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The Northern Road Upgrade Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park

NSW Environmental Impact Statement /
Commonwealth Draft Environmental Impact Statement

Appendix J – Technical working paper: Socio-economic

June 2017





***The Northern Road Upgrade –
Mersey Road to Glenmore Parkway***

Prepared for Roads and Maritime Services by Jacobs Australia

Socio-economic Assessment

Final

15 May 2017



The Northern Road Upgrade (Mersey Road to Glenmore Parkway)

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1. Introduction

The project would include upgrading the 16 km section of The Northern Road between Mersey Road, Bringelly and Glenmore Parkway, Glenmore Park (the project). The Northern Road is a key north–south road between Narellan and Richmond, connecting the North West and South West Priority Growth Areas (refer to **Figure 1-1**). The corridor intersects with a number of regional motorway, arterial and collector roads such as (north to south) Richmond Road, Great Western Highway, M4 Motorway, Elizabeth Drive, Bringelly Road, and Camden Valley Way.

The upgrade of The Northern Road (including the project) is part of the Western Sydney Infrastructure Plan (WSIP). The WSIP involves major road and transport linkages that will capitalise on the economic gains from developing Western Sydney Airport whilst boosting the local economy and liveability of western Sydney. This socio-economic assesses the impact of The Northern Road Upgrade from Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park.

1.1 Project overview

The project involves upgrading the 16 km section of The Northern Road between Mersey Road, Bringelly and Glenmore Parkway, Glenmore Park (the project).

The project generally comprises the following key features:

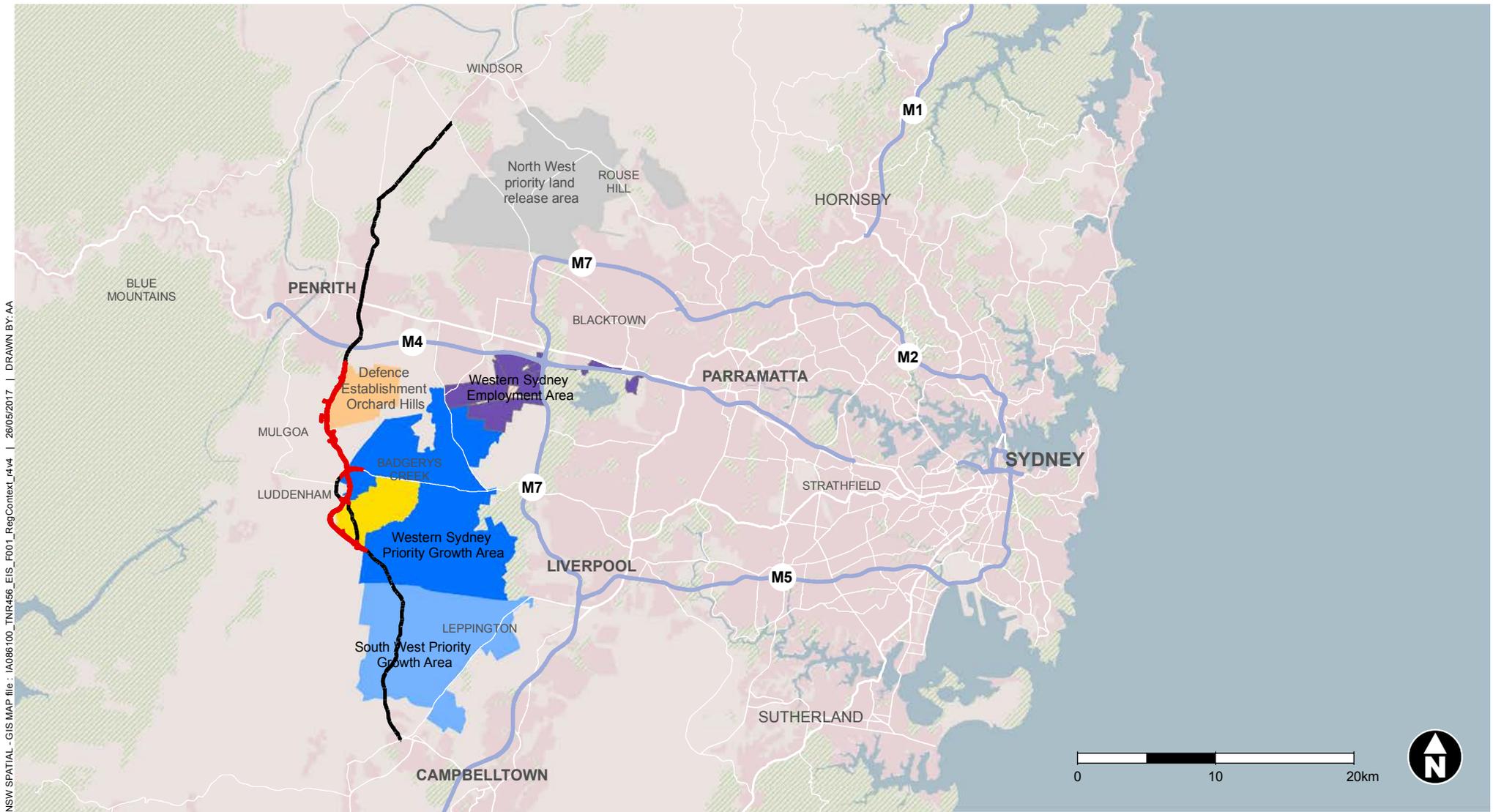
- A six-lane divided road between Mersey Road, Bringelly and Bradley Street, Glenmore Park (two general traffic lanes and a kerbside bus lane in each direction). The wide central median would allow for an additional travel lane in each direction in the future, if required
- An eight-lane divided road between Bradley Street, Glenmore Park and about 100 m south of Glenmore Parkway, Glenmore Park (three general traffic lanes and a kerbside bus lane in each direction separated by a median)
- About eight kilometres of new road between Mersey Road, Bringelly and just south of the existing Elizabeth Drive, Luddenham, to realign the section of The Northern Road that currently bisects the Western Sydney Airport site and to bypasses Luddenham
- About eight kilometres of upgraded and widened road between the existing Elizabeth Drive, Luddenham and about 100 m south of Glenmore Parkway, Glenmore Park
- Closure of the existing The Northern Road through the Western Sydney Airport site
- Tie-in works with the following projects:
 - The Northern Road Upgrade, between Peter Brock Drive, Oran Park and Mersey Road, Bringelly (to the south)
 - The Northern Road Upgrade, between Glenmore Parkway, Glenmore Park and Jamison Road, South Penrith (to the north)
- New intersections including:
 - A traffic light intersection connecting the existing The Northern Road at the southern boundary of the Western Sydney Airport, incorporating a dedicated u-turn facility on the western side
 - A traffic light intersection for service vehicles accessing the Western Sydney Airport, incorporating 160 m of new road connecting to the planned airport boundary
 - A traffic light intersection connecting the realigned The Northern Road with the existing The Northern Road (west of the new alignment) south of Luddenham
 - A 'give way' controlled intersection (that is, no traffic lights) connecting the realigned The Northern Road with Eaton Road (east of the new alignment, left in, left out only)
 - A four-way traffic light intersection formed from the realigned Elizabeth Drive, the realigned The Northern Road and the existing The Northern Road, north of Luddenham
 - A traffic light intersection at the Defence Establishment Orchard Hills entrance, incorporating a u-turn facility

- New traffic lights at four existing intersections:
 - Littlefields Road, Luddenham
 - Kings Hill Road, Mulgoa
 - Chain-O-Ponds Road, Mulgoa
 - Bradley Street, Glenmore Park incorporating a u-turn facility
- Modified intersection arrangements at:
 - Dwyer Road, Bringelly (left in, left out only)
 - Existing Elizabeth Drive, Luddenham (left out only)
 - Gates Road, Luddenham (left in only)
 - Longview Road, Luddenham (left in, left out only)
 - Grover Crescent south, Mulgoa (left in only)
 - Grover Crescent north, Mulgoa (left out only)
- Dedicated u-turn facilities at:
 - The existing The Northern Road at Luddenham, south-west of Elizabeth Drive
 - The existing Elizabeth Drive, Luddenham around 800 m east of The Northern Road
 - Chain-O-Ponds Road, Mulgoa
- Twin bridges over Adams Road, Luddenham
- Local road changes and upgrades, including:
 - Closure of Vicar Park Lane, east of the realigned The Northern Road, Luddenham
 - Eaton Road cul-de-sac, west of the realigned The Northern Road, Luddenham
 - Eaton Road cul-de-sac, east of the realigned The Northern Road, Luddenham
 - Elizabeth Drive cul-de-sac, about 300 m east of The Northern Road with a connection to the realigned Elizabeth Drive, Luddenham
 - Extension of Littlefields Road, east of The Northern Road, Mulgoa
 - A new roundabout on the Littlefields Road extension, Mulgoa
 - A new service road between the Littlefields Road roundabout and Gates Road, including a 'give way' controlled intersection (that is, no traffic lights) at Gates Road, Luddenham
 - Extension of Vineyard Road, Mulgoa between Longview Road and Kings Hill Road
 - A new roundabout on the Vineyard Road extension at Kings Hill Road, Mulgoa
- A new shared path on the western side of The Northern Road and footpaths on the eastern side of The Northern Road
- A new shared path on the western side of The Northern Road and footpaths on the eastern side of The Northern Road where required
- The upgrading of drainage infrastructure
- Operational ancillary facilities including:
 - Heavy vehicle inspection bays for both northbound and southbound traffic, adjacent to Grover Crescent, Mulgoa and Longview Road, Mulgoa respectively
 - An incident response facility on the south-western corner of the proposed four-way traffic light intersection at Elizabeth Drive, Luddenham
- New traffic management facilities including variable message signs (VMS)

- Roadside furniture and street lighting
- The relocation of utilities and services
- Changes to property access along The Northern Road (generally left in, left out only)
- Establishment and use of temporary ancillary facilities and access tracks during construction
- Property adjustments as required
- Clearance of undetonated explosive ordinance (UXO) within the Defence Establishment Orchard Hills as required.

The project assessed in this EIS does not include surveys, test drilling, test excavations, geotechnical investigations or other tests, surveys, sampling or investigation for the purposes of the design or assessment of the project.

The location and an overview of the project is shown on **Figure 1-2**.



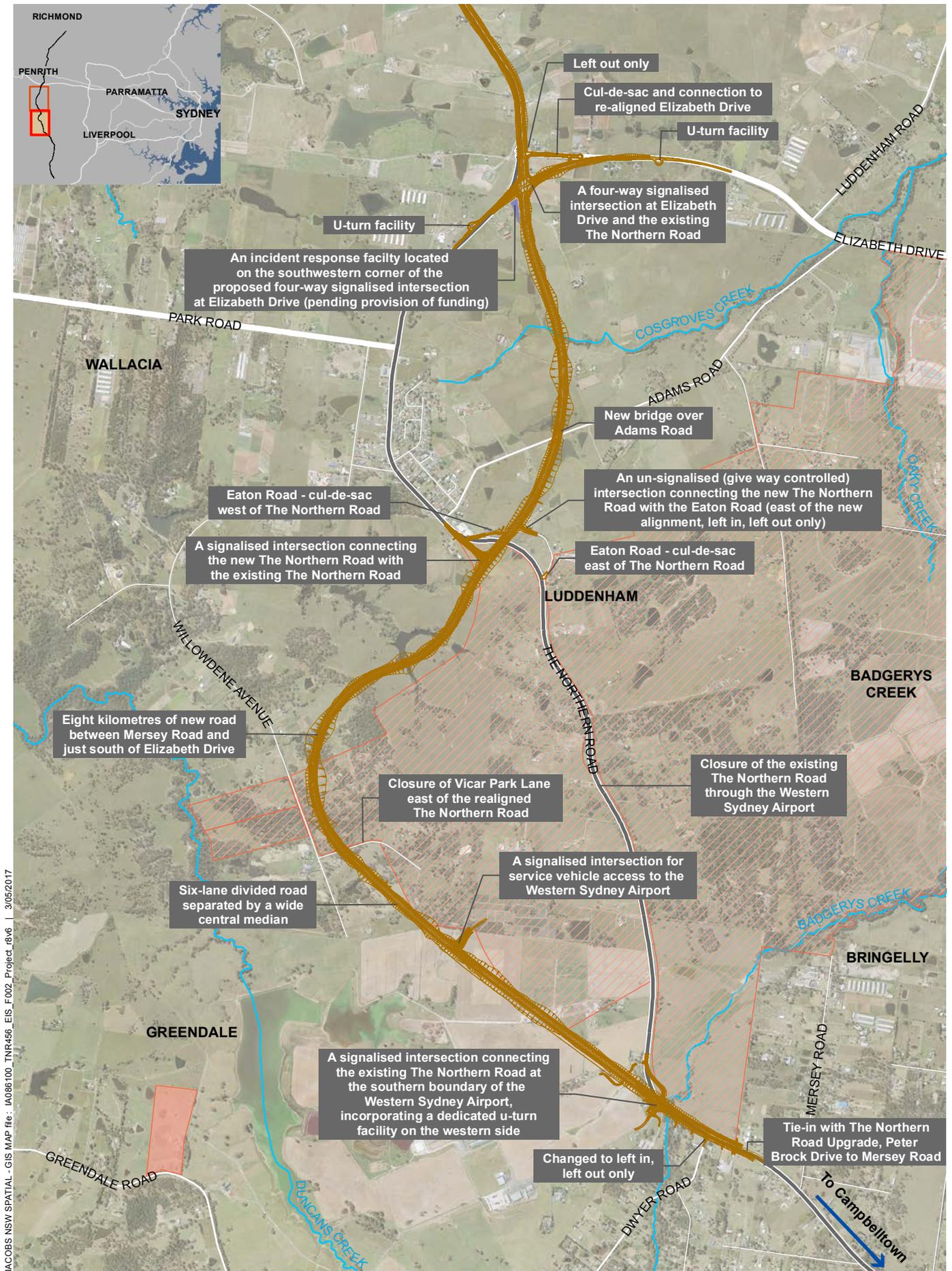
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Legend

- The Northern Road upgrade - Mersey Road to Glenmore Parkway
- The Northern Road
- Western Sydney Airport site (Commonwealth Land)
- Defence Establishment Orchard Hills
- Western Sydney Employment Area
- South West Priority Growth Area
- Western Sydney Priority Growth Area
- Reserves and parklands
- Growth centres
- Built areas

Figure 1-1 | Location of the project

The Northern Road upgrade - Mersey Road to Glenmore Parkway



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— The Northern Road upgrade - Mersey Road to Glenmore Parkway

— The Northern Road (Existing)

Western Sydney Airport site (Commonwealth Land)

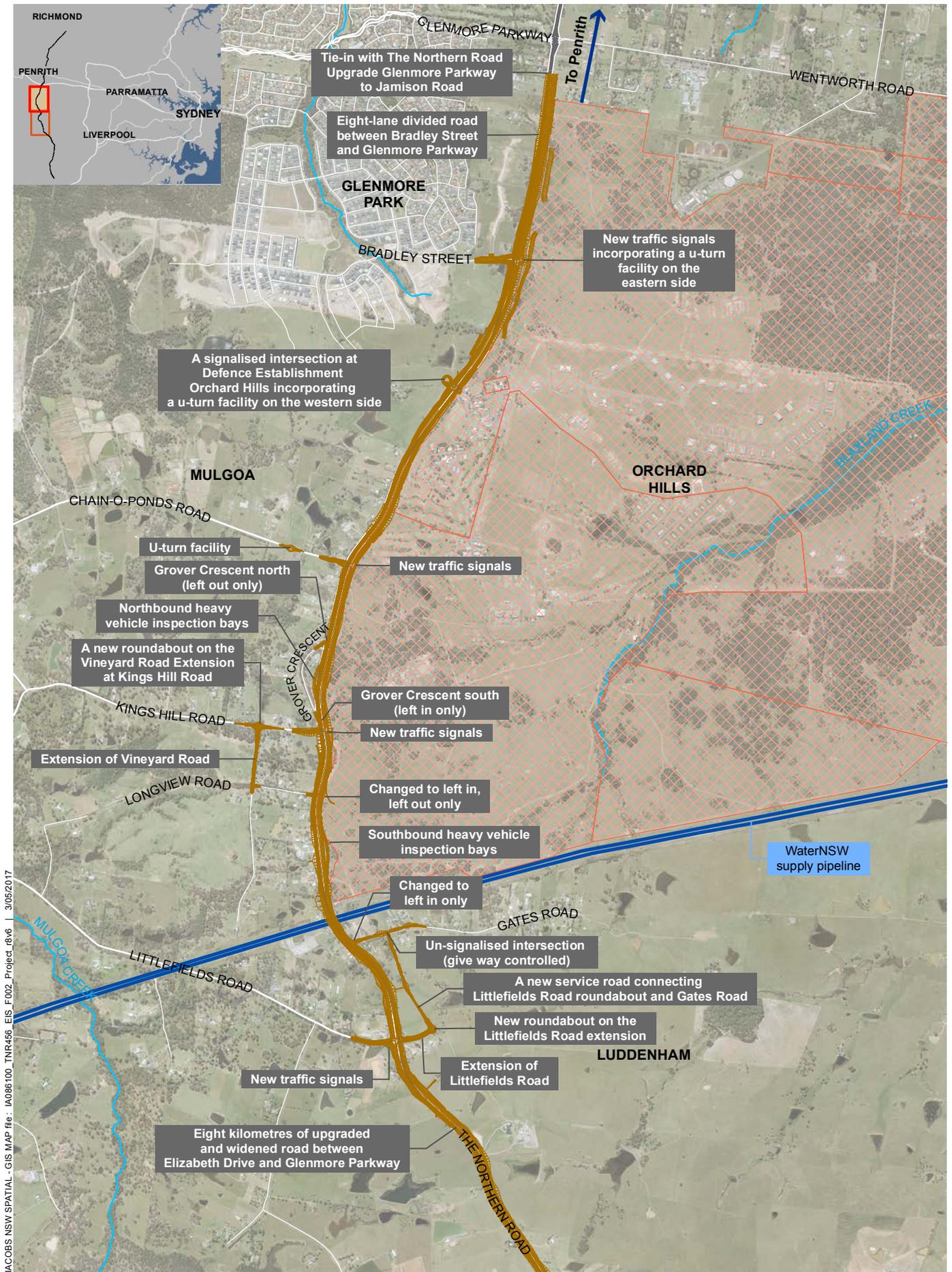
Defence Establishment Orchard Hills (Commonwealth Land)

Commonwealth Lands

0 0.5 1 km



Figure 1-2 | Overview of the project



JACOBS NSW SPATIAL - GIS MAP file: IA086100_TNR456_EIS_F002_Project_r6v6 | 3/05/2017

- The Northern Road upgrade - Mersey Road to Glenmore Parkway
- The Northern Road (Existing)
- WaterNSW supply pipelines

- Western Sydney Airport site (Commonwealth Land)
- Defence Establishment Orchard Hills (Commonwealth Land)
- Commonwealth Lands

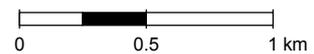


Figure 1-2 | Overview of the project

1.2 Purpose of this document

This working paper forms part of the environmental impact statement (EIS) for The Northern Road Upgrade between Mersey Road, Bringelly and Glenmore Parkway, Glenmore Park. The EIS has been prepared under Part 5.1 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) and Part 8 of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

This assessment has been prepared to address the NSW Planning and Environment Secretary's Environmental Assessment Requirements (SEARs) and the Commonwealth's *Guidelines for the content of a draft Environmental Impact Statement* (Commonwealth Department of Environment, August 2016) for the project (referred to throughout this report as the 'Commonwealth EIS Guidelines') relating to social and economic issues. It provides an assessment of potential socio-economic benefits and impacts of the project, including:

- A description of the existing socio-economic baseline conditions of potentially affected communities and groups near the project
- An assessment of potential changes to socio-economic conditions from the construction and operation of the project
- Recommended mitigation and management measures to enhance the project's benefits and avoid, manage or mitigate its potential socio-economic impacts
- Assessment of the residual socio-economic impacts of the project.

Table 1-1 outlines the SEARs relevant to this assessment along with a reference to where these are addressed in this working paper. The Commonwealth EIS Guidelines relevant to the socio-economic assessment are outlined in **Table 1-2** along with reference to where these are addressed in this working paper.

Table 1-1 : Secretary's Environmental Assessment Requirements

Secretary's Environmental Assessment Requirements	Reference
Social and economic – including: <ul style="list-style-type: none"> • Impacts on directly affected properties and land uses, including impacts related to access and severance, existing and proposed land uses, property acquisition and amenity related changes. 	<ul style="list-style-type: none"> • Section 6.1 (directly affected properties and property acquisition) • Section 6.2 (impacts on land use) • Section 6.9 (access) • Section 6.6.2 (severance) • Section 6.8 (amenity)
<ul style="list-style-type: none"> • Social and economic impacts to the community and businesses in the vicinity of the project (including agricultural businesses), associated with traffic, access, property, public domain and amenity related changes. 	<ul style="list-style-type: none"> • Section 6.5 (business impacts) • Section 6.9 (traffic and access) • Section 6.1 (property) • Section 6.8 (public domain and amenity related changes)
<ul style="list-style-type: none"> • A draft Community Involvement Plan for the works, identifying relevant stakeholders, procedures for distributing information and receiving/ responding to feedback and procedures for resolving community complaints during construction. Key issues that should be addressed in the draft Plan should include (but not necessarily be limited to): • Traffic management (including property access and pedestrian access) • Noise and vibration mitigation and management, including work outside standard construction hours. 	<ul style="list-style-type: none"> • Section 7 • Chapter 6 of the EIS

Table 1-2 : Commonwealth EIS Guidelines

Commonwealth EIS Guidelines	Reference
<p>The EIS must include a description of the environment of the proposal site and the surrounding areas that may be affected by the action. It is recommended that this include the following information:</p> <ul style="list-style-type: none"> • A description of the environment in all areas of potential impact, including all components of the environment as defined in Section 528 of the EPBC Act: <ul style="list-style-type: none"> • Ecosystems and their constituent parts, including plants and animals, people and communities, landscapes and soils • Natural and physical resources, including water resources and air • The qualities and characteristics of locations, places and areas • Heritage values of places • The social, economic and cultural aspects of a thing mentioned in preceding dot points. 	<ul style="list-style-type: none"> • Section 4 (existing social and economic environment) • Soils, water and contamination Working Paper (natural and physical resources, including water resources) – Appendix L of the EIS • Aboriginal Cultural Heritage Assessment Report (CHAR) – Appendix M of the EIS, and Non-Aboriginal heritage Working Paper (heritage values and places) – Appendix N of the EIS • Urban design, landscape character and visual impact assessment (qualities and characteristics of locations, places and areas) – Appendix O of the EIS • Biodiversity Working Paper (ecosystems and their constituent parts, including plants, animals, landscapes and soils) – Appendix I of the EIS
<p>Impacts to the environment (as defined in Section 528) should include but not be limited to the following:</p> <ul style="list-style-type: none"> • Changes in recreational use and amenity of natural areas 	<ul style="list-style-type: none"> • Section 6.7 and section 6.2 (recreational use) • Section 6.8 (amenity)
<p>The economic and social impacts of the action, both positive and negative, must be analysed. Matters of interest may include:</p> <ul style="list-style-type: none"> • Details of any public consultation activities undertaken, and their outcomes • Employment opportunities expected to be generated by the project (including construction and operational phases). <p>Economic and social impacts should be considered at the local, regional and national levels.</p>	<ul style="list-style-type: none"> • Section 2.3 and Section 5 (consultation) • Chapter 6 of the EIS (consultation) • Section 6.4 (employment) • Section 6 (impact assessment)

2. Methodology

2.1 Study area

The study area for this socio-economic assessment is shown in **Figure 2-1**. It has been based on those communities that have potential to experience impacts on or changes to socio-economic conditions due to the location and operation of the project, construction activities and changes in movement patterns for residents, workers and visitors. It includes the Australian Bureau of Statistics (ABS) Statistical Areas Level 2 (SA2) geographies of:

- Glenmore Park-Regentville SA2 (referred to as Glenmore Park-Regentville)
- Mulgoa-Luddenham-Orchard Hills SA2 (referred to as Mulgoa-Luddenham-Orchard Hills)
- Badgerys Creek-Greendale SA (referred to as Badgerys Creek-Greendale).

The project's benefits and impacts 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 local government areas (LGAs) of Penrith City and Liverpool City as well as the wider Sydney region.

2.2 Study methodology

Socio-economic impact assessment involves the process of analysing, monitoring and managing the intended and unintended social and economic impacts, both positive and negative, of a proposed development. It involves identifying, assessing and evaluating changes to or impacts on, communities, business and industry that are likely to occur as a result of a proposed development, in order to mitigate or manage impacts and maximise benefits.

This assessment has been developed in accordance with the *Roads and Maritime Environmental Impact Assessment Practice Note N05 – Socio-economic assessment* and to address the socio-economic matters outlined in the SEARs and the economic and social matters identified in the Commonwealth EIS guidelines.

The first step in the assessment process involved scoping the likely range of potential land use, property and socio-economic impacts and identifying communities likely to be affected by the project's construction and operation. The outcomes of the scoping phase informed the study area for the socio-economic assessment, the information to be gathered for the existing baseline, and assessment of potential impacts.

The second step of the assessment involved describing existing socio-economic characteristics, values and conditions in the study area. This provided a baseline from which potential benefits and impacts of the project can be assessed. The existing baseline involved consideration of both qualitative and quantitative analysis, including:

- Existing State and local government policies and strategies relevant to social and economic factors in the study area
- Population and demographic data for communities in the study corridor, such as population size and growth, diversity, socio-economic disadvantage and housing
- Existing and future land use, including land use zoning
- Economic information, including data on employment and income, agricultural uses, and local business and industry in the study area
- Existing social infrastructure in the study area and near the project, such as education facilities, health and emergency services, recreation uses and transport facilities
- Community values relating to factors such as amenity and sense of place, access and connectivity, and community health and safety.

The description of the existing land use, planning and socio-economic conditions principally draws on information from the ABS Census of Population and Housing 2011, which is the most comprehensive dataset

currently available on population and housing in the study area. Information on the population and socio-economic conditions in the study area has been supplemented with more recent information and data, where available including from:

- Government agencies such as the ABS, NSW Department of Planning and Environment, and NSW Department of Primary Industries
- State Government, Penrith City Council and Liverpool City Council publications, reports, guidelines and websites
- A visual survey of local businesses near the project and within Luddenham
- A survey of local businesses and car parking surveys at key locations within Luddenham.
- Observations made during a site visit to the study area
- Community and stakeholder consultation undertaken for The Northern Road Upgrade, including information on existing community values and issues raised about the project.

The next step for the assessment involved identifying and evaluating impacts on, and changes to, socio-economic conditions and values in the study area from the project's construction and operation. This included direct and indirect construction and operational benefits and impacts as well as consideration of cumulative impacts due to the project's interaction with other projects in the study area. The assessment of potential project benefits and impacts considered:

- Property impacts, including impacts on property from the operational and construction footprints, and impacts associated with property acquisition
- Land use impacts
- Changes to population and demography
- Impacts on local business, including direct impacts associated with property acquisition or temporary lease of land for construction, and impacts associated with changes to traffic and access and local amenity
- Impacts on agricultural uses, including agricultural businesses
- Direct and indirect impacts on social infrastructure, including both regional social infrastructure and social infrastructure near the project
- Impacts on community values, including those relating to local character and amenity, safety, and access and connectivity.
- Changes to local access and connectivity, including from the realignment of The Northern Road around the Western Sydney Airport site and east of Luddenham town centre
- Cumulative socio-economic impacts due to the project's interaction with impacts of other projects.

The final step for the assessment involved identifying measures to avoid, minimise or mitigate socio-economic impacts arising from the construction and operation of the project. This includes a draft Community Involvement Plan framework for the project.

This socio-economic assessment, including scoping of socio-economic issues, description of existing social and economic values, and impact assessment and management has been informed by:

- The SEARs for the project
- The Commonwealth EIS Guidelines for the project
- Significant Impact Guidelines 1.2 – Actions on, or impacting upon Commonwealth land and Actions by Commonwealth Agencies.
- Roads and Maritime's Environmental Impact Assessment Practice Note N05 – Socio-economic assessment
- Social and economic assessments undertaken for other road and transport infrastructure projects in NSW and elsewhere

- Literature relating to existing socio-economic values and characteristics in the study area, and assessment of socio-economic impacts, particularly impacts of road bypass projects
- Outcomes of consultation undertaken for The Northern Road Upgrade, including surveys of local businesses
- Car parking surveys at key locations and general observations of the study area
- Outcomes of other technical assessments undertaken for the EIS, including traffic and transport, noise, landscape and visual amenity, and cultural heritage.

2.2.1 Local business surveys

Two separate surveys were conducted to gather information on local businesses in the study area. These included:

- Car park (number plate) survey
- Survey of local business owners/ managers.

Car park (number plate) survey

The purpose of the number plate survey was to gather information on the origin of 'shoppers' within Luddenham. The survey involved recording vehicle number plates at three locations within Luddenham, including at the:

- IGA and adjoining businesses (for example, post office, pharmacy, medical centre)
- Shopping complex comprising bakery and hairdresser; and David's Stall fruit and vegetable shop
- Luddenham Village Café and Caltex.

The surveys were conducted over two days, being:

- Wednesday, 9 March 2016, between 9.30am and 3.30pm
- Saturday, 12 March 2016, between 8am and 3pm.

Number plates were recorded at each location about every 1.5 hours. Collated data was provided to Roads and Maritime to allow suburb information to be collated from registration details. Information was provided at a suburb level to ensure anonymity. The outcomes of the number plate survey are discussed in **section 4.4.3**.

Survey of local business owners/ managers

The purpose of the business surveys was to gather information on local businesses within the study area about the type and nature of businesses, business operations, and business owners' perceptions of potential benefits and impacts for local businesses of the project's construction and operation.

Written surveys were conducted with owners/ managers of retail and service businesses (eg doctors, hairdressers, etc) businesses within Luddenham and other areas near the project. Surveys were hand delivered to local businesses on Wednesday, 9 March 2016. These were either completed face-to-face with business owners/ managers or left for the business owners/ managers to complete separately. Some surveys were also completed over the telephone. A copy of the business survey is provided in **Appendix A**.

The outcomes of the business surveys are discussed in **section 4.4.3** and **section 6.5**.

2.3 Community and stakeholder consultation

Community and stakeholder consultation – including with affected property owners, local communities, businesses, and government agencies – has formed an integral part of the project development.

The Chapter 6 of the EIS provides an overview of community and stakeholder consultation undertaken for the project, along with the key issues raised. This assessment has been informed by the outcomes of this consultation, including the identification of existing features and values important to communities in the study area, assessment of potential benefits and impacts of the project, and identification of impact management measures.

In addition, targeted consultation was undertaken for this assessment with businesses in the study area, through a survey of local businesses. The methodology for the survey is described in **section 2.2.1**.

A summary of the key socio-economic issues raised is provided in **section 5**.

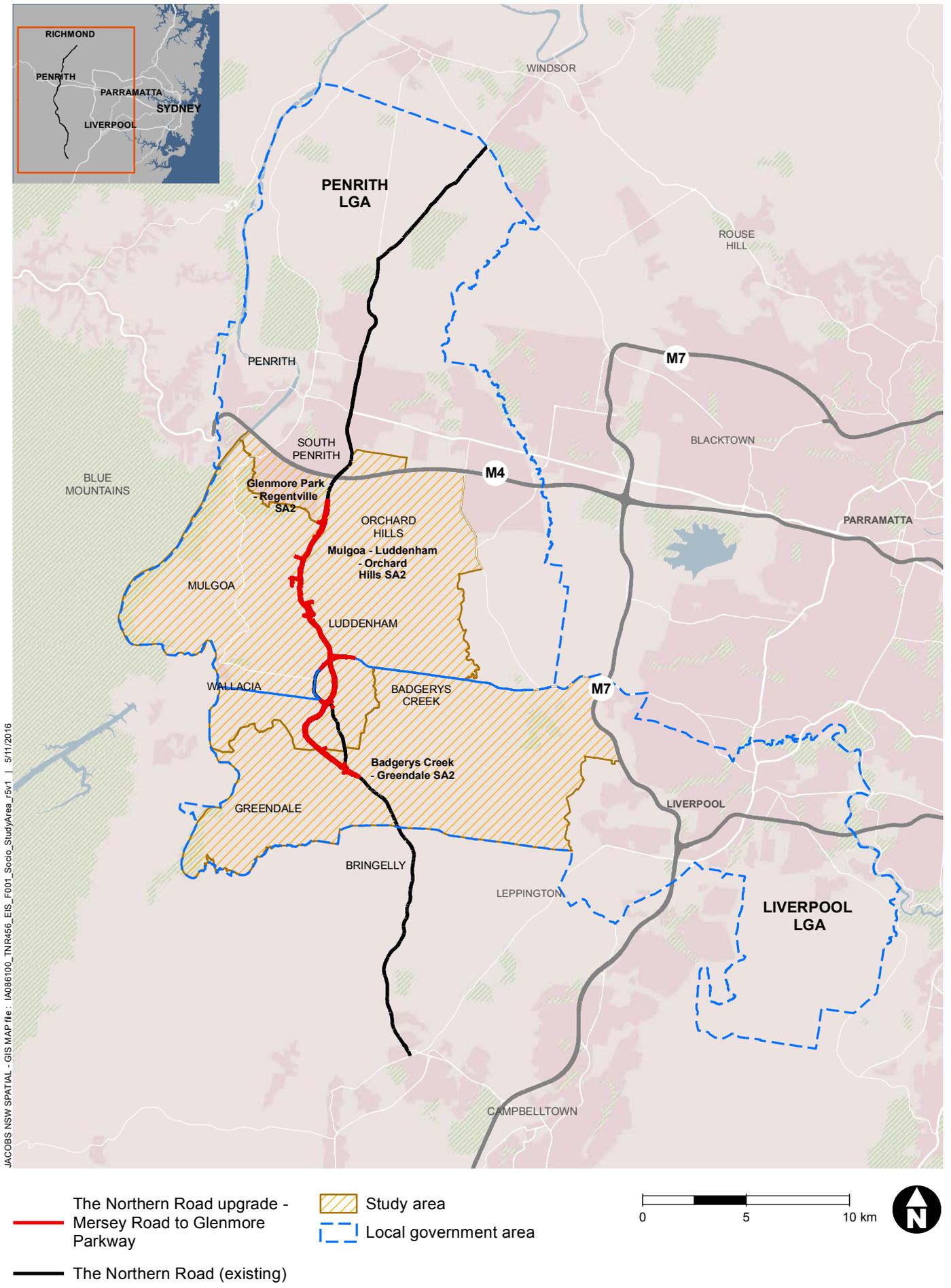


Figure 2-1 | Socio-economic assessment study area

3. Socio-economic policy context

A detailed discussion on strategic planning and policy documents relevant to the project is described in Chapter 3 of the EIS. This section provides an overview of those relevant to the socio-economic environment of the study area.

3.1 New South Wales

3.1.1 A Plan for Growing Sydney

A Plan for Growing Sydney (NSW Government, 2014a) is the NSW Government's plan for the future of the Sydney Metropolitan Area over the next 20 years. Released in December 2014, the Plan provides key directions and actions to guide Sydney's productivity, environmental management and liveability, including the delivery of housing, employment, infrastructure and open space.

The Plan outlines a number of goals to guide expected growth in Sydney over the next 20 years and achieve the vision for Sydney as '*a strong global city, a great place to live*'. Those relevant to the project include:

- A competitive economy with world-class services and transport
- A great place to live with communities that are strong, healthy and well-connected.

Transforming the productivity of western Sydney through growth and investment; enhancing capacity at Sydney's Gateways, including a Western Sydney Airport at Badgerys Creek; and delivering the infrastructure that is needed are some of the steps identified by the NSW Government to deliver the goals (<http://www.planning.nsw.gov.au/Plans-for-Your-Area/Sydney>).

Sub-regional planning

The project is located within the West and South West subregions of the Plan for Growing Sydney. The Plan identifies the West subregion as continuing to provide distinctive rural landscapes, extensive agricultural and resource lands, and large areas of conservation uses, as well as major urban areas. The Western Sydney Airport at Badgerys Creek will be a catalyst for new infrastructure investment and employment in the subregion. Improved transport connections to the Western Sydney Employment Area and between centres in the subregion and other subregions are identified as priorities for the West subregion (NSW Government, 2014a).

The South West subregion is the fastest growing subregion in Sydney. The Western Sydney Airport and Western Sydney Employment Area are expected to contribute to employment and growth and diversification of the subregion's economy. Investigating connections between north-south and east-west road links and strengthening the diverse economic benefits of a Western Sydney Airport are identified as priorities for the subregion (NSW Government, 2014a).

3.1.2 South West Priority Growth Centre

The NSW Government established the South West Priority Growth Area (formerly known as the South West Growth Centre and subsequently the South West Priority Land Release Area) in 2015 to streamline the supply of greenfield land for urban development, and coordinate the sustainable delivery of infrastructure through the NSW Department of Planning and Environment over the next 25 to 30 years. The South West Priority Growth Area comprises 18 precincts and covers about 17,000 hectares. It is expected to accommodate about 110,000 new dwellings for 300,000 people (Department of Planning and Environment, 2015). To date, seven precincts within the South West Priority Growth Area have been rezoned to allow urban development, which have the potential for about 42,560 new homes.

Detailed planning for stage 1 of Leppington Precinct has recently been finalised. Upon rezoning, it is expected the Leppington Precinct will provide land for approximately 2,500 additional homes.

The location of the South West Priority Growth Area is shown on **Figure 3-1**.

3.1.3 Western Sydney Priority Growth Area

The Western Sydney Priority Growth Area (formerly Broader Western Sydney Employment Area) is identified in A Plan for Growing Sydney (NSW Planning and Environment, December 2014). It extends from the intersection of the M4 Western Motorway and WestLink M7 Motorway, to south of The Northern Road/ Elizabeth Drive intersection. The project is located partly within the Western Sydney Priority Growth Area.

The Western Sydney Priority Growth Area identifies about 10,000 hectares of currently low intensity rural activity lands to be developed as a diverse employment centre, providing businesses in the region with land for industry and employment, catering for transport and logistics, warehousing and office space. It is anticipated to provide over 57,000 jobs over the next 30 years and over 200,000 jobs once it is fully established. The redevelopment of this area will involve substantial changes to the local road network, and place significant pressure on arterial roads that will service the employment area.

The location of the Western Sydney Growth Area is shown on **Figure 3-1**.

3.1.4 Western Sydney Infrastructure Plan

The Australian and NSW governments are funding a 10 year, \$3.6 billion road investment program for western Sydney. The WSIP will deliver major road infrastructure upgrades to support an integrated transport solution for the region and to capitalise on the economic benefits from developing a western Sydney airport. The WSIP provides improved road transport capacity ahead of future traffic demand, as planned residential and employment development comes online in Western Sydney Priority Growth Area and the South West Priority Growth Area. The WSIP is a partnership between the Australian and NSW governments to improve and upgrade road infrastructure.

The WSIP program of works includes:

- The Northern Road Upgrade, including all stages of work between the Old Northern Road, Narellan and Jamison Road, Penrith
- Werrington Arterial Road – a two kilometre road to provide a high quality link between the Great Western Highway and the M4 Western Motorway. Construction began in March 2015 and is expected to finish in late 2016
- Bringelly Road Upgrade – An upgrade of Bringelly Road between Camden Valley Way, Leppington and The Northern Road, Bringelly. It would be delivered in two stages:
 - Stage 1 – 5.7 km from Camden Valley Way, Leppington to King Street, Rossmore. Construction is currently underway and expected to be completed in late 2017
 - Stage 2 – 4.3 km from King Street, Rossmore to The Northern Road, Bringelly. Detailed design is being finalised for Stage 2. Construction is expected to start in early 2017 and be completed in mid-2019
- M12 Motorway – a 17 km motorway standard east–west link between the WestLink M7 Motorway and The Northern Road. The proposed route options were displayed for community comment in February 2016 with the preferred corridor planned to be announced in late-2016 and construction expected to start around 2020, subject to approval
- A grade-separated interchange of The Northern Road and Bringelly Road – this would be delivered as part of the upgrades to The Northern Road and Bringelly Road. Subject to approval, construction is expected to start by early 2017 with the new interchange open to traffic in late 2019.
- Glenbrook Intersection Upgrade – this would improve safety and manage congestion at the intersection of Ross Street and the Great Western Highway, Glenbrook
- The Local Roads Package – this would allow councils to deliver targeted road improvements and provide better transport connections.

The Western Sydney Infrastructure Plan is shown on **Figure 3-1**.

3.1.5 Western Sydney airport

In April 2014, the Australian Government announced its decision to develop a Western Sydney Airport at Badgerys Creek, with passenger flight operations starting in 2025 catering for about three million passengers per year (DIRD, 2015). The airport would be located south east of the existing junction of The Northern Road and Elizabeth Drive and would substantially increase traffic volumes along these arterial roads and other roads in the area.

The *Western Sydney Airport Environmental Impact Statement 2016* indicates that the operation of Stage 1 of the airport is expected to result in approximately 43,118 vehicles in total entering and leaving the airport site each day by 2030 (Department of Infrastructure and Regional Development, 2015). It is noted that the traffic impact assessment is based on the information published in the *Western Sydney Airport Draft Environmental Impact Statement 2015* as available at the time of the assessment, i.e. 41,858 vehicles (refer to the Traffic and Transport Working Paper, **Appendix G** of the EIS).

The location of the Western Sydney Airport is shown on **Figure 3-1**.

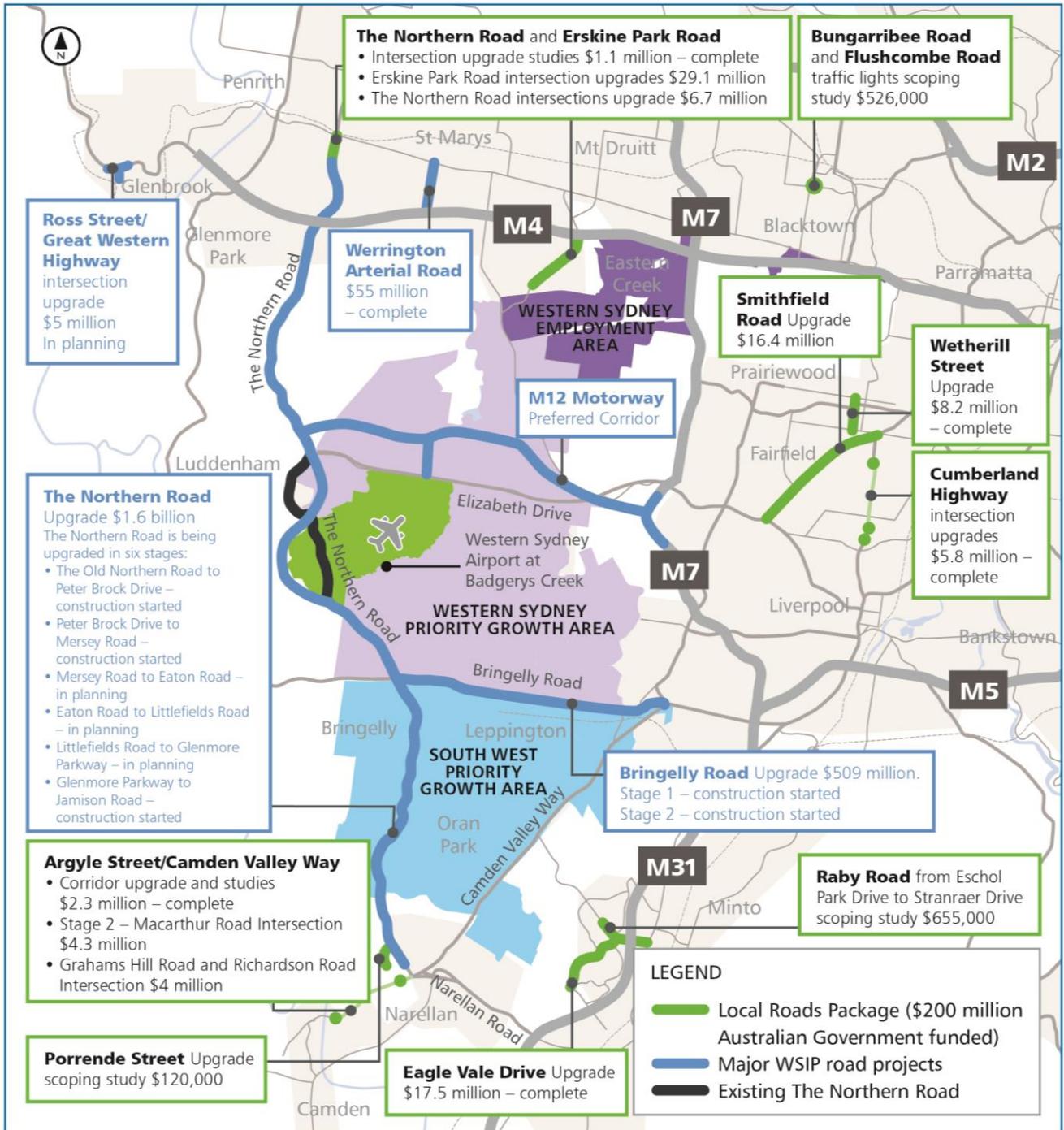


Figure 3-1 : Western Sydney Infrastructure Plan

3.2 Local Government strategies

3.2.1 Penrith Community Plan

The *Penrith Community Plan* (Penrith City Council, 2015) (Community Strategic Plan) outlines Penrith City Council's key strategies to meet the community's long term aspirations for Penrith City. The *Community Plan* focuses on seven community outcomes that reflect the community's goals for the LGA and outlines the strategies Penrith City Council has developed to address these goals.

Community outcomes relevant to the project include:

- *We can work close to home*, which looks at how government, partners and Council attract strategic investment, facilitate diversity and growth in employment, promote job clusters and encourage local workforce skills and training so that we can be more resilient to economic changes. A key strategy for this outcome includes 'secure infrastructure that improves economic opportunities for existing and new businesses'.
- *We plan for our future growth*, which seeks to ensure the City's future urban growth protects rural lands, respects heritage and provides housing choice. Ensuring services, facilities and infrastructure meet the needs of a growing population is identified as a key strategy for this outcome.
- *We can get around the city*, which targets the delivery of effective transport options for passengers and freight in the City and the region by Council and other levels of government. Strategies to achieve this outcome relate to securing an effective public transport network; providing a safe and efficient road network supported by parking; improving the City's footpaths and shared pathway network; improving critical cross regional transport connections; and securing an efficient, integrated and sustainable freight network.

3.2.2 Growing Liverpool 2023

Growing Liverpool 2023 (Liverpool City Council, 2013) is Liverpool's Community Strategic Plan. It outlines the 10-year plan to transform Liverpool into a 'vibrant regional city of opportunity, prosperity and diversity'.

The Plan identifies seven strategic directions and associated strategies to achieve the community's vision and move Liverpool forward. Direction six relates to an 'accessible connected city', with a diverse range of transport options including public transport, roads, cycleways and pathways. Strategies identified to achieve this direction over the next 10 years that are relevant to the project include:

- Provide safe and easy travel with a high quality road and traffic management network
- Encourage sustainable and alternative transport options such as walking, cycling and integrated public transport.

3.2.3 Local planning context

Roads and Maritime is seeking project approval for the project under Part 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). As such, the planning and development controls contained in the *Penrith Local Environmental Plan (LEP) 2010* and the *Liverpool LEP 2008* do not apply. However, for completeness, the provisions of these LEPs relevant to the socio-economic assessment have been considered in this assessment eg the defined land use zones.