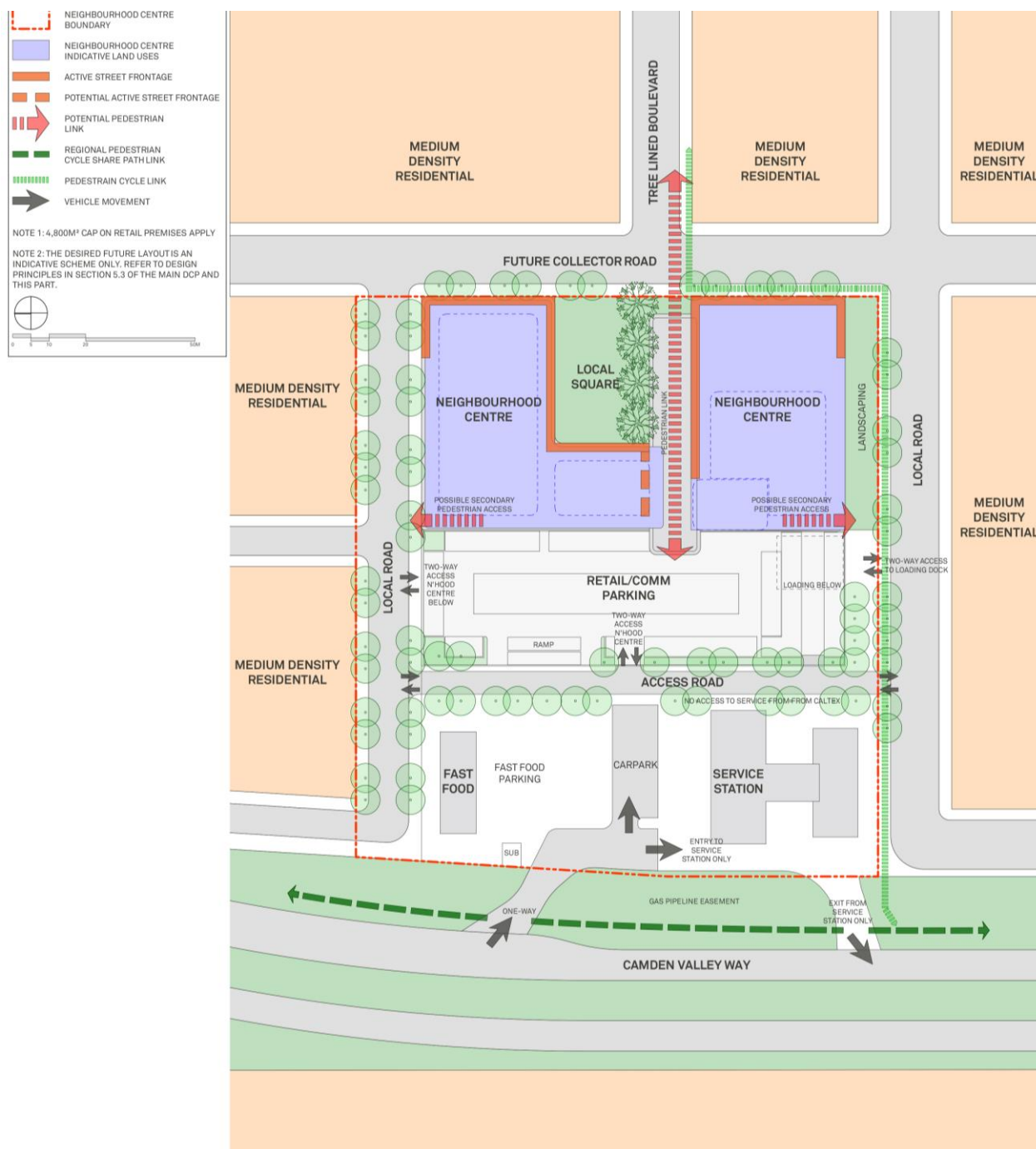


Figure 3-2: Desired future layout of the Neighbourhood Centre

Note: The definition of 'Food and drink premises' includes fast food outlets.

3.2 Neighbourhood shops in residential areas

Neighbourhood shops are permitted under the Growth Centres SEPP in residential zones. These shops are typically to serve the needs of local residents and are restricted to a gross floor area of 100m².

Development should be consistent with the controls stipulated in either the Low Density Residential or Medium Density Residential sections of the Main DCP, and should also consider controls, as relevant in the Commercial Centres Section of the Main DCP.

The following are additional design controls for these uses.

Objective

- a. To support neighbourhood shops in suitable locations and where they contribute to a walkable neighbourhood.
- b. To ensure that development provides for the amenity of residents living in the surrounding locality.

Controls

1. Small neighbourhood shops (eg corner shops), located outside the nominated Neighbourhood Centre, are encouraged where they serve a particular market need and can be integrated with surrounding land uses.
2. Developments are to:
 - i. demonstrate how the location contributes to walkability and provides for a particular market need;
 - ii. examine its relationship to existing neighbourhood shops, open space networks and the nominated Neighbourhood Centre;
 - iii. minimise noise transmission, loss of privacy and provide adequate sunlight access to neighbouring dwellings;
 - iv. provide details of delivery of goods and management of any waste; and
 - v. ensure any signage does not impact on residential occupants in terms of illumination and visual impacts.

Note: The general requirements of section 4.4.5 of the Main DCP deal with the clustering of non-residential uses in residential areas where the cumulative impact on residential amenity may be unacceptable.

4 Site Specific Controls

4.1 Aboriginal Cultural Heritage

Any one proposing to carry out an activity that may harm an Aboriginal object or a declared Aboriginal place must investigate, assess and report on the harm (being to destroy, deface, damage or move an object from the land) that maybe caused by the activity proposed.

Within the Liverpool Part of the Precinct, certain land has been surveyed and reported² upon as part of Precinct Planning work. These surveyed properties can rely upon the Aboriginal Cultural Heritage Impact Assessment Report prepared by Godden Mackay Logan dated June 2012 and titled East Leppington Precinct Planning Indigenous and Non-Indigenous Heritage Assessment and Appendix D Lands North of Denham Court Road - Aboriginal Archaeological Technical Report to consult with OEH and finalise relevant matters regarding Aboriginal cultural heritage prior to subdivision or development.

Note: *Additional studies may be required as part of a Development Assessment process.*

Refer to **Figure 2.5** for those properties which have been surveyed and those that still require an archaeological survey for Aboriginal cultural heritage.

The provisions of this Schedule and Section 2.3.4 of the Main DCP apply.

Objectives

- a. To ensure future development does not adversely impact Aboriginal cultural heritage conservation areas or sites of Aboriginal heritage value.
- b. To ensure appropriate management and mitigation measures are implemented for identified Aboriginal conservation areas and Aboriginal heritage sites.

Controls

1. An Aboriginal archaeological survey is required for those lands identified in **Figure 2.5**. This survey is to be undertaken by a suitably qualified professional in consultation with the Office of Environment and Heritage NSW. Reference should be made to the relevant Office of Environment and Heritage (OEH) guidelines.
2. For land where an Aboriginal archaeological survey has been undertaken and a report prepared (as identified in footnote 2) consultation is required with OEH to finalise the process steps and approvals prior to development of the land. Note: This could be undertaken as a group of landowners or singularly.

² An Aboriginal Cultural Heritage Impact Assessment Report has been prepared by Godden Mackay Logan dated June 2012 and titled East Leppington Precinct Planning Indigenous and Non-Indigenous Heritage Assessment. Appendix D Lands North of Denham Court Road - Aboriginal Archaeological Technical Report applies specifically to those lands surveyed in the Liverpool LGA.

3. Mitigation measures for Aboriginal heritage sites are to be identified and implemented in consultation with the OEH as part of the Development Application.
4. For land in Management Area K1 (**Figure 2.5**) a recommended mitigation strategy have been identified in Appendix D to the East Leppington Precinct Planning Indigenous and Non-Indigenous Heritage Assessment 2012 requiring consultation with OEH to determine how this may be correctly undertaken.
5. Where impacted to heritage sites can be avoided then appropriate measures (consistent with relevant guidelines) and/or avoidance strategies should be employed.
6. If impacts cannot be avoided then the relevant Aboriginal Heritage Impact Permit (AHIP) under the National Parks and Wildlife Act 1974 should be sought from the OEH.
7. Where an Aboriginal Heritage Impact Permit (AHIP) has been granted by the OEH the conditions of the AHIP consent must be complied with prior to development proceeding.

Note: *Should any previous unrecorded Aboriginal heritage sites or objects be uncovered during the course of future development that are not covered under an existing AHIP, then work in the vicinity of the item should cease and the site be reported to the OEH in order to determine the appropriate course of action.*

4.2 Lands adjacent to or within an Electricity Easement

Objectives

- To ensure that development on land near or within electricity easements considers potential impacts on the integrity and safety of electricity infrastructure.
- To ensure reasonable standards of public amenity and a high quality public domain in the vicinity of electricity easements.

Controls

- Restrictions apply to planting and erection of raised public domain elements (such as light poles) and are identified in the *Mains Maintenance Instruction MMI 0015 - Management of Endeavour Energy's electrical easements* (Endeavour Energy, 2011) or as revised, for design requirements.
- All proposed activities within electricity easements require approval from the relevant infrastructure agency. Applicant should consult with these agencies and obtain the relevant approvals prior to submitting a Development Application to Council. Evidence of approval is to be submitted with the Development Application.
- Subdivision of residential land containing easements is to be generally consistent with the desired future subdivision layout in **Figure 2-19** and **Figure 2-20**.
- Within land shown as Very Low Density Residential on the ILP, the location of dwellings and substantial structures (as defined by Endeavour Energy) is to be consistent with **Figure 4-1** and the following design principles:
 - Dwellings and substantial structures are to be located outside the easement.
 - Access to the easement for inspections and maintenance is not to be unduly restricted, therefore in certain circumstance where an easement is located within backyards or at the side of dwellings it is to be consistent with the requirements of the infrastructure agency.

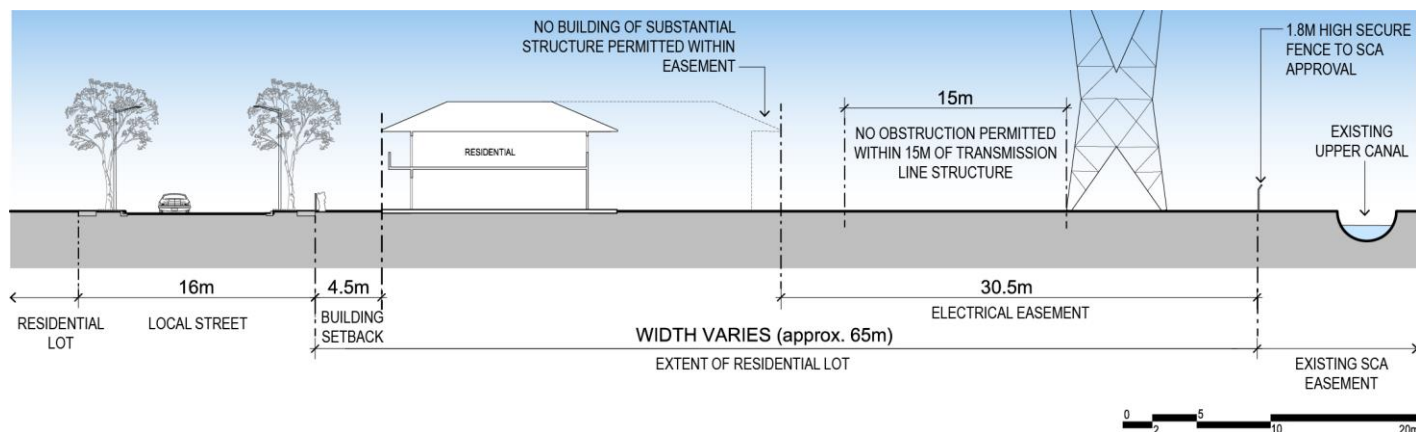


Figure 4-1: Location of dwellings - land affected by Endeavour Energy electricity easement

5. Any proposed ground level changes and or road crossings within the easement may require the transmission line to be reconstructed or modified to provide the requirement clearance. All costs associated with any reconstruction or modifications are the responsibility of the applicant.

4.3 Land adjacent to or affected by a Gas Easement

Objectives

- a. To ensure development on land near or within gas easements considers potential impacts on the integrity and safety of the gas pipeline.
- b. To ensure reasonable standards of residential amenity, safety and a high quality residential environment in the vicinity of high pressure gas easements.

Controls

1. Development and use of land within the easement is restricted by the conditions of the easement and applicants should demonstrate compliance with any restrictions imposed by the easement when submitting applications for development.
2. The following development within the easement must be referred to the relevant infrastructure agency for approval prior to any works being commenced, and evidence of the infrastructure agency's agreement must be submitted with the Development Application:
 - i) Excavation, blasting or other earthworks.
 - ii) Any improvements or installations (e.g. Buildings, roads, footpaths fencing or other structures).
 - iii) Transport or parking of heavy vehicles.
 - iv) Planting or cultivating trees within five metres of the pipeline.
3. Dwellings and other buildings are to be located outside the gas easement.
4. Subdivision of land containing easements should be minimal, however battle-axe lots and differently configured lots may be appropriate in some locations to maximise the development potential of land while avoiding impacts on the easement. Refer to **Figures 2.19** and **2.20** for an indicative lot layout.
5. Reference should be made to AS2885 in relation to sensitive land uses that may be restricted within a certain distance (referred to as the Zone of Influence) of the gas pipeline. Sensitive land uses include (but are not limited to) schools, hospitals, aged care facilities and community facilities. Applicants should consult with the organisation responsible for the gas pipeline to determine specific requirements.
6. To the satisfaction of the infrastructure agency, landscaping (including tree planting), other than groundcover, is not permitted within 5m of the pipelines.

4.4 Lands adjacent to Camden Valley Way & Denham Court Road

Refer also to Section 2.3.9 and Section 4 of the Main DCP.

Objectives

- a. To ensure appropriate access to residential lands located next to Camden Valley Way and Denham Court Road.
- b. To ensure reasonable standards of residential amenity and a high quality residential environment in the vicinity of Camden Valley Way and Denham Court Road.
- c. To ensure residential dwellings are not adversely impacted by traffic noise through appropriate setbacks and noise attenuation measures.

Controls

1. Residential development should be configured and designed to comply with the Indicative Layout Plan at **Figure 2-1**.
2. Land adjoining Camden Valley Way and Denham Court Road³ shall be accessed by vehicles via adjacent local streets within the Precinct.
3. Vehicular access to properties fronting Camden Valley Way provided by Roads and Maritime Services (RMS) as part of the upgrade of Camden Valley Way will be closed when alternative access is provided within the Precinct. Alternative access must be provided for any development on the land that includes a change of use from that lawfully commenced when alternative access was provided by RMS.
4. Where temporary access may be required for construction purposes to land along Camden Valley Way which entails crossing the gas easement, the temporary crossing is to be undertaken by the builder/developer to the satisfaction of the gas provider and with the approval of the RMS.
5. Vehicular access to Camden Valley Way into and out of the place of public worship on the property shown in **Figure 4-2** is to be in accordance with RMS approval.
6. No vehicular access is permitted from the place of public worship into the precinct while access is maintained to Camden Valley Way. See **Figure 4-2** below.

³ The northern part of Denham Court Road, to be replaced by the re-alignment and upgrade of Denham Court Road with Ingleburn Road, is to be retained as a local street as indicated on the ILP. Access to residential lots is permitted for this portion providing for a loop road with access denied to Camden Valley Way and the main collector road to the south.

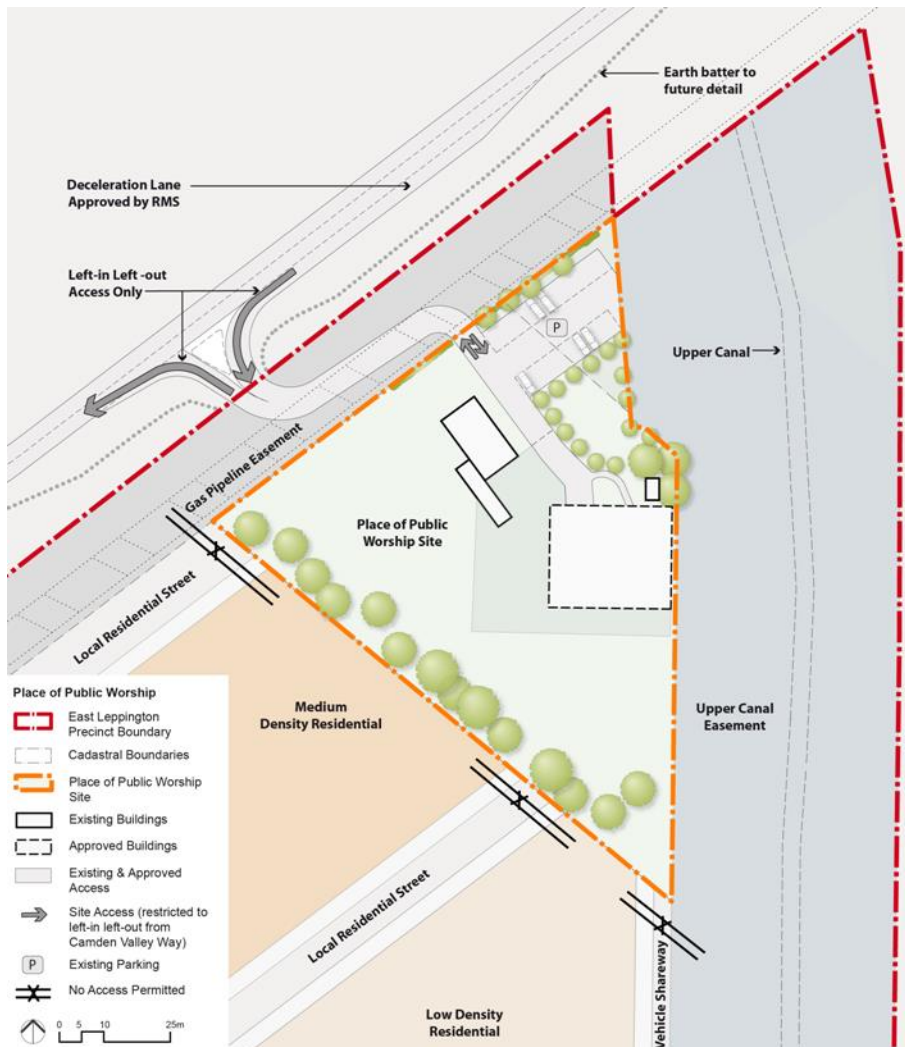


Figure 4-2: Access to Camden Valley Way and Place of Public Worship

7. Depending on the subdivision design the siting of dwellings relative to Camden Valley Way shall be consistent with **Figure 4-3** or **Figure 4-4** and the following controls:
 - i) Dwellings must address the local street, running parallel to Camden Valley Way;
 - ii) Principal private open space must be located to the rear of dwellings so that the buildings provide acoustic shielding, with consideration given to the levels of solar access and amenity as required elsewhere in the Main DCP; and
 - iii) Suitable noise control treatments are provided for dwellings and noise sensitive uses. See section 2.3.9 of the Main DCP and section 2.5 of this Schedule.
8. Prior to undertaking any work at the existing Denham Court Road overbridge, the Heritage Branch should be contacted to determine if the stone abutments are relics or works as defined in the Heritage Act and whether a permit under section 139 of the Heritage Act is required.

Note 1: Development is to take into account the location of the gas pipeline to Camden Valley Way and Denham Court Road and the requirements of the infrastructure agency.

Note 2: Development should also refer to the relevant Australian Standard, for example AS2107.

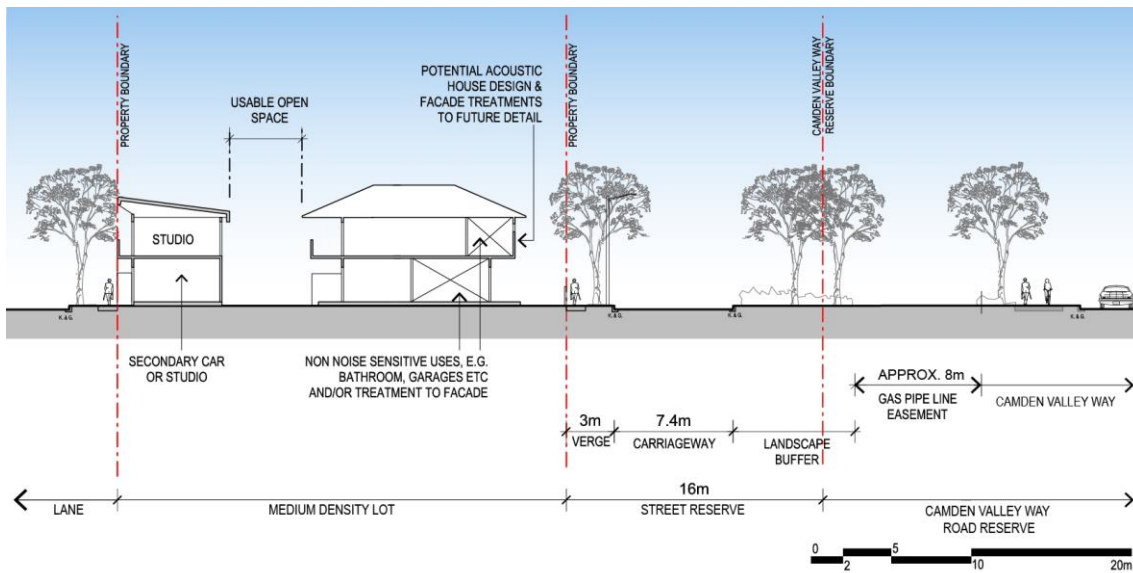


Figure 4-3: Camden Valley Way Section – medium density lot with studio/dwelling and rear lane access

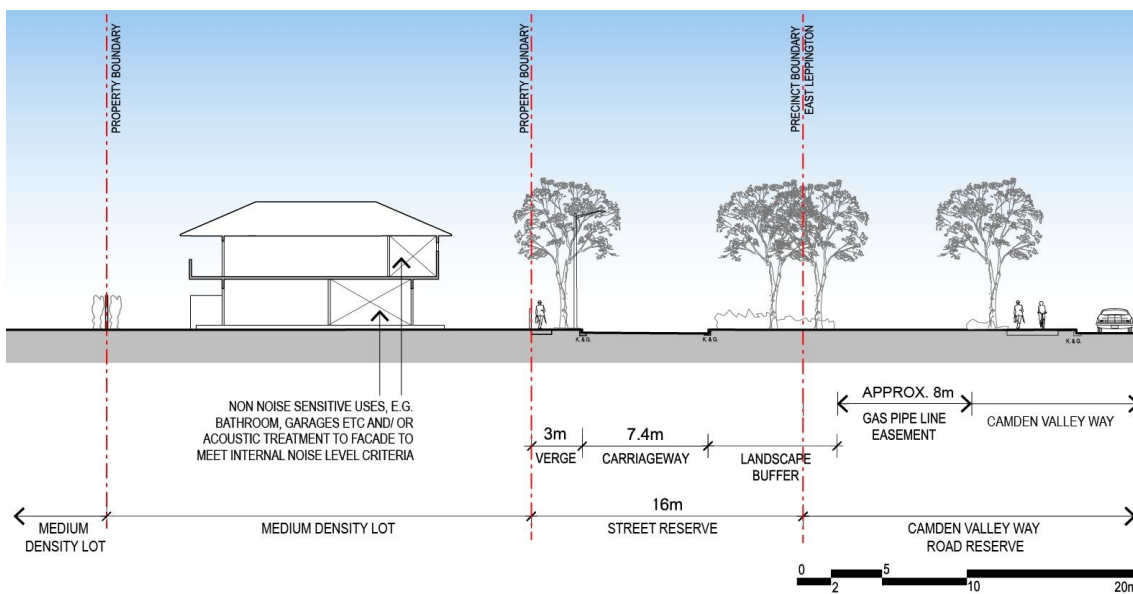


Figure 4-4: Camden Valley Way Section – medium density lot with single dwelling and no rear lane access

4.5 Land adjacent to the Sydney Catchment Authority Upper Canal

Objectives

- a. To ensure that the Upper Canal is taken into account in siting, designing and constructing any proposed development adjoining or in the vicinity of the Canal.
- b. To ensure that development adjacent to the Upper Canal corridor does not impact on the continued operation of the Canal infrastructure.
- c. To provide for the safety and amenity of the public living or visiting areas adjacent to the Upper Canal.
- d. To protect water quality by preventing stormwater or other pollutants entering the Upper Canal system.

Controls

1. Where development (including subdivision) is proposed adjacent to the Upper Canal corridor, applicants shall consult with the Sydney Catchment Authority (SCA) as part of the process of preparing the Development Application. Development is to be consistent with the SCA publication "*Guidelines for development adjacent to the Upper Canal and Warragamba Pipelines*". Any written requirements of the SCA shall be submitted with the DA and the DA documentation shall show how the requirements have been addressed.
2. Prior written approval shall be obtained from the SCA for any access that may be required to the Upper Canal corridor during the investigation and construction phases.
3. Access points to the Upper Canal for SCA staff and contractors to carry out inspections and maintenance shall be retained or provided in accordance with SCA requirements.
4. Earthworks (excavation or filling) and landscape works carried out adjacent to or crossing the Upper Canal shall avoid impacting on water quality and damaging the Canal infrastructure, in accordance with SCA requirements.
5. Stormwater systems serving development adjacent to the Upper Canal shall be designed to ensure that stormwater does not enter the Canal. Stormwater management measures shall accommodate and not impede upstream flows from any systems that convey stormwater across, along or under the Upper Canal. Detailed plans showing the proposed stormwater management and runoff from development are to be submitted with the Development Application. The plans must demonstrate that stormwater will be managed up to the 1 in 100 year flood event to prevent runoff from within the Precinct entering the Canal.
6. Shareways may be located to the front or side boundary of a lot. Where shareways are to the side boundary, fences are to be maximum 1.8m high to the rear yard only. Side fences are to be 1.2m to corners.
7. Appropriate security fencing shall be provided, or existing fencing retained along the length of development boundaries that directly adjoin the Upper Canal corridor, in accordance with SCA requirements.

8. Where indicated on the ILP, a local road, shareway or pedestrian/ cycle way is to be provided, between development and the Upper Canal corridor. Refer to **Figure 4-5**. Wherever possible a road is to contain a landscaped verge between the carriageway and Upper Canal corridor. A footpath is not required to be constructed on the Canal side road verge as part of subdivision of adjoining land.
9. The State Heritage status of the Upper Canal (**Figure 2-6**) should be taken into account when designing development adjacent to the Canal corridor. Refer to Section 2.3.4 of the Main DCP.

Note: The Upper Canal is owned and managed by the Sydney Catchment Authority and is located on land classified as a controlled area under the Sydney Water Catchment Management Act 1998. The Canal begins at Pheasants Nest Weir on the Nepean River and transfers water from the Upper Nepean dams to the Prospect Water Filtration Plant to supply a significant part of Sydney's drinking water. The Upper Canal is historically significant having functioned as part of Sydney's main water supply system for more than 120 years and is listed on the State Heritage Register. The Upper Canal is also an aesthetically significant landscape element within the Greater Sydney Metropolitan region.

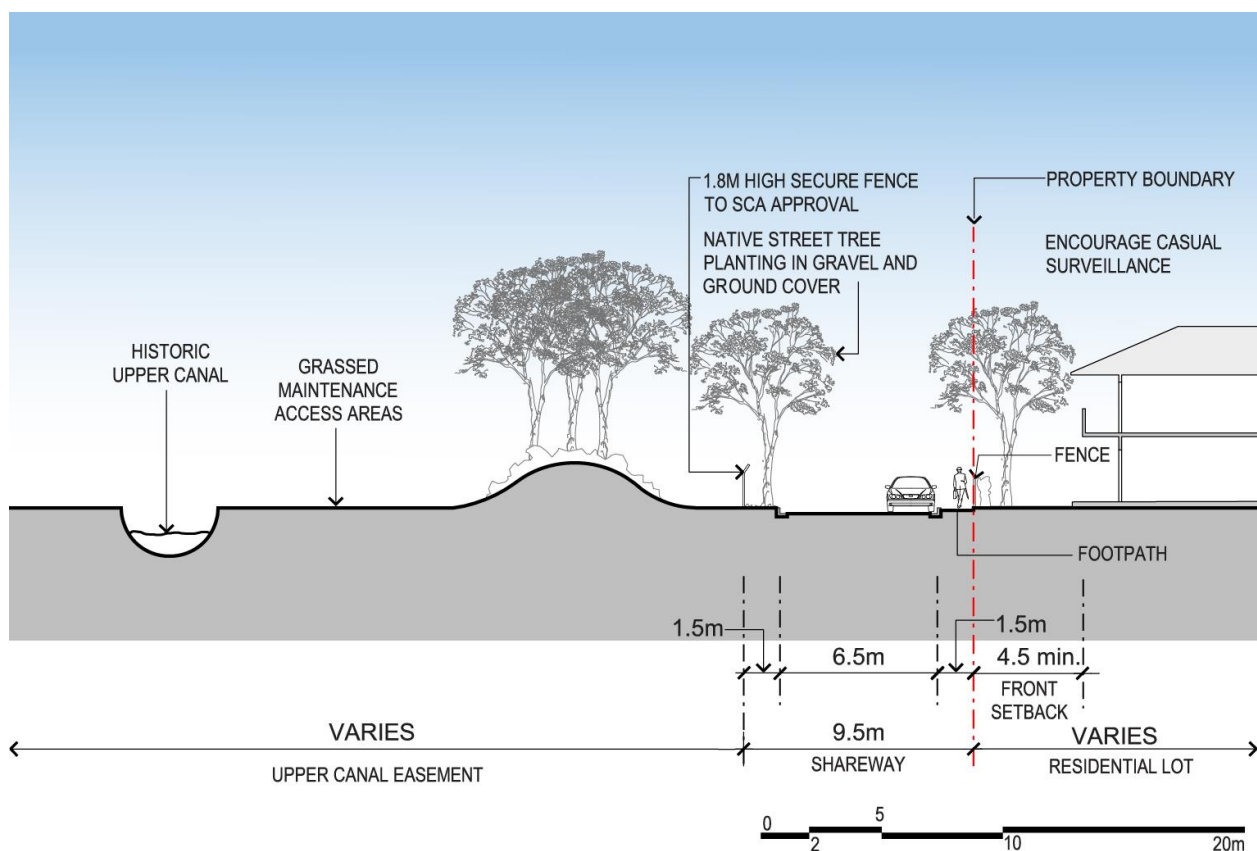


Figure 4-5: Typical access shareway - Sydney Catchment Authority Upper Canal

4.6 Land adjacent to Open Space – 1370 Camden Valley Way Leppington (Lot E in DP28997)



Figure 4-6: Land to which section 4.6 of this Schedule applies

Objectives

- a. To provide personal and property security for residents and visitors.
- b. To enhance community safety.
- c. To provide pedestrians with safe, unobstructed and direct routes of travel.

Controls

1. Address 'Safer-by-Design' principles in the design of public and private domain, and in all developments including the NSW Police 'Safer by Design' Crime Prevention Through Environmental Design (CPTED) principles.
2. The residential subdivision should be orientated towards the open space.
3. All public spaces including streets, parks, squares and plazas must be directly overlooked by adjacent development.