



## **Spring Farm Parkway Stage 1**

Roads and Maritime Services

### **Land use, property and socio-economic assessment**

IA186400-RP-EN-0056 | 03

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## Spring Farm Parkway Stage 1

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## Contents

<b>Executive Summary</b> .....	<b>1</b>
<b>1. Introduction</b> .....	<b>4</b>
1.1 Overview .....	4
1.2 The proposal .....	4
1.3 Key construction activities.....	7
1.4 Purpose of this document .....	8
1.5 Methodology .....	8
<b>2. Strategic policy context</b> .....	<b>10</b>
2.1 NSW Government.....	10
2.2 Campbelltown LGA .....	10
<b>3. Existing land use, property and socio-economic environment</b> .....	<b>11</b>
3.1 Regional context .....	11
3.2 Land use .....	11
3.3 Socio-economic profile.....	15
3.4 Community values .....	17
3.5 Social infrastructure .....	18
3.6 Transport and access .....	19
<b>4. Potential land use, property and socio-economic impact</b> .....	<b>20</b>
4.1 Property impact .....	20
4.2 Construction impact .....	20
4.3 Operation impact.....	23
<b>5. Safeguards and management measures</b> .....	<b>25</b>
<b>6. References</b> .....	<b>27</b>

## Executive Summary

NSW Roads and Maritime Services (Roads and Maritime) is proposing to deliver the future Spring Farm Parkway in two stages. When complete, stages 1 and 2 would provide a 6.1 kilometre east-west arterial road link between Camden Bypass, the Hume Motorway (the Hume Motorway) and Menangle Road in Sydney's south west, 11 kilometres south of Campbelltown and 70 kilometres from Sydney CBD.

Spring Farm Parkway would service existing and future residential land releases including Spring Farm, Elderslie, Menangle Park and Mount Gilead. It would provide an alternative east-west route to Narellan Road, with direct access to the Hume Motorway. The section of road linking to the Hume Motorway would be designated as a State or Regional Road due to the intersection with the Hume Motorway. It is assumed the remaining section of road would remain a local road.

Key features of the proposal include:

- A new four lane divided road (Spring Farm Parkway) extending about 0.9 kilometres from Menangle Road west to Menangle Park land release
- Capacity for widening Spring Farm Parkway to an ultimate six lanes in the future
- Inclusion of a shared-use path on the southern side of Spring Farm Parkway and the south-eastern side of Menangle Road through to Broughton Anglican College at the southern limit of work
- Provision of access to the Menangle Park land release area at the western end of Spring Farm Parkway
- A grade separated interchange to connect Spring Farm Parkway with the Hume Motorway with north facing entry and exit ramps designed to be compatible for future implementation of Smart Motorway requirements. The length of the entry and exit ramps would be about 1.6 kilometres
- A bridge about 20 metres wide and 76 metres long bridge over the Hume Motorway with provisions for future widening to accommodate a six lane Spring Farm Parkway and turn lanes for south facing ramps to allow access to and from the Hume Motorway
- Four signalised intersections including:
  - an intersection between Spring Farm Parkway and Menangle Road
  - a north facing exit ramp from the Hume Motorway onto Spring Farm Parkway
  - a north facing entry ramp from Spring Farm Parkway to the Hume Motorway
  - an intersection providing access to the proposed Menangle Park land release area at the western end of Spring Farm Parkway (stage 1) including a stub for the future connection of Spring Farm Parkway (stage 2)
- Upgrade of Menangle Road near the proposed Spring Farm Parkway intersection including widening to four lanes, and tie-ins to suit the new intersection to cater for forecast traffic demand
- Installation of new drainage infrastructure and upgrade of existing drainage infrastructure including kerb and gutters, pits, pipes and open drains
- Ancillary work associated with the proposal including:
  - Relocating, adjusting or protecting existing utility services that are in conflict with the proposal
  - Installation of new street lighting to improve the night-time visibility of intersections and various road furniture
  - Delineation including signage, line-marking and other items to facilitate road user safety of the new infrastructure
  - Urban design improvements, amenity planting and landscaping

- Property adjustments where necessary.

It is anticipated that the proposal would be constructed over a 30-month period from mid-2020.

### **Community and stakeholder consultation**

The following communication and engagement objectives have been developed for the proposal:

- Provide regular and targeted information to build awareness about the proposal as well as information about the likely impacts and benefits of the proposal
- Provide clear direction to the community and stakeholders about whether we are providing information or seeking feedback so expectations are clear at all stages
- Ensure community and stakeholder views are continuously fed into the proposals' development and used to understand and effectively assess impacts
- Collaborate with government agencies and local councils to ensure a whole-of-government approach and consistent key messaging.

The proposal has been consultation with Aboriginal people has been carried out in accordance with the Procedure for Aboriginal Cultural Heritage Consultation and Investigation (PACHCI) (Roads and Maritime Services, 2011), OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (OEH 2010) and the requirements of Clause 80C of the National Parks and Wildlife Regulation 2009.

Roads and Maritime will continue to keep the community and key stakeholders informed as the proposal progresses via proposal updates, web updates, stakeholder briefings, media releases, advertisements and other consultation tools where relevant.

### **Potential impacts**

During construction, the proposal may result in temporary impacts to the community, including:

- impact on the use of Menangle Road and areas to the west of Menangle Road due to the location of construction work and site compounds
- changes in local amenity for residents and community (including students at Broughton Anglican College) closest to the proposed work, due to increased noise and dust from construction activities and increased traffic, including heavy vehicles.

It is not anticipated that the proposal would result in impacts to local businesses, and access to the AGL gas wells, properties near to the construction work and Broughton Anglican College would be maintained throughout construction works.

The proposal would require some property adjustments on both sides of Menangle Road, including partial acquisition of one residential property (116 Menangle Road). The acquisition would affect the driveway access and fencing to the property. Access arrangements and property adjustments to individual properties would be finalised during detailed design for the proposal in consultation with affected property owners. Partial acquisition of small areas of Broughton Anglican College and Sugarloaf Farm would also be required for widening on the eastern side of Menangle Road.

Once operational, the proposal is anticipated to support future land use and development in the Greater Macarthur Growth Area. In particular, the proposal would support future population and employment growth in the Menangle Park and Gilead areas.

The proposal would improve access and connectivity from future residential areas to community services and facilities near the proposal, including Broughton Anglican College and community uses in urban areas of Glen Alpine and Rosemeadow.

The provision of a shared-use path on the southern side of Spring Farm Parkway and south-eastern side of Menangle Road would improve access for pedestrians and cyclists to the college. This would have a beneficial impact for students and teachers of the college.

Adverse changes to amenity for some parts of Broughton Anglican College may result from increased road traffic noise associated with the new interchange and altered views in relation to the widened Menangle Road and the new Spring Farm Parkway, which would be partially visible at some locations. Some limited adjustments to three property boundaries would be required for the widening of Menangle Road.

### **Justifications and conclusion**

Overall the proposal would result in temporary impacts during construction, with some permeant impacts to properties on the eastern and western sides of Menangle Road. However, the proposal has been designed as far as possible to be located within land zoned for public infrastructure, which has limited the direct impacts to properties. During construction, activities which may result in amenity related impacts such as noise and dust pollution would be managed in accordance with mitigation measures outlined as part of the Review of Environmental Factors. Once operational, the provision of infrastructure to support the ongoing development of land release areas of Menangle Park and Mount Gilead, and the wider objectives of the Greater Macarthur Growth Area, would result in significant positive impacts on a local and regional scale to the community.

# 1. Introduction

## 1.1 Overview

Roads and Maritime Services (Roads and Maritime) is proposing to build Spring Farm Parkway at Menangle Park, an east-west arterial link road that would ultimately service several future residential land releases within the Greater Macarthur Priority Growth Area. It would provide an alternative connection to Spring Farm, Elderslie, Menangle Park, and Mount Gilead. Ultimately, this east-west link would connect Camden Bypass, the Hume Motorway and Menangle Road in Sydney's south west.

Stage 1 of Spring Farm Parkway, subject of the proposal, is needed to support the development of the Menangle Park Urban Release, which is part of the Greater Macarthur Priority Growth Area. Stage 1 would provide access to a new housing subdivision being developed by Dahua Pty Ltd on the western side of the Hume Motorway, which consists of 1,500 lots proposed for completion in 2022. Access would be provided to and from the Hume Motorway and Menangle Road.

## 1.2 The proposal

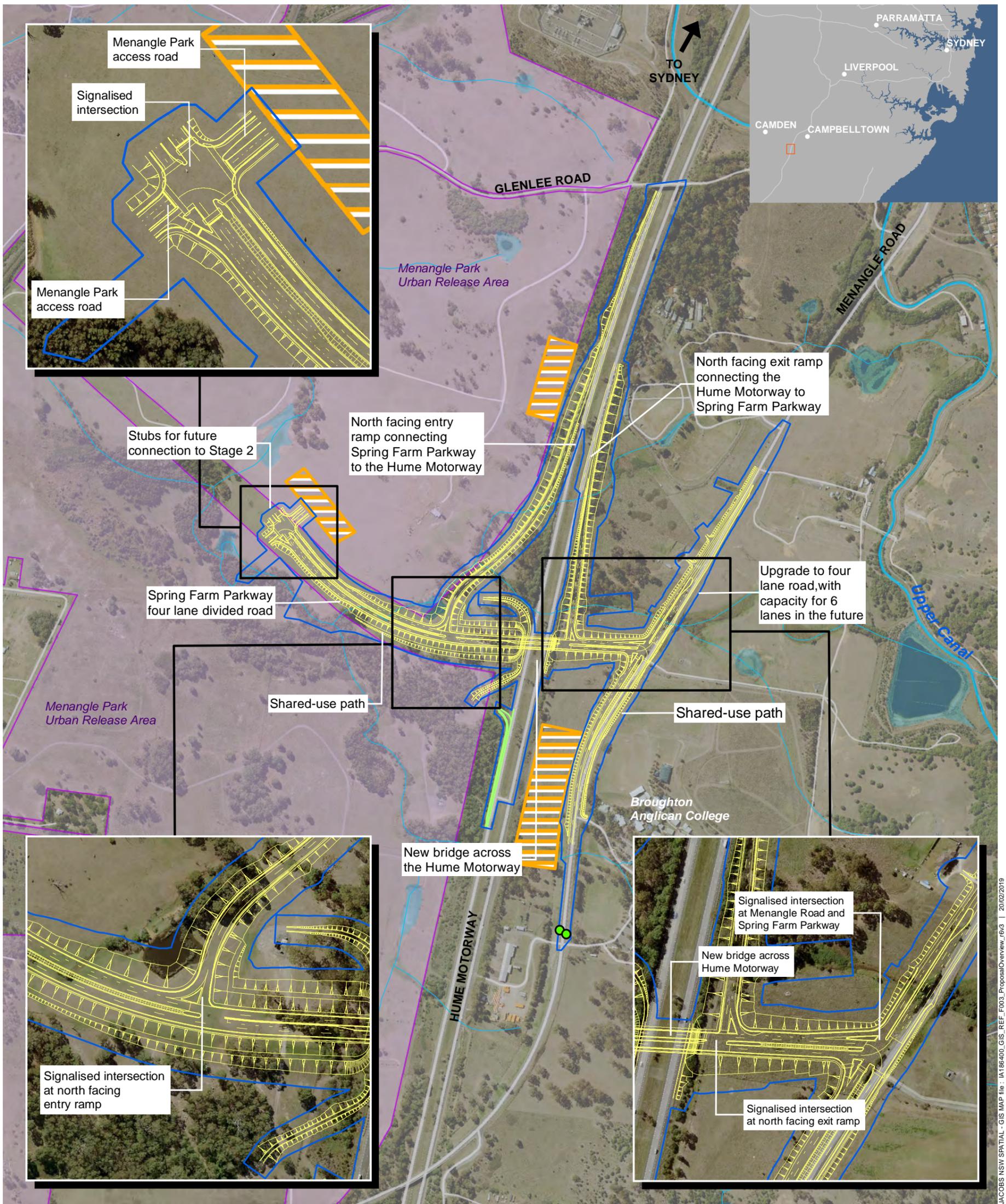
Roads and Maritime Services NSW (Roads and Maritime) proposes to build Stage 1 of Spring Farm Parkway, which would provide the principal arterial route between Glen Alpine and Spring Farm. Key features of the proposal include:

- A new four lane divided road (Spring Farm Parkway) extending about 0.9 kilometres from Menangle Road west to Menangle Park land release
- Capacity for widening Spring Farm Parkway to an ultimate six lanes in the future
- Inclusion of a shared-use path on the southern side of Spring Farm Parkway and the south-eastern side of Menangle Road through to Broughton Anglican College at the southern limit of work
- Provision of access to the Menangle Park land release area at the western end of Spring Farm Parkway
- A grade separated interchange to connect Spring Farm Parkway with the Hume Motorway with north facing entry and exit ramps designed to be compatible for future implementation of Smart Motorway requirements. The length of the entry and exit ramps would be about 1.6 kilometres
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  - an intersection providing access to the proposed Menangle Park land release area at the western end of Spring Farm Parkway (stage 1) including a stub for the future connection of Spring Farm Parkway (stage 2)
- Upgrade of Menangle Road near the proposed Spring Farm Parkway intersection including widening to four lanes, and tie-ins to suit the new intersection to cater for forecast traffic demand
- Installation of new drainage infrastructure and upgrade of existing drainage infrastructure including kerb and gutters, pits, pipes and open drains

- Ancillary work associated with the proposal including:
  - Relocating, adjusting or protecting existing utility services that are in conflict with the proposal
  - Installation of new street lighting to improve the night-time visibility of intersections and various road furniture
  - Delineation including signage, line-marking and other items to facilitate road user safety of the new infrastructure
  - Urban design improvements, amenity planting and landscaping
  - Property adjustments where necessary.

Key features of the proposal are shown in Figure 1.1. A detailed description of the proposal is provided in Chapter 3 (Description of the proposal) of the Review of Environmental Factors (REF).

Subject to planning approval, construction is anticipated to start in 2020 and is expected to take around 30 months to complete. The proposal is expected to be operational by 2022.



JACOBS NSW SPATIAL - GIS MAP file : I1186400\_GIS\_REF\_F003\_ProposalOverview\_r6v3 | 20/02/2019

Source : Ausimage 2018

**Legend**

- |  |                                  |  |                   |
|--|----------------------------------|--|-------------------|
|  | 80% design                       |  | Deceleration lane |
|  | Menangle Park Urban Release Area |  | Waterway          |
|  | Site compound                    |  | Road              |
|  | Proposal area                    |  | Bus stop          |



**Figure 1-1** | Key features of Spring Farm Parkway

### 1.3 Key construction activities

Construction activities would be guided by a construction environmental management plan (CEMP) to ensure work is carried out to Roads and Maritime specifications within the specified work area. Detailed work methodologies would be determined during detailed design and construction planning. The proposed work methodologies are described below.

The proposed construction work and methodology provided are indicative and based on the current concept design and would be further developed during detailed design. Detailed construction staging plans and methods would be determined by the construction contractor(s) after completion of the detailed design in consultation with Roads and Maritime. In the event that construction activities result in environmental impacts above those assessed in the REF, further environmental assessment would be required to be undertaken and approved by Roads and Maritime.

Construction work would be expected to involve the following methodology:

- Pre-construction identification and marking of sensitive areas as identified in this REF and the CEMP
- Site establishment (including temporary fencing and construction compound)
- Installation of traffic management measures such as placing safety barriers in accordance with the traffic control plan
- Construction of temporary deceleration lane for vehicles exiting the Hume Motorway to access the site
- Vegetation removal and installation of erosion and sediment controls
- Utility adjustments
- Drainage work
- Earthwork
- Road construction work that includes placement and compaction of subbase, base and wearing surface materials
- Kerb and gutter construction
- Installation of permanent traffic control signals
- Installation of line marking, signposting and other road furniture
- Landscaping work
- Signposting
- Site clean-up.

#### 1.3.1 Site access

At the start of construction activities, construction vehicles would access the site via the following roads:

- Menangle Road
- Racecourse Avenue
- Cummins Road
- Fitzpatrick Street
- AGL access road.

The use of these routes would be restricted to the early phases of the proposal only. The use of these access routes would be permitted while work on the north bound access ramp, and the temporary deceleration lane from the Hume Motorway are being carried out. Work on these elements would be prioritized during the construction scheduling to minimise the duration of the traffic related impact to sensitive receivers within Menangle Park.

### 1.3.2 Ancillary facilities

Temporary site compound facilities would be required as part of the proposal. The following areas would be used as site compounds throughout the construction of the proposal. These sites may be used for material processing including batch or crushing plant; stockpiles site for materials; and site compound including offices, sheds for the storage of equipment and plant:

- A site compound area of approximately 24,000 m<sup>2</sup> is located on the eastern side of Menangle Road, opposite Broughton Anglican College (Compound 1)
- A site compound area to the west of the Hume Motorway, on the northern boundary of Spring Farm Parkway (Compound 2). This site compound, which would be about 7,600 m<sup>2</sup>.
- A site compound area on the western side of the Hume Motorway, adjacent to the northbound entry ramps (Compound 3). This compound would be about 9,500 m<sup>2</sup>.

Compound facilities are shown in Figure 1.1. It is expected that the compound facilities would be accessed directly from Menangle Road or via the Hume Motorway deceleration lane and onto Spring Farm Parkway.

These areas have been selected in accordance with Roads and Maritimes' *Stockpile Site Management Guidelines* (Roads and Maritime, 2015). These guidelines also recommend that where possible, site compounds should be located at least 100 metres from noise sensitive receivers. Compound 1 is located about 200 metres from the Broughton Anglican College. However, controls to limit noisy activities during sensitive periods, such as exam periods, would be implemented during construction in consultation with the Broughton Anglican College.

Once construction is complete, the land where the site compounds are located would be reinstated to their previous condition.

## 1.4 Purpose of this document

This technical report has been prepared to support the review of environmental factors for the proposal. The REF has been prepared under Division 5.1 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). This technical report provides an assessment of potential land use, property and socio-economic benefits and impacts of the proposal, including:

- A description of existing land use, property and socio-economic conditions and values in the study area (described in section 1.5)
- An assessment of potential impacts on and changes to land use, property and socio-economic conditions from the construction and operation of the proposal
- Safeguards and management measures.

## 1.5 Methodology

The study area for this assessment includes the Australian Bureau of Statistics (ABS) Statistical Areas Level 2 (SA2) geography of Rosemeadow – Glen Alpine. The Rosemeadow – Glen Alpine SA2 is located within the Campbelltown local government area (LGA) in Sydney's south-western suburbs.

Benefits and impacts from the proposal's construction and operation may also be experienced by regional communities. As such, this assessment also considers at a broader level, regional impacts on communities and businesses in the Campbelltown LGA and wider Sydney region.

The methodology for this assessment is guided by the *Environmental Impact Assessment Practice Note No. 05: Socio-economic assessment* (EIA-N05) (Roads and Maritime, 2013).

Key steps in the assessment included:

- Scoping of the potential land use, property and socio-economic impacts of the proposal and potentially affected communities
- Analysing existing land use, property and socio-economic conditions and values in the study area, including land use and tenure, population and housing, social infrastructure (that is, education, recreation and health services and facilities), and local businesses
- Identifying and assessing potential land use, property and socio-economic impacts of the proposal's construction and operation, including on local amenity, access and connectivity, social infrastructure and local community values
- Identifying safeguards and management measures to mitigate or manage identified impacts and maximise potential benefits.

The description of the existing socio-economic environment principally draws on data and information from the ABS 2016 Census of Population and Housing. This is supplemented with data and information from:

- NSW Government and other ABS
- The Campbelltown City Council website.

## 2. Strategic policy context

### 2.1 NSW Government

#### 2.1.1 Greater Macarthur Growth Area

The Greater Macarthur Growth Area one of 36 development plans from the NSW Government Department of Planning and Environment (DPE) to address Sydney's growing population. DPE have worked closely with local councils, communities and Members of Parliament to plan for the future.

The Greater Macarthur Growth Area looks to address Sydney's growing population whilst making sure local character and infrastructure planning help deliver better connections between homes, jobs and open space, all close to the seven train stations between Glenfield and Macarthur.

The plan hopes to show how opportunities for people to live close to where they work can also protect local character and be consistent with plans for schools, transport and services. Residents would benefit from improved public transport links and connections to neighbouring suburbs, offering vibrancy, diversity and convenience for residents.

DPE have worked closely with Campbelltown City Council on:

- New urban design and local character plans around seven train station precincts from Glenfield to Macarthur to provide new homes and apartments and 21,000 jobs over the next 20 to 30 years
- New land release areas of Menangle Park and Mount Gilead
- New roads, parks, schools, sporting and community facilities
- An infrastructure plan to fund state infrastructure in the area.

### 2.2 Campbelltown LGA

#### 2.2.1 Campbelltown 2027 – Community strategic plan

The Campbelltown 2027 Community Strategic Plan would guide and influence the actions and initiatives of Dubbo Regional Council, the community, all tiers of government and community stakeholders through to 2027. It outlines the aspirations and visions as overarching strategic outcomes to be achieved over the next 9 years.

The importance of appropriate infrastructure to further enhance quality of life, support population growth and allow development of a vibrant, liveable city. This is reflected in the 'A successful city' theme, which is one of four themes to achieve the community's vision. Strategies to achieve this theme relevant to the proposal include:

- *Advocate and plan for enhanced connectivity, accessibility and movement within, to and from our city*, which aims to this through improved public transport, road and traffic management infrastructure, cycling and pedestrian movement.
- *Responsibly manage growth and development, with respect for the environment, heritage and character of our city*, is focused on ensuring transport strategies facilitate access throughout the region and residential growth areas are well-connected to employment areas and services; and that business and industry are supported through the provision of appropriate and well-connected road infrastructure.

The proposal supports the strategies of the 'A successful city' theme through additional road access, improving access and connectivity for local and future growth areas and improved road links between Camden Bypass, the Hume Motorway and Menangle Road.

### 3. Existing land use, property and socio-economic environment

This section describes existing land use, property and socio-economic conditions, values and features in the study area, including land use and tenure, population and demography, business and industry, social infrastructure, community values and transport and access.

#### 3.1 Regional context

The Campbelltown LGA is located in Sydney's south-western suburbs, approximately 30-55 kilometres from central Sydney. The LGA is bounded to the north by Liverpool City, Sutherland Shire and Wollongong City to the east, Wollondilly Shire to the south, and Camden Council to the west (<https://profile.id.com.au/campbelltown/about>).

In June 2017, the Campbelltown LGA had an estimated resident population of about 164,273 people. Over the 10 years to 2017, the LGA's population grew at an average of 1.1 per cent annually, although average population growth increased over the five years to 2017 to 1.5 per cent annually. This was below the rate of growth for Greater Sydney as a whole, which grew at 1.7 per cent and 1.9 per cent over the same periods (based on ABS, 2018a).

The Campbelltown LGA forms part of the Greater Macarthur Growth Area – one of the most significant and current future growth areas in south west Sydney. The LGA's population is projected to grow to about 233,150 people by 2036. This represents an average annual growth rate of 1.7 per cent between 2011 and 2036, which is marginally above the average growth rate for metropolitan Sydney over the same period (1.6 per cent) (based on Department of Planning and Environment, 2016).

The original inhabitants of the Campbelltown area are the Dharawal Aboriginal people. European settlement in the LGA dates from the early 1800s, with land mainly used for agricultural activities such as wheat, sheep and dairy farming. The LGA comprised predominantly rural uses until the 1960s, with significant resident and employment growth occurring from the late 1960s and continuing during the 1970s and 1980s. Today, Campbelltown LGA is a residential and rural area, with substantial areas of commercial and industrial uses (<https://profile.id.com.au/campbelltown/about>).

Major features of the LGA include the Ingleburn and Minto industrial areas, community uses such as Campbelltown Hospital, University of Western Sydney, and TAFE NSW South Western Sydney Institute, and a wide range of sport and recreation uses, including Meangle Park Paceway located near the proposal area. The LGA is well serviced by both road and rail transport, including the Hume Motorway and Macarthur railway line (<https://profile.id.com.au/campbelltown/about>).

#### 3.2 Land use

This section provides an overview of existing and future land use within or surrounding the proposal.

##### 3.2.1 Existing land uses and land use zoning

Existing land use within or surrounding the proposal comprises mainly land used for grazing activities. Other land uses include community uses located east of the Hume Motorway (Broughton Anglican College), land used for horse breeding and horse students located south of the proposal, and rural residential uses located south west of the proposal between Racecourse Avenue and Cummins Road.

The State Heritage listed Glenlee Homestead is located north west of the proposal. The heritage listed Upper Canal runs in a north-west direction, crossing beneath Menangle Road north of the proposal. Sugarloaf Farm is

located east of the proposal, on Menangle Road. This is listed on the State Heritage Register, and operates as a horse-riding school.

Land use zones within and surrounding the proposal are established by the Campbelltown Local Environmental Plan 2015.

The proposal footprint is zoned as Infrastructure – future road corridor (SP2). Among other things, the objectives of this zone is to provide for infrastructure and related uses, and to prevent development that is not compatible with or that may detract from the provision of infrastructure. Other objectives of the zone relate to the retention and creation of view corridors, preservation of bushland, wildlife corridors and natural habitat, and maintenance of visual amenity of prominent ridgelines.

An overview of land use zones within and surrounding the proposal are outlined in Table 3 1 along with an outline of the zone objectives.

**Table 3 1: Land use zones**

Land use zone	Land use zone objectives
Infrastructure – future road corridor (SP2)	<ul style="list-style-type: none"> <li>• To provide for infrastructure and related uses</li> <li>• To prevent development that is not compatible with or that may detract from the provision of infrastructure</li> <li>• To encourage activities involving research and development</li> <li>• To optimise value-adding development opportunities, particularly those associated with research</li> <li>• To provide for the retention and creation of view corridors</li> <li>• To preserve bushland, wildlife corridors and natural habitat</li> <li>• To maintain the visual amenity of prominent ridgelines.</li> </ul>
Low density residential (R2)	<ul style="list-style-type: none"> <li>• To provide for the housing needs of the community within a low density residential environment</li> <li>• To enable other land uses that provide facilities or services to meet the day to day needs of residents</li> <li>• To enable development for purposes other than residential only if that development is compatible with the character of the living area and is of a domestic scale</li> <li>• To minimise overshadowing and ensure a desired level of solar access to all properties</li> <li>• To facilitate diverse and sustainable means of access and movement.</li> </ul>
Large lot residential (RE5)	<ul style="list-style-type: none"> <li>• To provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality</li> <li>• To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future</li> <li>• To ensure that development in the area does not unreasonably increase the demand for public services or public facilities</li> <li>• To enable development for certain purposes other than residential only if that development is compatible with the character and scale of the living area</li> <li>• To minimise overshadowing and ensure a desired level of solar access to all properties.</li> </ul>
Rural landscape (RU2)	<ul style="list-style-type: none"> <li>• To encourage sustainable primary industry production by maintaining and enhancing the natural resource base</li> </ul>

Land use zone	Land use zone objectives
	<ul style="list-style-type: none"> <li>• To maintain the rural landscape character of the land</li> <li>• To provide for a range of compatible land uses, including extensive agriculture</li> <li>• To preserve and enhance bushland, wildlife corridors, natural habitat and water resources, including waterways, ground water and riparian land</li> <li>• To protect and enhance areas of scenic value, and the visual amenity of prominent ridgelines, by minimising development and providing visual contrast to nearby urban development.</li> </ul>
Public recreation (RE1)	<ul style="list-style-type: none"> <li>• To enable land to be used for public open space or recreational purposes</li> <li>• To provide a range of recreational settings and activities and compatible land uses</li> <li>• To protect and enhance the natural environment for recreational purposes</li> <li>• To provide for land uses compatible with the ecological, scientific, cultural or aesthetic values of land in the zone</li> <li>• To facilitate the multiple use of certain open space areas</li> <li>• To facilitate development that is ancillary or incidental to the special land uses provided for in this zone</li> <li>• To provide for the sufficient and equitable distribution of public open space to meet the needs of the local community</li> <li>• To preserve and rehabilitate bushland, wildlife corridors and natural habitat, including waterways and riparian lands, and facilitate public enjoyment of these areas</li> <li>• To provide for the retention and creation of view corridors</li> <li>• To protect and enhance areas of scenic value and the visual amenity of prominent ridgelines</li> <li>• To preserve land that is required for public open space or recreational purpose</li> </ul>
Environmental management (E3)	<ul style="list-style-type: none"> <li>• To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values</li> <li>• To provide for a limited range of development that does not have an adverse effect on those values</li> <li>• To enable development for purposes other than rural-residential only if that development is compatible and complementary, in terms of design, size and scale, with the character of land in the zone</li> <li>• To allow cellar door premises, restaurants and cafes only where they are directly associated with the agricultural use of the land</li> <li>• To protect, and maintain the environmental, ecological and visual amenity of, the Scenic Hills, the Wedderburn Plateau and environmentally sensitive lands in the vicinity of the Georges River from inappropriate development</li> <li>• To preserve the rural heritage landscape character of the Scenic Hills</li> <li>• To protect and enhance areas of scenic value and the visual amenity of prominent ridgelines</li> <li>• To protect bushland, wildlife corridors and natural habitat, including waterways and riparian lands</li> <li>• To ensure the preservation and maintenance of environmentally significant and environmentally sensitive land.</li> </ul>

Source: Campbelltown City Council, 2015

### 3.2.2 Future land use

The proposal is located within the Menangle Park / Mount Gilead Priority Precinct of the Greater Macarthur Growth Area (refer to Figure 3.1). Future land use in the precinct is proposed to be predominantly residential uses of varying densities, with commercial uses located in proposed local centres at Mount Gilead and Menangle Park, and village centres at Glenlee and Gilead. Twenty-four hectares of land for future employment is also identified in the precinct area.

The Menangle Park / Mount Gilead Priority Precinct is planned to ultimately provide for about 18,100 dwellings and approximately 4,500 jobs. Other future land uses planned for the precinct include:

- Transport infrastructure
- Utilities infrastructure, including electrical substations, water storage tank and sewer pump stations
- Education facilities, including six primary schools and two high schools
- Emergency services
- Primary health care clinic
- District parks.

Spring Farm Parkway is identified in the structure plan as a proposed east-west road link (Spring Farm Link Road) that would connect Camden Bypass in Spring Farm with the Hume Motorway, Menangle Road and Appin Road. The road is proposed to ease congestion on Narellan Road and Appin Road and to support development in the Menangle Park and Gilead areas.

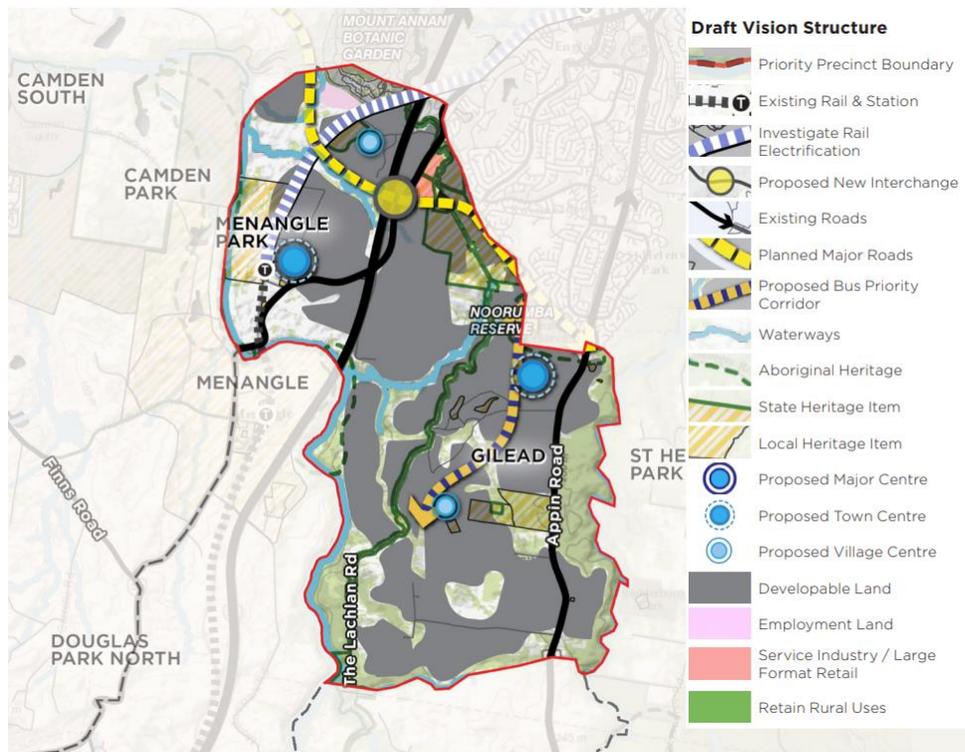


Figure 3.1: Menangle Park and Mount Gilead Structure

Source: NSW Planning and Environment, 2015

### 3.3 Socio-economic profile

This section describes existing socio-economic conditions in the study area, including population and demography, housing and households, employment and local business.

#### 3.3.1 Population and demography

The study area had an estimated resident population of about 21,497 people in June 2017. Over the 10 years to 2017, the population of the study area remained relatively stable increasing by about 0.3 per cent annually. This is compared to a growth rate of 1.7 per cent in Greater Sydney as a whole.

Socio-economic characteristics of the study area are shown in Table 3 2. At the 2016 Census, communities in the study area are generally characterised by:

- A younger population compared to Greater Sydney, with a lower median age, higher proportions of children and working aged people and lower proportions of older people aged 65 years or over
- Relatively low levels of cultural diversity, with lower proportions of overseas born people and people who speak a language other than English at home
- Higher proportions of Indigenous people, with 4.2 per cent of the population reporting as Aboriginal and/or Torres Strait Islander compared to 1.5 per cent in Greater Sydney
- Levels of people needing assistance in one or more of the three core activity areas of self-help, mobility or communications due to disability, a long-term health condition or old age, above the Greater Sydney average.

The ABS produces Socio-economic Indexes for Areas (SEIFA) that rank areas in Australia according to their socio-economic advantage and disadvantage, that is people's access to material and social resources, and their ability to participate in society (ABS, 2018).

The SEIFA index of relative socio-economic disadvantage summarises variables that indicate relative disadvantage, for example low income, unemployment, lower levels of education attainment, no access to motor vehicle, and lower levels of English proficiency. Low decile values generally represent a high proportion of relatively disadvantage people in an area. At the 2016 Census, the Rosemeadow – Glen Alpine SA2 had a decile score of three, indicating higher levels of relative disadvantage (ABS, 2018).

**Table 3 2: Socio-economic characteristics of the study area**

Indicator	Rosemeadow – Glen Alpine	Greater Sydney
<b>Population and growth*</b>		
Estimated resident population (as at June 30 2017)*	21,497	5,131,326
Population growth (2007-2017) (average annual change)* (per cent)	0.3%	1.7%
<b>Age</b>		
Median age	35 years	36 years
0-14 years (per cent)	21.6	18.7
15-64 years (per cent)	66.8	67.4
65 years and over (per cent)	11.6	13.9
<b>Diversity</b>		

Indicator	Rosemeadow – Glen Alpine	Greater Sydney
Overseas born (per cent)	25.1	36.8
Aboriginal and/or Torres Strait Islander (per cent)	4.2	1.5
Speaks language other than English at home (per cent)	22.5	35.8
Speaks other language and speaks English not well or not at all (per cent)	3.1	6.5
<b>Disadvantage and need for assistance</b>		
Index of relative socio-economic disadvantage (decile)**	3	
Need for assistance (per cent)	5.8	4.9
<b>Households</b>		
Total private dwellings	6,654	
Occupied private dwellings (per cent)	95.6	92.3
Separate dwellings (per cent)	82.5	52.5
Semi detached, row or terrace house, townhouse etc (per cent)	9.5	12.9
Households with no vehicle (per cent)	6.2	11.1
Households with two or more vehicles (per cent)	90.3	85.6
<b>Employment and income***</b>		
Median weekly individual income	\$640	\$719
Median weekly household income	\$1,533	\$1,750
Unemployment (per cent)	7.6	6.0
Industry of employment (top five responses)	Hospitals (except psychiatric hospitals) (3.7%) Supermarket and grocery stores (3.0%) Takeaway food services (2.8%) Road freight transport (2.3%) Primary education (2.0%)	Hospitals (except psychiatric hospitals) (3.4%) Computer system design and related services (2.5%) Cafes and restaurants (2.5%) Banking (2.5%) Supermarket and grocery stores (2.0%)

Source: Unless otherwise specified, data is based on 2016 Census of Population and Housing General Community Profile (Cat No. 2001.0) for Rosemeadow – Glen Alpine SA2 and Greater Sydney; \*Based on ABS.Stat, ERP by SA2 and above (ASGS 2016), 2001 onwards

([http://stat.data.abs.gov.au/Index.aspx?DataSetCode=ABS\\_ERP\\_COMP\\_SA#](http://stat.data.abs.gov.au/Index.aspx?DataSetCode=ABS_ERP_COMP_SA#)); \*\*ABS (2018b), 2033.0.55.001 – Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016, released on 27 March 2018 \*\*\*2016 Census QuickStats for Rosemeadow – Glen Alpine SA2 ([http://quickstats.censusdata.abs.gov.au/census\\_services/getproduct/census/2016/quickstat/123021444?opendocument](http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/123021444?opendocument)) and Greater Sydney Greater Capital City Statistical Area ([http://quickstats.censusdata.abs.gov.au/census\\_services/getproduct/census/2016/quickstat/1GSYD?opendocument](http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/1GSYD?opendocument))

### **3.3.2 Households**

At the 2016, there were 6,654 dwellings within the study area. The study area had relatively high levels of dwelling occupancy with 95.6 per cent of dwellings occupied on Census night, compared to 92.3 per cent in Greater Sydney (refer to Table 3 2).

Separate dwellings were the predominant form of housing in the study area, comprising about 82.5 per cent of total dwellings. Medium density dwellings (that is, semi-detached, row or terrace houses, townhouses, etc) was the next largest dwelling type comprising 9.5 per cent of dwellings. This is compared to 52.5 per cent and 12.9 per cent in Greater Sydney respectively.

Households in the study area had a relatively high level of car ownership, with more than 90 per cent of households having more than two vehicles at the 2016 Census. Households without access to a motor vehicle comprised 6.2 per cent of households, below the Greater Sydney average at 11.1 per cent.

### **3.3.3 Employment and income**

Individual and household incomes in the study area are below the Greater Sydney average. At the 2016 Census, median weekly incomes were \$640 for individuals and \$1,533 for households. This is compared to \$719 and \$1,750 respectively in Greater Sydney (refer to Table 3 2).

The study area had relatively high levels of unemployment at the 2016 Census, with 7.6 per cent of the labour force unemployed compared to 6.0 per cent in Greater Sydney. Similar to Greater Sydney, hospitals (except psychiatric hospitals) was the largest industry of employment in the study area with 3.7 per cent of employed people working in this industry. This was marginally above the proportion of people working in this industry in Greater Sydney (3.4 per cent). Other key industries of employment in the study area included supermarket and grocery stores, takeaway food services, road freight transport and primary education.

### **3.3.4 Business and industry**

There are no businesses located within or immediately surrounding the proposal area. The nearest businesses to the proposal are located at Menangle Park and include:

- A newsagency at Cummins Road, that cater for residents in the local area
- Home based businesses (for example, a signwriters)
- Club Menangle within the Menangle Park Paceway facility.

Other businesses in the study area are mainly located in urban areas such as Glen Alpine and Rosemeadow. These include retail businesses such as supermarket, takeaway and food outlets and service stations, as well as various home based businesses offering personal services (for example, hairdressers, fitness training, driving training) and on-line retail services.

As indicated in section 3.2.2, the Menangle Park / Mount Gilead Priority Precinct identifies future commercial uses in proposed local centres at Mount Gilead and Menangle Park, and village centres at Glenlee and Gilead. The precinct plan also identifies 24 hectares of land for future employment north-west of the proposal area.

An AGL gas well (MP11) is located near the proposal, west of the Hume Motorway.

## **3.4 Community values**

Local amenity and character in the study area is characterised by a mix of urban and rural land uses, including rural and rural residential uses at Menangle Park and Gilead, and urban residential communities of Glen Alpine

and Rosemeadow, which offer a range of residential uses and community facilities, including schools, open space and recreation.

The study area's historic heritage is also important to local communities. Sugarloaf Farm is located along the eastern side of Menangle Road. It was made up of a number of separate small grants. Other nearby land grantees making up Sugarloaf Farm were individuals of the Taber family, who were instrumental in settling the Menangle area. One house survives on the property, dating from c1865. It is described as a "modestly scaled Colonial rural cottage in the Georgian style" (Graham Brooks & Associates, 2001:22). Sugarloaf Farm is currently used as a horse-riding school. The farm building and outbuildings are set well back from the road and no outbuildings are located along the Menangle Road frontage.

Glenlee homestead was designed in 1823 by Henry Kitchen, the colony's first non-convict architect. The homestead was constructed with convict labour during 1823-1824. The estate was used for a variety of produce, including cattle and sheep grazing and tobacco. Glenlee, however, was known as a dairy farm. Howe produced one of the first butters to be exported to Britain, under the brand name "Sun and Thistle" (Heritage Division, 2003). It was accessed via a formal driveway from what is now known as Glenlee Road; the Gate Lodge is located along this driveway to the east of the homestead.

### 3.5 Social infrastructure

Social infrastructure such as sport and recreation facilities, open space, education, and cultural facilities are generally located within the urban areas of Glen Alpine and Rosemeadow.

Facilities that cater for local and district communities are also located in Menangle Park. These include Menangle Park Paceway at Racecourse Avenue, which comprises a harness racing track and associated facilities. The Paceway is used as a training ground for as many as 200 horses and over 130 meetings are held annually (<http://clubmenangle.com.au/about/>).

Social infrastructure located near the proposal is generally limited and includes education facilities and a museum. Further information on these facilities is provided in Table 3 3.

**Table 3 3: Social infrastructure near the proposal**

Facility	Location	Description
Broughton Anglican College	Menangle Road, Menangle Park	Broughton Anglican College is an independent, co-educational Anglican school. The college was established in 1986 and caters for students from preparatory to Year 12. In 2017, the college had 983 students in Kindergarten to Year 12, comprising 438 junior school students and 545 senior school students. Indigenous students comprise about two per cent of the college's student population, which approximately 10 per cent of students are from homes with a language background other than English (Broughton Anglican College, 2017 College Annual Report, June 2018). The college provides before and after school care and vacation care programs for students in pre-kinder to Year 7. Before school care commences at 6:45am, with after school care operating to 6:15pm. Vacation care hours are between 7:00am and 5:30pm, Monday to Friday during vacation periods ( <a href="http://www.broughton.nsw.edu.au">www.broughton.nsw.edu.au</a> ).
Bellbirds Early Learning Centre	Taber Street, Menangle Park	Bellbirds Early Learning Centre offers long day care services. The centre is licensed for 52 children per day and caters for

Facility	Location	Description
		children from six weeks to six years of age. The centre operates between 7:00am and 6:00pm, Monday to Friday and is open 52 weeks per year ( <a href="http://www.bellbirdselc.com.au/about-child-care-campbelltown.htm">http://www.bellbirdselc.com.au/about-child-care-campbelltown.htm</a> ).
Campbelltown Steam and Machinery Museum, located at Menangle Road	Menangle Road, Menangle Park	The museum is a volunteer organisation that aims to preserve historic machinery for the education and information of the public. The museum is open twice a year, including one weekend in May and one weekend in October. Special events are also held at other times of the year, for example the Menangle Military Muster, and the site is also available for hire by other organisations at other times (for example, private social events, Scout and Guide camping events, television filming) ( <a href="http://www.csmm.com.au/">http://www.csmm.com.au/</a> ).

### 3.6 Transport and access

Major roads located near the proposal include the Hume Motorway and Menangle Road.

- The Hume Motorway is the primary motorway connecting Sydney to Melbourne via Canberra. The highway links directly to the Sydney motorway network
- Menangle Road connects from Narellan Road in the north to Picton Road in the south. It provides access to local land uses near the proposal, including community uses such as Broughton Anglican College and residential uses at Menangle Park.

At a broader regional level, other key roads in the study area include Narellan Road and Appin Road.

The Spring Farm Parkway is identified as a future major road in the Menangle Park / Mount Gilead Priority Precinct of the Greater Macarthur Growth Area.

The study area is served by both bus and rail public transport. Bus routes operate along Menangle Road (Route 889) serving areas between Campbelltown and Menangle, including Menangle Park. The bus route operates at 60 minute frequencies during peak times, and limited times during off-peak and on Saturday. No services operate at evenings or on Sundays. Bus stops near the proposal are located at Menangle Road near to Broughton Anglican College.

Formal pedestrian and cycle access is limited near the proposal. No existing pedestrian and cycle infrastructure provided along the Hume Motorway or Menangle Road near the proposal.

## 4. Potential land use, property and socio-economic impact

This section describes potential the potential impact on land use, property and socio-economic values from the construction and operation of the proposal.

### 4.1 Property impact

The proposal is located within the road corridor and on sites adjacent to the Hume Motorway and Menangle Road. The proposal boundary has been developed considering all proposal work including earthworks, drainage channels and utility relocations. There are a total of seven property lots of rural/ green field sites on the western side of the Hume Motorway. There are eight property lots on the eastern side of Hume Motorway, five lots are between the Hume Motorway and Menangle Road and three are east of Menangle Road. There are three lots that would be directly impacted as part of the proposal:

- State heritage listed Sugarloaf Farm, which is also the location of The Sugarloaf Horse Centre
- Broughton Anglican College
- a residential property on the western side of Menangle Road (116 Menangle Road, Menangle Park).

Temporary construction facilities such as construction worksites and laydown areas would be located between the Hume Motorway and Menangle Road opposite the Broughton Anglican College (this land is owned by Roads and Maritime) and west of the Hume Motorway within the proposal boundary at on private property soon to be developed for the Menangle Park Land Release. Following construction, land occupied by construction activities but not required for the ongoing operation of the proposal would be reinstated to its pre-construction use.

Adjustments to driveway accesses and fencing would be required to the identified properties at Menangle Road due to road widening. Property adjustments may also be required to some properties adjacent to the Hume Motorway. Access arrangements and property adjustments to individual properties would be finalised during detailed design for the proposal in consultation with affected property owners. Access to private property surrounding the proposal area would be maintained during the construction phase of the proposal.

### 4.2 Construction impact

#### 4.2.1 Land use impacts

The use of land affected by temporary leases during construction would be temporarily disrupted or suspended for the duration of the lease. Any structures, facilities or infrastructure located on the affected lands would likely be demolished and/or relocated, in consultation with the landowner.

On completion of construction, any land not required for the project's long-term operation would be reinstated to its former use. The construction works are not expected to restrict exploration activities in the vicinity of the project associated with the existing AGL gas well (MP11).

Potential impacts on land uses due to changes in access and local amenity are discussed in section 4.2.5 and section 4.2.6 respectively.

#### 4.2.2 Population and demography

During construction, the construction workforce for the proposal would be sourced from across the wider Sydney region and would not change population and demography in the study area. Any potential changes would be relatively minor in the context of construction associated with broader investment and development planned to occur in the wider Sydney region in coming years.

### **4.2.3 Local business and employment**

The proposal would not directly impact on any properties that contain local businesses. As indicated in section 3.3.4, the nearest businesses to the proposal are located at Menangle Park, with other businesses located in the urban areas of Glen Alpine and Rosemeadow. Access to and from the proposal would also impact on the local road network in the early stages of construction, with vehicles requiring the use of the local roads in Menangle Park. This would result in some temporary impacts to local receivers, including Bellbirds Early Learning Centre. Construction would be scheduled to prioritise delivery of the northbound access ramps and a deceleration lane to provide direct access to and from Hume Motorway. This would limit the duration of impacts to receivers in Menangle Park. It is not anticipated that noise levels at the Bellbirds Early Learning Centre would be within construction noise management levels, and so are not expected to result in significant impacts. Works would be managed in accordance with the mitigation measures outlined in the REF. As such, indirect impacts on local businesses due to traffic changes or construction noise and dust are expected to be minor.

At a broader regional level, benefits may occur for some businesses and industries that support construction work due to increased construction related expenditure for the proposal.

The proposal would support employment through the creation of direct construction related jobs through the construction phase. The proposal would also support indirect jobs in businesses and industries that service the construction phase. These include businesses that provide goods and services to support the day-to-day needs of construction and the construction workforce, suppliers of materials and equipment, and transport operators.

### **4.2.4 Impacts on social infrastructure**

During construction potential impacts may be experienced by users and workers of social infrastructure near to construction work due to:

- Increased noise, dust and construction traffic, impacting on amenity
- Temporary traffic changes
- Changes in visual amenity due to the presence of construction infrastructure and the clearing of vegetation within the existing road corridor.

Broughton Anglican College is located adjacent to work at Menangle Road and south-east of the main work for the interchange of Spring Farm Parkway and Hume Motorway. During construction, noise and dust from construction activities may temporarily impact on the amenity for students, teachers and visitors to the college. These effects are likely to be most noticeable in outdoor teaching and recreation areas located closest to construction work. Ongoing consultation would be undertaken the college during the construction phase to manage potential impacts.

Access to Broughton Anglican College would be maintained during construction, although temporary changes may be required due to work at Menangle Road. This may result in short-term delays and disruptions for students, teachers and visitors. An increase in construction traffic, including heavy vehicles along Menangle Road may present possible safety risks for students and impact on perceptions of student safety, particularly during school drop-off and pick-up times. Communication with the school community about proposed access changes and management of construction traffic would assist in mitigating potential impacts for the college's students, teachers and visitors.

Potential construction noise and dust impacts on the amenity for users of Bellbirds Early Learning Centre are expected to be manageable due to the distance between the early learning centre and the construction work for the proposal.

Noise and dust from construction work for the widening of the Hume Motorway and construction of the access ramps to Spring Farm Parkway may impact on amenity for users of the Campbelltown Steam and Machinery Museum. As indicated in section 3.5, the museum is open twice yearly in May and October and is also used for special events at other times. Consultation would be undertaken with managers of the museum about the timing of construction activities to manage potential impacts on open days and other events held at the museum.

#### 4.2.5 Community values

Potential impacts on community values during construction may be result from:

- Temporary changes in local amenity for residents and community uses closest to proposed work, due to noise and dust from construction activities
- Temporary changes in local access and connectivity, including for motorists and bus users
- Changes in visual amenity due to the presence of construction work and removal of vegetation within construction areas.

Changes to amenity may temporarily impacts on the use and enjoyment of residents of some rural residential properties closest to construction work. This includes rural residential uses located adjacent to the proposed work at Menangle Road, and at Cummins Road and Fitzpatrick Street west of the proposal area. Noise and dust from construction activities would particularly impact on the use and enjoyment of outdoor areas. Potential impacts on health and wellbeing for local residents would generally only occur if work result in sleep disturbance over extended periods, which is extremely unlikely as out of hours work would be limited during this proposal. Further discussion about potential impacts associated with construction noise and dust is provided in the respective chapters and technical reports of this REF.

Potential impacts associated with changes in local access and connectivity are described in section 4.2.6.

The proposal would require the removal of some established vegetation within the Hume Motorway road corridor for the provision of north facing entry and exit ramps, and future Spring Farm Parkway road corridor as well as areas affected by construction activities. This may impact on community values relating to the environment and visual and landscape amenity for some community members. Minimising the extent of vegetation clearing required for construction activities would be important in helping to mitigate potential impacts on community values.

#### 4.2.6 Local access and connectivity

Potential impacts on local access and connectivity during construction would generally be associated with:

- Traffic delays and disruptions for motorists using the Hume Motorway and Menangle Road, including from the temporary closure of some traffic lanes near the proposal
- Increased construction traffic on Menangle Road and other local roads near the proposal, including heavy vehicles used for the delivery of materials and equipment and worker vehicles, presenting possible safety risks for road users and impacting on perceptions of road safety for motorists, pedestrians and cyclists
- Changes to road conditions near to proposed work, presenting possible safety risks for road users
- Possible short-term delays to bus services near to construction work at Menangle Road.

Access to properties near to construction work for the proposal would be maintained during construction. Where changes are required, suitable access arrangements would be implemented in consultation with affected property owners.

A detailed assessment of potential construction traffic impacts on local access and connectivity is provided in the traffic chapter of the REF.

## **4.3 Operation impact**

### **4.3.1 Land use impacts**

As indicated in section 3.2.2, the proposal is identified in the Menangle Park / Mount Gilead Priority Precinct of the Greater Macarthur Growth Area. Operation of the proposal would support future land use and development in the Greater Macarthur Growth Area. In particular, the proposal would support future population and employment growth in the Menangle Park and Gilead areas.

The proposal would mainly be located within the existing road reserve or on land zoned SP2 Infrastructure – future road corridor or classified road. Areas adjacent to the road corridors are zoned for residential and rural uses. Where the proposal extends outside of the designated road corridors, the proposal would result in changes to existing land use.

As discussed in section 4.1, adjustments to driveway accesses and fencing would be required at some properties adjacent to the proposal. These adjustments would be finalised in consultation with the affected property owners and is not anticipated to impact on the ongoing use and functioning of these land uses.

Potential impacts on adjoining land uses due to changes in access and local amenity are discussed in section 4.3.5 and section 4.3.6 respectively.

### **4.3.2 Population and demography**

Population and demography changes in the study area are affected by external factors such as land use changes and urban development within the Greater Macarthur Growth Area. As indicated in section 3.2.2, the Menangle Park / Mount Gilead Priority Precinct is planned to ultimately provide for about 18,100 dwellings and approximately 4,500 jobs, leading to changes in population and demography over time. Operation of the proposal would support this future population and employment growth.

### **4.3.3 Local business and employment**

At a regional level, the proposal would have longer-term beneficial impacts on businesses through improved access and connectivity within the Greater Macarthur Growth Area. In particular, following completion of the Spring Farm Parkway (Stages 1, 2 and 3), the proposal would support access to for future commercial centres and employment land within the Menangle Park / Mount Gilead Priority Precinct, as well as provide congestion relief for Narellan Road and Appin Road, helping to improve travel times and reliability for freight and commercial vehicles and reducing transport costs.

Locally, operation of the proposal is not expected to change access arrangements for local businesses in the study area.

As indicated in section 3.3.4, an AGL gas well is located near to the proposal. Access tracks would be provided to these gas wells and no impact on the operation of this well is expected from the proposal.

### **4.3.4 Impacts on social infrastructure**

During operation, the proposal would improve access and connectivity from future residential areas to community services and facilities near the proposal, including Broughton Anglican College and community uses in urban areas of Glen Alpine and Rosemeadow.

The provision of a shared-use path on the southern side of Spring Farm Parkway and south-eastern side of Menangle Road would improve access for pedestrians and cyclists to the college. This would have beneficial impacts for students and teachers of the college.

Adverse changes to amenity for some parts of Broughton Anglican College may result from increased road traffic noise associated with the new interchange and changes in visual values. These impacts and possible management measures are discussed in the noise and visual impact chapters of the REF.

#### **4.3.5 Community values**

In the longer term, the proposal would support improved travel and accessibility to new urban areas within the Menangle Park / Mount Gilead Priority Precinct and wider Greater Macarthur Growth Area.

Changes to local amenity may be experienced for some existing residents and facilities near to the proposal, for example rural residential uses at Menangle Road. Discussion about potential impacts relating to changes in noise, air quality, traffic and visual amenity is provided in the respective chapters and technical reports of this REF.

#### **4.3.6 Local access and connectivity**

During operation, the proposal would support access and connectivity to future residential, employment and community uses within the Menangle Park / Mount Gilead Priority Precinct and wider Greater Macarthur Growth Area.

The proposal would support opportunities for active transport in the study area, through the provision of a shared-use path on the southern side of Spring Farm Parkway and south-eastern side of Menangle Road to Broughton Anglican College.

Property access would be maintained to properties in near the proposal, although adjustments to driveway accesses may be required to some properties at Menangle Road due to road widening. Access arrangements to individual properties would be finalised during detailed design for the proposal in consultation with affected property owners.

## 5. Safeguards and management measures

Proposed safeguards and management measures relating to the proposal’s property, land use and socio-economic impacts are outlined in Table 5 1. Other safeguards and management measures that would address these impacts are also outlined the following working papers and chapters of the REF:

- Traffic and transport
- Noise and vibration
- Landscape character and visual amenity
- Air quality.

**Table 5 1: Safeguards and management measures**

Impact	Environmental safeguard	Responsibility	Timing
Property impacts	All property acquisition will be carried out in accordance with the <i>Land Acquisition Information Guide</i> (Roads and Maritime, 2012) and the <i>Land Acquisition (Just Terms Compensation) Act 1991</i> .	Roads and Maritime	Pre-construction
	Access to properties will be maintained on a continuous basis during construction. Where temporary changes are required, alternate access will be determined in consultation with affected property owners.	Contractor	Construction
Community engagement	A Communication Engagement and Stakeholder Management Plan (CESMP) will be prepared and implemented as part of the CEMP to help provide timely and accurate information to the community during construction. The CEMP will include (as a minimum): <ul style="list-style-type: none"> <li>• Mechanisms to provide details and timing of proposed activities to affected residents, business owners, managers of community facilities, transport users and the broader community, including changed traffic and access conditions</li> <li>• Contact name and number for complaints.</li> </ul> The CESMP will be prepared in accordance with the <i>Community Involvement and Communications Resource Manual</i> (Roads and Traffic Authority, 2008).	Contractor	Pre-construction
	Ongoing consultation will be undertaken with managers and users of potentially affected social infrastructure (for example Broughton Anglican College, Campbelltown Steam and Machinery Museum, and Bellbirds Early Learning Centre) regarding the timing, duration and likely impact of construction activities.	Contractor	Construction
	Consideration will be given to the timing of construction activities near to social infrastructure in relation to key usage times of social infrastructure (for example, open days at Campbelltown Steam and Machinery Museum).	Contractor	Construction
Access and connectivity	A Traffic Management Plan will be prepared and implemented as part of the Construction Environmental Management Plan (CEMP).	Contractor	Construction
	Communication will be undertaken with the Broughton Anglican College and Bellbirds Early Learning Centre about the timing of haulage activities and potential changes to road conditions.	Contractor	Construction
	Awareness programs will be undertaken for construction workers and transport operators for the proposal about potential road safety risks,	Contractor	Construction

Impact	Environmental safeguard	Responsibility	Timing
	including near to Bellbirds Early Learning Centre and Broughton Anglican College.		
Local amenity	Measures for managing construction noise and dust will be implemented as part of the CEMP.	Contractor	Construction
	The extent of vegetation clearing within the proposal footprint will be minimised where possible.	Contractor	Pre-construction/ construction

## 6. References

Australian Bureau of Statistics (2018a), 3218.0 – Regional Population Growth, Australia, 2016-2017, released 24 April 2018

Australian Bureau of Statistics (2018b), 2033.0.55.001 – Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016, released on 27 March 2018

Campbelltown Council 2015 (Table 3.1)

Campbelltown Council (2017), Campbelltown 2027 – Community Strategic Plan, Sydney, NSW

Department of Planning and Environment (2015) Greater Macarthur Growth Area, Sydney, NSW

Department of Planning and Environment (2016), 2016 New South Wales State and Local Government Area population and household projections. Sydney, NSW