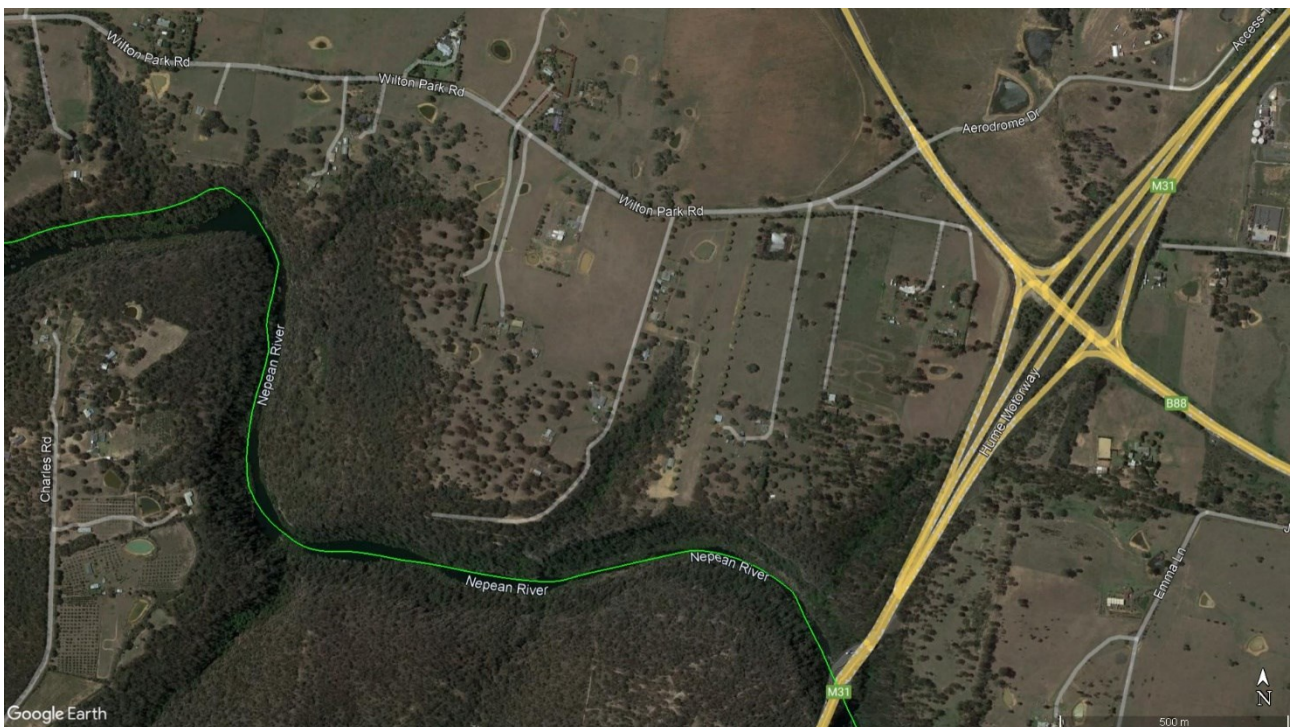




Wilton Park Rd, Wilton Agricultural Land Capability Report



December 2022

Wilton Park Rd, Wilton
Agricultural Land Capability Report

Prepared for Altis Property Partners
by



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Chapter 1: Introduction

1.1. Introduction

Altis own land at Wilton Park Road, Wilton which has an area of 108 ha and is comprised of nine separate lots ranging in area from 2.4 ha to 16.8ha.

Edge Land Planning has been engaged by Altis Property Partners to provide an assessment of the agricultural land capability of the land.

The study will specifically address the Local Planning Directions 1.2 and 1.5 dealing with rural lands.

This study has been prepared to accompany a planning proposal to be submitted to Wollondilly Shire Council and the NSW Department of Planning and Environment to enable it to be rezoned for industrial development.

1.2. Study Area

The study area is in the Wollondilly Shire to the south west of the Wilton urban area and within the West Wilton Precinct of the Wilton Growth Area Precinct and has an area of 108 ha and is comprised of nine separate lots ranging in area from 2.4 ha to 16.8ha. The details of each of the lots is contained in Table 1

Table 1: Individual Lot Details

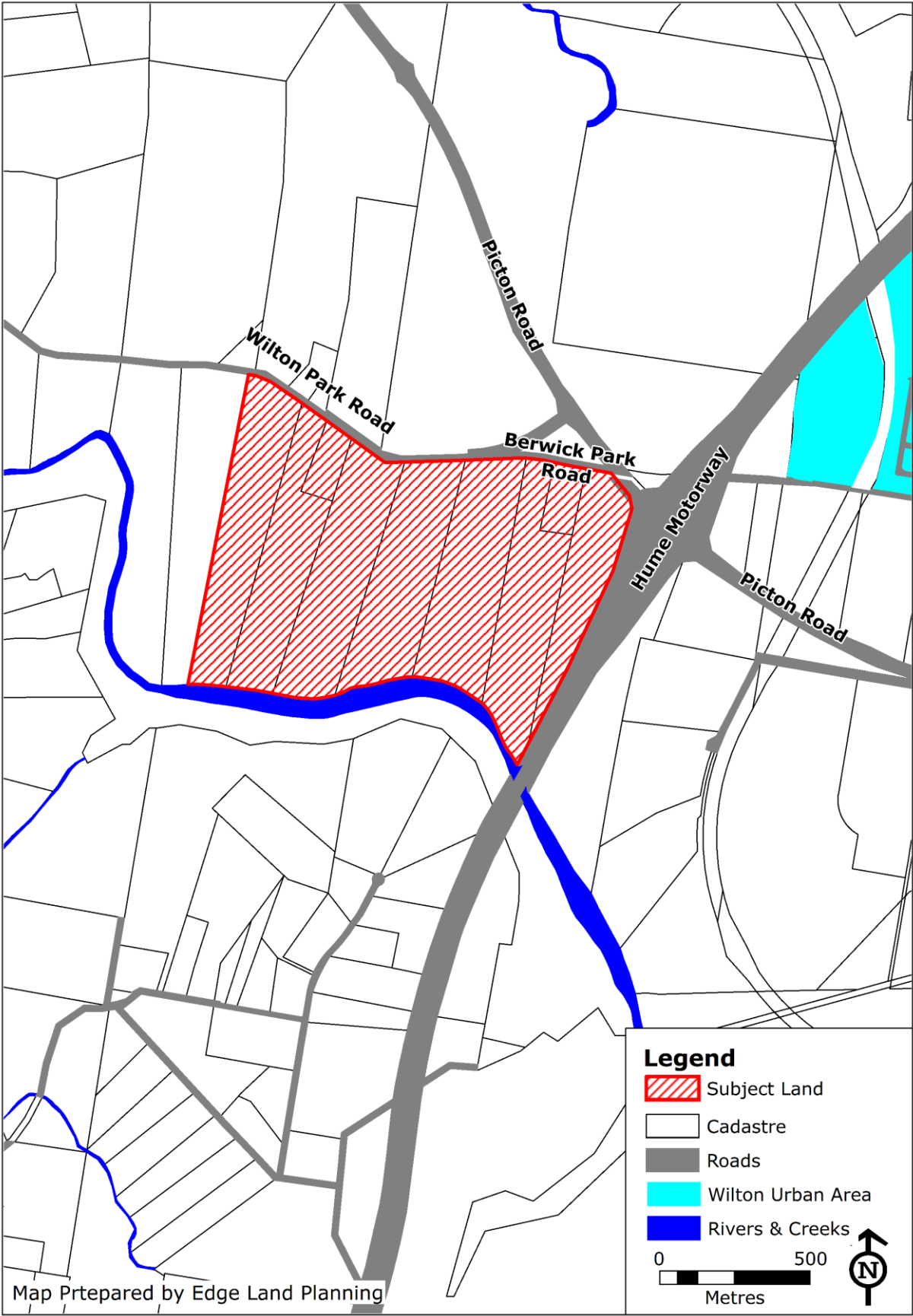
Property Address	Lot & DP Number	Area (ha)
10 Berwick Park Rd	Lot 16 DP251051	10.0
20 Berwick Park Rd	Lot 1 DP609222	2.4
30 Berwick Park Rd	Lot 1 DP609222	14.8
25 Wilton Park Rd	Lot 7 DP233845	16.8
45 Wilton Park Rd	Lot 6 DP233845	16.1
55 Wilton Park Rd	Lot 5 DP233845	16.2
75 Wilton Park Rd	Lot 41 DP749823	2.4
85 Wilton Park Rd	Lot 40 DP749823	13.5
95 Wilton Park Rd	Lot 3 DP233845	16.1

The site is bounded by Wilton Park and Berwick Park Roads to the north, the Hume Motorway to the east with the Nepean River being the southern boundary. The western boundary of the site is other land on Wilton Park Road. Photo 1 shows a typical image of the study area.

A map of the study area is shown in Map 1.



Photo 1: Study Area
Date of Photo: October 2022



Map 1: Study Area

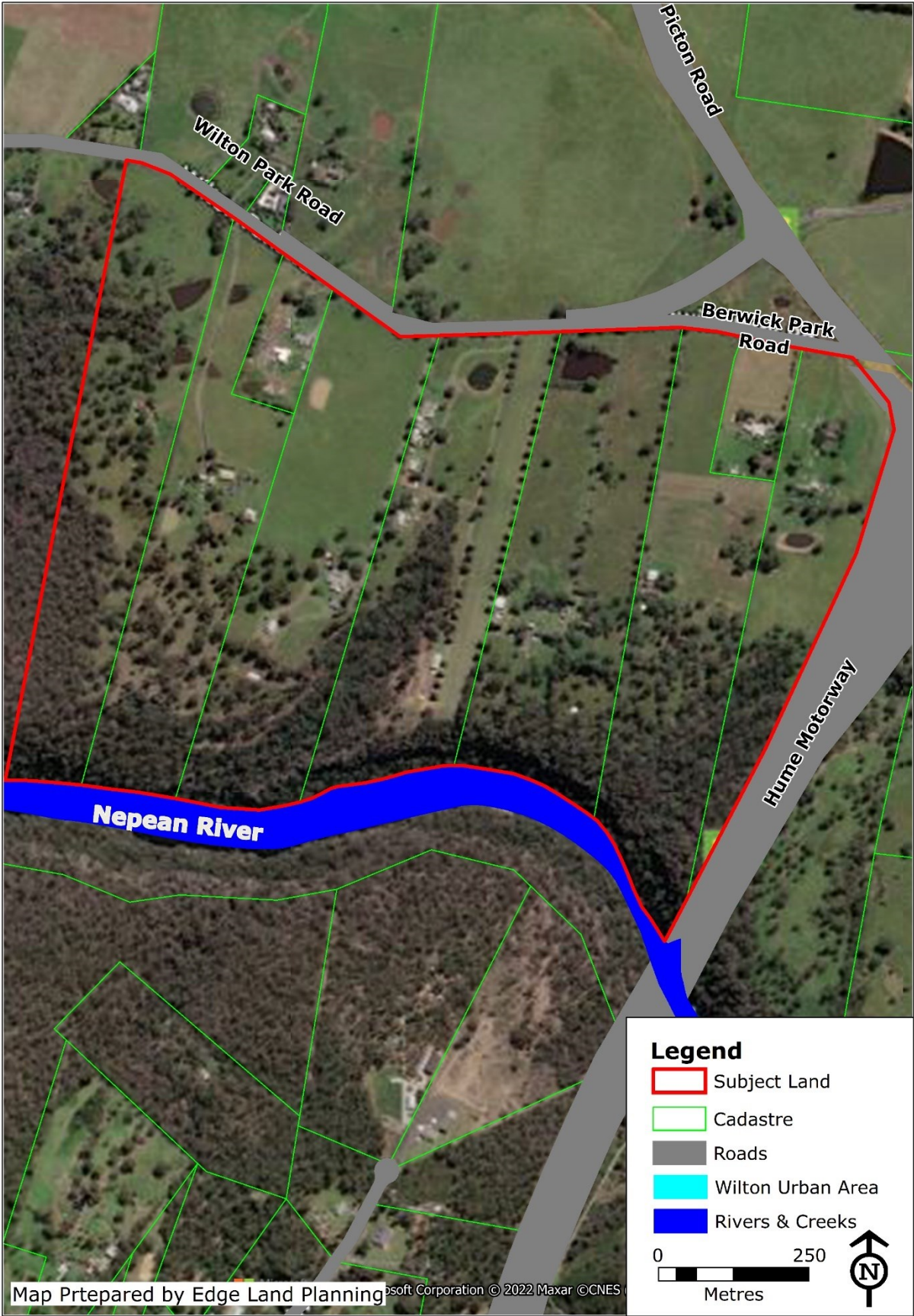
Chapter 2: Site Description

2.1. Introduction

This chapter provides a detailed description of the site and focuses on the slope, drainage, vegetation, soils, and the land use of the site.

Each of the properties has been used for rural residential use with some grazing by cattle and horses.

Map 2 shows an aerial photo of the site.



Map 2: Aerial Photograph of the Site

2.2. Slope

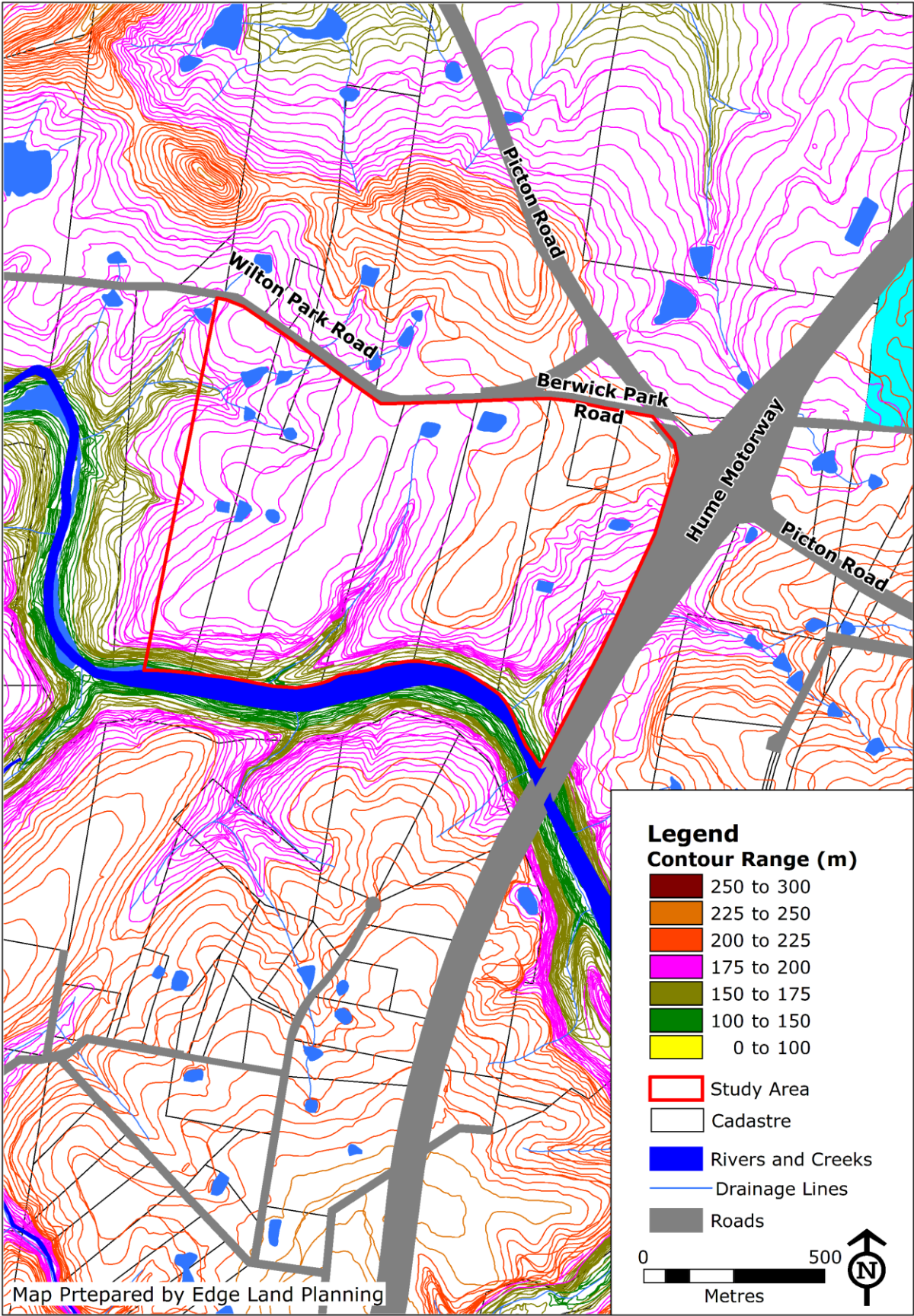
The site can be described as relatively flat along the Wilton Park and Berwick Road frontages with a high point and ridge running in a south westerly direction on the eastern boundary. It slopes generally to the Nepean River to the south. Photo 2 shows the flat land on the Wilton Park Road frontage.



Photo 2: Steep land near the eastern boundary

Date of Photo: October 2022

As depicted in Map 3, the land slopes generally to the south and the Nepean River with three gullies, two of which run in a southerly direction and the other in a south westerly direction at the western boundary of the study area. The contours range from 204m AHD at the highest point to 122m on the eastern side of the site. There is a steep gorge along the southern boundary where the land drops to the Nepean River. Beyond this area, the site is mostly flat with some undulations.



Map 3: Topography

2.3. Drainage

The Nepean River forms the southern boundary of the site but there is no access to it from the site because it is in a gorge. There are four small drainage lines running through the property. They are as follows:

- The eastern most one runs in a south westerly direction and enters the site on the eastern boundary commencing approximately 900m to the east of the site.
- The central drainage line runs in a north south direction commencing on the Wilton Park Rd frontage.
- The western drainage lines are comprised of one that enters the site from north and traverses in a south westerly direction where it picks up a smaller drainage line that starts approximately 200m to the east.

Photo 3 shows the drainage on the western boundary of the site. Map 4 shows the drainage of the site.

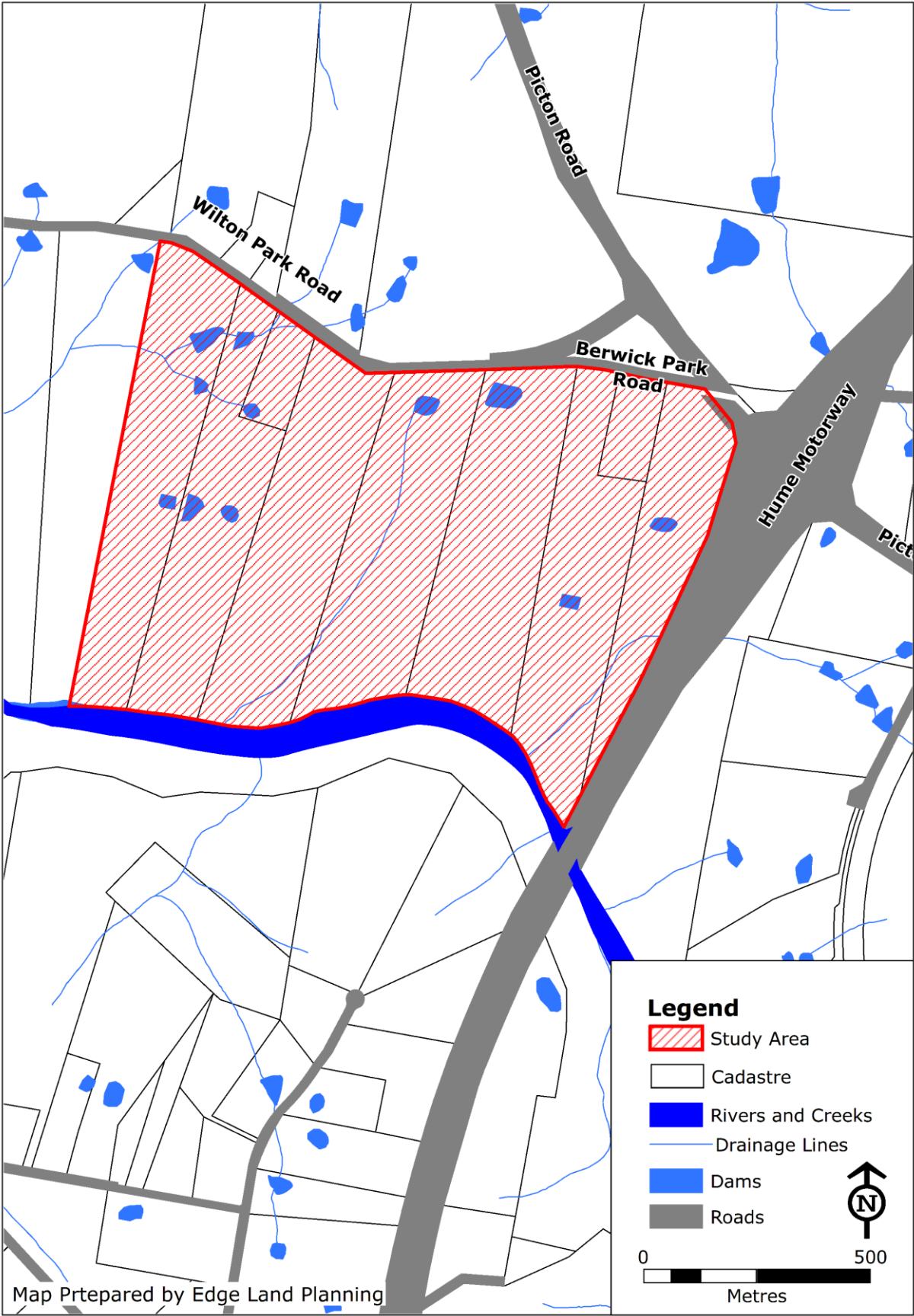
All of the drainage lines are intermittent due to the small size of their catchments and are therefore not a permanent source of water.

There are eleven small dams on the site, which are associated with each of the residential uses. .



Photo 3: Drainage Line on the western boundary.

Date of Photo: October 2022



Map 4: Drainage

2.4. Vegetation

The site is mostly cleared on the Wilton Park and Berwick Park Road frontages with dense vegetation along the Nepean River Gorge.

The vegetation has been cleared to facilitate the rural residential use of each of the lots and this ranges from mostly cleared to scattered trees set in a woodland.

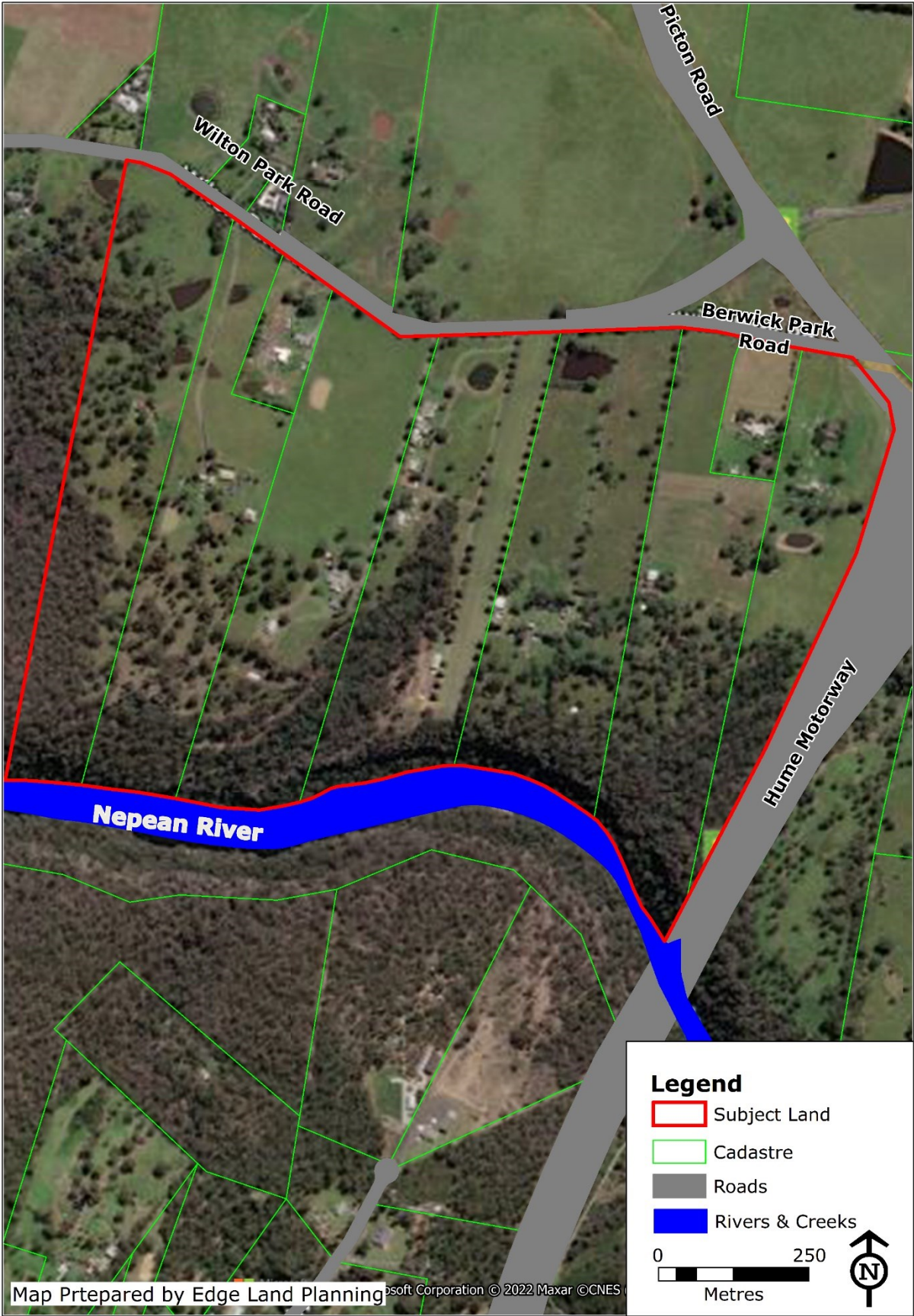
The drainage line in the centre of the site is heavily vegetated as is the one on the western boundary.

Photo 4 shows the scattered vegetation and Photo 4 shows the location of the vegetation communities on the site, as identified by Ecological Australia.



Photo 4: Scattered Woodland Vegetation

Date of Photo: November 2021



Map 5: Aerial Photo showing vegetation

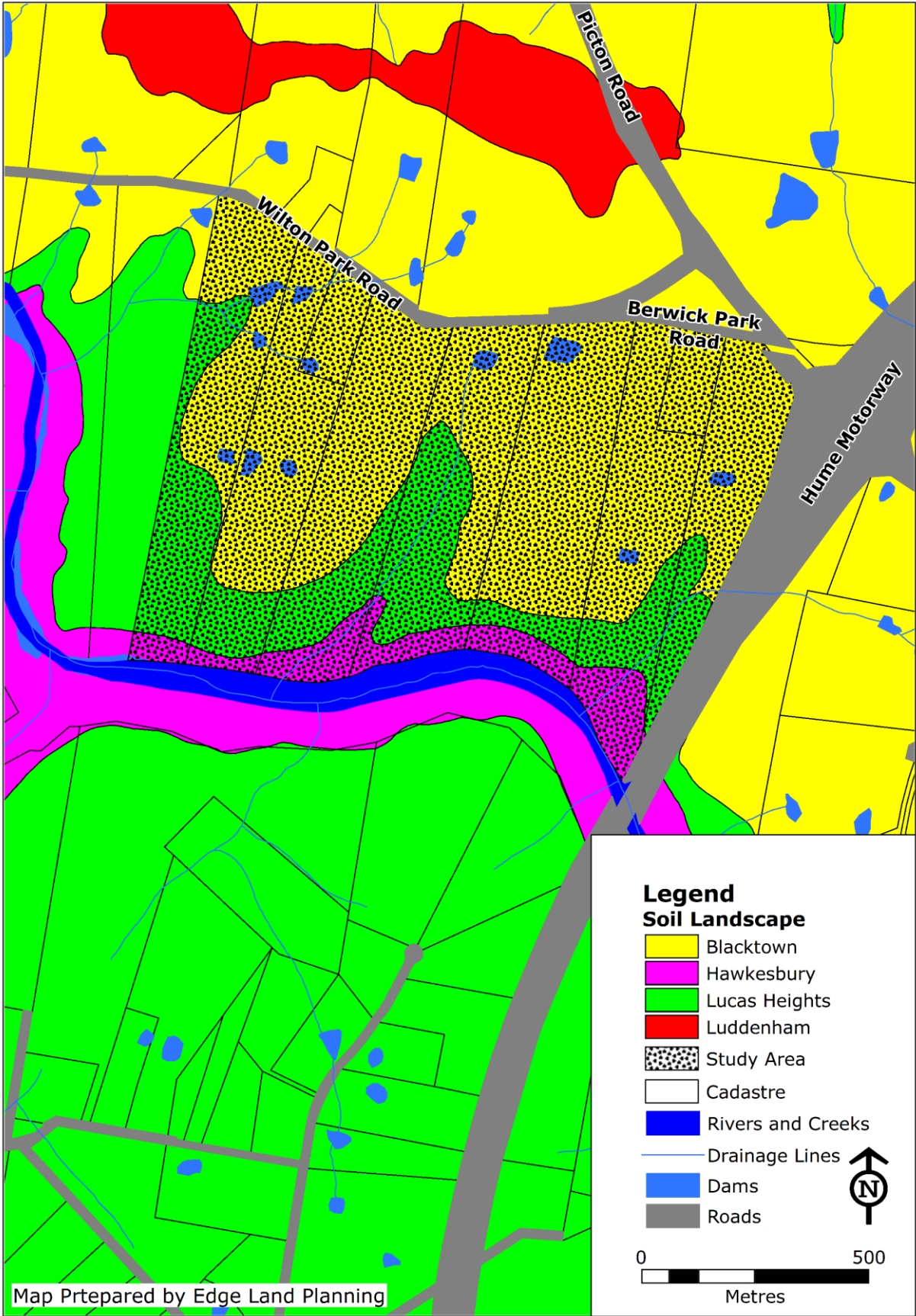
2.5. Soils

The Soil landscapes of the Wollongong-Port Hacking 1:100,000 Map (Hazelton & Tillie, 1990) has been used to derive details about the soils of the site.

There are three different soil landscapes on the site (Map 6) detailed below:

- **Blacktown.** This soil landscape covers the most of the subject land. It is described as having gently undulating rises on shale with slopes with a gradient of usually less than 5% and up to 10%. It has low soil fertility and has broad rounded crests and ridges with gently inclined slopes. Almost completely cleared eucalypt woodland, open-forest. The limitations are described as being low fertility, localised salinity, hard setting surfaces with low to moderate water holding capacity and moderately erodible soils. It has moderately reactive soils with seasonal waterlogging. The dominant land use for this landscape is urban with some orchards, market gardens and livestock grazing. Its rural capability is for some regular cultivation and grazing.
- **Hawkesbury.** This landscape covers the steep sides of the Nepean River Gorge and is mostly sandstone. Only a small part of it is on the site. It is described as having rugged, rolling to very steep hills on Hawkesbury Sandstone with slopes of greater than 25 % gradient. It has very low soil fertility. The limitations are described as being extreme soil erosion hazard, mass movement (rock fall) hazard, steep slopes, rock outcrop, shallow, stony, highly permeable soil, very low soil fertility. The dominant land use is mostly National Park. It has no rural capability because it cannot be cultivated or grazed.
- **Lucas Heights.** This soil landscape applies to the southern parts of the site associated with the drainage lines. It is described as being gently undulating crests, ridges and plateau surfaces with a gradient of less than 10%. It is extensively to completely cleared dry sclerophyll low open-forest and low woodland. It has low soil fertility. The limitations are described as being stoniness, hard-setting surfaces, low soil fertility. The land use is described as citrus orchards, market gardens and poultry farms; raising of horses and cattle is common on improved, kikuyu-dominated pastures; small rural subdivisions and hobby farms occur on the urban fringes of the metropolitan area. Its rural capability is generally capable of grazing with some localised areas capable of regular cultivation.

To summarise, the soils on the site can be described as low fertility, however, the limitations of stoniness and hard setting surfaces limit its rural land capability to grazing of cattle and some cultivation.



Map 6: Soil Landscapes

2.6. Land Use

Each of the eleven lots has been used for rural residential land use with some grazing of cattle and horses.

The land use of the land surrounding the study area can be seen from Map 7. The land use survey methodology can be seen from Appendix 1. The land surrounding the subject land has a mixture of rural residential use to the west and to the north is a mix of rural residential and extensive agriculture.

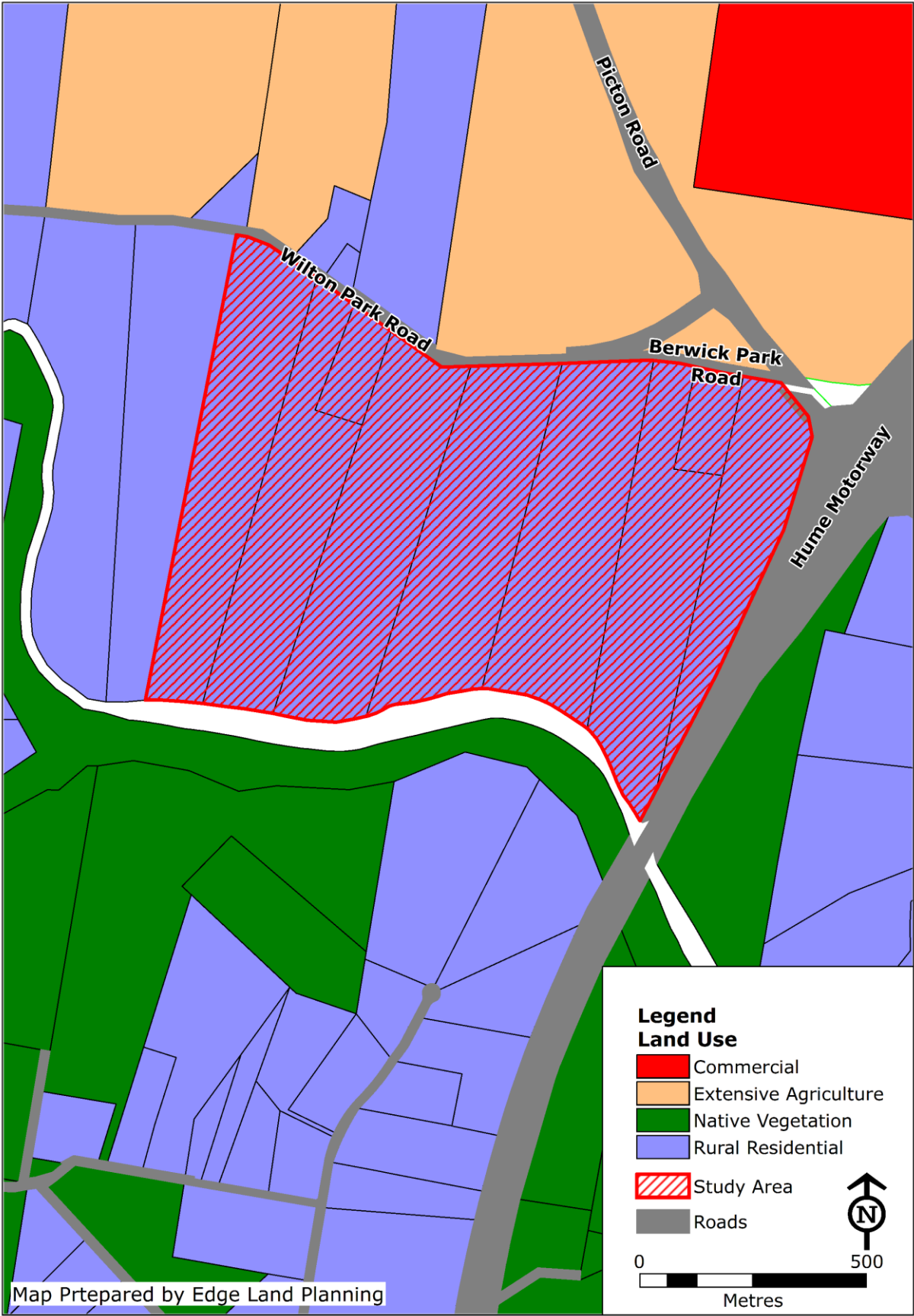
As has been stated, rural residential development is the most dominant of the surrounding land uses. A definition of this land use can be found in a planning text as follows:

"The residential use of rural land is called rural residential development; that is, people live on rural lots, but use the land primarily for residential rather than agricultural purposes. Although some engage in 'hobby farming', most derive the principal source of their income from pursuits not carried out on the land. The main distinction between urban housing and rural residential housing is bigger lot size and larger distances between dwellings. This creates a sense of openness and of living in the landscape rather than in an urban area. Rural residential dwellings are often large (up to 1000 to 2000 square metres in floor area). They can be found in clusters of new houses and are often mixed with intensive plant and animal uses, which invariably leads to rural land-use conflict. (Sinclair, Docking, Jarecki, Parker, & Saville, 2004) They can have varying degrees of native vegetation cover, from totally covered to totally cleared. This has been termed 'rural sprawl' (Daniels, 2014) because of its pervasiveness over the rural landscape, particularly adjoining the metropolitan areas as well as large cities and towns.

Rural residential development can be divided into two main categories: rural fringe and rural living. Rural fringe development is characterised by single detached houses and dual occupancies on lot sizes of approximately 4000 square metres to two hectares laid out in an estate. This estate usually joins or is in close proximity to an urban area.

Rural living, on the other hand, features single detached houses and dual occupancies on lot sizes between one hectare and 40 to 100 hectares and can adjoin farmland or vegetated areas (it should be noted that there are sometimes lots of less than one hectare). People living on these lots use the land primarily for residential purposes, although they may graze some cattle or have horses. This requires lot sizes of more than two hectares if land degradation is to be avoided. The lots do not adjoin townships or villages and are scattered throughout the rural landscape." (Sinclair & Bunker, 2012)

The presence of agriculture near rural residential and urban development can lead to a loss of amenity by these residents because of pollution from the agriculture. They will often complain about this, thus causing rural land use conflict (Sinclair & Bunker, 2012). From a land use planning perspective, it is preferable not to have agricultural land uses located near to rural residential and urban land uses, so that land use conflict can be avoided.



Map 7: Land Use

Chapter 3: Agricultural Suitability

3.1. Introduction

This chapter explores the constraints of the site to assess the current agricultural practices and determine its suitability for agriculture. Information has also been provided on the types of agriculture practiced in the area to gain an understanding of local farming practices and the characteristics of the farming community.

The biggest issue with the agriculture suitability of the site is that it has been owned and developed as nine separate lots ranging in size from 2.4 ha to 16.8ha.

The information contained in this section has been obtained from several sources including the ABS Agricultural Census.

3.2. Agriculture in Wollondilly Shire

The ABS Agriculture Census is a good source of information about agriculture in the Wollondilly Shire. It outlines the characteristics of farming in the Shire which provide some context to the agriculture suitability of the subject land. The subject land sits within the Douglas Park – Appin part of the Shire, which is a Statistical Area Level 2.

The Wollondilly Rural Lands Strategy has found that the Shire has a diverse range of agricultural producers including dairy farming, nurseries, flowers, turf, vegetables, poultry, and beef cattle (Locale Consulting, 2021).

The value of Agriculture in the Shire is \$86.8m (ABS, 2022f) and the Douglas Park – Appin region has a value of \$9.46m (ABS, 2022e) which is 10.8% of the total value of agriculture in Wollondilly and the lowest value of agriculture of the five SA2 regions that make up the Shire.

It should be noted that the cut off for filling the Agricultural Census is \$40,000 farm gate value and so this data only shows an accurate picture of farmers who earn income from the farm. It is also based on farmers who have an Australian Business Number and therefore have a registered business. \$40,000 is a relatively small income given it is 57% of the Australian adult average full time weekly wage of \$1,344.7 (ABS, 2022a) which equates to \$69,924.4 per annum.

Table 2 shows the individual commodities which are found in the Douglas Park – Appin region as well as the Shire. For the Shire, 63.1% of the value comes from livestock (39.7% poultry, 9.6% milk, 6.0% eggs, 7.1% cattle and 0.3% sheep meat, wool 0.2% and pigs 0.2%) while cropping makes up the remaining 36.9% (vegetables 17.1%, nurseries 15.1 flowers 1.5%, fruit and nuts 1.5%, hay production 0.9%, and turf 0.6%). It is significant to note that cattle grazing does not make up a high proportion of the total agricultural value at 7.1%.

The Douglas Park – Appin region value of production is number five out of the five regions which make up the Shire. Poultry meat is the number one commodity making up just less than two thirds of the total value (61.0%), followed by vegetables (21.0%), flowers (6.2%), cattle grazing (3.9%), nurseries (1.9%).

Table 2: Value of Agriculture

Commodity	Douglas Park - Appin SA2	% of SA2	% of LGA	Wollondilly	% of LGA Total	LGA % of NSW
Broadacre Crops	\$0	0.0%	0.0%	\$229,488	0.3%	0.0%
Hay	\$152,192	1.6%	20.2%	\$752,752	0.9%	0.0%
Nurseries	\$991,754	10.5%	7.6%	\$13,080,917	15.1%	0.2%
Flowers	\$0	0.0%	0.0%	\$1,272,605	1.5%	0.0%
Turf	\$0	0.0%	0.0%	\$560,842	0.6%	0.0%
<i>Total Nurseries, Flowers & Turf</i>	\$991,754	10.5%	6.6%	\$14,914,364	17.2%	0.2%
Fruit & Nuts	\$9,704	0.1%	0.7%	\$1,277,569	1.5%	0.0%
Total Vegetables	\$290,979	3.1%	2.0%	\$14,816,246	17.1%	0.0%
<i>Total Crops</i>	\$1,444,629	15.4%	4.5%	\$31,990,417	36.9%	0.0%
Wool	\$47,241	0.5%	29.1%	\$162,445	0.2%	0.0%
Milk	\$1,353,019	14.4%	16.2%	\$8,357,942	9.6%	0.2%
Eggs	\$408,543	4.3%	7.9%	\$5,185,953	6.0%	0.1%
<i>Total Livestock Products</i>	\$1,808,804	19.2%	13.2%	\$13,706,340	15.8%	0.1%
Sheep	\$49,302	0.5%	22.3%	\$220,823	0.3%	0.0%
Cattle	\$2,789,148	29.7%	45.2%	\$6,165,998	7.1%	0.1%
Pigs	\$0	0.0%	0.0%	\$202,650	0.2%	0.0%
Poultry Meat	\$3,305,760	35.2%	9.5%	\$34,490,914	39.7%	0.4%
Other	\$5,406	0.1%	42.6%	\$12,671	0.0%	0.1%
<i>Total Livestock Meat</i>	\$6,149,616	65.4%	14.9%	\$41,093,055	47.3%	0.1%
<i>Total Crops</i>	\$1,444,629	15.4%	4.5%	\$31,990,417	36.9%	0.0%
<i>Total Livestock</i>	\$7,958,420	84.6%	14.5%	\$54,799,395	63.1%	0.1%
Total Agriculture	\$9,403,049	100.0%	10.8%	\$86,789,812	100.0%	0.1%

Source: (ABS, 2022e)

Wollondilly's contribution to the Greater Sydney production is 10.0% making it the fourth largest (ABS, 2022e).

The Agricultural Census counted 184 farms in the Wollondilly Shire having a total area of 16,341 ha making the average farm size in the Shire 88.7 ha (ABS, 2022c). In the Appin – Douglas Park SA2 region there are 34 farms having a total area of 6,061 ha resulting in an average farm size of 179.6ha (ABS, 2022b).

In addition to counting the number of farms, The Agricultural Census provides counts on the total number of livestock on each farm. This information provides an indication of the average number of cattle on each farm in the Shire as well as the Douglas Park – Appin SA2 region. These figures can then be compared to Sydney and NSW. Table 3 outlines the total number of meat cattle (which are used for breeding) and the total number of farms with the number of cattle per farm then calculated from these figures.

The number of cattle per farm in the Douglas Park – Appin area is 171, the Shire is 82, Sydney is 80 and NSW is 276. Given that the cattle grazing in the Sydney Peri-Urban area is more commonly undertaken on a part-time basis, the NSW figure of 300 cattle per farm is a better indicator of economic sustainability for a breeding herd, of which approximately one third would be sold each year. This is discussed in more detail in Section 0.

Table 3: Number of Cattle per Farm

Commodity	Douglas Park – Appin SA2	Wollondilly Shire	Sydney	NSW
Number of Meat Cattle	3,893	6,844	18,076	4,147,595
Number of Farms	23	83	226	15,011
Cattle per farm	171	82	80	276

Source: (ABS, 2022b, 2022c)

Table 4 **Error! Reference source not found.** shows the industry of employment drawn from the ABS Census of Housing and Population (2021) for the Douglas Park - Appin SA2 area and for Wollondilly Shire. The urban areas of Appin, Douglas Park and Wilton have been removed to provide data on the rural areas only. In the Douglas Park – Appin SA2 rural area 3.2% of the workforce are employed in agriculture, forestry and fishing which is number 17. Construction is the number one sector of employment for the residents of the region.

Table 4: Industry of Employment

Industry Sector	Appin Douglas Park Rural	Wollondilly Shire
Agriculture, Forestry and Fishing	3.2%	2.1%
Mining	2.0%	1.5%
Manufacturing	6.7%	7.8%
Electricity, Gas, Water and Waste Services	1.1%	1.6%
Construction	18.1%	16.7%
Wholesale Trade	2.6%	3.1%
Retail Trade	7.4%	8.8%
Accommodation and Food Services	4.2%	4.5%
Transport, Postal and Warehousing	6.6%	5.9%
Information Media and Telecommunications	1.2%	0.7%
Financial and Insurance Services	2.6%	2.1%
Rental, Hiring and Real Estate Services	2.9%	1.6%
Professional, Scientific and Technical Services	5.0%	4.4%
Administrative and Support Services	2.7%	2.7%
Public Administration and Safety	4.8%	6.1%
Education and Training	10.0%	9.4%
Health Care and Social Assistance	8.3%	11.1%
Arts and Recreation Services	1.6%	1.0%
Other Services	4.3%	4.4%
Inadequately described/Not stated	4.8%	4.6%
Total	100.0%	100.0%

Source: (ABS, 2017a)

The top five employment sectors are shown in Table 5 which compares the Douglas Park – Appin SA2 Rural area with the rural lands of the Shire, all of Wollondilly Shire, Sydney Peri-Urban Rural Lands, Sydney Region, NSW, and Australia. This shows that not only is agriculture not in the top five, but the rural lands also have a very similar employment make up as the Shire, Sydney, NSW, and Australia. Agriculture is number eleven for the SA2 Region, number thirteen for Wollondilly rural lands, number thirteen for Wollondilly LGA, number eighteen for Sydney Greater Capital City Area, number fourteen for NSW and Australia (ABS, 2022d).

Table 5: Top Five Employment Sectors

Douglas Park - Appin SA2	Douglas Park Appin Rural	Wollondilly LGA	Sydney GCCA	NSW	Australia
Construction 15.9%	Construction 18.1%	Construction 16.7%	Health Care and Social Assistance 13.4%	Health Care and Social Assistance 14.4%	Health Care & Social Assistance 14.5%
Education & Training 10.7%	Education & Training 10.0%	Health Care and Social Assistance 11.1%	Professional, Scientific, and Technical Services 10.9%	Retail Trade 9.0%	Retail Trade 9.1%
Health Care & Social Assistance 9.7%	Health Care & Social Assistance 8.3%	Education and Training 9.4%	Retail Trade 8.8%	Professional, Scientific and Technical Services 8.9%	Construction 8.9%
Retail Trade 8.2%	Retail Trade 7.4%	Retail Trade 8.8%	Education and Training 8.5%	Education and Training 8.9%	Education and Training 8.8%
Manufacturing 7.4%	Manufacturing 6.7%	Manufacturing 7.8%	Construction 8.2%	Construction 8.6%	Professional, scientific & technical services 7.8%

Source: (ABS, 2022d)

This employment data provides a guide to the land use which can be assumed to be mostly rural residential as these employment sectors either work from home or just live in the area and work in other places. It can be said therefore that most of the rural lands are rural residential use, with some limited areas of agriculture which are a combination of horticulture as well as poultry meat and eggs. This applies to the Douglas Park – Appin SA2 region as well as the Shire.

The average age of a farmer in the Douglas Park – Appin SA2 region is 58 years old (ABS, 2017b), which is considerably older than Wollondilly Shire (52), Sydney Peri-Urban area (54) and also older than a NSW (57) and Australian farmer (56). Across

the other three SA2 regions within Wollondilly, the average age of farmers range from 45-55, significantly lower than the Douglas Park – Appin SA2 area.

Figure 1 further emphasises the age of farmers within the Douglas Park – Appin SA2 region with 57.4% younger than 55. This percentage sits lower than the Shire (62.9%), Sydney (69.3%), NSW (57.7%) Australia (61.8%).

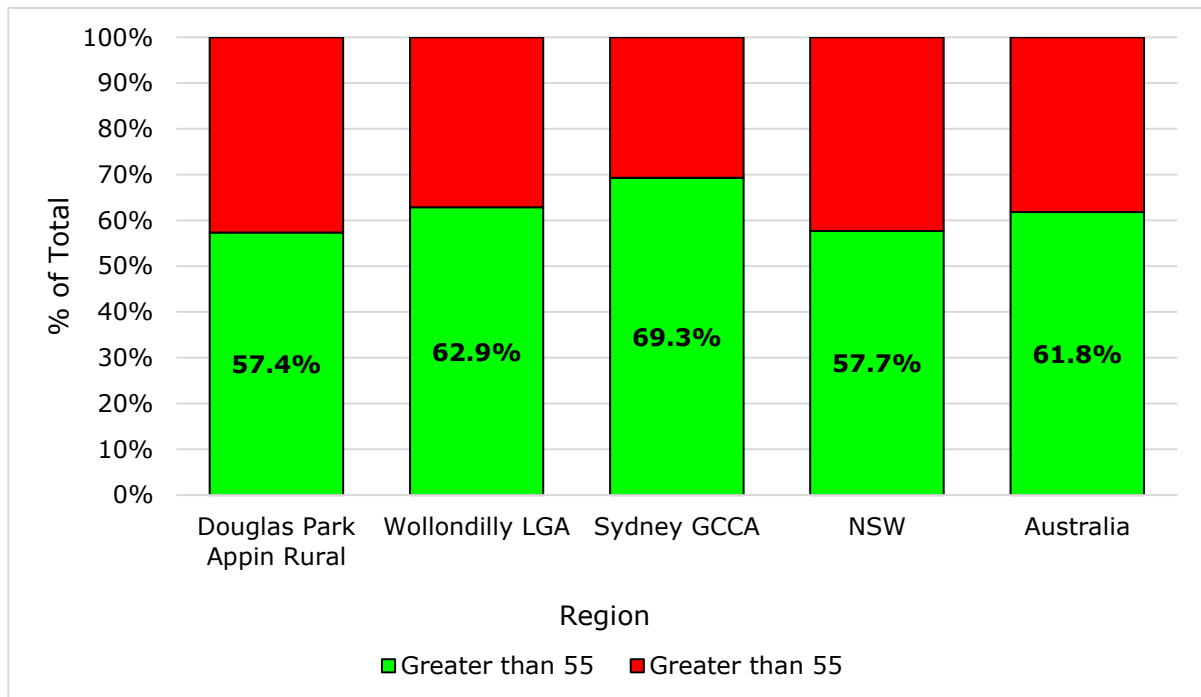


Figure 1: Age of Farmers

Source: (ABS, 2022d)

The agriculture situation in Douglas Park – Appin region can be summarised as:

- Slightly more than one third of the agricultural production is poultry meat;
- Cattle makes up 29.7% of the total agricultural value;
- Cropping makes up 15.4% with nurseries making up 10.5%.
- The region does not have many people who work in farming – only 3.2% of the rural workforce.
- The age of the farmers is younger than Wollondilly, the Sydney Greater Capital City Area, NSW and Australia;
- There are fewer farmers younger than 55 years of age when compared to the Shire, Sydney, NSW and Australia.
- The average herd size for cattle in the Douglas Park – Appin region is 171.4 while for the Shire it is 82, Sydney 800 and NSW 276.

3.3. Constraints for Agriculture

The site constraints for agriculture are soils, drainage lines, slope and vegetation. However, the main constraint is that it has been used for rural residential purposes and is in fact used as nine separate properties, each with very little agricultural production.

The combination of drainage lines, slope, native vegetation and the lack of good soils create significant constraints to using the land for the growing of plants – both intensive and extensive cropping.

3.4. Current Agricultural Practices

Currently the land is used for rural residential purposes and Table 6 sets out the use and the agricultural practices that are carried out on each lot.

Table 6: Individual Lot Details

Property Address	Area (ha)	Agricultural Use
10 Berwick Park Rd	10.0	Horses
20 Berwick Park Rd	2.4	None
30 Berwick Park Rd	14.8	Horses
25 Wilton Park Rd	16.8	Horses
45 Wilton Park Rd	16.1	Horses
55 Wilton Park Rd	16.2	Cattle
75 Wilton Park Rd	2.4	None
85 Wilton Park Rd	13.5	Horses
95 Wilton Park Rd	16.1	None

Most the lots have significant amounts of vegetation on them which limits the ability for them to be used for productive agricultural uses.

The agricultural uses outlined in Table 6 are defined as extensive agriculture and are carried out in association with the rural residential use of the land. It is considered that the horse and cattle grazing is not sufficient to earn an average income.

3.5. Suitability of the Site for Agriculture

The site is constrained for its use as an agricultural operation by several factors, discussed above and outlined further below:

- Rural residential use of the land.
- Soil quality.
- Slope of the land.
- Presence of Native Vegetation.
- Size of land.
- Lack of permanent water supply.

The constraints listed have to be considered when contemplating the suitability of the site for agriculture. As stated in section 3.3, the most significant constraint is the fact that the land is held in nine separate ownerships all of which are used for rural residential purposes. In order for it to be used for agriculture, it would have to be aggregated into one holding and all of the fences and a number of the buildings and possibly the dwellings demolished. This would be a costly exercise and the cost of this would in all likelihood be more expensive than the land could make from agriculture.

There are a range of potential agricultural uses that could be carried out in addition to the current use as extensive agriculture (cattle and horse grazing) which include intensive livestock agriculture (poultry farming), as well as intensive cropping for market gardening or protected cropping. All of these are permitted with consent however they require specific expertise and experience to run a profitable operation. All of these would also require some form of consolidation of the current nine

ownerships into one holding, particularly taking into account the amount of vegetation and the slope.

Intensive livestock agriculture

There is the potential to carry out intensive livestock agriculture on the property, but this has the potential to cause land use conflict due to noise, odours, dust and other matters which can lead to a loss of amenity for the surrounding landowners.

The use of the land for poultry farming as the most likely form of intensive livestock agriculture is possible however due to a variety of issues, outlined further below, it is unlikely that Council would approve such an operation. Poultry farming requires large pads of flat land to accommodate sheds which can be up to 150m long with 4 sheds normally found on each farm. Each shed costs approximately \$1m to build which is a significant upfront investment and generally deters smaller scale operators.

The potential for land use conflict with the surrounding landowners makes this not a suitable option.

Market gardens

Market gardening is another agricultural use that could be carried out on the property, particularly on the Wilton Park Road frontage where there is some flat land. To be economically sustainable, it would need to be in the vicinity of 5 to 10 ha of market garden. It would also require a permanent source of water for irrigation which would be either from a commercial bore or via a pump from the Nepean River – neither of which currently exist.

As previously outlined however, the soils are not very fertile and would require improvement with the application of manure (likely poultry) raising odour concerns for adjacent landowners and residents. Topsoil may also be necessary to be imported to the site for a market garden. This is very expensive at approximately \$50-60 per cubic metre and for 50,000 cubic metres (5ha of soil 1m deep) it would cost approximately \$2.5m. This is prohibitively expensive and would not be feasible.

The cost of setting up a market garden is estimated to be \$400,000 to \$500,000 (not including topsoil) with only marginal returns likely due to the poor fertility of the soil. Therefore, market gardens would not be an economically feasible cropping system.

Protected cropping.

The site could be used for protected cropping for vegetables or ornamental plants however protected cropping requires structures of 2,000 m² to 2 ha and larger to be profitable depending on the type of technology (NSW Department of Primary Industries, 2018). The cost of constructing a 2,000 m² greenhouse and associated infrastructure is approximately \$1.7m which is an upfront investment that is not within reach of a typical farmer, nor the current landowners.

Suitable Agriculture Production

So, whilst it is technically possible to carry out more intensive forms of agriculture, only market gardening or protected cropping would be practical having regard to the issues associated with poultry farming. These are subject to their own issues though

of poor soil fertility and high upfront investment costs. Both land uses require specialist knowledge and experience to operate which the current owners do not possess.

As a result, the only type of agriculture that the property would be suited to is cattle grazing it the land is not of a suitable size to make that a sufficient profit and income to support a family without an appropriate source of off farm income.

Chapter 4: Planning Policy Context

4.1. Introduction

The below planning policies and studies apply to the future of the land and will be addressed separately.

- Wollondilly LEP 2011;
- State Environmental Planning Policy Primary Production and Rural Development 2019;
- State Environmental Planning Policy (Precincts—Western Parkland City) 2021
- Western Sydney District Plan
- Wollondilly Rural Lands Strategy 2021
- Wollondilly Local Strategic Planning Statement
- Section 117 Local Planning Directions.

4.2. Wollondilly LEP

The subject site is covered by Wollondilly LEP 2011 which zones the site as RU2 Rural Landscape.

It has a minimum subdivision size of 40ha.

The zoning table shows that extensive agriculture is permissible without consent and intensive animal livestock and intensive plant agriculture are permitted with consent.

4.3. State Environmental Planning Policy (Primary Production and Rural Development) 2019

This State Environmental Planning Policy (SEPP) came into force in February 2019.

The aims of this Policy are as follows:

- a) to facilitate the orderly economic use and development of lands for primary production,
- b) to reduce land use conflict and sterilisation of rural land by balancing primary production, residential development and the protection of native vegetation, biodiversity and water resources,
- c) to identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,
- d) to simplify the regulatory process for smaller-scale low risk artificial waterbodies, and routine maintenance of artificial water supply or drainage, in irrigation areas and districts, and for routine and emergency work in irrigation areas and districts,
- e) to encourage sustainable agriculture, including sustainable aquaculture,
- f) to require consideration of the effects of all proposed development in the State on oyster aquaculture,

- g) to identify aquaculture that is to be treated as designated development using a well-defined and concise development assessment regime based on environment risks associated with site and operational factors.

4.4. State Environmental Planning Policy (Precincts—Western Parkland City)

The land is in the West Wilton Precinct of the Wilton Growth Area which forms part of this SEPP.

The land has not yet been rezoned, but it has been identified as an investigation area for Employment Land Use in the Wilton 2040 Plan. (NSW Department of Planning and Environment, 2018) This suggests that it has potential for urban use, as opposed to agricultural.

4.5. Western Sydney District Plan

Wollondilly Shire is within the Metropolitan Rural Area (MRA) which has been identified in the Structure Plan for the Sydney Region Plan – A Metropolis of Three Cities as being of critical importance to the outcomes of Plan. (Greater Sydney Commission, 2018a). The Greater Macarthur Growth Area and the Wilton Growth Area have been excluded from the Metropolitan Rural Area.

The Western Sydney District Plan (Greater Sydney Commission, 2018b) is a plan that provides a guide for implementing the Greater Sydney Region Plan which has several priorities, objectives and actions to achieve this. Planning Priority 17 deals specifically with the MRA. It is noted that the rural areas support productive agriculture, provide mineral and energy resources, contribute to habitat and biodiversity and sustain the local rural towns and villages. This includes the Hawkesbury and Nepean River floodplains, escarpment, hills and steep ridgelines and comprise 28% of the landmass. The agriculture includes poultry meat, egg production, dairies, irrigated horticulture such as vegetables and mushrooms, nurseries and cut flowers as well as turf farming. It also includes extractive industry and ecological values. However, as the MRA does not include the Wilton Growth Area, this is not relevant.

4.6. Wollondilly Local Strategic Planning Statement

The Wollondilly Local Strategic Planning Statement (LSPS) outlines the Council's vision for land use planning over the next twenty years.

The document has four themes as follows:

1. Infrastructure and Collaboration
2. Liveability
3. Productivity
4. Sustainability

There are a total of eighteen planning priorities listed to implement these themes. Planning Priority 16 titled Enhancing and protecting the diverse values of the MRA is the one that is relevant to this report.

Planning Priority 16 acknowledges the rural lands of the Shire provide a unique landscape setting having high environmental, agricultural, and mineral resource rich

land. The agriculture, natural resources, and cultural landscapes as well as the mineral resources all contribute make up the MRA in the Shire. It says that land use conflict is to be avoided between residential development and industry including agriculture.

Planning Priority 16 and its actions to protect agriculture don't apply to the subject land because of its inability to support agriculture due to the constraints outlined in section 3.3.

4.7. Planning Directions

The Department of Planning, Industry and Environment have issued a set of Planning Directions pursuant to section 9.1 of the Environmental Planning and Assessment Act, 1979 which must be followed when a Council is preparing any amendment to its LEP.

The directions that are relevant to the subject site are:

- Direction 9.1 Rural Zones
- Direction 9.2 Rural Lands

It is noted that the proposed development intends to integrate agriculture within the design and may include market gardens, protected cropping and orchards. This is unique and has the potential to achieve the objectives of these planning directions even though it is subdividing rural land.

4.4.1. Rural Zones.

The objectives of this direction are to protect the agricultural production value of rural land.

This direction states that a Council must not rezone land from a rural zone to a residential, business, industrial, village or tourist zone or increase the density of the land unless it is justified by a study prepared in support of the planning proposal which considers the objectives of the direction.

Comment

This study has demonstrated that due to soil quality, land size, access to water, as well as the fragmented ownership and current use pattern, amongst other reasons outlined in Chapter 3, the site is not suitable for agriculture. This limits the ability to make an adequate return and provide a sufficient income to support a family. In considering the findings of this study, the property is not large enough to protect the agricultural production value of the land for cattle grazing, which is the only form of agriculture that could be carried out.

4.4.2. Rural Lands

The objectives of this direction are as follows:

- (a) protect the agricultural production value of rural land,
- (b) facilitate the orderly and economic use and development of rural lands for rural and related purposes,

- (c) assist in the proper management, development and protection of rural lands to promote the social, economic and environmental welfare of the State,
- (d) minimise the potential for land fragmentation and land use conflict in rural areas, particularly between residential and other rural land uses,
- (e) encourage sustainable land use practices and ensure the ongoing viability of agriculture on rural land
- (f) support the delivery of the actions outlined in the New South Wales Right to Farm Policy.

This direction applies when a Council prepares a planning proposal that affects an existing or proposed rural or environmental protection zone or changes the existing minimum lot size of land in a rural or environmental protection zone.

Existing Rural Zones

A planning proposal that affects land in an existing rural zone must:

- (a) be consistent with any applicable strategic plan, including regional and district plans endorsed by the Secretary of the Department of Planning and Environment, and any applicable local strategic planning statement.

Comment

The Greater Sydney Region Plan and the Western City District Plan apply to the site. These plans identify the land as being part of a Land Release Area.

The site is part of the Wilton Growth Area and has been identified as an investigation area for Employment Land Use in the Wilton 2040 Plan. (NSW Department of Planning and Environment, 2018).

The use of the land for agricultural use would not be consistent with the future identified use for employment land.

- (b) consider the significance of agriculture and primary production to the State and rural communities.

Comment

Section 3.3 outlined the constraints for agriculture of the land and it found that the site constraints for agriculture are soils, drainage lines, slope and vegetation. However, the main constraint is that it has been used for rural residential purposes and is in fact used as nine separate properties, each with very little agricultural production.

Wollondilly Shire is known for its agriculture production, but it is not a significant producer of beef cattle. Cattle grazing contributed 7.1% of the total Wollondilly agricultural value however it was only 0.1% of the NSW total value. As the land is too small for cattle grazing, the loss of any agricultural production from these properties will not have an impact on the value of agriculture to NSW nor to the Wollondilly Shire.

- (c) identify and protect environmental values, including but not limited to, maintaining biodiversity, the protection of native vegetation, cultural heritage, and the importance of water resources.

Comment

This direction is not considered to be applicable to the agricultural potential of the land.

- (d) consider the natural and physical constraints of the land, including but not limited to, topography, size, location, water availability and ground and soil conditions.

Comment

Chapter 2 of this report has outlined the physical characteristics of the site, and these have been summarised again in section 0 and include the quality of the soils, the size of the land and the fact that it is used for rural residential purposes. These combine to make the land not suitable for ongoing intensive agricultural production which is necessary to derive a suitable income.

- (e) promote opportunities for investment in productive, diversified, innovative and sustainable rural economic activities.

Comment

The constraints of the site do not allow for any agricultural use which means that under its current management, it is not able to provide the opportunities outlined.

- (f) support farmers in exercising their right to farm.

Comment

The NSW Right to Farm Policy was published in 2016 and aims to reduce land use conflict by ensuring that agriculture does not cause an impact on adjoining land uses and vice versa. One of the key aspects of this is to ensure that new residential developments do not locate near agricultural land uses. It has been noted in section 0 that the proximity of the site to rural residential development on the adjoining land precludes its use for any form of intensive agriculture. Therefore, any intensive agriculture on the site will not achieve the objectives of the NSW Right to Farm Policy.

- (g) prioritise efforts and consider measures to minimise the fragmentation of rural land and reduce the risk of land use conflict, particularly between residential land uses and other rural land uses.

Comment

The land is already fragmented, and this limits its agricultural potential. Therefore, due to the potential for land use conflict, the site is not suited to growing intensive agriculture.

- (h) consider State significant agricultural land identified in State Environmental Planning Policy (Primary Production and Rural Development) 2019 for the purpose of ensuring the ongoing viability of this land.

Comment

The land is not identified as State Significant Agricultural Land in the SEPP Primary Production and Rural Development 2019.

- (i) consider the social, economic and environmental interests of the community.

Comment

The social interests of the community in relation to rural lands is to avoid land use conflict which would result in loss of amenity to adjoining residents.

The economic interests of the community would centre on the development not having a detrimental impact on the local economy. Agricultural land use is not occurring on the land and so this is not serving the interests of the local economy.

The environmental interests of the community are served by ensuring that the environmental qualities of the land are preserved.

This direction is not considered to be applicable to the agricultural potential of the land.

Changing Minimum Lot Size

A planning proposal which proposes to change the minimum lot size must demonstrate that it:

- (a) is consistent with the priority of minimising rural land fragmentation and land use conflict, particularly between residential and other rural land uses.

Comment

The proposal is not to subdivide the land for residential use and so this is not considered relevant.

- (b) will not adversely affect the operation and viability of existing and future rural land uses and related enterprises, including supporting infrastructure and facilities that are essential to rural industries or supply chains.

Comment

There are not many other full-time agricultural land uses in the area and so this part of the direction is not relevant.

- (c) Where it is for rural residential purposes:

- i. is appropriately located taking account of the availability of human services, utility infrastructure, transport and proximity to existing centres
- ii. is necessary taking account of existing and future demand and supply of rural residential land.

Comment

This is not relevant to this agricultural assessment.

Chapter 5: Conclusion

Altis own land at Wilton Park Road, Wilton which has an area of 108 ha and is comprised of nine separate lots ranging in area from 2.4 ha to 16.8ha.

The site is bounded by Wilton Park and Berwick Park Roads to the north, the Hume Motorway to the east with the Nepean River being the southern boundary. The western boundary of the site is other land on Wilton Park Road.

The Douglas Park – Appin Region and the Shire is not known as a significant producer of agriculture. The average size of farms in the region of 45.5 ha which is lower than the Sydney Region and NSW. Farmers in the region are 58 years old which is older than the NSW and national averages and only 3.2% of the workforce is employed in agriculture suggesting that most farmers are retired and carry out farming on a part-time basis.

The site has constraints for its use as an agricultural holding due to the physical characteristics of slope, soil fertility, and lack of a permanent water supply. These constraints limit its use to cattle grazing however it has been found that the land size is not large enough to make a sufficient income to support a family full time and as a result, an off-farm source of income is needed. Other agriculture is possible but requires considerable expertise and capital investment.

The land has been identified as an investigation area for Employment Land Use in the Wilton 2040 Plan and is also within the Wilton Growth Area. This report has found that the land is not capable of supporting productive agriculture because of its constraints.

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Appendix 1: Land Use Methodology and Definitions

The Land Use Survey:

A land use survey has been carried out to determine the land use of the study area and the surrounding land.

The first step is to identify the categorisation of the land uses to be surveyed. The land use has been categorised into primary and secondary land use categories. The primary land use categories are as follows:

- Commercial
- Extensive Agriculture
- Extractive industries
- Irrigated Plants
- Intensive Animals
- Native Vegetation
- Public Use
- Rural Residential
- Urban
- Vacant

Definitions of each use which were used for the purpose of identifying the land uses are as follows:

- *Commercial* uses are uses that are used for a commercial or industrial type of use and which do not have any dwellings associated with them.
- *Extensive Agriculture* means the growing of plants using natural rainfall or the rearing of animals using grazing as a feeding method. It also includes the growing of fodder crops and irrigated pasture.
- *Extractive Industry* means a use that extracts material from the land and includes mining, sand and clay mining and quarrying of sandstone and other stones.
- *Irrigated plants* means the growing of vegetables and ornamental plants for commercial gain using the application of irrigated water and includes market gardening, protected cropping structures, orchards, vineyards, and other similar uses.
- *Intensive Animals* means the rearing of animals using a feeding method other than natural grazing and includes poultry and piggeries mainly.
- *Native Vegetation* means a lot that has no dwellings or structures on it and which has the majority of the land covered in native vegetation.
- *Public Uses* mean a use that is commonly used and or operated by a public authority or associated body. It includes community facilities, golf courses and Government owned uses of the land.
- *Rural Residential* means a house on a lot that is greater than 0.4 ha generally, and is in a rural environment where the main source of income is from other sources than agricultural use of the land. Rural-residential is further divided into three categories, being:
 - ⇒ *Rural Fringe*: estate style development on lots ranging from of 0.4 to 2 ha;

⇒ *Rural Living: lots ranging from 1 ha to 40 ha scattered throughout the landscape*

- *Vacant* land is land that is mostly cleared of native vegetation, and which does not have any dwellings or other structures on it.

The sub-categories are a detailed description of the land use of each parcel. It includes the following:

- Commercial: factory
- Extensive agriculture: grazing,
- Extractive Industry: coal Mine
- Intensive Animals: poultry
- Irrigated Plants: protected cropping
- Native Vegetation: native vegetation
- Public Use: church
- Rural Residential: dwellings,

Methodology:

There are 3 components to the carrying out of the land use survey as follows:

- Preliminary identification of land use.
- Study area inspection.
- Data entry and mapping.

Preliminary identification of land use occurred in the office prior to the field inspection. Aerial photography was used to identify the land use. The major things to be picked out are extensive agriculture, intensive animals, irrigated plants, dwellings on small lots, vacant land, lots which are totally covered with native vegetation, and extractive industries. Only one major land use was identified for each site. An assumption was made that lots less than 40 ha which did not have an intensive agricultural, commercial, industry or public use and were in a separate ownership to the surrounding land, were rural residential. Where there is just a dwelling, it was coded in the second use as dwelling, if there was a horse, horse and if there was a truck use it was coded as a truck use. If the land is cleared and has a dwelling house located on it and is either greater than 40 ha, or was owned in association with the surrounding land and was greater than 40 ha, it was coded as extensive agriculture.

This information was entered into the database using the coding that has been identified for the primary and secondary land uses.

The study area inspection was carried out by windscreen survey of all of the roads. This was done to check the primary land use categories and also to enter secondary ones that could not be identified from the aerial photos. As each road is driven on the land use is clarified against the preliminary identification. Signage, which gives an indication that the property may be used for a secondary use such as a home business or a commercial use, was also noted. Many photos were taken of the land use and general landscape of the rural lands.