SOCIO-ECONOMIC IMPACT ASSESSMENT

Appendix M



Powering Sydney's Future TransGrid

Potts Hill to Alexandria transmission cable project

Socio-economic Impact Assessment

Potts Hill to Alexandria transmission cable project

Socio-economic Impact Assessment

Client: TransGrid

Co No.: 609 169 959

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Glossary

Term	Definition
Amenity	The quality of a place, its appearance, feel and sound, and the way its community experiences the place. Amenity contributes to a community's identity and its sense of place.
Cable bridges	A purpose built bridge made typically of reinforced concrete structures, through which the transmission cables are integrated for support and protection.
Cable circuit	A series of three phase alternating current transmission cables which make up an electrical circuit to carry an electrical current. A single circuit transmission cable typically comprises a minimum of three cables per circuit.
Conduit	A protective tube or pipe system for individual electric cables. Sometimes referred to as a 'duct'.
Construction	Includes all physical work required to construct the project and also includes construction planning such as the development of construction management plans.
Construction laydown areas	Areas required for temporarily storing materials, plant and equipment and providing space for other ancillary facilities, such as project offices, during construction. Some construction laydown areas would be used for stockpiling.
Community	A group of people living in a specific geographical area or with mutual interests that could be affected by the project.
Cumulative impacts	Impacts that, when considered together, have different and/or more substantial impacts than a single impact assessed on its own.
Detailed design	The stage of the project following concept design where the design is refined, and plans, specifications and estimates are produced, suitable for construction.
Detour	An alternative route, using existing roads, made available to traffic.
Earthworks	All operations involved in loosening, excavating, placing, shaping and compacting soil or rock.
Easement	A 'right of way' around infrastructure that allows access to authorised personnel for inspections, repairs and maintenance. The establishment of an easement also restricts certain activities on the land that could endanger members of the public or impact on the safe operation of the infrastructure.
Electric and magnetic fields (EMF)	Electric and magnetic fields (EMF) are part of the natural environment and are present in the earth's core and the atmosphere. These fields are also produced wherever electricity or electrical equipment is used.
Emission	The discharge of a substance into the environment.
Environment	As defined within the <i>Environmental Protection</i> & Assessment Act, 1979, all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings.
Fill	The material placed in an embankment.

Term	Definition
Frequency	The repetition rate of the cycle measured in Hertz (Hz). The frequency corresponds to the pitch of the sound. A high frequency corresponds to a high pitched sound and a low frequency to a low pitched sound.
Greater Sydney area	The area generally from Penrith in the west to the east coast and from Hornsby in the north to Campbelltown in the south.
Hazard	A source of potential harm that can cause injury/loss of human life and/or damage to the environment or property.
Impact	Influence or effect exerted by a project or other activity on the natural, built and community environment.
inner Sydney	Includes the Sydney Central Business District (CBD) and eastern suburbs.
Joint bay	An enlarged section of excavated trench in which cables are joined together.
Key stakeholders	Government departments/agencies, local councils, utility and service providers.
L _{eq}	The constant sound level which, when occurring over the same period of time, would result in the receiver experiencing the same amount of sound energy.
Methodology	The method for analysis and evaluation of the relevant subject matter.
Pre-construction	All work prior to, and in respect of the State significant infrastructure, that is excluded from the definition of construction.
Project area	 The project area comprises the overall potential area of direct disturbance by the project, which may be temporary (for construction) or permanent (for operational infrastructure) and extend below the ground surface. The project area includes the location of operational infrastructure and construction work sites for: the transmission cable route (including the entire road reserve of roads traversed); cable bridge crossings; substation sites requiring upgrades (noting that all works would be contained within the existing site boundaries); and construction laydown areas.
Proponent	The person or organisation that proposes to carry out the project or activity. For the purpose of the project, the proponent is TransGrid.
Roadway	Any one part of the width of a road devoted particular to the use of vehicles, inclusive of shoulders and auxiliary lanes.
Road reserve	The area comprising roads, footpaths, nature strips and public transport infrastructure.
Secretary's Environmental Assessment Requirements (SEARs)	Requirements and specifications for an environmental assessment prepared by the Secretary of the NSW Department of the Planning and Environment under section 5.16 of the NSW <i>Environmental</i> <i>Planning and Assessment Act 1979</i> .

Term	Definition
Sensitive receiver/receptor	Includes residences, educational institutions (including preschools, schools, universities, TAFE colleges), healthcare providers (including nursing homes, hospitals), religious facilities (including churches), child care centres, passive recreation areas (including outdoor grounds used for teaching), active recreation areas (including parks and sports grounds), commercial premises (including film and television studios, research facilities, entertainment spaces, temporary accommodation such as caravan parks and camping grounds, restaurants, office premises, retail spaces and industrial premises).
Switch bay	Part of a substation within which the switch and control equipment relating to a given circuit are contained.
Traffic noise	The total noise resulting from road traffic. The L_{eq} sound pressure level is used to quantify traffic noise.
Transmission cable	An insulated wire that conducts an electrical current at voltages greater than 132 kV.
Underboring	This is a trenchless method for installing cables involving passing the conduits under infrastructure (such as a road or railway corridor) or a watercourse. Underboring could be via thrust boring (also known as micro tunnelling) or horizontal directional drilling.
Work site	A specific section of the project area for carrying out project construction activities such as trenching and excavation, establishment of a joint bay or installing a cable bridge. The work site would be fenced off from public access and may include associated activities such as traffic management measures.

Acronyms and abbreviations

Acronym	Definition
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
DPE	NSW Department of Planning and Environment
EIS	Environmental Impact Statement
EMF	Electric and magnetic fields
EPA	Environmental Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Commonwealth Environment Protection and Biodiversity Conservation Act 1999
GIS	Gas insulated switchgear
IAIA	International Association for Impact Assessment
ICNG	Interim Construction Noise Guideline
IEO	Index of Education and Occupation
IER	Index of Economic Resources
IRSAD	Index of Relative Socio-economic Advantage and Disadvantage
IRSD	Index of Relative Socio-economic Disadvantage
LCVIA	Landscape Character and Visual Impact Assessment
LCZ	Landscape Character Zones

Acronym	Definition
LGA	Local Government Area
NCA	Noise Catchment Area
NPV	Net present value
NSW	New South Wales
OLs	Observer Locations
PACR	Project Assessment Conclusions Report
PADR	Project Assessment Draft Report
PSCR	Project Specification Consultation Report
RIT-T	Regulatory Investment Test for Transmission
RNP	Road Noise Policy
SEARs	Secretary's Environmental Assessment Requirements
SEIA	Socio-Economic Impact Assessment
SEIFA	Socio-economic Indexes for Areas
SIA	Social impact assessment
SIS	Social impact statement
SSC	State suburb code

Executive summary

TransGrid is the manager and operator of the major high-voltage electricity transmission network in New South Wales (NSW) and the Australian Capital Territory (ACT). TransGrid is seeking approval under Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for the construction and operation of a new 330 kilovolt (kV) underground transmission cable circuit between the existing Rookwood Road substation in Potts Hill and the Beaconsfield West substation in Alexandria (the project).

The project has been identified as a solution to address existing issues in the electricity supply network for inner Sydney, which is characterised by ageing and deteriorating infrastructure and forecast increases in consumer demand.

This Socio-economic Impact Assessment (SEIA) assesses the potential social and economic impacts of the project and has been prepared to support the Environmental Impact Statement (EIS) for the project.

Methodology

The primary methodology utilised for the assessment of social impacts for the project is the social indicators method, whereby social indicators are used to measure and monitor impacts and changes to the social environment. The social indicators method is appropriate for the assessment of impacts resulting from proposed developments, but also as an ongoing monitoring tool to measure community wellbeing.

The social indicator methodology for this SEIA includes:

- identifying the area in which socio-economic impacts, as a result of the project, have the potential to occur;
- undertaking a desktop review of social indicators and relevant data in order to create a baseline profile of the community;
- identifying project components that are likely to result in potential impacts;
- reviewing the results of the traffic, noise, air quality, landscape and visual amenity studies to identify and assess potential social and cumulative impacts;
- assessing the significance of impacts based on the extent, duration, severity of impacts and the sensitivity of different receivers; and
- developing mitigation and management measures to address socio-economic impacts and any residual effects identified in the technical assessment.

Study area

Two study areas have been identified for the assessment of socio-economic impacts. The local study area has been defined as the area within 400 metres of the transmission cable route which covers Rookwood Road and Beaconsfield West substations, and immediate surrounds of the construction laydown areas and Sydney South substation. The regional study area considers impacts that may occur on a broader regional or community scale and includes four local government areas (LGAs) and the 17 suburbs that the project would be located within.

Community identity and profile

The socio-economic profile presented through socio-economic statistics informs the assessment of sensitivity of the broader community. How receivers adapt to change, their vulnerability and the level of concern raised in their feedback helps inform the sensitivity of potentially affected receivers.

The project is located within the Canterbury-Bankstown, Strathfield, Inner West and City of Sydney LGAs. Resident populations are increasing across the LGAs and this is reflected through the population growth of the local suburbs within the study area between 2011 and 2016 according to Census data (Australian Bureau of Statistics, 2011 & 2016). All LGAs within the study area are

anticipated to experience population growth by 2036, with the highest growth anticipated for the Strathfield (74%) and City of Sydney (72%) LGAs.

The local suburbs within the study area recorded a high proportion of people born overseas compared with NSW average, and suburbs within the western portion of the study area reported a high proportion of households where a language other than English is spoken at home. Levels of socioeconomic advantage and disadvantage varied across the local study area with Lakemba ranked with the highest level of disadvantage within the study area and Alexandria ranked as the least disadvantaged.

The LGAs provide a significant number of businesses and recreational and community infrastructure that meet the needs of the local and regional communities. These areas are well-established suburban regions and consequently feature a wide variety of businesses, community facilities and services catering to the educational, cultural, entertainment, health and social needs of residents.

Potential impacts

The project has the potential to result in socio-economic impacts, which broadly include:

- the temporary occupation of property or permanent placement of cables within property;
- amenity impacts, including changes to noise, air quality, traffic and visual amenity;
- changes to access and connectivity for vehicles, pedestrians and cyclists;
- impacts to local businesses and the local economy; and
- cumulative impacts with other developments planned or proposed within the study area.

Construction impacts

Land use changes during construction involve use of parts of three parks/ recreational areas as construction laydown areas for the project. However, the temporary occupation of land and parks during the construction of the project is considered to result in medium impacts as the overall area occupied per park is small and there are a number of alternative recreational spaces available in the study area.

In regard to demographic changes, the construction of the project would result in an increase in the number of people working in the study area and an increase in persons travelling to the study area for work. Given the diversity of the local communities and projected population growth for the region as well as the accessibility of the project by car and public transport, the overall impacts to the demographic profiles as a result of the project is considered to be low.

Amenity impacts associated with construction of the project progressing linearly along the proposed route could result in temporary impacts on individual residential, business and social infrastructure receivers. The transmission cable route intersects through residential, recreational and commercial areas and would potentially affect a number of receivers. However, appropriate mitigation measures are proposed to be implemented during construction to manage any temporary impacts. As such, the overall significance of impacts to amenity is considered to be low for air quality impacts and high for noise and visual amenity impacts.

Construction of the project would result in an increase in the number of traffic movements within the local study area and may affect local travel, including trip duration, wait times at intersections and road safety. A large number of receivers along the transmission cable route who rely on access and connectivity to the road network to get to their properties, and to attend to their day-to-day activities are likely to be affected. Traffic flow would be maintained on all state roads, with diversions required on some sections of regional and local roads. Bus routes would be able to operate with minor amendments to the bus stop locations, with only some routes to be diverted due to the available road width not being sufficient for a bus to pass the work site and/or because lane closures may be required. The project has also considered mitigation measures to ensure pedestrian access and safety during construction. As such, the overall significance of impacts to access and connectivity of the road network is medium.

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There are several commercial areas which the project area traverses and these generally follows main roads (for example Punchbowl Road, the Hume Highway or the New Canterbury Road), are focused along major intersections, or clustered around train stations or other transport infrastructure hubs.

The local study area comprises of over 550 businesses ranging from retailers, restaurants, cafes, hotels, real estate offices, auto repairs, wholesale businesses, industrial businesses, veterinary hospital and dance schools. Business and economic impacts associated with the construction of the project would involve potential impacts to amenity on local businesses affecting the ability of customers, employees or business owners to enjoy their workplace and daily activities. Expenditure during the construction of the project would be of value to the local and regional economies, through increased expenditure at local businesses due to purchases by construction workers, increased employment as a result of the project, and through the provision of goods and services required for construction. The sensitivity of these businesses to changes in amenity and access from the construction of the project is considered to be high. Due to the large number of potentially impacted receivers and considering the temporary nature and short duration of works in any one location, the magnitude of amenity impacts and changes to access to businesses during construction is considered to be moderate. As a result of this, the significance of construction impacts on businesses is considered to be high.

Environmental management and mitigation measures outlined in **Section 8.0** are proposed to manage and/or mitigate potential socio-economic impacts.

Operational impacts

Following construction, the areas impacted by the temporary occupation of land and construction of the transmission cable circuit would be reinstated. The majority of the transmission cable route would be located within road reserves, with minimal impact to the ongoing operation of the road. However, certain activities and future land uses would be limited along the cable alignment, within registered easements and at cable bridges, to provide safety to the public and the assets. Easements over the cable alignment within private property would provide additional legal clarity of property specific restrictions. Given the limited number of receivers who would be impacted during operation of the project, and the small footprint required for easements and cable bridges, the overall impact to land use is considered to be medium.

Once operational, the project has the potential to adversely affect local visual amenity through the establishment of cable bridges (which would be new elements in the landscape) and through the removal of street trees, where required. The establishment of cable bridges would be of a similar scale to the existing pedestrian bridges, however, visibility of the proposed cable bridges would vary at each location wherein views to bridges are sometimes limited by the visual containment of the crossing point. For example, where a road bridge crosses a rail corridor, the bridge deck is visible to traffic passing over it, but views to the bridge from within the rail corridor would be limited by the difference in grade between the rail corridor and the surrounding landscape, and by fringing vegetation along the rail corridor which screens views into the corridor. Views to the cable bridges would be most accessible where public open spaces are associated with the bridges, for example at the crossing point of the Cooks River and at Camdenville Park, St Peters. If removed, trees would be replanted where feasible, depending on the location of the transmission cable route within the road reserve which is subject to detailed design. The installation of the transmission cable circuit is likely to have a negligible impact on the surrounding visual environment once operational as land would be returned to its original condition (or as otherwise agreed with the relevant authority). The overall impact to visual amenity during operation is considered to be moderate given the medium change in the visual environment due to the addition of cable bridges and measures that would be implemented such as replanting of trees where possible.

All road surfaces and footpaths impacted by the project would be returned to their former state or as otherwise agreed with the relevant roads authority. As a result, pedestrian and cycle paths would not be impacted during project operation and access to bus stops would be reinstated at the completion of construction in each location. The project would also seek opportunities to enhance pedestrian and cyclist connectivity and safety within the study area during detailed design. As such, the overall impact to access and connectivity is considered to be negligible.

The transmission cables would create electric and magnetic fields (EMF) during operation. These EMF levels would be well within the reference levels applied to the general public and occupational exposure levels along the transmission cable route. A prudent avoidance approach has been adopted in the design and siting of electricity infrastructure for the project to reduce public exposure to EMF. EMF levels in all locations are well below the reference levels applied to the general public and occupational personnel. As such, the overall significance of impacts from EMF generated by the project is anticipated to be low.

The project would maintain and improve the reliability, affordability and security of electricity supply across inner Sydney, including additional security for periods of peak demand. With the rate of development within Sydney and the projected rate of population growth anticipated, the significance of the economic benefits of the project is anticipated to be high (positive). Furthermore, the project would provide an indirect economic benefit, by contributing to securing Sydney's electricity supply for the future. Overall, the social and economic benefits of the project coincide with the community values and goals identified for each LGA with regards to economic growth and safety.

Management and mitigation

The project is anticipated to generate both beneficial and adverse social impacts. As such, mitigation measures have been developed to manage potential socio-economic impacts. Social and economic impacts associated with other environmental issues (traffic, noise and vibration, air quality and visual amenity) would be managed in accordance with the measures outlined in their respective assessments.

Conclusion

Overall, impacts during construction are anticipated to be temporary or short-term. Operational impacts would include the restriction of development activities that could impact the transmission cable, the establishment of easements along a small portion of the transmission cable route, the installation of some above ground infrastructure such as cable bridges, and the potential removal of vegetation including mature trees within the project area. The project would provide an indirect economic benefit, by contributing to securing Sydney's electricity supply for the future. Both electricity network and land use planning for the Greater Sydney area recognise the need for infrastructure to cater for both increased employment and population growth in the inner Sydney area. The project would serve to provide continuity and reliability benefits to users of electricity within the inner Sydney area including additional security for periods of peak demand.

1.0 Introduction

TransGrid is the manager and operator of the major high-voltage electricity transmission network in New South Wales (NSW) and the Australian Capital Territory (ACT). TransGrid is seeking approval under Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for the construction and operation of a new 330 kilovolt (kV) underground transmission cable circuit between the existing Rookwood Road substation in Potts Hill and the Beaconsfield West substation in Alexandria (the project).

The project has been identified as a solution to address existing issues in the electricity supply network for inner Sydney, which is characterised by ageing and deteriorating electricity infrastructure and forecast increases in consumer demand.

As the project is State Significant Infrastructure under section 5.12 of the EP&A Act, an Environmental Impact Statement (EIS) has been prepared to assess the impacts of the project. This technical report has been developed in support of the EIS.

1.1 Project overview

The transmission cable circuit would be about 20 kilometres long and would generally be located within existing road reserves, at existing electrical infrastructure sites, within public open space and on previously disturbed areas as shown in **Figure 1-1**. The project would comprise the following key components:

- cable works connecting Rookwood Road substation with the Beaconsfield West substation;
- special crossings of infrastructure or watercourses;
- upgrade works at the Rookwood Road and Beaconsfield West substations;
- conversion works at the Beaconsfield West and Sydney South substations; and
- temporary construction laydown areas to facilitate construction of the project.





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PROJECT OVERVIEW Powering Sydney's Future Potts Hill to Alexandria Transmission Cable Project This technical report has been prepared in accordance with the revised Secretary's Environmental Assessment Requirements (SEARs) issued for the project on 20 August 2019 by the Planning Secretary of the NSW Department of Planning, Industry and Environment (DPIE).

The SEARs relevant to this technical assessment are presented in Table 1-1.

Table 1-1 SEARs

SEARs		Section addressed
Social and economic	 an assessment of impacts from construction and operation on potentially affected land (including Crown lands), schools, hospitals, places of worship, businesses, public reserves (including Sydney Park), recreational users, including property acquisitions/adjustments, access, and amenity; 	Section 5.0 and Section 6.0.
	 identification of opportunities for community initiatives to deliver benefits for the local community, in consultation with relevant stakeholders, and including consideration of street improvements and community facilities in 	Section 6.7 and Section 8.0. Potential opportunities for community initiatives are discussed in
	areas impacts by the project;	Appendix C of the EIS (Community Consultation Framework).
	 identification of opportunities to improve pedestrian and cycle access and connectivity, particularly where bridging structures would be required to facilitate crossings, including at Muir Road, Bedwin Road, Enfield Intermodal Terminal rail lines, the Cooks River, Arlington Station or the Dulwich Hill Light rail line, the playground at Amy Street and Sydney Park; and Sydney Trains Network at Bedwin Road; and 	Section 5.4, Section 6.4 and Section 8.0.
	 an assessment of potential impacts on utilities (including communications, electricity, gas, 	Section 4.4 and Section 5.5.
	sewerage, water and stormwater, particularly the stormwater treatment facility at Sydney Park) and the relocation of any utilities.	Impacts to utilities are addressed in Chapter 11 of the EIS (Hazards and risks).
		Impacts on drainage infrastructure are addressed in Appendix L of the EIS (Surface Water and Flooding Report), stormwater treatment facility at Sydney Park is addressed in Section 5.7 of Appendix L of the EIS (Surface Water, and Flooding Report).

2.0 Description of the project

2.1 Project components

Key components of the project are listed below. A detailed description of the project is provided in **Chapter 4 Project description** of the EIS:

- cable works connecting Rookwood Road substation with the Beaconsfield West substation comprising:
 - a 330 kV underground transmission cable circuit comprising three cables installed in three conduits;
 - another set of three conduits for a possible future 330 kV transmission cable circuit if it is required;
 - four smaller conduits for carrying optical fibres;
 - around 26-30 joint bays, per circuit, where sections of cable would be joined together, located approximately every 600-800 metres along the transmission cable route;
 - link boxes and sensor boxes associated with each joint bay to allow cable testing and maintenance;
 - optical fibre cable pits for optical fibre cable maintenance;
- seven special crossings of infrastructure or watercourses including two rail lines (at Chullora and St Peters), one freight line (Enfield Intermodal rail line at Belfield), one light rail line (at Dulwich Hill), the Cooks River and its associated cycleway (at Campsie/Croydon Park), a playground (at Marrickville) and the southern wetland at Sydney Park (at Alexandria);
- upgrade works at the Rookwood Road and Beaconsfield West substations to facilitate the new 330 kV transmission cable circuit;
- conversion works at the Beaconsfield West and Sydney South substations to transition the existing Cable 41 from a 330 kV connection to a 132 kV connection; and
- five temporary construction laydown areas to facilitate construction of the project.

Associated works required to facilitate the construction of the project, such as potential utility relocations, have been considered. No major relocations are anticipated and where smaller services may need to be moved to accommodate the transmission cable circuit, this relocation would be restricted to within the project area assessed in this EIS.

The project does not include the cable pulling and jointing works for the possible future second transmission cable circuit. This activity, should it be required, would be subject to separate assessment and approval as per the requirements of the EP&A Act.

Several route options and alternative construction methods are being considered as part of the project. These are described further in **Section 2.4**.

2.2 Project location

The project would be located in the suburbs of Potts Hill, Yagoona, Chullora, Greenacre, Lakemba, Belmore, Belfield, Campsie, Croydon Park, Ashbury, Ashfield, Dulwich Hill, Marrickville, Newtown, St Peters, Alexandria and Picnic Point in the following local government areas (LGAs):

- City of Canterbury-Bankstown;
- Strathfield;
- Inner West; and
- City of Sydney.

The location of the project is shown on Figure 1-1.

The project would be located primarily within road reserves, at existing electrical infrastructure sites, within public open space and on previously disturbed areas. The project has been and would continue to be designed to avoid impacts to private property and open spaces where possible; however, there would be a need for both the use of public open space and easements over some private commercial properties due to significant existing constraints within the road reserve. Land uses adjacent to the road reserves in which the project would be located are mainly residential, with relatively short sections of commercial and mixed uses in the suburbs of Dulwich Hill and Petersham. The project would be located close to industrial areas at the western and eastern ends of the project around Potts Hill, Chullora, Greenacre, Marrickville, St Peters and Alexandria. The existing Sydney South substation at Picnic Point is surrounded by the George's River National Park.

The location of the proposed special crossings is provided in Table 2-1.

Location	Crossing type	Infrastructure or watercourse crossed
Muir Road, Chullora	Cable bridge	Rail line
Enfield Intermodal, Belfield	Underbore	Freight rail line
Cooks River, Campsie/Croydon Park/Ashbury	Cable bridge or underbore (preferred)	Cooks River and cycleway
Arlington Light Rail Station, Dulwich Hill	Underbore	Dulwich Hill light rail line or station
Amy Street, Marrickville	Underbore	Playground near Henson Park
Bedwin Road, St Peters	Cable bridge	Rail line
Sydney Park, Alexandria	Underbore	Wetland

Table 2-1 Location of proposed special crossings

2.3 The project area

The project area comprises the overall potential area of direct disturbance by the project, which may be temporary (for construction) or permanent (for operational infrastructure) and extend below the ground surface. It includes all options under consideration for the project, as described in **Section 2.4**.

The project area includes the location of operational infrastructure and construction work sites for:

- the transmission cable route (including the entire road reserve¹ of roads traversed);
- special crossings of infrastructure or watercourses;
- substation sites requiring upgrades (noting that all works would be contained within the existing site boundaries); and
- construction laydown areas.

While the boundaries of the project area represent the physical extent of where project infrastructure may be located, or construction works undertaken, it does not mean that this entire area would be physically disturbed or that indirect impacts would not be experienced beyond this area. Should the project be approved, the detailed design would aim to refine the location of project infrastructure and work sites within the boundaries of the project area assessed in this EIS.

There is a possibility that to minimise impacts on other utilities or transport corridors (roads and rail), that deviations from the assessed project area may be required. In this event, specific impacts of this approach would be assessed further. Future changes to the project may require additional

¹ Road reserve is defined as the area comprising roads, footpaths, nature strips and public transport infrastructure (including indented bus bays, bus shelters and bus stop signage).

assessment and approval as described in more detail in **Chapter 5 Statutory planning and approval process** of the EIS.

The location of joint bays and the location of the transmission cable circuit within the road reserve (e.g. kerbside or non-kerbside) is yet to be determined and is subject to detailed design.

2.4 Options under consideration

The project includes route options and alternative construction methods in locations as outlined below and shown in Figure 4-6 in **Chapter 4 Project description** of the EIS. As the project design develops, a preferred option would be selected for each location. However, approval may be sought for some options where further design and engineering information is required before a preferred option can be selected.

The project options are discussed below by geographical area, from west to east.

2.4.1 Cooks River

There are three options for the transmission cable route in the vicinity of the Cooks River at Campsie/Croydon Park and two options for special crossing methods, including:

- Option 1: the transmission cable route travels in a south-easterly direction along Cowper Street from the intersection with Brighton Avenue, Campsie and then east on Lindsay Street. At the culde-sac at the end of Lindsay Street, there are two special crossing options of the Cooks River into Lees Park before the transmission cable route continues on to Harmony Street, Ashbury:
 - Option 1a: construct a cable bridge parallel to and to the north of the existing Lindsay Street pedestrian bridge; or
 - Option 1b: install the conduits under the Cooks River via underboring (this is the preferred option); or
- Option 2: the transmission cable route travels in a north-easterly direction from Byron Street at the intersection with Brighton Avenue, Campsie, through Mildura Reserve. From this parkland, the conduits would be underbored beneath the Cooks River, surfacing in Croydon Park near the cul-de-sac of Croydon Avenue in Croydon Park. The transmission cable route then travels north along Croydon Avenue, east along Dunstan Street, and south along Hay Street, before continuing east along Harmony Street; or
- Option 3: the transmission cable route travels in an easterly direction from Byron Street at the intersection with Brighton Avenue, Campsie, then in a south-easterly direction through Mildura Reserve, between residences and the Cooks River until the cul-de-sac at Lindsay Street. From here, there are two special crossing options of the Cooks River into Lees Park before the transmission cable route continues on to Harmony Street, Ashbury, which are the same for Option 1:
 - Option 3a: construct a cable bridge parallel to and to the north of the existing Lindsay Street pedestrian bridge; or
 - Option 3b: install the conduits under the Cooks River via underboring.

A description of the cable bridge and underboring methods is provided in **Section 2.5**, with further detail in **Chapter 4 Project description** of the EIS.

2.4.2 Dulwich Hill light rail corridor

There are two options for the transmission cable route crossing of the Dulwich Hill Light Rail corridor in the vicinity of the Arlington Light Rail station, Dulwich Hill. This includes:

- Option 4a: the transmission cable route travels northeast along Windsor Road from the intersection with Arlington Street, then east on Terry Road. At the Terry Road cul-de-sac, the conduits would be underbored beneath the rail corridor, surfacing at the Hill Street cul-de-sac. From here the transmission cable route continues along Hill Street to Denison Road; or
- Option 4b: the transmission cable route travels southeast along Constitution Road from the intersection with Arlington Street, before crossing into the southern end of Johnson Park. From

here, the conduits would be underbored beneath the rail corridor near the Arlington light rail station. The transmission cable route then continues along Constitution Road and then north on Denison Road.

2.4.3 Henson Park

There are two options for the transmission cable route crossing in the vicinity of Henson Park, Marrickville including:

- Option 5a: the transmission cable route continues northeast on Centennial Street to a car park. From here it travels in an easterly direction through a grassed verge between the tennis courts and Henson Park oval to near the Amy Street playground. The conduits would be underbored beneath the playground, surfacing at Amy Street. The transmission cable route then turns east on to Horton Street; or
- Option 5b: the transmission cable route travels north on Sydenham Road from Centennial Street, turning northeast on to Neville Street, then southeast on Surrey Street to Amy Street before continuing along Charles Street.

2.4.4 Marrickville

There are two options for the transmission cable route in the vicinity of Addison Road, Marrickville. Note that the project may include one or both options at this location including:

- Option 6a: the transmission cable route travels north along Agar Street from the intersection with Illawarra Road, then east on to Newington Road and south down Enmore Road to the intersection with Scouller Street; and/or
- Option 6b: splitting the two circuits as there is insufficient space along Addison Road to
 accommodate both circuits. One circuit would travel along Newington Road (as for Option 6a) and
 one circuit would travel east on Addison Road from the intersection with Illawarra Road, then
 north on Enmore Road to the intersection with Scouller Street.

2.5 Construction works

Construction activities would be limited to the identified project area and include the activities summarised in **Table 2-2**. A substantial portion of the transmission cables would be installed using pre-laid conduits. The conduits would only require the excavation of short sections of trench at a time (an average of 20 metres at any one location), with backfilling occurring as soon as each section of the conduits has been installed. Depending on the overall construction program and associated number of work crews required, it is expected that trenching and excavation would occur concurrently at multiple work sites along the transmission cable route.

The project would involve the construction of seven special crossings that would involve either the installation of a cable bridge or underboring (i.e. an underground crossing). Works for these crossings would be undertaken in coordination with the relevant asset owner (e.g. road or rail authorities).

The construction of the project would require a number of work sites along the transmission cable route and at special crossings. Each work site represents an area of disturbance required to undertake the construction activity (e.g. trenching, cable bridge installation, underboring) and would be located within the project area.

Table 2-2 Summary of construction activities

Construction activity	Description
Site preparation	 implementation of traffic management changes (such as safety barriers and road signage) to facilitate access and egress to/from the work sites; installation of environmental control measures (such as sediment barriers); vegetation clearing and tree removal, where required; establishing construction laydown areas and ancillary facilities including temporary offices and worker amenities, site fencing and provision of power/services; and delivery and storage of plant and equipment at construction laydown areas and work sites.
Trenching and excavation	 clearing of surface vegetation along excavation area if required; saw cutting of the road surface/pavement and lifting this material using a backhoe/front end loader. If rock is encountered, a rock breaker may be used to loosen the material; removal of material down to the base of the trench using an excavator and placement of spoil directly onto trucks to be transported to a licensed facility. The trench would typically be around 3 metres wide and 1.2 metres deep but could be deeper or shallower depending on the presence of utilities; and installation of shoring as a precaution against slump or collapse where necessary, particularly where deeper sections of trench are required (i.e. deeper than 1.4 metres).
Relocation of minor utilities/services	 use of non-destructive digging methods to expose buried services to guide the excavator; and minor relocations, if required, would occur within the road reserve and be subject to consultation with the relevant asset owner/operator.
Conduit installation and backfilling	 laying the transmission cable conduits on plastic spacers to provide the required clearance from the side walls and bottom of the trench; placing the optic fibre communication cable conduits into position; backfilling the trench with engineered backfill; laying of polymeric covers and warning tape, marked with appropriate warnings in case of accidental excavation; and installation of the road base and temporary restoration of the road surface to allow vehicles and other road users to travel across the area.
Excavation and establishment of joint bays	 excavation of joint bays via open trenching; installation of erosion and stormwater flow controls and barriers; erecting fencing or hard barriers as required; provision for vehicle access, worker amenities and equipment storage; temporary covering with steel plates to provide access to adjacent properties where required; and excavation of nearby pits to facilitate the installation of link and sensor boxes.
Cable pulling and jointing	 installation of a tent or demountable building over the joint bay to provide a controlled work environment and dry work site; pulling cables through the conduits which is fed from large drums holding 600-800 metres of cable; and connecting sections of cables at the joint bay.

Construction activity	Description	
Permanent road restoration	 removing the temporary road surface; backfilling with road base up to surface level, where required; reinstating pavement; and reinstating the remaining areas that were excavated with spoil or other fill material to pre-construction levels and final finishing to match existing as appropriate (e.g. footpath and/or kerb and gutter) or as otherwise agreed with the relevant roads authority. 	
Cable markers	 once restoration activities have been completed, cable markers would be installed along the transmission cable route to give warning of the presence of the cables and the need to make enquiries before digging; markers may include: small signs attached to road kerbs; concrete marker posts (between 800-900 millimetres tall) along the transmission cable route in vegetated areas where surface markers would be difficult to see; or flush-markers constructed of concrete that are around 50-100 millimetres thick. 	
Cable bridges	 establishment of the work site and access including vegetation clearing (where required); boring and earthworks for the bridge piers; installation of the pre-cast cable bridge and steel cage (where required) by crane; integration with the conduits in the road reserve; and reinstatement of the work site. 	
Underboring	 underboring around 4 to 10 metres below the ground surface by either thrust boring or horizontal directional drilling (HDD); thrust boring would require a launch pit (at least 4 metres deep) and associated work site of around 800 square metres and a receive pit and work site of about 100 square metres; HDD would require a work site at the drill launch area of around 800 square metres and a receive pit for the drill exit of around 1.5 metres deep; and work sites would be restricted to the road reserve and public open space areas where feasible and reasonable to limit the need for vegetation removal. 	
Substation upgrades	 site establishment; earthworks and excavations needed for cable entries and footings for new equipment; installation of new infrastructure (such as switchbays and busbars); removal of redundant infrastructure; installation and connection of new cables; commissioning of cables; and demobilisation. 	

2.5.1 Staging and timing of construction activities

An indicative duration of construction activities is provided in **Table 2-3**. The timing is subject to detailed design and the final construction approach. For example, some works, such as trenching and excavation, would be undertaken by multiple work crews working along the transmission cable route. Staging of activities outside of certain hours would also influence the construction approach.

Should the project be approved, construction is planned to occur over 24 months, commencing in 2020. It is estimated that around 15 months would be required for civil construction works and conduit installation and about nine months for cable pulling and jointing, testing and commissioning. The transmission cable circuit is expected to be completed and commissioned in 2022/23.

Table 2-3 Indicative timing of typical construction activities

Construction activity	Indicative duration
Excavation, conduit (pipe) installation and trench backfilling	Conduits for each 600-800 metre cable section would take up to eight weeks to install (with most properties exposed to around two weeks of trench excavation activity).
Joint bay construction	Each individual joint bay would take up to three weeks to establish (in addition to trenching works). Each joint bay contains one cable circuit.
Cable pulling	Cable pulling at each joint bay for each 600-800 metre cable section would typically take up to two weeks to complete.
Cable jointing	Cable jointing would typically take up to three weeks to complete at each joint bay.
Cable bridges	Each cable bridge crossing is expected to take around 10 weeks to complete in total, however works would be staged and not continuous over the 10 week period.
Underboring	Each underboring crossing is expected to take around eight to 10 weeks to complete in total, however works would be staged and not continuous over this period.
Substation works	Construction works at the Rookwood Road substation is expected to take around four to six months, while works at the Beaconsfield West and Sydney South substations are expected to take around six to nine months at each site.

2.5.1.1 Construction hours

Construction works would be undertaken during standard daytime construction hours as specified in the *Interim Construction Noise Guideline* (DECC, 2009) where reasonable and feasible to do so. However, it is expected that works outside standard construction hours would also be required, as described below.

Standard construction hours are:

- Monday to Friday 7am to 6pm;
- Saturday 8am to 1pm; and
- No work on Sundays and public holidays.

It is likely that construction works would be required at night time (after 10pm) due to the requirements of relevant road and rail authorities. These works could include, but are not limited to, works within major road reserves (i.e. on State and regional roads such as Rookwood Road and Old Canterbury Road), through signalised intersections, or at special crossings. Work outside standard construction hours may be required for safety reasons and/or to limit disruption to road traffic and rail services.

Cable jointing works at each joint bay would need to be undertaken continuously i.e. 24 hours. Some works at the substation sites may also need to be undertaken outside of standard construction hours due to outage constraints on the existing infrastructure (i.e. the need to maintain power supply to customers).

Cable bridges and underboring at rail corridors would be timed with other rail works to limit disruption to freight and/or passenger rail services. These works could be undertaken outside of standard construction hours including at night time or over weekends, subject to approval of the relevant rail authority.

Scheduled construction activities, work hours and duration would be further refined through consultation with relevant government agencies and would be outlined in the CEMP for the project.

2.5.2 Construction precincts

The transmission cable route has been divided into five construction precincts to aid the characterisation of the existing environment and assessment of project impacts. These precincts broadly align with similar land uses. A description of each precinct follows:

- **Precinct 1** includes the areas between the Rookwood Road substation and the Hume Highway, including the industrial area of Chullora along Muir Road;
- **Precinct 2** includes the areas between the Hume Highway and Brighton Avenue near the Cooks River including the residential areas of Greenacre, Lakemba, Belmore, Belfield and Campsie;
- **Precinct 3** includes the areas from the Cooks River to Illawarra Road including the residential areas of Croydon Park, Ashbury, Ashfield, Dulwich Hill and Marrickville;
- **Precinct 4** includes the area between Illawarra Road and the Bankstown rail line including the residential areas of Marrickville, Enmore and Newtown; and
- **Precinct 5** includes the areas between the Bankstown rail line and the Beaconsfield West substation including the residential areas of St Peters and the recreational area of Sydney Park in Alexandria.

2.5.3 Construction laydown areas

As part of the construction of the project, temporary construction laydown areas would be required to store materials, equipment, excavated spoil and provide space for other ancillary facilities such as site offices. Five locations have been investigated as potential construction laydown areas. The final number and location is subject to ongoing consultation with the relevant landowners and would be determined during detailed design.

Stockpiling of excavated spoil at the construction laydown areas would be ongoing for the duration of the civil works (around 15 months). Stockpiling would be managed by erosion and sediment controls in accordance with *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004) (The Blue Book).

While it is expected that construction would require the use of transportable roadside facilities for individual work sites, provision for temporary site offices would be located within construction laydown areas for the duration of construction (up to two years).

Construction laydown areas would be fenced and would have lighting for security and to facilitate night works.

Driveways may need to be created from gravel or similar material to enable heavy vehicles to enter/exit the site. At construction laydown areas at Cooke Park and Peace Park, extended driveways would be required to access the laydown area. The construction of these driveways would require ground disturbance and potentially tree removal.

Temporary infrastructure at the construction laydown areas, including noise mitigation controls (such as hoardings), driveways and stockpile areas, would involve minimal subsurface ground disturbance (i.e. excavation) and would be removed once construction is complete.

For works at the Rookwood Road and Sydney South substation sites, sufficient space exists at each location to store materials and equipment; therefore, no additional laydown areas would be required.

The proposed locations and area required for the five potential construction laydown areas are listed in **Table 2-4**.

Table 2-4	Potential	construction	laydown areas
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Potential construction laydown area	LGA	Potential area (hectares)
12 Muir Road, Chullora	City of Canterbury-Bankstown	0.48
Cooke Park, Belfield	Strathfield	0.37
Peace Park, Ashbury	Inner West Council	0.45

Potential construction laydown area	LGA	Potential area (hectares)
Camdenville Park, St Peters	Inner West Council	0.18
Beaconsfield West substation, Alexandria	City of Sydney	0.85

2.6 Cable operation and maintenance

Once the transmission cables have been installed, generally only visual inspections would be required. This would involve regularly driving along the transmission cable route to check for hazards or activities (such as excavation works in the vicinity) that could impact the underground cables or cable bridges. Ongoing physical access to the transmission cables is not required however ongoing monitoring of the cable for damage (missing/worn cable markers) and outages would occur. This would be through access to the link boxes and sensor boxes located near the joint bays. Optical fibre cables installed alongside the transmission cables would be monitored at the optical fibre cable pits.

Pits for link and sensor boxes and optical fibre cables would generally be located in the footpath/road verge but in some cases where there is insufficient space, they may be required in the roadway. Roadway access would be managed with standard traffic controls.

Regular checks of the pits would ensure they are accessible and that the pit does not contain water or tree roots. Cable bridge structures would be inspected to ensure structural integrity and aesthetics are being maintained.

2.7 Other relevant technical information

2.7.1 Site access and traffic movements

Access for heavy vehicles would be required throughout the project area. The standard of access along the transmission cable route would be sufficient to permit passage of excavators, spoil haulage trucks, concrete trucks, low loaders and mobile cranes. The estimated vehicle movements required for construction is outlined in **Table 2-5**. The vehicle numbers estimated do not include private vehicles used by the workforce to arrive at the work site, or traffic management vehicles. The vehicle numbers for the 'transmission cable route' assume four work crews operating concurrently at multiple locations within the project area. The final number of work crews, materials and vehicle movements would be determined during detailed design and construction planning.

Location	Activity	Number of vehicle movements per day
Construction laydown areas	Delivery/pickup of plant and materials, spoil transfer (at relevant sites)	Vehicle movements per construction laydown area, per day: • Light: 3-4 • Heavy: 12
Transmission cable route – trenching and joint bay excavation	Delivery of plant and materials, removal of spoil, general construction	Vehicle movements for four work sites, per day: • Light: 16 • Heavy: 96
Special crossings	Delivery of plant and materials, removal of spoil, general construction	Light: 10-12Heavy: 8-10
Substation upgrade – Rookwood Road	Delivery of plant and materials, removal of spoil	Light: 3-4Heavy: 4
Substation upgrade – Beaconsfield West	Delivery of plant and materials, removal of spoil	Light: 3-4Heavy: 4

Table 2-5 Anticipated vehicle movements

Location	Activity	Number of vehicle movements per day
Substation upgrade – Sydney South	Delivery of plant and materials, removal of spoil	Light: 5-6Heavy: 6

Equipment and materials would be held in storage at the laydown areas until needed and delivered to the relevant work sites. Larger plant and cable materials may be delivered at night to avoid disrupting daytime traffic. Materials such as the cable drums may be temporarily stored near the trench and would be securely stored and barricaded.

Where the trench intersects another road or access to properties is required to enable construction works, vehicle and pedestrian passage would be restored as soon as possible after excavation has passed the intersection or access point.

2.7.2 Workforce

Typical workforce requirements are set out in **Table 2-6**. The numbers presented in **Table 2-6** are an estimate only of the number of workers likely needed to undertake construction activities. Additional workers would be required for traffic management. It is expected that multiple work crews would be spread along the transmission cable route and at the substation sites. A peak construction workforce of around 70 personnel is expected to be required for the project, assuming four work crews operating concurrently on works associated with the transmission cable route (i.e. excluding substation upgrades and special crossings).

Construction activity	Workforce estimate (per work site)
Trenching and backfilling	4 to 6
Cable pulling	12 to 15
Permanent road restoration	4 to 6
Cable jointing	4 to 6
Cable bridge construction	8 to 10
Underboring	4 to 6
Substation upgrades	20 to 30

Table 2-6 Typical workforce requirements

3.0 Assessment methodology

3.1 Study area

The study area for this socio-economic impact assessment (SEIA) was defined based on the need to consider local and regional community impacts. The study area includes:

- the local study area considers impacts within the direct vicinity (within 400 metres) of the project; and
- the regional study area considers impacts that may occur on a broader scale. The regional study area comprises the four LGAs and the 17 suburbs traversed by the project.

The local study area and regional study area are shown in **Figure 3-1**. Statistical data for the 17 suburbs potentially affected by the project has been used to identify community characteristics and to identify key demographic trends, where applicable. Statistical data are based on data available for each LGA and state suburb code (SSC) as defined by the Australian Bureau of Statistics (ABS) and has been used to establish a social baseline to assess the potential impacts of the project.

3.1.1 Local study area

The local study area considers impacts within 400 metres of the project. This area has been divided into five construction precincts for the purposes of assessment. A summary of the local study area and the corresponding land uses that characterise each precinct are provided in **Table 4-1**.

This SEIA assesses potential socio-economic impacts to each precinct within the local study area. Site specific impacts were also assessed for options under consideration as outlined in **Section 2.4**.

3.1.2 Regional study area

The regional study area is comprised of 17 suburbs which are traversed by the project. These 17 suburbs are covered by 4 LGAs (Canterbury-Bankstown, Strathfield, Inner West, and City of Sydney). These suburbs are:

- Potts Hill;
- Yagoona;
- Chullora;
- Greenacre;
- Lakemba;
- Belmore;
- Belfield;
- Campsie;

- Ashbury;
- Ashfield;
- Dulwich Hill;
- Marrickville;
- Newtown;
- St Peters;
- Alexandria; and
- Picnic Point.

Croydon Park;

In 2016, the City of Canterbury and City of Bankstown Council were amalgamated to form Canterbury-Bankstown Council, and Ashfield, Leichhardt Municipal and Marrickville Councils were amalgamated to form Inner West Council. As a result, census data for Canterbury-Bankstown and Inner West LGAs is available only for the 2016 Census.

Given the availability of data, this SEIA considers the 2016 Census data for the Canterbury-Bankstown, Strathfield, Inner West, and City of Sydney LGAs. In some instances, comparison is provided against the Greater Sydney area and NSW more broadly to provide context. Disclaimer: AECOM makes no representations or warranties of any kind, either expressed or implied, about the accuracy, reliability, completeness or suitability, including (without limitation) any warranty of merchantability or fitness for purpose in relation to the data provided on this figure. By using this data you agree that AECOM is under no liability for any loss or damage (including consequential or indirect loss) that you may suffer from use of the data.



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Note: The project area is confined to the roadway reserve with the exception of parks and special crossings Source: Department of Finance, Services and Innovation - Spatial Services (2018), Nearmap (2018)

3.2 Statutory context, policies and social impact guidelines

3.2.1 Statutory requirements

The assessment of socio-economic impacts is essential to the assessment of broader environmental impacts under both Commonwealth and NSW State environmental planning legislation, whereby 'environment' is defined to include the socio-economic environment. The statutory definition of the environment is provided in the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the NSW EP&A Act 1979.

3.2.2 Relevant guidelines

This technical report was undertaken with consideration of the following guidelines:

- Techniques for Effective Social Impact Assessment: A Practical Guide (Office of Social Policy, NSW Government Social Policy Directorate, 1995);
- International Principles for Social Impact Assessment (International Association for Impact Assessment, 2003); and
- Marrickville Development Control Plan (DCP) Generic Provisions Social Impact Assessment (Marrickville Council, 2011).

The principles outlined in these documents, as relevant to this assessment, are discussed below.

3.2.2.1 Techniques for Effective Social Impact Assessment: A Practical Guide

The guideline document, *Techniques for Effective Social Impact Assessment: A Practical Guide* (Office of Social Policy, NSW Government Social Policy Directorate, 1995) provides guidance on social impact assessment for a broad range of purposes, including the assessment of public and private sector policies and programs, as well as development proposals.

The guideline document presents a number of techniques and methodologies for the assessment of social impacts and provides a comparison of the ease of use or suitability of these methods, in order to assist in the development of a social impact assessment approach. The assessment has been undertaken to be consistent with the recommended techniques.

3.2.2.2 International principles for Social Impact Assessment

The International Association for Impact Assessment (IAIA) has prepared a guideline document, *International Principles for Social Impact Assessment* (2003), which provides a set of principles to guide the assessment of social impacts as part of broader environmental impact assessment.

The guideline defines social impacts as changes that can occur as a result of changes to people's:

- way of life: how they live, work, play and interact with each other on a day-to-day basis;
- **community**: its composition, cohesion, character, how it functions and sense of place;
- access to and use of infrastructure, services and facilities: provided by local, state, or federal governments, or by for-profit or not-for-profit organisations or volunteer groups
- **culture**: shared beliefs, customs, values and stories, and connections to land, places, and buildings (including Aboriginal culture and connection to country);
- **health and wellbeing**: state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity;
- **surroundings**: access to and use of ecosystem services², public safety and security, access to and use of the natural and built environment, and its aesthetic value and/or amenity;
- **personal and property rights**: whether people are economically affected, or experience personal disadvantage or have their civil liberties affected;

- **decision-making systems**: the extent to which people can have a say in decisions that affect their lives, and have access to grievance and remedy mechanisms; and
- **fears and aspirations**: related to one or a combination of the above, or about the future of their community, their aspirations for their future and the future of their children.

The IAIA principles, as described above have been used to identify social indicators for this assessment.

3.2.2.3 Marrickville Development Control Plan – Generic Provisions Social Impact Assessment

In 2011, the Marrickville Council (now part of the amalgamated Inner West Council) published Social Impact Assessment provisions to support its Development Control Plan 2011. The provisions provide guidance to assist in the preparation of social impact assessments for development applications to ensure social impacts were adequately considered in the local planning approvals process.

While the DCP does not apply to state significant infrastructure projects, this SEIA has been prepared generally in accordance with the requirements of the Social Impact Assessment provisions.

3.3 Approach and methodology

The assessment of social impacts associated with the project has used the social indicators method. This method uses social indicators such as availability and access to community services and health and wellbeing of the community to measure and monitor impacts and changes to the social environment.

Guidance provided in the Practical Guide (1995) notes that the social indicators method is appropriate for the assessment of impacts resulting from proposed developments, but also as an ongoing monitoring tool to measure community wellbeing.

In implementing the social indicator method, the following steps have been followed:

- 1. identify the study area in which the project may result in socio-economic impacts;
- 2. identify the social indicators against which socio-economic impacts will be assessed and monitored;
- 3. undertake a desktop review of social indicators and other relevant data in order to create a baseline profile of the community;
- 4. identify and describe project components or activities that are likely to result in potential impacts, both positive and negative;
- 5. review the results of the traffic, noise, air quality, and landscape and visual amenity studies to identify and assess potential social and cumulative impacts;
- 6. identify and assess potential social impacts and the significance of these social impacts, based on the extent, duration, severity of impacts and the sensitivity of different receivers and how they are likely to respond (based on knowledge of the community profile, their values, fears and aspirations, previous projects etc.). This includes consideration of potential cumulative social impacts; and
- 7. recommend management measures to address socio-economic impacts and any residual impacts.

3.3.1 Identification of social indicators

Social impacts identified for the project have been measured against changes to the following social indicators:

- current population and projected population growth and trends;
- health and wellbeing of the community;
- housing;
- education;
- employment and income;

- availability and access to community services, including social infrastructure such as education facilities, health and emergency services, places of worship and sporting and recreational facilities; and
- community identity, including the shared values and goals, as well as community cohesion.

The use of the social indicator method, and the development of a community profile, relies on the use of statistics. Statistics for the social indicators, identified above, have been obtained from the 2016 Census of Population and Housing (ABS, 2016).

3.3.2 Assessment of significance

A conceptual diagram of the methodology used is outlined in Figure 3-2.



Figure 3-2 Assessment methodology for determining significance of social impacts

The significance of each potential social impact was assessed considering the magnitude of the impact and the sensitivity of the receptor. Magnitude is informed by the following criteria:

- spatial extent: the geographic area affected by the impact, considering the number or proportion of people affected;
- duration: the timeframe over which the impact occurs; and
- severity: the scale or degree of change from the existing condition as a result of the impact.

The sensitivity of the receptor refers to the susceptibility or vulnerability of people or receiving environments to adverse changes caused by the impact, or the importance placed on the matter being affected. Sensitivity of receptors is also defined by the ability for people to adapt to change.

The definitions for the ratings of magnitude and sensitivity used in this assessment are presented in **Table 3-1** and **Table 3-2**.

Table 3-1 Magnitude rating definitions

Magnitude rating definitions		
Negligible	No discernible positive or negative changes caused by the impact	
Minor	 small change caused by the impact; generally temporary or short term in duration; impacts confined to a small number of receivers within the study area or 	

Magnitude rating definitions			
	 immediate locality; and able to be mitigated or managed such that impacts are deemed to be low. 		
Moderate	 moderate change caused by the impact; generally temporary or short to medium term in duration; spatial extent of impacts may vary across the affected LGAs; and able to be mitigated or managed such that impacts are deemed to be moderate. 		
Major	 large change caused by the impact; generally medium to long term in duration; spatial extent of impacts may vary across the affected LGAs, or the broader region or State; and negative impacts would require extensive mitigation and consultation with affected stakeholders. 		

Table 3-2 Sensitivity rating definitions

Sensitivity ra	Sensitivity rating definitions		
Neutral	 high resilience or ability to adapt to change; and issues not raised in feedback from stakeholders. 		
Low	 high resilience or ability to adapt to change; low vulnerability or low number of sensitive receivers/receptors affected; and issues rarely raised in feedback from stakeholders. 		
Medium	 moderate resilience or ability to adapt to change; moderate vulnerability or moderate number of sensitive receivers/receptors affected; and issues raised in feedback from some stakeholders. 		
High	 low resilience or ability to adapt to change; high vulnerability or high number of sensitive receivers/receptors affected; and issues raised in feedback from most stakeholders. 		

The assessment matrix in **Table 3-3** was developed to determine the significance of social impacts based on the magnitude of the impact and the sensitivity of potentially affected receivers.

Table 3-3 Significance assessment matrix

	Magnitude			
Sensitivity	Negligible	Minor	Moderate	Major
Neutral	Negligible	Negligible	Low	Medium
Low	Negligible	Low	Medium	Medium
Medium	Low	Low	Medium	High
High	Low	Medium	High	High

3.4 Community and stakeholder consultation

Community and stakeholder consultation undertaken for the project to date has enabled TransGrid to obtain an understanding of the community's perceptions and values about their environment, their community, and the project. Stakeholder consultation included the following key stakeholders:

- City of Sydney Council, Canterbury-Bankstown Council, Inner West Council, and Strathfield Council;
- government authorities including Roads and Maritime Services, NSW Environment Protection Authority, NSW Office of Environment and Heritage, Department of Industry – Water, Water NSW, Transport for NSW, Greater Sydney Commission, Sydney Coordination Office and Department of Education NSW;

- major development proponents/operators including Sydney Motorway Corporation, Sydney Metro, Sydney Light Rail and Sydney Trains;
- utility providers including Sydney Water, Telstra, Optus, Jemena and Viva Energy;
- directly affected receivers including schools, child care centres, businesses, property/landowners, residents, hospitals, healthcare providers, community groups and places of worship;
- the wider community, including local environment groups, resident action groups, pedestrian and bicycle safety groups, precinct committees, and Chambers of Commerce; and
- elected government officials.

Community and stakeholder consultation for the project began in late 2016. Consultation was carried out with stakeholders to assist in the identification and evaluation of route options. A series of community consultation events were carried out in mid-2017 to inform the community about the preferred route selection.

TransGrid started consultation to assist EIS development in late 2017. In early 2019, a revised route was identified - the rationale for the revised route is described in **Chapter 3 Project development and alternatives**. Community consultation on the revised route commenced in early 2019.

Consultation will be carried out during and after the public exhibition of the EIS and will be ongoing during detailed design and construction.

For further information on the consultation activities and tools utilised, refer to **Chapter 6 Consultation** of the EIS.

3.4.1 Outcomes of consultation

- Key issues and/or themes relevant to the assessment of socio-economic impacts raised during community consultation include: business and economic impacts associated with the construction of the project;
- amenity impacts on local businesses, including effects on the ability of customers, employees or business owners to enjoy and have access to their workplace and daily activities;
- access and connectivity issues for residents along the transmission cable route;
- amenity impacts such as noise, air quality and visual to individual receivers;
- amenity impacts to users of park lands; and
- removal of street trees (this report has considered impacts to vegetation in relation to visual amenity impacts. Biodiversity impacts are assessed in the Biodiversity Development and Assessment Report in **Appendix H**).

A detailed summary of consultation activities undertaken for the project and feedback received is provided in **Chapter 6 Consultation** of the EIS.

4.0 Description of the existing environment

4.1 Study area context

 Table 4-1 describes the land uses and key community infrastructure located within the local study area.

Construction precinct	LGA	Suburbs traversed by the project	Local study area summary	
Precinct 1 Including Rookwood Road substation	Canterbury- Bankstown	Potts Hill, Yagoona, Chullora	Precinct 1 has an industrial character, consistent with its land zoning. This area includes the existing substation facility located at the intersection of William Holmes Street and Rookwood Road in Potts Hill, the previous TAFE NSW South Western Sydney Institute Chullora campus (TAFE Chullora Campus) and industrial properties on the eastern side of Rookwood Road. The Rookwood Road substation has no nearby sensitive receivers. Along Muir Road there are large warehousing/light industrial premises with extensive hard surface areas and at-grade parking areas. This precinct also includes the construction laydown area at 12 Muir Road, Chullora.	
Precinct 2	Canterbury- Bankstown	Greenacre, Lakemba, Belfield, Campsie	Precinct 2 is characterised by low density residential development and is interspersed with pockets of other land uses. These include a sport field in Maiden Street and a small area at the intersection of Hillcrest Avenue and Rawson Roa which features a row of one and two storey shop top premises. There is also a small group of local shops at the intersection of Rawson and Waterloo Road. Along Wangee Road, there are some light industrial businesses and a mosque, where the	
	Strathfield	Greenacre Belfield	area becomes characterised by low density residential again. The transmission cable route then crosses under the freight rail line at Belfield and continues through a low density residential area until the end of the precinct.	
			This precinct also includes the construction laydown area at Cooke Park, Belfield.	
Precinct 3	Canterbury- Bankstown	Croydon Park	Precinct 3 is characterised predominantly by low density residential development and is interspersed with pockets of other land uses including mixed use, business development, high density residential	
	Inner West	Ashbury, Ashfield, Dulwich Hill Marrickville	(near Arlington Light Rail) and public open space at Henson Park and Amy Playground. Cooks River crosses through Precinct 3 near Croydon Park and Lees Park.	
			Precinct 3 has options for special crossings at three locations; the Cooks River, Arlington Light Rail and at Henson Park. Refer to Section 2.4 for more detail.	
			The study area also includes the construction laydown area at Peace Park, Ashbury.	

 Table 4-1
 Summary of the local study area
Construction precinct	LGA	Suburbs traversed by the project	Local study area summary
Precinct 4	Inner West	Marrickville, Enmore, Newtown	Precinct 4 is predominantly residential with light industrial/warehousing land uses around Addison Road and on the southern side of Edgeware Road. There are various open spaces including Enmore Park.
Precinct 5	Inner West	St Peters	The predominant land use and built form character
Including Beaconsfield West substation	City of Sydney	Alexandria	for Precinct 5 is open space, such as Sydney Parl and a mix of employment uses including commercial and light industrial.
			The area also includes the Beaconsfield West substation which is located between Burrows Road and the Alexandra Canal in Alexandria. There are no sensitive receivers in close proximity to this substation.
			The study area also includes the construction laydown areas at Camdenville Park, St Peters and Beaconsfield West substation, Alexandria.
Sydney South substation	Canterbury- Bankstown	Picnic Point	Sydney South substation is an industrial site and is located adjacent to Henry Lawson Drive and a number of walking and cycling tracks. A residential area is located to the north and there are several recreational facilities nearby including Revesby Beach, Cattle Duffers Flat picnic area and sporting facilities at Bill Delauney Reserve.

4.2 Socio-economic profile

The following profile has been informed by the most recent release of the Census of Population and Housing (ABS, 2016), unless otherwise stated. Whilst the study area may have experienced some demographic change since 2016, the data is still considered a reasonable representation for the purposes of this assessment.

Data are presented for the study area to establish a social baseline for communities in proximity to the project. Data for the four LGAs is provided in instances where suburb data was unavailable or where the broader LGA data is more appropriate or provides further context to inform the social baseline. The data presented for the study area was then compared against statistics for the Greater Sydney area and NSW.

The socio-economic profile presented through socio-economic statistics informs the assessment of sensitivity of the regional community. A detailed set of tables containing the relevant ABS data is provided in **Annexure A**.

4.2.1 Population demographics

Current population statistics for the regional study area demonstrate positive growth in all LGAs between the 2011 and 2016 Census of Population and Housing (ABS, 2011 and 2016). Key population statistics are outlined in **Table 4-2**. All statistics are informed by the 2016 data, unless specified otherwise.

Table 4-2	Population demographic statistics
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Population demograph	nics
Current population	• <u>Population growth</u> : within the study area, the suburb of Potts Hill demonstrated the largest percentage change between 2011 and 2016 of 100% growth (Potts Hill was previously an industrial area, with no resident population). Alexandria and Canterbury recorded the second highest percentage growth at 15%, followed by Campsie (14%) and

Population demographics		
	Yagoona (11%). Other suburbs between Greenacre and St Peters experienced a growth ranging between nine to two percent. Greater Sydney demonstrated a similar growth trend of 9%.	
Future population projections	 By 2036: <u>Projections</u>: Population for all LGAs within the study area is expected to increase, with the highest growth anticipated for Strathfield (74%) and City of Sydney (72%). Note: There is uncertainty associated with the precise forecast projections for trends in fertility and migration due to the influence of social, economic and political factors which are can change over time (DPE, 2016). 	
Age and gender structure	 <u>Gender structure</u>: Even distribution of males and females across the suburbs covered by the study area; <u>Median age</u>: Eight out of the 17 suburbs experienced an increase in median age between the 2011 and 2016 censuses. Six suburbs experienced a reduction in the median age and two suburbs maintained the same median age. City of Sydney and Strathfield LGAs reported comparatively younger median age of 32 compared with the Inner West and Canterbury-Bankstown LGAs (36 and 35 respectively). The Inner West and Canterbury-Bankstown LGAs are more in line with the Greater Sydney median age of 36; and <u>Population aged 65 years</u>: The LGA of City of Sydney had the lowest percentage (8%), followed by Strathfield (11%), the Inner West (12%) and Canterbury-Bankstown LGAs (14%). The percentage of the population aged 65 years and over for Canterbury-Bankstown is equivalent with Greater Sydney. 	
Household composition and family structure	 <u>Household types</u>: Potts Hill (87%) and Ashbury (85%) had the highest proportions of family households compared to the overall study area . Newtown (51%) and Alexandria (57%) had the lowest proportion of family households and reported comparatively higher proportions of single (i.e. lone person) and group (i.e. multiple unrelated persons) households; and <u>Family structure</u>: There are relatively higher proportions of couples without children in Alexandria (62%), St Peters (52%), Marrickville (40%), Dulwich Hill (39%) and Ashfield (41%). Suburbs located away from the city towards the west reported a higher proportion of couples with children, with Lakemba having the highest percentage of 61% and Alexandria having the lowest proportion, at 28%. Belmore recorded the highest proportion of single parent families (21%) with Alexandria having the lowest proportion of 8%. Greater Sydney had 50% of couples having children and 33% for couples without. 	
Ethnic diversity	 <u>Indigenous communities</u>: Suburbs located in the eastern portion of the study area (Alexandria, St Peters, Marrickville and Dulwich Hill) recorded a higher proportion of Indigenous people (2%), while the remaining suburbs and Greater Sydney had 1% or lower proportions of Indigenous people; <u>Born overseas</u>: Suburbs covered by the study area showed a diverse proportion of people born overseas (between 24% to 72%). The average proportion of people born overseas in Greater Sydney is 43%. Suburbs with an above average proportion of people born overseas in Greater Sydney is 43%. Suburbs with an above average proportion of people born overseas included Campsie (72%), Lakemba (69%), Ashfield (61%), Potts Hill (61%), Marrickville (45%), Belfield (44%) and Croydon Park (43%); <u>Languages</u>: Suburbs within the western portion of the study area reported a high proportion of households where a language other than English is spoken at home including Lakemba (83%), Greenacre (73%), and Yagoona (68%). However, only 6% of households in Potts Hill spoke a language other than English at home. Suburbs within the 	

Population demograph	ics
	eastern portion of the study area reported a lower number of households where a language other than English is spoken at home. Ashbury has the lowest proportion of households where a language other than English is spoken at home (15%), followed by Newtown (21%) and Alexandria (23%). Greater Sydney has a total of 38% of households where a language other than English is spoken at home; and
	 <u>Languages spoken</u>: A wide variety of languages other than English are spoken within the study area including Mandarin, Arabic, Cantonese, Thai, Indonesian, Greek, Italian, Vietnamese, Korean, Nepali, Hindu, Telugu, Bengali, and Urdu.

4.2.2 Health and wellbeing

A profile of the health and wellbeing of the community is provided in **Table 4-3** in the context of:

- the available health services in the area; and
- extent to which people in the community require assistance.

Table 4-3 Health and wellbeing statistics

Health and wellbeing	
Health services	Hospitals within the study area are likely to attract people from across the region as patients for hospital and medical services and as a place of employment for staff. Medical centres and general medical practices are likely to attract people from within their respective local area for non-emergency medical care and general wellbeing.
	The local study area is serviced by a wide range of health facilities, including numerous local medical centres and the MetroRehab hospital.
	Need for assistance refers to people with a profound or severe disability who require help or assistance in areas of self-care, mobility and communication due to long-term health conditions or a disability lasting six months or more, or from old age.
Need for assistance	The percentage of persons with a need for assistance ranges across the study area from 2% in Alexandria and Newtown to 8% in Yagoona, Greenacre and Belmore. City of Sydney LGA has the lowest percentage of persons with a need for assistance at 2% and Canterbury-Bankstown with the highest at 7%. This is reflected in the number of aged care facilities available in the study area in Canterbury-Bankstown. Greater Sydney showed an average of 5%.

4.2.3 Socio-economic indexes for areas

SEIFA broadly defines relative socio-economic advantage and/or disadvantage in terms of people's access to material and social resources, and their ability to participate in society. SEIFA aids in providing an assessment of the welfare of Australian communities and helps to determine areas that require funding and services (ABS, 2013). The higher the score and area decile indicates the lesser disadvantaged areas.

A profile of the socio-economic indexes for the study area is provided in Table 4-4.

Table 4-4 SEIFA

SEIFA	
Socio-Economic	Lakemba and Yagoona are ranked as the area subject to the highest level

SEIFA	
Indexes for Areas (SEIFA)	of disadvantage (decile 1) and Alexandria is ranked as the least disadvantaged (decile 10).

4.2.4 Housing

A profile of the type, availability and affordability of housing within the regional study area is provided in **Table 4-5**.

Table 4-5 Housing statistics

Housing	
Dwelling type	 <u>Separate houses</u>: Ashbury has the highest percentage of the population who occupy a separate house at 89%, with the lowest being Alexandria at 2%. This reflects the percentage of the population who occupy a separate house by LGA wherein City of Sydney is at 2%, Inner West at 25%, Strathfield at 34% and Canterbury-Bankstown at 57%. Greater Sydney have an equal proportion to Canterbury-Bankstown; <u>Flats, units or apartments</u>: The percentage of the population who occupy flats, units or apartments in the City of Sydney is 78%, in the Inner West is 41%, in Strathfield is 41% and in Canterbury-Bankstown is 26%. The Greater Sydney's percentage of people occupying flats, units or apartments is 28%. <u>However, on a suburb basis,</u> Lakemba and Ashfield recorded the highest percentage of the population who occupy flats, units or apartments at 70% and 66%, respectively. Greenacre and Belfield demonstrated the lowest at 6% and 7%; and <u>Semi-detached, row or terrace house, townhouse</u>: St Peters and Newtown have the highest proportion of residents living in semi-detached, terrace house and townhouses at 46% and 54%, respectively. The lowest recorded was 4% at Lakemba. Greater Sydney has a rate of 14%.
Tenure	 <u>Tenure types</u>: A higher proportion of properties within the study area are rented with the suburb of Newtown the highest rate of 56%, followed by Lakemba at 56%, with the lowest at Ashbury at 12%; and The tenure type trend is reflective of the Greater Sydney area, wherein 34% of properties are rented, followed by owned with a mortgage at 33% and 29% owned outright. NSW demonstrated an equal distribution across the tenure types (fully owned, owned with mortgage and rented) at 32% each.
Housing affordability and availability	 <u>Household income which contributes to mortgage repayments</u>: Greenacre recorded the highest proportion of household income which contributes to mortgage repayments of 40% followed by Belmore, Belfield and Yagoona with 39% and 38% respectively. These percentages are relatively high compared to the Greater Sydney area (29%) and the NSW average (31%); and <u>Household income which contributes to rental repayments</u>: Lakemba recorded the highest contribution to rental payments of 35% of total household income. Alexandria contributes the lowest proportion 24% which relatively aligns with those of the Greater Sydney area (25%) and NSW (26%).
Occupancy	 <u>Unoccupied rates</u>: most of the suburbs within the study area have a relatively similar overall unoccupied dwelling rates when compared to Greater Sydney at around 7% such as the suburb of Marrickville, Dulwich Hill, Ashbury and Yagoona. The highest percentage of unoccupied dwellings is found in the suburb of St Peters at 11%.

4.2.5 Education

A profile of education across the study area is provided in **Table 4-6**.

Table 4-6 Education statistics

Education	
Attendance	 There is an average of approximately 30% of the population across the study area that are attending educational facilities, where Greenacre recorded the highest rate of 37% and the lowest rate of 25% in Alexandria; The Strathfield, Inner West and Canterbury-Bankstown LGAs recorded 2% of people in attendance at tertiary or university educational facilities in alignment with Greater Sydney. The City of Sydney LGA recorded 3% attendance; and Canterbury-Bankstown recorded slightly higher proportions of people attending primary and secondary school education when compared to the other LGAs and with Greater Sydney.
Qualifications	 The highest percentage of people attaining a bachelor's degree level and above are in the suburbs of Alexandria (50%), St Peters (40%) and Newtown (48%). The suburbs with the lowest rate are Greenacre and Yagoona at 15%. A higher proportion of postgraduate and bachelor's degree qualifications were recorded for the City of Sydney (12% and 27%, respectively) and Inner West (10% and 23%, respectively) LGAs in comparison with Greater Sydney (6% and 16%, respectively); and Canterbury-Bankstown LGA recorded a lower proportion of people having a bachelor's degree qualification of 11% when compared with Greater Sydney at 16%.

4.2.6 Income and employment

A profile of the income and employment within the local area is provided in Table 4-7.

 Table 4-7
 Income and employment statistics

Income and employment		
Income	 The highest median household incomes were recorded for Alexandria at \$2,421 and St Peters at \$2,318 per week. The lowest median household income was for the suburbs of Greenacre (\$1,184 per week) and Lakemba (\$1,012 per week). Greater Sydney's rate is \$1,750 per week; and Suburbs with the Canterbury-Bankstown LGA had a much lower rate (\$1,298 per week) when compared to Greater Sydney (\$1,750 per week) and NSW (\$1,780 per week). 	
Employment	 The rate of unemployment as a total of the available labour force across the regional study area were lower than that of Greater Sydney as a whole (6%); However, on a suburb basis, the suburb of Lakemba and Yagoona recorded the highest unemployment rates at 13% and 10%, respectively; The lowest unemployment rate was recorded in Ashbury and Picnic Point (2%); and Alexandria (75%), St Peters (71%), Potts Hill (66%), Dulwich Hill (65%), Marrickville (63%), Potts Hill (66%) and Croydon Park have a higher full-time employment rate than the total for Greater Sydney at 61%. 	
Employment by industry section	 The 'health care and social assistance', 'retail trade', 'professional, scientific and technical services', 'education and training' and 	

Income and employme	nt
	 'construction' sectors employ the highest proportion of the labour force across the suburbs within the regional study area; and This reflects the industry sector percentage for Greater Sydney and NSW.
Employment by occupation	 There are a relatively higher percentage of occupations within the white-collar trade across the regional study area; and The top occupations recorded included 'professionals', 'managers and clerical and administrative', 'managers' and 'technicians and trade workers'.

4.3 Transport and access

4.3.1 Road network

A street index of all the roads along the transmission cable route is provided in the Traffic and Transport Assessment in **Appendix D** of the EIS, which also includes an inventory of the street characteristics (including road widths, speed limits, parking, bus stops etc.).

The road network along the transmission cable route is made up of the following types of roads:

- primary arterial roads (state): these roads provide links for vital or major movements of goods and services, people and public transport, are essential to network performance, and provide goods and services, mobility, public transport, tourism and community functions to centres of regional economic or social significance;
- sub arterial roads (regional): regional roads provide for medium level movements of people, goods and services and public transport, support and link State Roads, and provide those functions to centres of local economic or social significance; and
- local access roads (local): the primary purpose of local roads is to provide for local circulation and access to property, provide connection to the state and regional roads, and support the living environment in which they are located.

4.3.2 Public transport

There are several rail and light rail lines and bus routes that are located along the project route. These routes provide local and regional connectivity across Sydney, which include key commuter routes and, accessibility to services.

The Dulwich Hill light rail line is located within the study area and provides regular services between Central Station and Dulwich Hill.

The following heavy rail lines operate within the study area:

- Non-passenger line Carter Street and Lucerne Street (near the Enfield Intermodal, Belfield); and
- T3 Bankstown Line, T4 Eastern suburbs and Illawarra Line and T8 Airport and South Line -Bedwin Road.

While the transmission cable route does not run along any of the heavy rail or light rail lines, there are locations where the route crosses these transport corridors.

There are a number of bus services that utilise streets that may be impacted by the transmission cable route. These bus routes provide local and regional connectivity across Sydney, which include key commuter routes, accessibility to services and local amenity. These are presented in **Table 4-8**.

LGA	Bus routes	Details
Canterbury- Bankstown	M92	Sutherland to Parramatta with stops along Rookwood Road
	491	Hurstville to Five Dock with stops along King Street
	913	Bankstown to Strathfield with stops along Hillcrest Avenue

 Table 4-8
 Bus services operating along streets impacted by the transmission cable route

LGA	Bus routes	Details
	914	Greenacre to Strathfield with stops along Wangee Road
	925	East Hills to Lidcombe via Bankstown with stops along Muir Road
	939	Greenacre to Bankstown which crosses the transmission cable route at the intersection of Rawson Road and Noble Avenue and Rawson Road and Waterloo Road
	941	Bankstown to Hurstville via Greenacre with stops along Hillcrest Avenue and Rawson Road
	942	Lugarno to Campsie with stops along Seventh Avenue
	450	Strathfield to Hurstville with stops along Yangoora Road
Inner West	L23	Kingsgrove to City Martin Place with stops along Enmore Road
	M30	Sydenham to Taronga with stops along Enmore Road
	N40	East Hills to City Town Hall with stops along Enmore Road
	308	Marrickville Metro to Central Eddy Avenue via Redfern which stops along Edgeware Road
	352	Marrickville Metro to Bondi Junction via Oxford St, Crown Street and King Street which stops along Edgeware Road
	355	Marrickville Metro to Bondi Junction via Moore Park and Erskineville with stops along Enmore Road
	406	Five Dock to Hurlstone Park which stops along Old Canterbury Road
	410	Hurstville to Macquarie Park with stops along Seventh Street
	412	Campsie to City Martin Place via Earlwood with stops along Livingstone Road
	413	Campsie to Martin Place with stops along Brighton Avenue
	415	Campsie to Chiswick with stops along Carter Street
	423	Kingsgrove to Martin Place with stops along Enmore Road
	426	Dulwich to Martin Place with stops along Enmore Road
	428	Canterbury to Martin Place with stops along Livingstone Road and Addison Road
	422	Kogarah to Central Pitt St which crosses the transmission cable route at the intersection of the Princes Highway and May Street
	348	Wolli Creek to Bondi Junction which crosses the transmission cable route at the intersection of the Princes Highway and May Street

4.3.3 Active transport network

The transmission cable circuit would cross sections of the road network identified by Roads and Maritime Services (Roads and Maritime) as cycle routes. The cycle network is generally managed by local authorities. Cycle networks includes the shared path facilities at Cooks River which runs through Lees Park and Croydon Park, May Street between Campbell Street and Applebee Street and Sydney Park.

In addition, an urban green corridor in Sydney's inner west, the Greenway, is a planned bush corridor and hub for community arts and groups, bush care, walking and cycling between the Cooks River and Iron Cove. The Greenway shared path will introduce a shared pedestrian/cycle path that will cross the transmission cable route near Arlington Light Rail Station.

An alternative cable route is also proposed within the Greenway near Terry Road. The Greenway Master Plan was adopted by Inner West Council on 14 August 2018 and includes proposals for \$57 million of works to be implemented over the long term. High priority works are anticipated to be completed by 2022 and may overlap with the anticipated construction of the project.

4.4 Utilities

The existing major underground utilities located in the project area that have the potential to be affected by the project include:

- communications (Telstra, Optus, NBN);
- gas (Jemena);
- power (Ausgrid, Sydney Trains, TransGrid);
- sewer (Sydney Water);
- stormwater (relevant local councils);
- fuel pipelines (Viva Energy Australia);
- water supply (Sydney Water); and
- control cables and traffic lights (Roads and Maritime).

The depths of utilities within the project area would typically be about 0.5 to 2 metres below the ground surface.

4.5 Social infrastructure

The City of Sydney, Inner West, Canterbury-Bankstown and Strathfield LGAs provide a significant number of recreational facilities and community infrastructure essential to meeting the needs of local and regional communities. These areas are well-established suburban regions and consequently feature a wide variety of community facilities and services catering to the educational, cultural, entertainment, health and social needs of residents. Recreational and community infrastructure include:

- educational facilities;
- child care centres;
- places of worship;
- health, medical and emergency services;
- aged care facilities;
- community service facilities (such as libraries, community halls, civic centres); and
- sporting and recreational facilities.

Recreational and community infrastructure within the study area are identified in **Annexure B** and are shown in **Figure 4-1** to **Figure 4-4**.





COMMUNITY FACILITIES IN PROXIMITY OF THE PROJECT AREA - MAP 1

Note: The project area is confined to the roadway reserve with the exception of parks and existing substations Source: Department of Finance, Services and Innovation - Spatial Services (2018), Nearmap (2018)

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FIGURE 4-1

Powering Sydney's Future

Potts Hill to Alexandria Transmission Cable Project

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COMMUNITY FACILITIES IN PROXIMITY OF THE PROJECT AREA - MAP 2

Powering Sydney's Future Potts Hill to Alexandria Transmission Cable Project

Note: The project area is confined to the roadway reserve with the exception of parks and existing substations Source: Department of Finance, Services and Innovation - Spatial Services (2018), Nearmap (2018)





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COMMUNITY FACILITIES IN PROXIMITY OF THE PROJECT AREA - MAP 3 Powering Sydney's Future Potts Hill to Alexandria Transmission Cable Project

Note: The project area is confined to the roadway reserve with the exception of parks and existing substations Source: Department of Finance, Services and Innovation - Spatial Services (2018), Nearmap (2018)

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COMMUNITY FACILITIES IN PROXIMITY OF THE PROJECT AREA - MAP 4 Powering Sydney's Future

Potts Hill to Alexandria Transmission Cable Project

4.6 Community values

This section outlines the community values identified within the LGAs of the regional study area. The identification of community values and goals aids in the assessment of potential social and economic impacts by providing insight into how the community may perceive these impacts and assists in the assessment of indirect impacts on community identity, cohesion and sense of place.

A review of the strategic planning documents relevant to each LGA was undertaken to identify values and aspirations specific to each community. Local community plans were reviewed for the former LGAs of Ashfield, Marrickville, Canterbury, and Bankstown LGAs, as updates to these plans for the new amalgamated LGAs are yet to be published. A summary of the community identity, values and future aspirations for each LGA within the study area is provided in **Table 4-9**.

Table 4-9 Community identity, values and goals (sourced from community strategic planning documents for each LGA)

LGA	Community identity	Community values and goals
City of Sydney (City of Sydney Community Strategic Plan 2017-2021)	 a city characterised by a diverse community who live, work in and visit Sydney; and encompasses major civic functions, government offices, cultural and entertainment assets and transport infrastructure. 	 promote an environment of equality for all people; all people feel welcome, included, connected and accepted in the city and feel a sense of belonging; the urban environment promotes health and wellbeing; city residents, businesses, building owners, workers and visitors improve their environmental performance; the City's operations and activities demonstrate leadership in environmental performance; the extent and quality of urban canopy cover, landscaping and city greening is maximised; transport services and infrastructure are accessible; innovative, creative, retail, hospitality, tourism and small business activity is supported in the city centre; and the amenity of the city centre and villages is enhanced through the careful management and integration of transport.
Inner West (Marrickville Community Strategic Plan 2023)	 a diverse, vibrant and innovative inner-city community; diverse age profile, lifestyles and cultural backgrounds; strong sense of social justice; creative community with high participation in arts and cultural activities; and revitalised industrial areas with a focus on high technology, creative and eco business enterprises. 	 maintain cultural diversity; improved housing affordability; adequate availability of recreational facilities and open space; innovative urban planning that protects the character and heritage of the area; provision of adequate aged care, health, transport and educational services; increased availability of quality child care services; support for disadvantaged community members; and improved community wellbeing and safety.
Inner West (Ashfield 2022)	 a caring community of linked villages inspired by its rich cultural history, heritage and 	 a creative and inclusive community with safe, connected and accessible places; unique and distinctive neighbourhoods;

LGA	Community identity	Community values and goals
	 diversity; a place where everyone matters, and community life is enriched by generations of migrants from many parts of the world; and a place of unique, culturally enriched neighbourhoods, each with its own distinct character. 	 living sustainably; an attractive and lively town centre and thriving local economy; and an engaging and innovative local democracy.
Strathfield (Strathfield Community Strategic Plan 2017)	• a well-connected urban centre in Sydney's inner west with rich cultural diversity and a strong sense of community cohesion. The community is engaged with council in guiding a sustainable future and opportunities for education, recreation, employment and overall wellbeing in Strathfield.	 transport that is easy and safe to use, planning infrastructure that is adequate for growth and improved information and communication technologies to connect the local community to the world; the wellbeing of the local community is supported and enhanced by providing safe, clean, healthy and attractive environments, access to public spaces and community facilities, and opportunities to participate in programs and activities; providing opportunities for prosperity through innovative business development, improving regulatory systems and promoting a sense of civic pride creates economic benefits; supporting high quality, well planned and sustainable urban and natural environments that balance well designed and innovative development with existing local character while protecting and enhancing the natural environments; and responsible management of community assets and consistent delivery of efficient and effective services.
Canterbury- Bankstown (City of Canterbury Community Strategic Plan 2014-2023)	 a city where people from many diverse nations and cultures live together harmoniously, and there is a great sense of community; and all the services and facilities we need are here for learning, health and fitness, sport, art and cultural expression. 	 an attractive city with attractive streetscapes, balanced development and a prosperous economy; a strong and safe community which embraces diversity and provides adequate access to community facilities and health services; a healthy environment with transport alternatives, responsible use of resources and care for the natural environment; and a city with transport alternative which encourages an accessible transport network that caters for the needs of pedestrians, cyclists, public transport and motor vehicle users.
Canterbury- Bankstown (CB City 2028 (Community Strategic	• a city with a community-feel and diverse cultures that our neighbourhood promotes.	 a safe city where people care about each other, respect one another and celebrate their diversity in fun and interesting ways; a prosperous city where businesses succeed and there is high local

LGA	Community identity	Community values and goals
Plan))		 employment; a resilient city that has embraced the future with smart people, smart thinking and innovation; a green city which values and protects its natural environment – for people, for animals, for plants and for the future; a city that's easy to get around and through – accessible and safe, with shorter travel times; a well-designed and planned city, with proper infrastructure for the growing population; an open city with quality spaces and parks to enjoy and promote healthy living; a city with forward-thinking leaders, who listen to you and give you a chance to have a say in your city and your future; and a cosmopolitan city – a destination where people are unapologetically themselves, living and working together for a better future.

5.0 Assessment of potential construction impacts

5.1 Changes to land use

Temporary occupation of private and public land would be required for works such as the construction of special crossings and for construction laydown areas, as outlined in **Section 2.5.3**.

Construction laydown areas would be primarily located on public recreation areas and industrial properties. As they would not occupy the entire site, this would allow continued access and use of some of the space. At construction laydown areas, these areas would be occupied for up to two years. Following construction, the land would be returned to its original condition (or as otherwise agreed with the landowner). Works within these properties would require temporary access to the land prior to construction commencing and is likely to temporarily disrupt the existing use of these areas during their occupation (e.g. by reducing the available land area and through access and amenity impacts). This would be the case for construction laydown areas proposed at Peace Park, Cooke Park and Camdenville Park.

Special crossings would involve either the installation of a cable bridge or underboring and these crossings are primarily located on public recreation areas and areas zoned as infrastructure (e.g. rail corridor). Construction for special crossings is expected to take around 10 weeks to complete in total, however works would be staged and not continuous over a 10 week period. For this period, there would be a temporary change in land use which would only affect the direct area at each special crossing location. There is one cable bridge to be constructed over an active rail corridor at Bedwin Road and works would be timed with other rail works to limit disruption to freight and/or passenger rail services.

Works at the substations would be confined to the existing substation boundaries and would therefore not require any property acquisition or land use changes.

Further information on temporary occupation of property as a result of the project is provided in **Chapter 20 Land use and property** of the EIS.

Key receivers likely to be affected within each precinct are summarised in Table 5-1.

Table 5-1	Key impacts and	receivers likel	y to be affected	by changes in land use
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Precinct	Land use character	Key receivers likely to be affected by land use change during construction
1	Characterised by industrial area.	Owners of the industrial land for the cable
	Vacant industrial land adjacent to the proposed cable bridge on Muir Road over the discontinued rail line and the previous TAFE Chullora Campus.	bridge over a rail line on Muir Road, Chullora. Owners of the vacant land for the construction laydown area at 12 Muir Road, Chullora.
2	Suburban environment with low residential and parks.	Users of Cooke Park.
3	Suburban environment with low and high residential and parks.	Users of Peace Park due to the construction laydown area.
		<i>Cooks River crossing</i> Option 1 and 3: Users of Lees Park, Mildura Reserve, Cooks River cycle pathways.
		Option 2: Users of Mildura Reserve, Croydon Park and Cooks River cycle pathways.
		Dulwich Hill light rail corridor crossing Option 4a: No receivers for this option would be affected by land use change.
		Option 4b: Users of Johnson Park and the

Precinct	Land use character	Key receivers likely to be affected by land use change during construction
		Greenway cycle path and customers of the Arlington light rail.
		Henson Park crossing Option 5a: Users of Henson Park and Amy Street playground.
		Option 5b: No receivers for this option would be affected by land use change.
4	Light industrial and residential character.	No receivers affected by land use change for this precinct.
5	Suburban and light industrial environment with a rail corridor and recreational facilities.	Users of Camdenville Park, St Peters.
		Users of Sydney Park, including the western car park.
		Businesses adjacent to the Beaconsfield West substation on Burrows Road due to the construction laydown area.
Sydney South substation	Existing substation.	No receivers affected by land use change for this precinct.

Table 5-2 provides an assessment of the significance of impacts associated with the temporary occupation of land during construction.

Table 5-2 Assessment of significance – change of land use

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
1	Low , as the land to be temporarily occupied by the construction laydown area is currently vacant and its use would be negotiated with landowners. The industrial land for the cable bridge over a rail line on Muir Road, Chullora is not accessible to the public and its use would be negotiated with the landowners.	Minor , given the vacant land use at 12 Muir Road. The land would be used as a 24 hour construction laydown area for up to two years. The area would be used for storage of materials, equipment, excavated spoil and to provide space for other ancillary facilities. The installation of the cable bridge on the industrial land at Muir Road is expected to take around 10 weeks to complete in total. However, works would be constructed adjacent to the existing footbridge over a rail line that is not in service and as such, the scale of change from the existing condition would not be major.	Low
2	Low , as only one park would be affected (Cooke Park) during construction. There are a number of alternative recreational spaces available in the precinct for users of Cooke Park to use while a portion of the park is used as a construction laydown area such as Begnell Field and Bark Huts Reserve, both located less than 300 metres away from Cooke Park.	Moderate , given that only approximately 10% of Cooke Park would be used as a construction laydown area for up to two years. This change in land use would be noticeable to users but would affect a limited area only. The location was selected so that the cricket oval is not affected, and any organised sports would still be able to be played in the field.	Medium
3	Medium Construction laydown area Users of Peace Park would be affected during construction. There are several alternative recreational spaces available nearby for users of Peace Park that offer similar facilities which would be available to the community while a portion of the park is used as a construction laydown area such as W H	 Moderate, due to the number of recreational spaces to be temporarily affected during construction and for the reasons presented below. <i>Construction laydown area</i> Only approximately 8% of Peace Park would be used as a construction laydown area. The selected area is also located in the corner of the park and is separated from the main park area (i.e. picnic area, open field and playground area). This change in land use would be somewhat different than the existing condition and would be for a period of up to two years. As such, the magnitude for this laydown area is classed as moderate. <i>Cooks River crossing</i> Option 1 to construct the cable bridge adjacent to the existing pedestrian bridge 	Medium

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
	Wagener Oval.	near Lindsay Street would affect the recreational spaces at Mildura Reserve, Lees Park and the Cooks River cycleways.	
	Cooks River crossing Options for this crossing would have the potential to affect users of Lees Park, Mildura Reserve, Croydon Park and the Cooks River cycle pathways. There are several	Option 2 to underbore the Cooks River, surfacing in Croydon Park and Option 3 to underbore under the existing pedestrian bridge near Lindsay Street would involve construction activities such as the establishment of the work site at the drill launch area and receiver pit for the drill exit. Option 2 would affect the southeast corner of Croydon Park, whereas Option 3 would affect Lees Park.	
	alternative recreational spaces available nearby (such as Picken Oval and Croydon Park playing field) for users of these public recreational spaces while these recreational areas are in use.	The change in land use for all three options at this location would be noticeably different than the existing land use, however impacts would only affect a limited area at the selected recreational spaces, and the work site areas for all options would be located away from the primary areas where users are likely to occupy such as the sports fields and playgrounds. This impact would be for a period of up to eight to 10 weeks for underboring and up to 10 weeks for the cable bridge. As such, the magnitude of impact for these options are classed as moderate.	
	Dulwich Hill light rail corridor crossing Users of the Arlington light rail and users of Johnson Park and the Greenway cycle path would be affected by the land use changes for this underboring option.	Dulwich Hill light rail corridor crossing Impacts of Option 4a involve underboring activities including the establishment of the work site at the drill launch area and receiver pit for the drill exit. This option would have no receivers that would be directly affected by land use change as construction works would be within the rail corridor and not through any private properties. As such, the magnitude for this option is classed as negligible.	
	Henson Park crossing Users of Henson Park and Amy Street playground would be affected by the land use changes for this underboring option.	Option 4b to underbore from Constitution Road in order to cross the light rail in Dulwich Hill would affect users of Johnson Park and the Greenway cycle path and customers of the Arlington light rail for up to eight to 10 weeks. Whilst a large section of Johnson Park (northern section) would still be available for public use, given residual disruption to light rail, cycle path and park users, the magnitude of impact has been classed as major. All efforts would be made to ensure access is maintained along the shared path by locating the send and receive pits for the underbore away from the shared path.	
		Henson Park crossing Option 5a to underbore through Henson Park from Centennial Street to Amy Street would result in land use changes within a section of Henson Park for up to eight to 10 weeks to establish a worksite. This change in land use would be noticeably different than the existing land use and would affect a limited area only at this recreational space. As such, the magnitude for this option is classed as	

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
		moderate. There would be no land use changes for Option 5b to trench along Neville, Surrey and Charles streets.	
4	Neutral, given the lack of receivers that would be affected by any land use changes.	Negligible, considering no change in land uses in this precinct	Negligible
5	Medium, due to the number of recreational spaces to be temporarily affected during construction. However, there are alternative recreational spaces available in the precinct (such as Simpson Park) while a section of the Camdenville Park is used as a construction laydown area in this precinct and a section of Sydney Park is used as the works site for underboring.	Moderate, considering the area to be occupied as the construction laydown area for this precinct at Camdenville Park is currently being used as the laydown area for another major project. As such, the project would extend the unavailability of this area for public use for a further two years rather than monopolise additional areas of the park for construction. The Camdenville Park adjacent to the construction laydown area would not be affected and any organised sports would still be able to be played in the field. Underboring through the southern wetland at Sydney Park would change the land use for up to eight to 10 weeks due to the establishment of the work site at the drill launch area and receiver pit for the drill exit. This could affect the southern recreational space at Sydney Park. However, works are selected to occur away from primary areas where users are likely to occupy such as the open fields and playgrounds. This change in land use at the location would be noticeably different than the existing land use and would affect a limited area only. As such, the magnitude for this laydown area is classed as moderate.	Medium
Sydney South substation	Neutral, given the lack of nearby receivers.	Negligible, considering the location within an existing substation and the scale of change from the existing condition would not change the existing land use on site.	Negligible

5.1.1 Summary

There are a number of parks and recreational spaces and sections of rail corridors to be temporarily occupied and affected by the project during construction, however there are several alternative recreational spaces and parks available in the study area. The significance of the overall impacts due to temporary occupation of land for the project is medium.

5.2 Changes to demographic profile

As the project is located in inner and western Sydney and is accessible by car and public transport, it is unlikely that construction workers would need to relocate to the study area and as such it is unlikely that the demographic profile of the study area would change. The impacts of the construction workforce on social infrastructure and the economy are discussed in **Section 5.6** and **Section 5.7**.

Employment generated during the construction of the project would increase the number of people working in the study area as well as the number of people travelling to the study area for work. The project would require a peak construction workforce of 70 personnel which is expected to be sourced from the Greater Sydney area.

The existing demographic profile of the study area indicates the presence of potentially vulnerable groups that may require special consideration during construction planning and management. This may include:

- construction communication that is sensitive to diverse ethnic backgrounds and potential language barriers; and
- construction planning and scheduling that considers potential sensitive demographic groups such as young families with children and people over 65 who may be home-bound and particularly exposed to amenity impacts (e.g. noise and dust) during construction.

Given the diversity of the local communities and projected population growth for the region, the sensitivity of receivers was classified as high.

The presence of construction workers is expected to have a negligible effect on housing, population and demographics given the diversity of the local communities (as presented in **Section 4.1**), projected population growth for the study area and the ability of construction workers to travel to and from work site locations.

As such, the significance of the overall impacts to the demographic profile as a result of the project is low.

5.3 Amenity impacts

Amenity impacts include any factors that affect the ability of a person to enjoy the local environment. This may include changes to existing noise, vibration, changes to views or changes to air quality. Changes in amenity may also conflict with community values, contributing to a loss of or change in a community's sense of place, and subsequently a community's perceived identity. The assessment of significance for amenity impacts is based on the number of receivers that are sensitive to these impacts and their ability to adapt to changes in their environment.

Construction of the project has the potential to affect the following amenity factors:

- noise and vibration;
- air quality and odour; and
- visual and aesthetics.

For areas subject to trenching and excavation, small sections would be constructed at any one time. Similarly, for joint bay construction, cable jointing and special crossings, the duration of activities is short term, not expecting to exceed 10 weeks. This means that any one area would be subject to disruptions to amenity for a short period only. Areas around construction laydown areas would be subject to longer duration impacts of up to two years.

5.3.1 Noise and vibration impacts

Noise and vibration associated with construction of the project has the potential to affect the amenity of people in proximity to the construction activities. This includes nearby residents, businesses and community facilities.

A portion of construction works, such as those within major road reserves, in the vicinity of signalised intersections, or activities that need to proceed continuously, would need to be undertaken outside of standard construction hours. This is due to safety and traffic management reasons or to meet the requirements of government agencies, as discussed in **Section 2.5**. These activities would inevitably result in greater amenity impacts upon nearby sensitive receivers.

Exposure to noise and vibration can create annoyance, interfere with daily activities, interfere with concentration and memory particularly with regard to children's school performance and business activity that depends on quiet environments. It may also disrupt sleep and rest patterns. Noise and vibration impacts may affect the health and wellbeing of affected communities and can create or exacerbate health concerns such as hearing impairments and cardiovascular health (elevated blood pressure).

More detail is provided in the Construction Noise and Vibration Impact Assessment prepared for the project (refer to **Appendix E** of the EIS).

Construction noise and vibration for the project has been assessed as per the NSW EPA Interim Construction Noise Guideline (ICNG). The assessment considered typical worst case construction noise scenarios, i.e. those scenarios that would likely have the highest potential noise impacts on residential and other receivers due to the duration and timing of works. As part of this methodology the study area was divided into noise catchment areas (NCAs). NCAs were determined by reviewing existing land use and identifying groups of noise sensitive receivers which are likely to be exposed to a similar existing noise environment. Key high noise generating activities during construction include the use of jack hammers, piling rigs, diamond saws and rock breakers. These activities occur during site preparation, trenching and excavation work required for cable installation and joint bays, cable pulling and restoration of road surfaces.

Impacts are likely to be more explicitly felt in proximity to the transmission cable route, special crossings and construction laydown areas. Impacts to noise amenity would also be dependent on existing background noise levels within each noise catchment area (NCA). As the works for the transmission cable route progress closer to a receiver and then move further away, the noise levels would first increase and then reduce. Noise from construction laydown areas may be experienced for up to two years from construction plant parking, spoil haulage, storage of equipment and deliveries. However, noise generating activities at the laydown areas would likely be intermittent primarily occurring at the start and end of shifts and during the delivery of plant and material rather than continuously over the construction period. Some activities would take place at night-time.

Vibration-intensive works may include the use of jack hammers and rock breakers. The effects of vibration in buildings include the human disturbance or discomfort and where building damage may occur. Works undertaken within the human comfort minimum working distances may cause some people to experience annoyance and concern for cosmetic damage. Based on the indicative construction activities assessed for the project, some works may occur within the minimum working distances for human comfort and cosmetic damage of residential/commercial buildings and heritage listed items. It is noted that the minimum working distances can vary from site to site depending on ground conditions etc.

If vibration-intensive works are required within these minimum working distances, mitigation measures to control excessive vibration would be implemented. Receivers located within the minimum distances for human comfort would be notified of the potential impacts as part of the notification of highly noise affected receivers.

The findings of the Construction Noise and Vibration Impact Assessment indicate significant temporary exceedances of the NSW ICNG noise management levels would occur during construction of the project at the nearest residential and non-residential receivers. The noise predictions are worst case and actual impacts are likely to be lower, as not all modelled equipment would be used concurrently on site at all times.

A number of mitigation and management measures have been identified to reduce construction noise and vibration impacts at adjacent sensitive receivers. However, exceedances are still expected to occur at a number of residences. Additional reasonable and feasible mitigation and management measures would be considered as appropriate to address residual noise impacts on a site-specific basis. These measures are detailed in the Construction Noise and Vibration Impact Assessment (refer to **Appendix E** of the EIS).

The receivers that may be affected by construction noise within each precinct are characterised in **Table 5-3**.

Precinct	Noise character	Key receivers likely to be affected
1	Noise environment characterised by proximity to major roads traffic (Rookwood Road and the Hume	Businesses and community receivers adjacent to the transmission cable route and construction laydown area.
	Highway) and noise generated by industrial premises.	Users of Potts Park, a sporting field located opposite of the Rookwood Road substation on William Holmes Street.
2	Suburban environment characterised by local traffic noise.	Residents, businesses and community receivers adjacent to the transmission cable route, including Lakemba Mosque, Hampden Park Public School, Star Academy Kids Learning Centre, users of Rudd Park, Harcourt Reserve, CASS Family Day Care.
		Residents adjacent to the underboring of the freight rail line between Walker and Carter Street.
		Residents adjacent to the construction laydown area on Madeline Street, Birriwa Avenue and Chisholm Street.
		Users of Cooke Park.
3	3 Characterised by traffic noise from a suburban environment and traffic noise from Old Canterbury Road, New Canterbury Road and Livingstone Road.	Residences and businesses adjacent to the transmission cable route.
		Community receivers adjacent to the transmission cable route including, Canterbury Boys High School, Yeo Park Infants School, Yeo Park Primary Outside School Hours Care Centre, Yeo Park, Lee's Learning Centre and Marrickville High School.
		Residents adjacent to the construction laydown area on King Street and Fifth Street and users of Peace Park.
		<i>Cooks River crossing</i> Option 1 and 3: Residents on Lindsay Street and users of Lees Park, Mildura Reserve, Cooks River cycle pathways.
		Option 2: Nearby residents on Cowper Street, Adam Street and Croydon Avenue. Users of Mildura Reserve, Croydon Park and Cooks River cycle pathways.
		Dulwich Hill light rail corridor crossing Option 4a: Nearby residents on Terry Street and Hill Street.

Table 5-3 Receivers likely to be affected by construction noise

Precinct	Noise character	Key receivers likely to be affected
		Option 4b: Users of Johnson Park, customers of the Arlington light rail and nearby residents on Grove Street facing the lighting rail and residents on Constitution Road.
		Henson Park crossing
		Option 5a: Residents near Amy Street playground, Horton Street and Centennial Street and users of Henson Park and Amy Street playground. Option 5b: Residents adjacent to the project area along Neville Surrey and Charles Street.
4	Characterised by traffic noise from a suburban environment and traffic noise from Sydenham Road, Addison Road and Edgeware Road.	Residences, businesses and community receivers adjacent to the transmission cable route including businesses along Addison Road, Llewellyn Street, Edgeware Road.
		Community receivers attending St Pius' Catholic Primary School, Camdenville Public School and St Pius Enmore Catholic Church.
		Users of Enmore Park.
5	Characterised by aircraft noise and local traffic noise from a suburban environment and light industrial area.	Residences along Campbell Road, businesses and community receivers adjacent to the transmission cable route including businesses along May Street, Barwon Park Road and Burrows Road.
		Users of Camdenville Park and Sydney Park.
Sydney South substation	Characterised by noise from the existing industrial substation and traffic noise from Henry Lawson Drive.	Users of walking and cyclist tracks located in vicinity of the substation.

Table 5-4 provides an assessment of the significance of construction noise on amenity for each precinct.

Table 5-4 Assessment of significance – construction noise on amenity

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact
1	Low, given the industrial noise character and predominance of industrial receivers in the area.	Minor, given that no receivers are expected to be highly noise affected as the acoustic environment for this precinct is characterised by constant road traffic noise and some industrial noise. Noise and vibration would be generated from trenching and excavation works, which includes equipment such as the excavator, saw cutter and potentially a rock breaker for up to 10 weeks.	Low
		Truck movement to and from the 24 hour construction laydown area at 12 Muir Road would also be generating noise impacts for up to two years.	
2	High , given the nature of nearby receivers. Most receivers in this precinct are residential who are likely to value a quiet environment, particularly at night. The precinct also contains other sensitive receivers such as educational facilities, child cares and parks, a place of worship, the function of all of which rely to some degree on a quiet environment. As such, receivers in this precinct would have high sensitivity to noise and vibration impacts.	 Major, given that the geographic area is categorised primarily by residential land use and given the anticipated duration of the works in any one location. Noise would be generated from trenching and excavation works, which includes equipment such as the excavator, saw cutter and potentially a rock breaker. As such, the scale of change from the existing noise environment would be noticed by residents living adjacent to the route and other sensitive receivers such as Lakemba Mosque, Hampden Park Public School and Star Academy Kids Learning Centre. Residents adjacent to the underboring of the freight rail line (between Walker and Carter Street) would be susceptible to a change in the noise and vibration environment for up to eight to 10 weeks. This noise would be substantially higher than existing background levels. Residents adjacent to the construction laydown area at Cooke Park and users of the park would be subject to a change in the noise environment due to truck movements to and from the 24 hour construction laydown area for up to two 	High
3	High , given the nature of nearby receivers. Most receivers in this precinct are residential who are likely to value a quiet environment, particularly at night. The precinct also contains other sensitive receivers such as educational	years. Major , given the nature of the works proposed in this area and their timing. This includes noise generated from trenching and excavation works, including excavators, concrete cutters and potentially a rock breaker. Compared to background noise levels, the use of these items would result in substantial increases on an intermittent basis over a limited area for up to two years. Residents adjacent to the construction laydown area at Peace Park and users of the park would be susceptible to a change in the noise environment due to truck	High

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact
	facilities, child cares and parks, the function of all of which rely to some degree on a quiet environment. As such, receivers in this precinct would have high sensitivity to noise and vibration impacts.	 movements to and from the 24 hour construction laydown area for up to two years. The option to underbore at the three locations in this precinct (Cooks River, Dulwich Hill light rail corridor and Henson Park) would produce noise and vibration impacts from the establishment of the work site at the drill launch area and receiver pit for the drill exit. This noise would be noticeably higher than existing background levels and would affect a wide area. This impact would be for a period of up to eight to 10 weeks per location. 	
4	High, given the nearby residential land use and businesses. In this precinct, the transmission cable route is adjacent to several businesses, places of worship and educational facilities. As such receivers in this precinct would have high sensitivity to noise and vibration impacts.	Major , given that the geographic area is categorised primarily by residential land use and businesses. The scale of change from the existing noise environment would be noticed residents, students and teachers and businesses adjacent to the route and other sensitive receivers for this precinct as outlined in Table 5-3 .	High
5	High, given that in this precinct, the transmission cable route is adjacent to several businesses, places of worship and educational facilities. As such, receivers in this precinct would have high sensitivity to noise and vibration impacts.	Moderate, given that the geographic area is categorised primarily by industrial and recreational land use. However, the scale of change from the existing noise environment would be still be noticed by residents living along Campbell Road and other sensitive receivers for this precinct as outlined in Table 5-3 .	High
Sydney South substation	Low given the lack of nearby receivers.	Minor, considering the location within an existing substation and lack of nearby receivers.	Low

5.3.2 Air quality and odour impacts

Changes to air quality and odour emissions have the potential to adversely affect community health and local amenity. A qualitative Air Quality Impact Assessment was undertaken to assess air quality and odour impacts from the construction of the project (refer to **Appendix F** of the EIS). Potential dust emissions from the project were assessed using the methodology provided in the UK *Institute of Air Quality Management Guidance on the assessment of dust from demolition and construction* (IAQM 2014).

The Air Quality Impact Assessment highlighted that the construction activities that would produce the most dust in relation to the transmission cable route would be 'trenching and excavation' and 'excavation and establishment of joint bays', including associated stockpiling.

The Air Quality Impact Assessment identified that prior to the application of mitigation, the project would result in a medium dust soiling impact risk and a medium human health risk. These ratings are applicable to the whole study area, including all five construction precincts and substations.

Impacts are likely to be more explicitly felt in proximity to the transmission cable route, special crossings and construction laydown areas. Impacts would decrease as the works progress through each area moving further away from these receivers. Given that earthworks required for construction would occur over a relatively small area at any one time, dust emissions from construction are anticipated to be low.

In addition to dust, potential odour impacts associated with a release of landfill gas were identified at the former landfill sites at Camdenville Park and Sydney Park. Only small amounts of landfill gas are expected to be encountered and excavation works in any single area would be short in duration. Furthermore, with time landfill gas concentrations at former landfill sites are known to decrease and eventually stabilise (EPA, 2012). The landfill at these parks is now more than 30 years old and as such is not expected to be producing any substantial quantities of gas. Given the lack of methane detection during previous geotechnical investigations in the area, and the anticipated short duration of excavation works (for both trenching and underboring) in any one area, it is considered unlikely that significant odour impacts would arise during the project.

The Air Quality Impact Assessment found that the implementation of mitigation and management measures during the project would be sufficient to minimise the potential for off-site dust and odour impacts, rendering them 'not significant'.

The receivers that may be affected by construction dust emissions within each precinct are characterised in **Table 5-5**.

Precinct	Land use character	Key receivers likely to be affected
1	Industrial area with industrial businesses and the previous TAFE Chullora Campus.	Businesses and community receivers adjacent to the transmission cable route and construction laydown area, including pet store warehouse, RSPCA vet and petrol station
		Users of Potts Park which is located adjacent to the proposed works approximately 20 metres away.

Table 5-5 Receivers likely to be affected by construction dust and odour emissions

Precinct	Land use character	Key receivers likely to be affected
2	Suburban environment with low residential and parks.	Residents, businesses and community receivers adjacent to the transmission cable route, including Lakemba Mosque, Hampden Park Public School, Star Academy Kids Learning Centre, users of Rudd Park, Harcourt Reserve, CASS Family Day Care.
		Residents adjacent to the underboring of the freight rail line between Walker and Carter Street
		Residents adjacent to the construction laydown area on Madeline Street, Birriwa Avenue and Chisholm Street.
		Users of Cooke Park.
3	Suburban environment with low residential and parks.	Residents adjacent to the construction laydown area on King Street and Fifth Street.
		Users of Peace Park.
		Residences and businesses adjacent to the transmission cable route.
		Community receivers adjacent to the transmission cable route including Yeo Park Infants School approximately 65 metres away and other educational facilities such as Canterbury Boys High School, Yeo Park Primary Outside School Hours Care Centre, Yeo Park, Lee's Learning Centre and Marrickville High School.
		<i>Cooks River crossing</i> Option 1 and 3: Residents on Lindsay Street and users of Lees Park, Mildura Reserve, Cooks River cycle pathways.
		Option 2: Nearby residents on Cowper Street, Adam Street and Croydon Avenue. Users of Mildura Reserve, Croydon Park and Cooks River cycle pathways.
		<i>Dulwich Hill light rail corridor crossing</i> Option 4a: Nearby residents on Terry Street and Hill Street.
		Option 4b: Users of Johnson Park, customers of the Arlington light rail and nearby residents on Grove Street facing the lighting rail and residents on Constitution Road.
		Henson Park crossing
		Option 5a: Residents near Amy Street playground, Horton Street and Centennial Street. Users of Henson Park and Amy Street playground.
		Option 5b: Residents adjacent to the project area along Neville Surrey and Charles Street.
4	Suburban environment	Residences, businesses and community receivers adjacent to the transmission cable route including businesses along Addison Road, Llewellyn Street,

Precinct	Land use character	Key receivers likely to be affected
		Edgeware Road.
		Community receivers attending St Pius' Catholic Primary School, Camdenville Public School and St Pius Enmore Catholic Church.
		Users of Enmore Park.
5	Suburban and light industrial environment with a rail corridor and	Residences adjacent to the cable bridge at Bedwin Road.
	recreational facilities.	Residences, businesses and community receivers adjacent to the transmission cable route including businesses along May Street, Barwon Park Road and Burrows Road.
		Users of Camdenville Park and Sydney Park.
Sydney South substation	Industrial substation surrounded by bushland.	No receivers are expected to be affected.

Table 5-6 provides an assessment of the significance of air quality and odour impacts on amenity for each precinct.

Table 5-6 Assessment of significance – air quality and odour impacts on amenity

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
1	Low, given the industrial character of the area.	Minor , given the anticipated duration of works in any one location, the relatively small volumes of work to be undertaken in any one location and range of mitigation measures proposed such as rescheduling any dust generation work activities on days where forecast weather conditions may result in high dust emissions and dry surfaces at construction laydown areas and cable bridge work sites would regularly be watered to reduce dry and dusty conditions. There are several mitigation measures to minimise dust generated from vehicles and plant movements for the deliveries and storage of materials, equipment and excavated spoil. Furthermore, most surplus excavated material from earthworks (e.g. from cable trenching) would be trucked from site immediately without stockpiling. The implementation of mitigation and management measures during the project would be sufficient to minimise the potential for off-site dust and odour impacts and as such, the severity of impacts from the existing condition is not considered major.	Low
2, 3 and 4 Medium, given the nature of nearby receivers. Most receivers in this precinct are sensitive to air quality impacts such as those living in aged care facilities, children attending educational facilities and users of		Minor , given the anticipated duration of works, the relatively small volumes of work to be undertaken in any one location and the range of mitigation measures proposed. The implementation of mitigation and management measures during the project would be sufficient to minimise the potential for off-site dust and odour impacts and as such, the severity of impacts from the existing condition is not considered major.	Low
facilities. The ability of these receivers to adapt to a reduced	open recreational and sporting facilities. The ability of these receivers to adapt to a reduced air quality environment would be low.	The presence and extent of landfill gas at Arlington Oval Park, Marrickville Park and Henson Park are unknown and may require further assessment. Assessment would need to be undertaken prior to the commencement of construction as part of site investigations and would be the responsibility of TransGrid. Site investigations would include assessment for the presence and risk of subsurface landfill gas by sampling ground gas following the <i>Guidelines</i> <i>for the Assessment and Management of Sites Impacted by Hazardous Ground</i> <i>Gases</i> (NSW EPA, 2012).	
		The activities at the construction laydown areas and special crossings would occur at fixed locations and dust-generating activities would be less intensive than along the transmission cable route. Therefore, impacts are generally not expected at receivers nearby these locations. Underboring activities would be	

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
		stationary and take around 10 weeks to complete. However, the highest dust generating activities (i.e. excavation of launch and receive pits) would likely take around a week or less.	
5 Medium, given nature of nearby receivers. Most receivers in this precinct are sensitive to air quality impacts such as residents, workers at businesses and users of open recreational and sporting facilities. The ability of these receivers to	Minor, given the anticipated duration of works, the relatively small volumes of work to be undertaken in any one location and the range of mitigation measures proposed during the project would be sufficient to minimise the potential for off-site dust and odour impacts. Excavation activities (for trenching and underboring) at Sydney Park (around 700 metres) would take up to about eight to ten weeks, while this duration is expected to be less at Camdenville Park (about 180 metres).	Low	
	adapt to a reduced air quality environment would be low.	Odour impacts at both Camdenville and Sydney parks from landfill gas are not considered likely, however precautionary measures are proposed to be adopted to prevent human health exposure posed by landfill gas and any nuisance odours. The implementation of mitigation and management measures during the project would be sufficient to minimise the potential for off-site dust and odour impacts and as such, the severity of impacts from the existing condition is not considered major.	
Sydney South substation	Low, given the lack of nearby receivers.	Minor, considering the location within an existing industrial environment and scale of works.	Low

5.3.3 Visual amenity impacts

Impacts to landscape character and visual amenity have the potential to adversely affect local amenity. A Landscape Character and Visual Impact Assessment (LCVIA) was undertaken to assess visual impacts associated with the project (refer to **Appendix G** of the EIS). Impacts to landscape character and visual amenity were assessed using a methodology informed by the Roads and Maritime Services Environmental Impact Assessment Practice Note – Guideline for Landscape Character and Visual Impact Assessment (Reference number EIA-N04, 2013), and the Guidelines for Landscape and Visual Impact Assessment, Third Edition (2013).

The LCVIA assessed impacts to visual amenity and landscape character during construction of the project. Changes to landscape character, such as the potential removal of trees and night lighting for security and night time operations, could create visual amenity impacts. For example, changes to views could impact the ability of a resident or visitor to enjoy their home or daily activities.

Receivers in the local study area may experience temporary visual impacts due to construction works and construction vehicle movements. These impacts would largely be temporary with the work sites reinstated to their pre-construction condition (or as otherwise agreed with the relevant authority) at the completion of construction.

During the installation of the transmission cable circuit, excavation works would be required in close proximity to the root zone of some street trees. This has the potential to affect their viability and therefore removal of some trees may be required. Where required, tree removal would affect views in affected streets, with the character of the streetscape of some streets and public recreational spaces (e.g. those with more mature street trees) being affected to a higher degree. The replacement of any removed trees in the same location may not be possible due to the presence of the underground transmission cable circuit. In these circumstances, replacement of trees in more suitable locations would be considered. A tree replanting strategy would be developed in consultation with the relevant council.

Construction laydown areas would need to be operational at night to facilitate work outside of standard construction hours or accept deliveries or spoil and therefore they would have flood lit night lighting. Night lighting may also be required at work sites along the transmission cable route where work is to be undertaken outside of standard construction hours.

The receivers that may be affected by changes to visual amenity within each precinct are provided in **Table 5-7**.

Precinct	Land use character	Key receivers likely to be affected
1	This precinct has an industrial land use and built form character, consistent with its industrial zoning. This precinct comprises the existing substation facility on Rookwood Road and industrial properties on the eastern side of Rookwood Road.	Users of industrial businesses (i.e. employees, customers, visitors) and Muir Road, including pet store warehouse, RSPCA vet and petrol station. Users of Potts Park. Passers-by on Muir Road.
2	This precinct has a low density residential land use and built form character with a small area of light industrial along Punchbowl Road, consistent with the zoning pattern. The predominant built form is detached housing, one and two storeys in height.	Residents, businesses and community receivers adjacent to the transmission cable route, including Lakemba Mosque, Hampden Park Public School, Star Academy Kids Learning Centre and CASS Family Day Care. Users of recreational open spaces such as Rudd Park and Harcourt Reserve.
	The low density residential development is interspersed with pockets of other land uses which are complementary to the residential	Residents adjacent to the underboring of the freight rail line between Walker and Carter Street. Residents adjacent to the construction laydown area on Madeline Street, Birriwa Avenue and

Table 5-7	Receivers likely to be affe	cted by visual amenity
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Precinct	Land use character	Key receivers likely to be affected
	character. This includes a sports field and local shops.	Chisholm Street and users of Cooke Park.
	Street tree planting contributes to the overall character of the residential areas within this precinct, particularly to the west of Punchbowl Road.	
3	This precinct has a low density residential land use and built form character with medium density pockets around the local and neighbourhood centres. Streets in this precinct are typically wide with small street trees along the verges contributing to the character of the precinct.	Residences and businesses adjacent to the transmission cable route. Community receivers adjacent to the transmission cable route including, Canterbury Boys High School, Yeo Park Infants School, Yeo Park Primary Outside School Hours Care Centre, Yeo Park, Lee's Learning Centre and Marrickville High School.
	At the site proposed for the Cooks River crossing, the area is characterised by a vegetation corridor for the river with pockets of reserves and parks.	Residents adjacent to the construction laydown area on King Street and Fifth Street and users of Peace Park.
		<i>Cooks River crossing</i> Option 1 and 3: Residents on Lindsay Street and users of Lees Park, Mildura Reserve, Cooks River cycle pathways.
		Option 2: Nearby residents on Cowper Street, Adam Street and Croydon Avenue. Users of Mildura Reserve, Croydon Park and Cooks River cycle pathways.
		<i>Dulwich Hill light rail corridor crossing</i> Option 4a: Nearby residents on Terry Street and Hill Street.
		Option 4b: Users of Johnson Park, customers of the Arlington light rail and nearby residents on Grove Street facing the lighting rail and residents on Constitution Road.
		Henson Park crossing
		Option 5a: Residents near Amy Street playground, Horton Street and Centennial Street and users of Henson Park and Amy Street playground.
		Option 5b: Residents adjacent to the project area along Neville Surrey and Charles Street.
4	The Precinct that the transmission cable circuit would traverse includes commercial, light industrial and bulky goods retailing land use and a	Residences, businesses and community receivers adjacent to the transmission cable route including businesses along Addison Road, Llewellyn Street, Edgeware Road.
	built form character with residential development being less common. Buildings generally feature limited setbacks to the street, with heights	Community receivers attending St Pius' Catholic Primary School, Camdenville Public School and St Pius Enmore Catholic Church.

Precinct	Land use character	Key receivers likely to be affected
	of two to three storeys. There are some street trees but there is little other vegetation.	Users of Enmore Park.
	Enmore Park, which is within the vicinity of the transmission cable circuit in this part of the precinct, is a significant area of public open space, with mature trees and extensive green space.	
5	Immediately east of the rail bridge, the land use and built form character is mixed, with a range of light industrial, commercial and residential properties along the proposed transmission cable circuit, with limited setbacks from the street and scattered street trees. Two parks are also located within the precinct, which include Camdenville Park and Sydney Park. Sydney Park provides extensive green space with mature tree planting.	Residences adjacent to the cable bridge at Bedwin Road. Residences, businesses and community receivers adjacent to the transmission cable route including businesses along May Street, Barwon Park Road and Burrows Road. Users of Camdenville Park and Sydney Park.
Sydney South substation	Industrial substation surrounded by bushland.	No receivers are expected to be affected.

Table 5-8 provides an assessment of the significance of visual impacts on amenity for each precinct.

Table 5-8 Assessment of significance – visual aesthetic impacts

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
1	Low, given that most receivers in this precinct are currently exposed to the industrial landscape character. The ability of these receivers to adapt to a change in the landscape environment would be high.	Moderate, given the industrial area, the temporary nature of works in any one location and longer term duration of the Muir Road construction laydown area.	Medium
		Night lighting within the streetscape would also increase in brightness and frequency during the construction period but would be directed away from residential properties to avoid light spill into properties at night.	
		The change from the existing condition include site preparation works such as safety barriers and road signage, construction activities for the cable bridge and installation of a tent or demountable building over the joint bay to provide a controlled work environment and dry work site. The potential removal of street trees in Muir Road would open up views to the construction laydown area from the road and would break up the avenue of Eucalyptus along the road which currently form a continuous landscape element.	
		Views to the construction laydown area from Muir Road would be partially screened as the frontage is bordered by a tall black metal fence with mature street trees. The change from the existing condition at this location include deliveries and storage of plant and equipment at the construction laydown area for a period of up to two years.	
		Mitigation measures would be in place to reduce visual impacts during construction of the project such as designing bridges to reduce visual prominence.	

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
2	 High, given the predominant residential landscape character and local businesses in this precinct. Residents are typically a sensitive viewer group, given that they have a proprietary interest in the views from their homes and properties. Workers and customers of local businesses, people attending the mosque and workers and children at childcare centres and schools are considered to be less sensitive groups as they are visitors doing their daily business/activity rather than residents with a proprietary view from homes. 	Major, given the residential area, the temporary nature of works in any one location and longer term impacts at the Cooke Park construction laydown area.	High
		Night lighting within the streetscape would also increase in brightness and frequency during the construction period but would be directed away from residential properties to avoid light spill into properties at night.	
		Residential receptors at this location would view construction activity (including the tents or demountable buildings over joint bays and works associated with the surfacing of the underboring work) within the road reserve from close proximity and with little screening. The change from the existing condition would also include underboring activities for the crossing of the freight light rail for the duration of up to eight to 10 weeks.	
		The southern and western boundaries of Cooke Park predominantly bordered by back fences of properties, and one side bounded by the Cooks River. Views into the park from Chisolm Street are limited by large tree plantings along the boundary. The change from the existing condition at this location include deliveries and storage of plant and equipment at the construction laydown area for a period of up to two years.	
3	High, given the predominant residential and public recreational landscape	Major, given the residential area, the temporary nature of works in any one location and longer term impacts at the Peace Park construction laydown area.	High
	character in this precinct. <i>Construction laydown area</i> Residents living adjacent to Peace Park and users of the park would be affected during construction. Only a low number of receptors would see the view to the construction laydown area from residential properties. These receptors would see the construction laydown area only from their backyards over the top of rear fences. However, residents are typically a sensitive viewer group, given that they have a proprietary interest in the views from their	Night lighting within the streetscape would also increase in brightness and frequency during the construction period but would be directed away from residential properties to avoid light spill into properties at night.	
		The change from the existing condition include site preparation works such as safety barriers and road signage, deliveries and storage of plant and equipment to work sites and at the construction laydown area and installation of a tent or demountable building over the joint bays to provide a controlled work environment and dry work site.	
		Construction laydown area The location of construction laydown area is positioned away from the street frontage and contained by landform, built form and planting. Views into the park can be seen from Trevenar Street and from the rear property boundaries of homes backing onto the park. The change from the existing condition at this	
Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
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	homes and properties. Users of the park would receive views to the construction	location include deliveries and storage of plant and equipment at the construction laydown area for a period of up to two years.	
	laydown area from close proximity, but partially screened by vegetation (scattered mature trees) within the park itself. This receptor group are typically a sensitive group, as they have their attention focussed on a high quality landscape while within the park.	Cooks River crossing The options (cable bridge or underboring) to cross the Cooks River would have a high magnitude of change given that receptors at this location would be viewing construction activity within the quiet cul-de-sac and from a parkland setting, and the changes would potentially include the removal of trees with the park and mangroves along the river frontage.	
	Cooks River crossing Options for this crossing would have the potential to affect users of Lees Park, Mildura Reserve and the Cooks River cycle pathways. Residents adjacent to the work site with an unobstructed view to the works include those residing on Brighton Avenue, Cowper and Adam Street, Croydon Avenue and Lindsay Street.	Dulwich Hill light rail corridor crossing The options to underbore the light rail corridor would have a high magnitude of change given that receptors would see the construction activity associated with the underboring of the rail corridor, and the increased traffic on the quiet residential streets that lead to and from the light rail station would be a change from existing conditions. <i>Henson Park crossing</i> The magnitude of change during construction at Amy Street playground would be moderate, given that receptors at this location would have a limited visibility of	
	Dulwich Hill light rail corridor crossing Users of the Arlington light rail and users of Johnson Park would be affected by the land use changes for the options of underboring. Residents living nearby the construction works on Terry Street and Hill Street.		
	Henson Park crossing Residents nearby Henson Park and Amy Street playground and users of these facilities would be affected. Receptors within the playground are typically a highly sensitive receptor as views from the play areas contribute to the quality of the recreational experience. Visitors of the Henson Park sports playing field would		

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
	have a clear and mostly unobstructed view to the Amy Street footpath, they would be unlikely to be looking in that direction, as they will be focused on playing sports or watching the sporting events.		
4	High, given the predominant mixed-use landscape character in this precinct with sensitive receivers such as residents, businesses and community receivers attending schools, church and public recreational spaces. Residents are typically a sensitive viewer group, given that they have a proprietary interest in the views from their homes and properties. The view to the project would be seen from within Enmore Park. Recreational park users are typically a sensitive receptor group due to the importance placed on the visual quality of the landscape and as they use the park facilities for active or passive recreation. These receptors would see views to the road reserve from within the park to the north and west, although these views would be partially screened by mature trees within the park.	Moderate, given no construction laydown areas are proposed for this precinct and the relatively low number of residential receivers. Night lighting within the streetscape would also increase in brightness and frequency during the construction period. The change from the existing condition include site preparation works such as trenching and excavation works, safety barriers and road signage, deliveries and storage of plant and equipment to work sites and installation of a tent or demountable building over the joint bays to provide a controlled work environment and dry work site.	High

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
5	Medium, given the predominant mixed residential landscape character in this precinct.	Major, given the potentially longer term impacts at construction laydown areas (Camdenville Park and Beaconsfield West substation) for a period of up to two years and the large number of receivers.	High
		The magnitude of change during construction at Sydney Park would be high, given that receptors at this location would be viewing construction activity uncharacteristic for this setting within a park of high scenic value. However, these changes would be seen for a short period of time, during the construction of the project at this location.	
		Night lighting within the streetscape would also increase in brightness and frequency during the construction period. The construction laydown areas within these precincts would be lit during construction, which would be a change to the previously unlit sites.	
Sydney South substation	Neutral, given no receivers are located within the vicinity of the substation.	Negligible, given no receivers who would be affected by visual impacts are located within the vicinity of the substation and the changes would be contained within a utilitarian infrastructure site with low scenic value.	Negligible

5.3.4 Summary of amenity impacts

The assessment of significance for noise and visual amenity impacts is high based on the number of receivers that are sensitive to these impacts and their ability to adapt to changes in their environment.

The assessment of significance for air quality during construction is low as impacts are likely to be more explicitly felt in proximity to the transmission cable route, at special crossings and at construction laydown areas. Dust emissions would decrease as the works progress through each area moving further away from these receivers and earthworks required for construction would occur over a relatively small area at any one time.

5.4 Access and connectivity impacts

The Traffic and Transport Assessment in **Appendix D** of the EIS identified that the construction of the project would require potential road closures, lane closures and road diversions. These changes would affect the connectivity and access of the road network and active transport in the study area.

5.4.1 Road network impacts

Road closures could increase travel times for those attempting to access properties, businesses and community infrastructure as well as people travelling through the area. This is due to increased travel times or the need to use alternate routes to reach their destination. Reduced convenience of access to social infrastructure and local businesses has the potential to affect social amenity and lead to reduced community participation levels.

On residential streets, road closures would generally be implemented during the day with a diversion route signposted. Where a suitable diversion cannot be found and/or in the case of high traffic volumes and anticipated unacceptable network performance, road closures may occur overnight to minimise disruption to traffic flow (subject to Roads and Maritime approval) and reopen the following day prior to the morning peak hour. The duration of road closures would vary for each street, however would only be temporary.

It is anticipated that the traffic impacts from the traffic generated by construction activities would be able to be accommodated within the surrounding road network, with relatively low traffic volumes expected to be generated by the work sites, substation sites and construction laydown areas during peak hours.

Vehicle access to residential and business properties would be maintained at all times, where possible. Where restricting access to properties is required to enable construction works, vehicle access will be restored as soon as possible. Where access to a property cannot be maintained, affected owners/occupants will be informed and feasible and reasonable solutions for access to their specific location discussed.

Impacts are likely to be more explicitly felt by those businesses and residences located adjacent to the project area. Impacts include changes to access, connectivity and reduced availability of parking. However, as construction of the transmission cable circuit would progress linearly, these impacts would be temporary and decrease as construction moves away. Impacts would also be experienced by passers-by travelling along roads where temporary changes to access, detours or road closures occur.

Indirect impacts to the broader road network would occur across the local study area for the duration of construction (up to two years) from the presence of additional construction vehicles, road closures and detours.

On-street parking along and adjacent to the transmission cable route would also be restricted during construction in any one location. Parking restrictions would affect receivers located along the transmission cable route in every precinct.

Receivers that would be affected by changes to traffic and access from road network impacts during construction of the project are characterised in **Table 5-9**.

Table 5-9	Receivers likely to be affected by impacts to the road network
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Precinct	Land use character	Key receivers likely to be affected
1	Industrial area with industrial businesses and the previous TAFE Chullora Campus.	Users of industrial businesses (i.e. employees, customers, visitors) and Muir Road including pet store warehouse, RSPCA vet and petrol station.
		People travelling through the area in Precinct 1.
2	Suburban environment with low residential and parks.	Residents, businesses and community receivers adjacent to the transmission cable route, including Lakemba Mosque, Hampden Park Public School, Star Academy Kids Learning Centre and CASS Family Day Care.
		Users of recreational open spaces such as Rudd Park and Harcourt Reserve.
		Residents adjacent to the construction laydown area on Madeline Street, Birriwa Avenue and Chisholm Street and users of Cooke Park.
		People travelling through the area in Precinct 2.
3	Suburban environment with low and high residential and parks.	Residences and businesses adjacent to the transmission cable route.
		Community receivers adjacent to the transmission cable route including, Canterbury Boys High School, Yeo Park Infants School, Yeo Park Primary Outside School Hours Care Centre, Yeo Park, Lee's Learning Centre, Marrickville High School and Henson Park.
		Residents adjacent to the construction laydown area on King Street and Fifth Street and users of Peace Park.
		People travelling through the area in Precinct 3.
		<i>Cooks River crossing</i> Option 1 and 3: Residents on Lindsay Street and users of Lees Park, Mildura Reserve, Cooks River cycle pathways.
		Option 2: Nearby residents on Cowper Street, Adam Street and Croydon Avenue and users of Mildura Reserve, Croydon Park and Cooks River cycle pathways.
		<i>Dulwich Hill light rail corridor crossing</i> Option 4a: Nearby residents on Terry Street and Hill Street.
		Option 4b: Users of Johnson Park, customers of the Arlington light rail and nearby residents on Grove Street facing the lighting rail and residents on Constitution Road.
		Henson Park crossing
		Option 5a: Residents near Amy Street playground, Horton Street and Centennial Street and users of Henson Park and Amy Street playground.

Precinct	Land use character	Key receivers likely to be affected
		Option 5b: Residents adjacent to the project area along Neville Surrey and Charles Street.
4	Suburban environment with low residential and parks.	Residences, businesses and community receivers adjacent to the transmission cable route including businesses along Addison Road, Llewellyn Street, Edgeware Road.
		Community receivers attending St Pius' Catholic Primary School, Camdenville Public School and St Pius Enmore Catholic Church.
		Users of Enmore Park.
		People travelling through the area in Precinct 4.
5	Suburban and light industrial environment with a rail corridor and	Residences adjacent to the cable bridge at Bedwin Road.
	recreational facilities.	Residences, businesses and community receivers adjacent to the transmission cable route including businesses along May Street, Barwon Park Road and Burrows Road.
		Users of Camdenville Park and Sydney Park.
		People travelling through the area in Precinct 5.
Sydney South substation	Industrial substation surrounded by bushland.	No receivers are expected to be affected.

Table 5-10 provides an assessment of the significance of road network impacts for each precinct.

Table 5-10 Assessment of significance – road network impacts

Precinct	Sensitivity of receivers	Magnitude of impact	Significa rating	nce of impact
1	High, considering the presence of businesses in Precinct 1 that rely on access for deliveries and parking for customers and staff.	Moderate, given the anticipated duration, temporary nature of works in location, and that access to properties and businesses would be maintat times, where possible. Where access to a property cannot be maintaine consultation will be undertaken with affected landowners/occupants to in appropriate timeframes for restricting access, or to negotiate alternative solutions. Emergency services access would be maintained at all times.	ined at all d, dentify	High
		Key impacts to this precinct include diversions on William Holmes Stree would result in delays in travel time for workers.	t and	
		To ensure disruption to the road network is minimised during construction project, management measures have been proposed including alternate construction methodologies to minimise the required work zone and avour need for road closures. Where road closures cannot be avoided, they we managed through the implementation of traffic control measures in const with the relevant road authority and local council.	e bid the ould be	

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
2	High , considering the presence of businesses, residences and social infrastructure in this precinct that rely on access to their properties and on-street parking.	Moderate, given the anticipated duration, temporary nature of works in any one location, and that access to properties and businesses would be maintained at all times, where possible. Where access to a property cannot be maintained, consultation will be undertaken with affected landowners/occupants to identify appropriate timeframes for restricting access, or to negotiate alternative solutions. Emergency services access would be maintained at all times.	High
		Key impacts to this precinct include diversions to regional and local roads such Burwood Road and Seventh Avenue. This traffic management approach has the potential to result in a temporary loss of on-road parking and in delays in travel time for workers and for people travelling through this precinct.	
		Residential receptors along local streets would be affected as works would be undertaken during the day with traffic diversion and lane closure causing delays to property access or to their destination.	
		To ensure disruption to the road network is minimised during construction of the project, management measures have been proposed including alternate construction methodologies to minimise the required work zone and avoid the need for road closures. Where road closures cannot be avoided, they would be managed through the implementation of traffic control measures in consultation with the relevant road authority and local council.	

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
3	High, considering the presence of businesses, residences and social infrastructure in this precinct that rely on access to their properties and on-street parking.	Moderate, given the anticipated duration, temporary nature of works in any one location, and that access to properties and businesses would be maintained at all times, where possible. Where access to a property cannot be maintained, consultation will be undertaken with affected landowners/occupants to identify appropriate timeframes for restricting access, or to negotiate alternative solutions. Emergency services access would be maintained at all times.	High
		Diversions in this precinct would occur on local roads such as Constitution Road. Diversions of local streets and roads have the potential to result in a temporary loss of on-road parking and disruptions for people travelling through this precinct.	
		Residential receptors along local streets would be more affected as works would be undertaken during the day with traffic diversion and lane closure causing delays to property access or to their destination.	
		To ensure disruption to the road network is minimised during construction of the project, management measures have been proposed including alternate construction methodologies to minimise the required work zone and avoid the need for road closures. Where road closures cannot be avoided, they would be managed through the implementation of traffic control measures in consultation with the relevant road authority and local council.	

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
4	High, considering the presence of businesses, residences and social infrastructure in this precinct that rely on access to their properties and on-street parking.	Moderate , given the anticipated duration, temporary nature of works in any one location, and that access to properties and businesses would be maintained at all times, where possible. Where access to a property cannot be maintained, consultation will be undertaken with affected landowners/occupants to identify appropriate timeframes for restricting access, or to negotiate alternative solutions. Emergency services access would be maintained at all times.	High
		Diversions required in this precinct are on Illawarra Road and Addison Road (regional roads) and Agar Street and Newington Road (local roads). This would affect businesses on Addison Road and people travelling through this area and result in the temporary loss of on-road parking.	
		To ensure disruption to the road network is minimised during construction of the project, management measures have been proposed including alternate construction methodologies to minimise the required work zone and avoid the need for road closures. Where road closures cannot be avoided, they would be managed through the implementation of traffic control measures in consultation with the relevant road authority and local council.	

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
5	High, considering the presence of businesses, residences and social infrastructure in this precinct that rely on access to their properties and on-street parking.	Moderate , given the anticipated duration, temporary nature of works in any one location, and that access to properties and businesses would be maintained at all times, where possible. Where access to a property cannot be maintained, consultation will be undertaken with affected landowners/occupants to identify appropriate timeframes for restricting access, or to negotiate alternative solutions. Emergency services access would be maintained at all times.	High
		Key impacts to this precinct include diversions on May Street which is a regional road with several operating businesses. This has the potential to result in delays in travel time for workers and for people travelling through this area, temporary loss of on-road parking and delays to property access or to their destination. Traffic flow would be maintained on Princes Highway and local roads such as Barwon Park Road, Euston Road and Burrows Road.	
		To ensure disruption to the road network is minimised during construction of the project, management measures have been proposed including alternate construction methodologies to minimise the required work zone and avoid the need for road closures. Where road closures cannot be avoided, they would be managed through the implementation of traffic control measures in consultation with the relevant road authority and local council.	
Sydney South substation	Negligible, given no surrounding receivers at the substation.	Neutral, given no impacts to access and connectivity would occur at the substation as the works would be contained within the substation site.	Negligible

5.4.2 Active and public transport networks

Increased traffic volumes generated during construction, along with any required lane closures and other traffic management measures may affect the active and public transport networks including relocation of bus stops, diversions of bus routes, closures of bike lanes, bicycle friendly roads and pedestrian footpaths.

The Traffic and Transport Assessment (refer to **Appendix D** of the EIS) also examined the likely impacts of construction of the project on the surrounding active transport and public transport networks along the transmission cable route.

The works are contained primarily within the road reserve and it is anticipated that there would be minimal impacts to the pedestrian network (mainly footpaths). Pedestrian access to residences and businesses would be maintained at all times during construction of the project. Construction of the project may result in impacts to pedestrians having to use alternate access arrangements e.g. footpaths on the other side of the road.

An assessment of the bicycle network considered impacts to bicycle friendly roads, dedicated cycling lanes and separated cycleways. Separate dedicated cycleways are provided away from the carriageway, where cyclists have priority. These are generally provided as lanes within the carriageway and separated by a median strip, or as shared pedestrian/cycle paths along the footpath. The sections of the cycleway network likely to be impacted are:

- Lees Park or Croydon Park (Cooks River cycleway);
- Johnson Park at Arlington Station (the Greenway shared path);
- May Street between Campbell Street and Applebee Street (shared path); and
- Sydney Park.

The shared facilities would be reinstated after the completion of the construction works. Alternative cycle routes would be identified during construction and would be signposted for cyclists with prior warning to guide them around work sites. Diversion of the dedicated off road cycleway through Sydney Park, the Greenway shared path and the Cooks River cycleway during construction may result in increased travel times for users and may deter some cyclists, for example less confident and younger riders, from using the cycleway during construction.

The assessment of impacts to the public transport network as part of the Traffic and Transport Assessment found that there may be impacts to the bus network along the transmission cable route during construction of the project. The majority of the bus routes would be able to continue to operate uninterrupted with minor temporary amendments to the location of the bus stops when the construction works occur near a bus stop. However, some bus routes may need to be diverted due to instances where roads are too narrow for a bus to pass when construction works are in progress. The assessment determined that no impacts to rail and light rail services are anticipated as a result of the construction of the project.

Temporary relocation of bus stops could result in some pedestrians being required to walk further to bus stops. Diversions of bus routes may result in longer travel times for passengers. These minor delays are not considered likely to deter passengers from using public transport.

Impacts are likely to be more explicitly felt by users of bus stops and active transport networks located along the transmission cable route. These users would experience changes to access, connectivity and longer journey times. Impacts may also be experienced by passengers on public transport routes through the regional study area due to longer travel times resulting from traffic disruptions.

Table 5-12 provides an assessment of the significance of impacts to the active and public transport networks for each precinct.

Precinct	Land use character	Key receivers likely to be affected
1	Industrial area with industrial businesses and the previous TAFE Chullora Campus.	Users of industrial businesses (i.e. employees, customers, visitors) and Muir Road including pet store warehouse, RSPCA vet and petrol station.
		Commuters using active and public transport networks located adjacent to the project area in this precinct to get to their destination, including people who use bus services on Rookwood Road, Muir Road and Hume Highway.
2	Suburban environment with low residential and parks.	Commuters using active and public transport networks located adjacent to the project area in this precinct to get to their destination. Bus networks likely affected in this precinct include services on Hillcrest Avenue, Waterloo Road, Rawson Road, Wangee Road, Yangoora Road, Burwood Road and Seventh Avenue. Cyclists travelling along Punchbowl Road, Wangee Road, Omaha Street, Byron Street could also be affected.
3	Suburban environment with low and high residential and parks.	Commuters using active and public transport networks located adjacent to the project area in this precinct to get to their destination, including people who use bus services on Roslyn Street, King Street, Old Canterbury Road, Livingstone Road and Centennial Street. Cyclists and pedestrians who use the Cooks River cycleway and the Greenway shared path would also be affected. Other cycle networks potentially affected include on-road cycle lanes on Hanks Street and Pigott Street.
4	Suburban environment with low residential and parks.	Commuters using active and public transport networks located adjacent to the project area in this precinct to get to their destination including people who use bus services on Enmore Road, Addison Road and Edgeware Road. Cycle networks affected include on-road cycle lanes on Newington Road, Enmore Road, Addison Road, Juliett Street and Llewellyn Street.
5	Suburban and light industrial environment with a rail corridor and recreational facilities.	Commuters using active transport networks located adjacent to the project area in this precinct to get to their destination, including cyclists and pedestrians who use Sydney Park and the shared path on May Street.
Sydney South substation	Industrial substation surrounded by bushland.	No receivers are expected to be affected.

Table 5-11 Receivers likely to be affected by disruptions to active and public transport networks

Table 5-12 provides an assessment of the significance of impacts to the active and public transport networks for each precinct.

Table 5-12 Assessment of significance – active and public transport networks

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
1	Low due to the small number of receivers and services affected in Precinct 1.	Minor, considering the temporary nature of works in any one location, and the relocation of bus stops for the M92, 925 bus services on Rookwood Road, Muir Road and the Hume Highway would be short term.	Low
2	Medium, considering the number of affected services and receivers.	Minor, due to the temporary nature of lane closures and diversions to the public transport network and duration of works in any one location. Any potential bus route diversions and relocation for bs stops for some bus services travelling along Hillcrest Avenue, Waterloo Road, Rawson Road, Wangee Road, Yangoora Road, Burwood Road and Seventh Avenue would be short term.	Low
3	Medium, given the number of receivers that may be affected by the temporary relocation of bus stops and temporary closure of the cycleway within this precinct.	Moderate, due to the temporary nature of diversions to the active and public transport networks and duration of works in any one location. Key impacts include the potential relocation of bus stops for the 413, 491, 406, 412 and 428 bus services on Roslyn and King Street, Old Canterbury and Livingstone Road and Centennial Street.	Medium
		The sections of the cycleway network likely to be impacted are Lees Park and Croydon Park (Cooks River cycleway) and Johnson Park at Arlington Station (the Greenway shared path). Impacts to these cycleways during construction include the potential for increased journey time due to changes in road conditions under traffic control, which may temporarily discourage cyclists from using affected sections of the transmission cable route. This would last for a period up to eight to 10 weeks. However, temporary diversions would be put in place or if the alternative route is too onerous in terms of distance or grade for example, a temporary surface may be provided around the work site. These cycle paths would be reinstated following construction. All efforts would be made to ensure access is maintained along the path by locating the send and receive pits for the underbore away from the shared path.	
4	Medium, considering the number of affected services and receivers.	Minor, due to the temporary nature of lane closures and diversions to the public transport network and duration of works in any one location.	Low
		Any potential relocation of bus stops on Enmore and Edgeware Road and bus route diversion on Addison Road would be short term.	

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
5	Low , given the number of receivers that may be affected by the temporary closure of the cycleway within this precinct.	 Minor, due to the temporary nature of section closures to the public transport network and duration of works in any one location. No bus routes in this precinct would be affected however, sections of the cycleway network likely to be impacted are May Street between Campbell Street and Applebee Street (shared path) and Sydney Park. The cycleway on May Street is provided along the southern footpath as a shared pedestrian/cycle path, which is separate from the carriageway. It is anticipated that generally the works would be impacted. However, if works are required within the shared path, a diversion route would be signposted for cyclists, which may involve using the carriageway on May Street or alternative diversion routes. 	Low
		The cycleway through Sydney Park is a dedicated off-road cycleway facility for cyclists. Some parts of the cycleway would be impacted during construction but would be reinstated as soon as possible to minimise disruption to the cycleway. However, in all instances an alternative cycle route within the park would be signposted for cyclists with prior warning to guide them around work sites. There are multiple cycle routes within the park which allows for internal diversions to occur as the cycle paths will not all be closed simultaneously.	
Sydney South substation	Neutral, given no impacts to active or public transport would occur at the substation.	Negligible, given no impacts to active or public transport would occur at the substation.	Negligible

5.4.3 Summary of access and connectivity impacts

Construction of the project would require road closures, lane closures and road diversions which would potentially affect the connectivity and access of the road network and active transport in the study area. However, traffic flow would be maintained on all state roads, with diversions required on some sections of regional and local roads. Bus routes would be able to operate with minor amendments to the bus stop locations, with only some routes required to be diverted due to the available road width not being sufficient for a bus to pass the work site. The traffic and transport impacts to the regional study area are anticipated to be relatively minor, given existing alternate routes. There would also be minimal impacts to rail and light rail services as it is proposed to align the works with scheduled rail maintenance days or during the night where possible. Impacts to the cycling infrastructure/bicycle network along the route were also considered to be minimal. Where diversion routes are proposed along bicycle friendly roads, cyclists would follow the diversion routes. Works at the substations would not have adverse impacts on the surrounding road network, due to the works being contained within the site and the low traffic generation numbers for each site.

As such, the overall impact to access and connectivity based on the assessment for the road networks and activity and public transport networks is considered to be medium.

5.5 Utilities impacts

Changes to utilities and services located within the project area may be required during construction. This may include protection, relocation or realignment of electricity, gas, telecommunications (including optic fibre cables), control cables and traffic lights, stormwater, sewer or water mains. If works are not managed appropriately, causing disruptions to utilities, a range of impacts could result upon residents, businesses and social infrastructure providers/operators. Potential impacts to utilities during construction include planned disruption and restoration, the relocation of utilities and the potential for utilities to be damaged during excavation works. These events could result in service disruption to residences and businesses and associated economic impacts and, in the event a utility is damaged, risks to public and worker safety. Impacts could include loss of operation of business-critical machinery or equipment, impacts upon residential household routines, interruptions to classes at education facilities and interruption of scheduled night time sporting activity. **Chapter 11 Hazards and risks** of the EIS discusses impacts on utilities.

No major utility relocations are anticipated. The nature and extent of utility changes would be confirmed during detailed design for the project. Utilities would be supported and/or protected as required to avoid or minimise any disruption of services. Where utilities cannot be avoided, they would be relocated. Potential impacts from relocation would include temporary service disruption. In the event that utilities need to be relocated, this would be undertaken in consultation with utility service providers (e.g. Sydney Water).

Mitigation measures have been proposed to reduce the potential impacts on utilities - refer to **Section 8.0**.

5.5.1 Summary

Considering the presence of businesses and residents across all precincts who depend on utility services, the sensitivity of users to disruptions or loss of service would be high. This sensitivity may be reduced for planned outages through adequate consultation, so people may make alternative arrangements. Given that utility relocation works (if required) and associated outages would be for an anticipated duration, and likely restricted to a local area only, the magnitude of these impacts would be moderate. On this basis, the significance of the overall impact on the social and economic environment would be high.

5.6 Social infrastructure impacts

Social infrastructure facilities generally operate at a local, district and/or regional level and are defined by the scale of the population catchment they serve. Social infrastructure can often be classified as a sensitive receiver in its own right.

The following section outlines impacts upon important social infrastructure within the study area. A complete list social infrastructure located within the study area is identified in **Annexure B**.

5.6.1 Educational facilities

There are a range of educational facilities in the study area, including child care centres, primary schools, secondary schools, specialised schools and tertiary education facilities as shown on **Figure 4-1** to **Figure 4-4**.

Child care centres and primary schools within the study area would mainly draw students from the local area, accommodating residents within a local catchment around each facility. High schools and tertiary education facilities are more likely to draw from a wider catchment, particularly where they are situated close to public transport services or provide specialised education services.

Child care and educational facilities located adjacent to the project area which may experience amenity impacts are outlined in **Table 5-13**.

Table 5-13 Receivers (educational facilities) likely to be affected by amenity impacts

Precinct	Key receivers likely to be affected
1, 5 and Sydney South substation	No educational facilities adjacent to the project area would be affected.
2	Employees, parents/caregivers, students and visitors to Wangee Road Childcare Centre, Hampden Park Public School, Whizz Kidzz Early Childhood Centre, Star Academy Kids Learning Centre and CASS Family Day Care.
3	Employees, parents/caregivers, students and visitors to Canterbury Boys High School, Yeo Park Infants School, Yeo Park Primary Outside School Hours Care Centre, Yeo Park, Lee's Learning Centre and Marrickville High School.
4	Employees, parents/caregivers, students and visitors to Enmore Children's Centre, Only About Children Enmore, St Pius' Catholic Primary School, Camdenville Public School and Camdenville Outside School Hours Care.

Table 5-14 provides an assessment of the significance of impacts to educational facilities for each precinct.

Table 5-14 Assessment of significance – educational facilities

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
1, 5 and Sydney South substation	Neutral, given no education facility receivers would be affected.	Negligible, given no education facilities are located within the vicinity of Precinct 1, Precinct 5 and the Sydney South substation.	Negligible
2, 3 and 4	High, considering the range of educational facilities in proximity to the project area. Employees and students at educational facilities are likely to value and rely on a quiet environment during school hours. The ability of these receivers to adapt to a higher noise environment would be low.	 Moderate, given the anticipated duration and temporary nature of construction in any one location. Temporary impacts which would be experienced by educational facilities located adjacent to the project area include changes to access and connectivity and increased noise and vibration associated with construction works. Impacts such as increased travel times due to changes to traffic as a result of diversions may also be experienced by educational facilities across the local study area. Noise and vibration impacts could result in the reduced capacity for concentration of students, teachers, children attending child care facilities, and carers as well as disturbance of child care sleep times. However, construction directly adjacent to schools will be undertaken outside of 	High
		school hours wherever possible to minimise impacts to amenity, traffic and access. Where full road closures are required adjacent to schools, which would affect school access, work will be undertaken outside of school hours to minimise access and traffic impacts, wherever possible. Consultation with the schools would be undertaken, in accordance with the community consultation framework (CCF), to identify appropriate timeframes for restricting access, or to negotiate alternative solutions.	

5.6.2 Health, medical and emergency services facilities

There are a number of health and medical facilities within the local study area as shown on

Figure 4-1 to **Figure 4-4**, including a hospital, medical centres and general medical practices. No emergency facilities are located within the local study area.

Health and medical facilities located adjacent to the local study area which may experience amenity impacts are outlined in **Table 5-15**.

Table 5-15 Receivers (healthcare providers)	likely to be affected by amenity impacts
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Precinct	Key receivers likely to be affected
1, 5 and Sydney South substation	No healthcare providers are located adjacent to the project area for these precincts.
2	Patients and workers at medical centres located on Rawson Road and a medical centre on the corner of Wangee Road and Punchbowl Road.
3	There is one medical facility located adjacent to the project area for Dr. Stanton Ian at Dulwich Hill.
	There are also several medical centres located within the local study area of these precincts such as the Marrickville Road Medical Practice. There is also one hospital (MetroRehab Hospital) located approximately 330 metres away from the transmission cable route.
4	No healthcare providers are located adjacent to the project area.
	However, there are several medical centres located within the local study area for this precinct including First Care Medical Centre and the Enmore Centre For Spine and Musculoskeletal Disorders.

Table 5-16 provides an assessment of the significance of impacts to health, and medical facilities for each precinct.

Table 5-16 Assessment of significance – health, medical facility services

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
1, 5 and Sydney South substation	Neutral , given no receivers would be affected within these precincts.	Negligible, given no healthcare providers are located adjacent to the project area within these precincts.	Negligible
2, 3 and 4	Medium, considering the number of health and medical facilities within these precincts. However, only a limited number of these facilities are directly within the project area and are located within the surrounding local study area.	Moderate, given the anticipated duration of construction in any one location and temporary lane closures and/or diversions. Impacts which would be experienced by medical services located adjacent to the transmission cable route include disturbance of patients due to construction noise and activity, temporary changes to access and connectivity and potential loss of on-road parking. Indirect impacts such as increased travel times due to changes to traffic from road closures or road diversions may also be experienced by health and medical facilities across the local study area.	Medium

5.6.3 Aged care facilities

Aged care facilities, including retirement homes and nursing homes, are located within the local study area, as shown on **Figure 4-1** to **Figure 4-4**.

Aged care facilities located adjacent to the project area which may experience amenity impacts are outlined in **Table 5-17**.

Table 5-17 Receivers (aged care facilities) likely to be affected by amenity impacts

Precinct	Key receivers likely to be affected
1, 5 and Sydney South substation	No aged care facilities are located adjacent to the project area or within the local study area for these precincts.
2	No aged care facilities are located adjacent to the project area.
	However, there are several aged care facilities located within the local study area of this precinct including the Bankstown Aged Care Facility on Chiswick Road at Greenacre, CASS Residential Aged Care Facility on Fifth Avenue at Campsie and the Wallgrove Aged Care Facility on Yerrick Road at Lakemba. Patients, workers and visitors at these would be likely receivers.
3	No aged care facilities are located adjacent to the project area.
	Patients and workers at the Bupa Aged Care Ashbury at Ashfield, approximately 70 metres north of the intersection of Hanks Street and Hardy Street.
4	No aged care facilities are located adjacent to the project area.
	However, there is one aged care facility located within the local study area of this precinct called the Willandra Aged Care on George Street at Marrickville.

Table 5-18 provides an assessment of the significance of impacts to aged care facilities for each precinct.

Table 5-18 Assessment of significance – aged care facilities

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
1, 5 and Sydney South substation	Neutral, given no receivers from aged care facilities would be affected within these precincts.	Negligible, given no healthcare providers are located adjacent of the project area within these precincts.	Negligible
2, 3 and 4	Medium, considering the number of aged care facilities within these precincts. However, none of these facilities are directly within the project area and are located within the surrounding regional study area.	Moderate, given the anticipated duration of construction in any one location. The aged care facilities in these precincts are not located directly adjacent to the construction works and therefore would not be affected by direct amenity impacts such as noise. Receivers may also experience changes to access and connectivity due to the presence of construction vehicles and temporary diversions.	Medium

5.6.4 Places of worship

Places of worship within the study area cater to a diverse range of religious and cultural backgrounds, as identified in **Section 4.5** and shown on **Figure 4-1** to **Figure 4-4**.

Places of worship located adjacent to the project area which may experience amenity impacts are outlined in **Table 5-19**.

Table 5-19 Receivers (places of worship) likely to be affected by amenity impacts

Precinct	Key receivers likely to be affected
1	No places of public worship are located adjacent to the project area or within the local study area.
2	Community members attending St John Vianney Catholic Church and Lakemba Mosque which are located adjacent to the project area.
3	Community members attending Holy Trinity Anglican Church, Dulwich Hill which is located adjacent to the project area.
4	Community members attending Marrickville Kingdom Hall of Jehovah's Witnesses Church, St Pius Enmore Catholic Church and Catholic Parish of Our Lady of The Southern Cross Church which are located adjacent to the project area.
5 and Sydney South substation	No places of public worship are located adjacent to the project area or within the local study area.

Table 5-20 provides an assessment of the significance of impacts to places of worship for each precinct.

Table 5-20 Assessment of significance - Places of worship

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
5 and Sydney South substation	Neutral , given no receivers would be affected within these precincts.	Negligible , given no places of worship are located adjacent of the project area within these precincts.	Negligible
1, 2, 3 and 4	High, given the number of places of worship within the local study area and taking into account that the attendees of the places of worship are a sensitive receptor group. Furthermore, taking into consideration the cultural and religious importance of these places.	 Moderate, given the anticipated duration and temporary nature of construction in any one location. Impacts which would be experienced by places of worship located adjacent to the transmission cable route include disturbance of community members attending service due to construction noise and activity, and temporary changes to access and connectivity, with the potential to result in increased travel times, detours due to road closures. Indirect impacts such as increased travel times due to changes to traffic from road closures may also be experienced by places of worship across the local study area. 	High

5.6.5 Community service facilities

Social infrastructure which supports community services, including community centres, halls, function centres and public libraries provide opportunities for:

• educational, recreational and health services and programs;

- community, cultural and social activities;
- places that build community connections and relationships; and
- places that improve the inclusion of community members, especially within areas of high culturally and linguistically diverse communities.

Community service facilities in the study area are shown on Figure 4-1 to Figure 4-4.

No community service facilities are located adjacent to construction laydown areas or proposed cable bridges. Community service facilities located adjacent to the project area which may experience amenity impacts are outlined in **Table 5-21**.

Table 5-21 Receivers (community service facilities) likely to be affected by amenity impacts

Precinct	Key receivers likely to be affected
1 and Sydney South substation	No community service facilities are located adjacent to the project area.
2	Community members using the Lebanese Muslim Association which is a place which provides social, religious, educational and recreational services for the Muslim community.
	There are also several community services facilities within the local study area of this precinct such as the Greenacre Library and the Greenacre Community Centre.
3	No community service facilities are located adjacent to the project area.
	There are also several community services facilities within the local study area of this precinct such as Plumtree (children development centre), Marrickville Youth Resource Centre, Marrickville Intensive English Centre and scouts' halls.
4	No community service facilities are located adjacent to the project area.
	However, there is one community service facility within the local study area of this precinct called the Guthrie House, a not-for-profit drug and alcohol rehabilitation service for women.
5	No community service facilities are located adjacent to the project area.
	However, there is one community service facility within the local study area of this precinct called the Launchpad Youth Community, a centre which provide services and support to young people, so they can participate, engage and belong in the community.

Table 5-22 provides an assessment of the significance of impacts to places of worship for each precinct.

Table 5-22 Assessment of significance – community service facilities

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
1 and Sydney South substation	Neutral, given no receivers would be affected within these precincts.	Negligible, given no community service facilities are located adjacent of the project area within these precincts.	Negligible
2, 3, 4 and 5	Low, given the limited amount of community facilities adjacent to the project area. Community services within the local study area are provided indoor in Precincts 2 to 5.	 Minor, given the anticipated duration and temporary nature of construction in any one location. Impacts which would be experienced by community service facilities located adjacent to the transmission cable route include disturbance due to construction noise and activity, and temporary changes to access and connectivity, with the potential to result in increased travel times, detours due to road closures. Indirect impacts such as increased travel times due to changes to traffic from road closures may also be experienced by community members using these facilities across the local study area. 	Low

5.6.6 Recreational and sporting facilities

There are a number of passive and active spaces in the study area in the form of parks, reserves, playgrounds and sporting fields as identified on **Figure 4-1** to **Figure 4-4**.

Recreational and sporting facilities which may experience amenity impacts are outlined in Table 5-23.

Table 5-23 Receivers (recreational and sporting facilities) likely to be affected by amenity impacts

Precinct	Key receivers likely to be affected
1	Users of Potts Park.
2	Users of Allum Park and playground, Ethyl Pyers Reserve, Cooke Park (construction laydown area), Rudd Park and Harcourt Reserve.
3	Users of Mildura Reserve, Canterbury Racecourse, Yeo Park, Peace Park (construction laydown area) and Johnson Park.
	<i>Cooks River crossing</i> Option 1 and 3: Users of Lees Park, Mildura Reserve, Cooks River cycle pathways.
	Option 2: Users of Mildura Reserve, Croydon Park and Cooks River cycle pathways.
	<i>Dulwich Hill light rail corridor crossing</i> Option 4a: No receivers affected by recreational and sporting facilities impacts for this option.
	Option 4b: Users of Johnson Park.
	Henson Park crossing Option 5a: Users of Henson Park, Amy Street playground and the Marrickville and District Hardcourt Tennis Association.
	Option 5b: No receivers affected by recreational and sporting facilities impacts for this option.
4	Users of Enmore Park.
	Users of the Annette Kellerman Aquatic Centre may also be affected given the facility's location adjacent to Enmore Park. However, the aquatic centre is not located adjacent to the project area.
5	Users of Camdenville Park (construction laydown area) and Sydney Park.
Sydney South substation	Users of walking and cycling tracks located in the vicinity of Sydney South substation.

Table 5-24 provides an assessment of the significance of impacts to recreational and sporting facilities for each precinct.

Table 5-24 Assessment of significance – recreational and sporting facilities

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
1	Medium, given the temporary nature of construction and receivers using the sports fields would have views to the project for short periods of time.	Minor, given the anticipated duration and temporary nature of construction works adjacent to Potts Park. Potts Park would not be affected by any direct amenity impacts.	Low
2	Medium , given the number of affected recreational spaces in this precinct, the temporary nature of construction and the number of alternative recreational spaces available within the local study area.	 Moderate, given the anticipated duration, temporary nature of construction, the small overall area to be occupied for construction laydown area. Approximately 10% of Cooke Park would be used as a construction laydown area for up to two years. The location was selected so that the cricket oval is not affected, and any organised sports would still be able to be played in the field. Other alternative sporting and recreational fields are available in the precinct such as Begnell Field and Bark Huts Reserve, both located less than 300 metres away from Cooke Park. Users of the recreational and sporting facilities located in this precinct would be affected by noise impacts from trenching and excavation works and truck movements to and from the 24 hour construction laydown area. The nature of works proposed in this area could result in temporary changes to visual amenity and access and connectivity. 	Medium
3	Medium, given the number of affected recreational spaces in these precincts, the temporary nature of construction and the number of alternative recreational spaces available within the local study area. <i>Construction laydown area</i> Users of Peace Park would be affected during construction. There are several alternative recreational spaces available nearby for users	Moderate , given the anticipated duration, temporary nature of construction, the small overall area to be occupied for construction laydown areas, and the number of alternative recreational spaces available within the local study area. Users of shared path facilities (cyclists and pedestrians) at the Cooks River and the Greenway cycleways would be impacted during construction including through increased journey time due to changes in road conditions under traffic control, which may temporarily discourage cyclists from using affected sections of the transmission cable route. This would last for a period up to eight to 10 weeks. However, temporary diversions would be put in place or if the alternative route is too onerous in terms of distance or grade for example, a temporary surface may be provided around the work site. These cycle paths would be reinstated following construction.	Medium

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
	of Peace Park that offer similar facilities which would be available to the community while a portion of the park is used as a construction	Construction laydown area Only approximately 8% of Peace Park would be used as a construction laydown area. The selected area is also located in the corner of the park and is separated from the main area (i.e. picnic area, open field and playground area).	
	laydown area such as W H Wagener Oval. <i>Cooks River crossing</i> Options for this crossing would have the potential to affect users of Lees Park, Croydon Park, Mildura Reserve and the shared path users of the Cooks River cycle pathways. There are several alternative recreational spaces available nearby for users of these public recreational spaces while a section of Mildura Reserve and Lees Park is used as a construction site for underboring works such as Picken Oval and Croydon Park.	<i>Cooks River crossing</i> Option 1 and Option 3 to construct the special crossing, either via cable bridge or underbore, adjacent to the existing pedestrian bridge near Lindsay Street would affect the recreational spaces at Mildura Reserve, Lees Park and the Cooks River cycleways. Option 2 to underbore the Cooks River surfacing in Croydon Park. Underboring works would involve construction activities such as the establishment of the work site at the drill launch area and receiver pit for the drill exit. Option 1 and Option 3 would affect the recreational spaces of Mildura Reserve, Lees Park and the Cooks River cycleways, whereas Option 2 would affect the south-east corner of Croydon Park and Mildura Reserve. The change in land use for all options at this location would be noticeably different than the existing land use, however impacts would only affect a limited area at the selected recreational spaces and the work site areas for all options would be located away from the primary areas where users are likely to occupy such as the sports fields and playgrounds. This impact would be for a period of up to eight to 10 weeks for underboring and up to 10 weeks for the cable bridge.	
	Dulwich Hill light rail crossing Users of Johnson Park and the Greenway cycle path would be affected for the options of underboring at this location for Option 4b.	Dulwich Hill light rail corridor crossing Option 4b to underbore from Constitution Road in order to cross the light rail in Dulwich Hill would affect users of Johnson Park and the Greenway cycle path as a result from site establishments for underboring activities using up the southern section of the park. However, the larger northern section of Johnson Park would still be available for public use.	
	Henson Park crossing Users of Henson Park would be affected by Option 5a to underbore at this location.	Henson Park crossing Option 5a to undertake underboring works through Henson Park from Centennial Street to Amy Street may affect users of Henson Park for up to eight to 10 weeks. Impacts to Henson Park from underboring works would affect a limited area only. Users of the Marrickville and District Hardcourt Tennis courts which are adjacent to Amy Street playground, would be indirectly affected by noise and visual impacts during this period.	

Precinct	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
4	Medium, considering construction works would occur adjacent to Enmore Park and users would only be temporarily affected the amenity change. Furthermore, there are several alternative recreational spaces available nearby that offer similar facilities to the community.	Minor, given the anticipated short-term duration of construction works adjacent to Enmore Park. Park users would see the changes from the boundaries of the park, and through screening vegetation within the park. Furthermore, only a section of the park would be adjacent to the project area on Enmore Road and as such, users would still be able to use the park facilities (such as the playground) without being directly affected by amenity impacts.	Low
5	Medium, due to the number of recreational spaces to be temporarily affected during construction. However, there are several alternative recreational spaces available in the precinct while a section of the Camdenville Park is used as a construction laydown area such as Simpson Park and Sydney Park. The majority of Sydney park would not be affected by construction works.	Moderate, given that the area to be occupied as the construction laydown area for this precinct at Camdenville Park is currently being used as the laydown area for another major project. As such the project would extend the unavailability of this area for public use for a further two years rather than monopolise additional areas of the park for construction. However, any organised sports would still be able to be played in the field. The Camdenville Park adjacent to the construction laydown area would experience amenity impacts for up to two years from construction plant parking, spoil haulage, storage of equipment and deliveries. Noise generating activities at the construction laydown areas would likely be intermittent primarily occurring at the start and end of shifts and during the delivery of plant and material rather than continuously over the construction period. With respect to air quality and odour impacts, the implementation of mitigation and management measures during construction would be sufficient to minimise the potential for off-site dust and odour impacts. Underboring through the southern wetland at Sydney Park would change the land use for up to eight to 10 weeks due to the establishment of the work site at the drill launch area and receiver pit for the drill exit. This could affect the southern recreational space at Sydney Park. However, works are selected to occur away from primary areas where users are likely to occupy such as the open fields and playgrounds. This change would be noticeably different than the existing land use and would affect a limited area only.	Medium
Sydney South substation	Low, considering the limited number of receivers.	Negligible, given the temporary nature of construction, and works contained within the substation site.	Negligible

Social infrastructure facilities across the local study area would be affected by construction activities. Those facilities located closer or adjacent to construction works and construction laydown areas would experience higher levels of amenity impacts. Precincts 2, 3, 4 and 5 are mainly characterised by urban development with more educational facilities, health and aged care services, places of worship and recreational and sporting facilities. There are three public recreational spaces that would be used for the construction laydown areas and a few public recreational spaces that would be affected by special crossings. Impacts would be for a period of up to two years at recreational areas used for construction laydown areas and for a period of up to 10 weeks for other construction activities. However, only a limited area at each recreational area would be taken up for the works and the selected area would be separated from the main area of these parks (i.e. picnic area, open field and playground area).

Given this, users of these services and facilities were assessed to have a higher level of sensitivity to amenity changes during construction. As such, the overall significance for social infrastructure impacts during construction in the study area considered to be medium.

5.7 Business and economic impacts

Potential economic impacts, both positive and negative, from construction of the project are anticipated to include:

- changes in business turnover, demand for services and employment due to construction expenditure;
- an increase in construction workforce and employment;
- changes to amenity of local businesses; and
- changes to accessibility of local businesses, including passing trade.

Expenditure associated with the construction of the project would be of value to the local economy. This can occur through increased expenditure at local businesses due to purchases by construction workers and potential increased employment as a result of the project. Construction expenditure and employment for the project also aligns with the local community goals of economic prosperity, thriving local business and local employment opportunities (refer to **Section 4.6**).

Employment of construction contractors would be required for the works, with the employment of an estimated 70 construction and site management personnel at the peak of construction. Demand for construction workers associated with the project and other major construction projects occurring across Greater Sydney may result in increased demand for construction personnel.

5.7.1 Construction business impact assessment

Businesses that may directly benefit from construction of the project are likely to include specialist construction subcontractors and those businesses who service or supply goods to the construction industry such as food and beverage retailers, accommodation providers, and other retail outlets that would cater to the day-to-day needs of the construction workforce.

However, there is also the potential for impacts on amenity of local businesses during the construction works, with impacts potentially resulting in loss of trade as customers may shop elsewhere to avoid adverse conditions during construction of the project. Amenity impacts include any factors that affect the ability of customers, employees or business owners to enjoy their workplace and daily activities such as noise, vibration, traffic disruptions, detrimental changes to views or changes to air quality.

A full list of businesses within the local study area is provided in Annexure B.

Changes to traffic and access during construction of the project may also affect revenue of local businesses. Potential impacts include reduced passing trade due to construction and access restrictions, increased travel time for employees, service and delivery vehicles and customers; and impacts to employee and customer parking and access. Assessment of impacts as a result of changes to traffic and transport arrangements during construction of the project are provided in **Section 5.3** and **Section 5.4** and in **Chapter 7 Traffic and transport** of the EIS.

Table 5-25 Receivers	(businesses)) likely t	o be affe	ected by	/ amenity	/ imi	oacts
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Precinct	Land use character	Key receivers likely to be affected
1	Industrial area with industrial businesses and the previous TAFE Chullora Campus.	Employees, couriers and customers for businesses located adjacent to the transmission cable route, including those on William Holmes Street, Rookwood Road and Muir Road. Such
	Businesses located within this precinct include industrial and wholesale businesses and a veterinary hospital.	businesses include Anytime Fitness, Hair and Beauty Kingdom, Garlock, Pet Care 2000 and Volkswagen Head Office.
2	Suburban environment with low residential and parks.	Employees, couriers and customers for businesses located adjacent to the transmission
	Businesses located within this precinct include retail, convenience stores, cafes, restaurants, petrol stations, childcares, mechanics.	cable route, including those on Rawson Road, Wangee Road, Yangoora Road and Seventh Avenue, such as King of Sweets Greenacre, Rawson Road Mixed Business and Fruit Shop, Caltex Lakemba and Campsie Convenience Store.
3 and 4	Suburban environment with low residential and parks. Businesses located within this precinct include retail, convenience stores, cafes, restaurants, childcares, mechanics.	Employees, couriers, and customers for businesses located adjacent to the transmission cable route, including those on King Street, Constitution Road, New Canterbury Road, Herbert Street, Livingstone Road, Addison Road, Enmore Road and Llewellyn Street. Businesses include First Street Pantry, Cycling Projects, Tyrepower Dulwich Hill, Sideways Deli Café, Car Lovers - The Ultimate Carwash, Faye Cahill Cake Design and The Vic On the Park.
5	Suburban and light industrial environment with a rail corridor and recreational facilities.	Employees, couriers and customers for businesses located adjacent to the transmission cable route, including those on May Street,
	Businesses located within this precinct include industrial and wholesale businesses, dance school, restaurants, petrol station.	Barwon Park Road, Euston Road and Burrows Road. Businesses include ASLAN Coffee Roasters, various businesses at 7 Unwins Bridge Road, St Peters, Sublitech, Graffic Art Mount and Yiamas Greek Taverna.
Sydney South substation	Industrial substation surrounded by bushland.	No businesses are located adjacent to the project area.

Table 5-26 provides an assessment of the significance of impacts to businesses for each precinct.

Table 5-26 Assessment of significance – business impacts

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
1	Medium, given the existing industrial character of the precinct and the sensitivity of these businesses to changes in amenity.	Moderate, given the industrial character of the precinct, the anticipated duration, temporary nature of works in any one location, and the small number of receivers.	Medium
2, 3, 4 and 5	High, due to the presence of businesses sensitive to changes in amenity and access.	Moderate , given the large number of potentially affected receivers and considering the anticipated duration and temporary nature of works in any one location.	High
		Potential impacts experienced by employees and customers include noise and vibration from trenching and excavation works and truck movements and associated dust emissions.	
		Other impacts that would be experienced by receivers include changes to access and connectivity may be experienced due to presence of construction vehicles and temporary diversions. Increase in construction workforce can have a positive economic impact on local businesses such as cafes and convenience stores.	
Sydney South substation	Neutral , given no businesses are located within the vicinity of the substation.	Negligible, given that works would be confined within the substation.	Negligible

5.7.1.1 Summary

Local businesses across the local study such as cafes, restaurants and retailers may be affected by temporary changes during construction. These changes include amenity impacts such as noise and vibration impacts and impacts to access and connectivity which would disrupt employees, customers, and deliveries of these local businesses. However, businesses may also experience economic benefits during construction such as businesses who service or supply goods to the construction industry such as food and beverage retailers, accommodation providers, and other retail outlets that would cater to the day-to-day needs of the construction workforce. As such, the significance of the overall impacts to local businesses during construction of the project is high.

5.8 Summary of construction impacts

Land use changes during construction involve the use of a number of parks and recreational areas as construction laydown areas for the project. Due to the relatively long though temporary occupation (two years), the impact is considered to be medium given the overall area occupied per park is small and there are a number of alternative recreational spaces available in the local study area.

In regard to demographic changes, the construction of the project would result in an increase in the number of people working in the local study area and an increase in persons travelling to the local study area for work. Given the diversity of the local communities and projected population growth for the region as well as the accessibility of the project by car and public transport, the overall impacts to the demographic profiles as a result of the project is considered to be negligible.

Amenity impacts such as noise and vibration, air quality and odour and visual amenity associated with construction of the project progressing linearly along the proposed route could result in temporary impacts on individual residential, business and social infrastructure receivers. The assessment of significance for noise and visual amenity impacts is high based on the number of receivers that are sensitive to these impacts and their ability to adapt to changes in their environment. The assessment of significance for air quality during construction is low as impacts are likely to be more explicitly felt in proximity to the transmission cable route, at special crossings and at construction laydown areas. Dust emissions would decrease as the works progress through each area moving further away from these receivers and earthworks required for construction would occur over a relatively small area at any one time.

Construction of the project would result in an increase in the number of traffic movements within the local study area and may affect local travel, including trip duration, wait times at intersections and road safety. A large portion of the transmission cable route intersects residential, recreational and commercial areas. As such, a large number of receivers who rely on access and connectivity of the road network to get to their properties and attend to their day-to-day activities would be affected. Traffic flow would be maintained on all state roads, with diversions required on some sections of regional and local roads. Bus routes would be able to operate with minor amendments to the bus stop locations, with only some routes to be diverted due to the available road width not being sufficient for a bus to pass the work site. The project has also considered mitigation measures to ensure pedestrian access and safety during construction. As such, the overall significance of impacts to access and connectivity of the road network is medium.

There are several commercial areas which the project area traverses and they generally follows main roads (for example Punchbowl Road, the Hume Highway or the New Canterbury Road), located at major intersections, or where there are train stations or other transport infrastructure hubs. The local study area comprises of over 550 businesses ranging from retailers, restaurants, cafes, hotels, real estate offices, auto repairs, wholesale businesses, industrial businesses, veterinary hospital and dance schools. Business and economic impacts associated with the construction of the project would involve potential impacts to amenity on local businesses affecting the ability of customers, employees or business owners to enjoy their workplace and daily activities. However, expenditure associated with the construction of the project would be of value to the local and regional economies, through increased expenditure at local businesses through purchases by construction workers, increased employment as a result of the project, and through the provision of goods and services required for construction. The sensitivity of these businesses to changes in amenity and access relating to construction of the project is considered to be high. Due to the large number of potentially impacted receivers and considering the temporary nature and short duration of works in any one location, the

Environmental management and mitigation measures outlined in **Section 8.0** are proposed to manage and/or mitigate potential socio-economic impacts of the project area.

6.0 Assessment of potential operational impacts

The project would provide greater security for Sydney's electricity network, contributing to improvements in the reliability, affordability and sustainability of supply and is critical to supporting future growth in Sydney.

Once the transmission cable circuit and other associated infrastructure (e.g. the cable bridges) have been installed, the project is likely to have a negligible impact on the surrounding environment. As such, socio-economic impacts associated with the operation of the project are anticipated to be negligible and consistent with existing electricity transmission infrastructure in the local area.

In most cases, during operation of the project, only periodic visual inspections along the transmission cable route would be required and ongoing physical access to the transmission cables and cable bridges is anticipated to be minimal. Occasional access would be needed for maintenance or to rectify any equipment faults. No additional permanent workforce is anticipated to be required for the operation of the project.

6.1 Changes to land use

While works along the transmission cable route would be reinstated following construction and would therefore maintain their existing (pre-disturbance) land uses during operation, land use changes would occur at the location of cable bridges.

The proposed transmission cable route has been primarily limited to road reserves. However, in some instances, the transmission cable route passes through public open space and some industrial land. While no freehold property would be acquired, TransGrid would require an easement (or other agreement) to protect the new underground transmission infrastructure across private land. Agreements over privately owned land would limit certain activities and future land uses to ensure the safe operation of the infrastructure and to maintain public safety. The project would not result in any permanent change to property access arrangements along the length of the transmission cable route.

Cable bridges are proposed to be located primarily in land zoned as SP2 (Infrastructure) or RE1 (Public recreation). There is one proposed cable bridge located out of the road reserve on private property on Muir Road which would require an easement and a change in land use. However, this impact would be minor, due to the relatively small footprint of the cable bridge.

At the substations, the project would be consistent with the existing land use. Works would be confined to the boundaries of the existing substations. As such, impacts on land use associated with the substations are not anticipated.

There may be occasional minor disruptions to existing land use along the transmission cable route should any maintenance or emergency works be required. However, these works would be temporary, and impacts are likely to be minor and consistent with comparable maintenance works undertaken by other utility operators that service the area.

Re-zoning of any part of the project area is not proposed as the project is permissible and compatible with current zoning. With the exception of the privately owned land required for cable bridges that may fall outside of road reserves, the project would not change existing land uses within the project area following completion. Based on the above, no significant impacts to current land uses are expected to result from the operation of the project.

Overall, the sensitivity of users to changes in land use would be low because of the limited number of receivers who would be affected by changes to land use. The magnitude of these impacts is also predicted to be minor because of the limited areas subject to land use change, and the limited scope of the change. On this basis the significance of the overall impact on the social and economic environment due to changes in land use during operation would be low.

6.2 Changes to demographic profile

Operation of the project is not anticipated to affect the demographic profile of the study area, as much of the project's operational infrastructure would be unmanned or would only require a small operational
workforce for maintenance. Given that there would be no change in the demographic profile of the study area during operation, no assessment of significance has been undertaken.

6.3 Amenity impacts

6.3.1 Noise and vibration impacts

The project does not include the installation of permanent noise generating plant, nor does it include any work which would generate road traffic during operation. No additional noise emissions to the existing environment are expected to occur. As such, the operational noise environment is expected to remain largely unchanged.

Given that there would be no operational noise and vibration generated during operation, no assessment of significance has been undertaken.

6.3.2 Air quality and odour impacts

All ground surfaces disturbed during construction would be returned to a condition similar to their original state (or as agreed with relevant road authority or local council) post-construction. Based on this, dust emissions are not anticipated during operation of the project except for during maintenance activities or emergency works along the transmission cable route or at the substations, which would be infrequent and generally only involve visual inspections and potentially small amounts of excavation.

The transmission cable circuit through locations with landfill gas present would be designed such that no preferential migration pathway for landfill gas exists. Based on this there would be no sources of odour emissions anticipated during operation of the project. If maintenance works are required, then potential odour emissions would be managed according to measures identified **Appendix F** of the EIS.

Given that there would be no dust or odour generated during operation, no assessment of significance has been undertaken.

6.3.3 Visual amenity impacts

Changes to landscape character and visual amenity have the potential to adversely affect local amenity during operation of the project, particularly the establishment of cable bridges and the removal of trees during construction. The installation of cable bridges would introduce new built elements into the local area and the potential removal of trees would have the potential to affect the visual amenity of receivers in the vicinity. There would be no change to night lighting during operation.

Cable bridges would mainly affect views when situated in public spaces or residential areas however as they would be adjacent to existing bridge structures, they would be consistent with the function and character of the existing service/ transport landscape and unlikely to comprise a significantly intrusive or out-of-place visual feature.

Tree removal during construction to accommodate the installation of the transmission cable circuit would affect views in impacted streets, with the character of the streetscape of some streets with mature street trees, mature trees within park reserves or within heritage conservation zones more significantly affected than others. Opportunities to retain trees would be investigated during detailed design and construction planning. Tree replacement and augmentation planting within affected road reserves (where feasible) may, over time, reduce the visual impact of tree removal, although the speed at which the view would be improved depends on the growth rate of the tree species and the maturity (pot size) of the street trees replanted.

The receivers that may be affected by changes to visual amenity within each precinct are outlined in **Table 6-1**.

Precinct	Key receivers likely to be affected
1	Passers-by on Muir Road rail overpass.
2 and 4	Residents, businesses and community receivers adjacent to the transmission cable route where potential tree removal is required to facilitate the trenching and conduit installation.
3	Nearby residents on Lindsay Street, Cowper Street, Adam Street and Croydon Avenue. Some residents may receive direct views to the cable bridge, if the cable bridge option chosen for the Cooks River crossing.
	Users of Lees Park, Mildura Reserve, Cooks River cycle pathways may be affected by the visual change of potential tree removal to facilitate the trenching and conduit installation.
	Residents, businesses and community receivers adjacent to the transmission cable route where potential tree removal is required to facilitate the trenching and conduit installation.
5	Residential terrace houses at the southern end of Edgeware Road would receive direct views to the cable bridge.
	The cable bridge would also be visible to passers-by on Edgeware Road and Bedwin Road.
	Residences, businesses and community receivers adjacent to the transmission cable route.
	Users of Camdenville Park (western end) and users of Sydney Park may be affected by the visual change of potential tree removal to facilitate the trenching and conduit installation.
Sydney South substation	No receivers are expected to be affected.

Table 6-1 Receivers likely to be affected by visual amenity

Table 6-2 provides an assessment of the significance of visual impacts on amenity for each precinct.

Table 6-2 Assessment of significance – visual amenity

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
1	Low, given the existing industrial environment.	Minor, given the predominant landscape character in Precinct 1 is industrial development, and the small number of receivers. Where feasible, juvenile trees or vegetation would replace any trees removed in suitable locations, in consultation with the local council and other relevant stakeholders.	Low
		The permanent cable bridge would be visible to passers-by on Muir Road rail overpass. Views to the north of Muir Road would not be affected.	
		Vegetation removal and the cable bridge would be new elements that would not be visible from surrounding industrial properties.	
2 and 4	High, given residents are typically a sensitive viewer group, given that they have a proprietary interest in the views from their homes and properties.	Minor, given no operational infrastructure would be visible to receivers in this precinct. The magnitude of change during operation would be minor due to the potential loss of trees within the streets. However, over time this change could reduce if trees were replanted.	Medium

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
3	Cooks River crossing (Option 1a and Option 3a) High, given that operational infrastructure would be visible to pedestrians and cyclists for this option, particularly for residents at Lindsay Street, users of Lees Park and the Cooks River cycleway. Cooks River Crossing (Option 1b, Option 2 and Option 3b) High, given no permanent operational infrastructure would be visible at these locations, however receivers may be affected by the loss of street trees along the Cooks River for Option 2. Residents on Lindsay Street, Cowper Street, Adam Street and Croydon Avenue would have a proprietary interest in the views from their homes and properties. Dulwich Hill light rail corridor crossing (Options 4a and 4b) High, given no permanent operational infrastructure would be visible at these locations, however receivers may be affected by the loss of street trees and verge planting at these locations. Henson Park crossing (Option 5a) High, as receivers at this location would have a proprietary interest in the views from their homes and properties.	Moderate, given the potential loss of trees and the potential additional piece of infrastructure (cable bridge) at the Cooks River crossing (Option 1) seen spaning the river. However, over time this change could reduce if trees were replanted. <i>Cooks River crossing</i> The magnitude of change during operation for Option 1b, Option 2 and Option 3b would be low due to the potential loss of some trees within the reserve or streetscape. However, over time this change could reduce if trees were replanted. There would be no change to lighting in the park or streetscape at operation. The magnitude of change during operation for Option 1 a and Option 3a for the cable bridge to cross the Cooks River would be moderate due to the potential loss of mangroves next to the river, and the additional piece of infrastructure seen spanning the river, which would be a more visually prominent structure than the existing pedestrian bridge due to the safety cage over the bridge deck. However, over time this change could reduce if the mangrove vegetation was replanted and results partially screening the bridge deck and safety cage from the road and from the reserve next to the river. The view to the river and parkland on the opposite bank would potentially be opened up, and the cable bridge would be an additional piece of infrastructure seen within the view. <i>Dulwich Hill light rail corridor crossing (Options 4a and 4b)</i> The magnitude of change at operation would be low due to the possible change to the trees within the street; however, over time this change would be low due to if replanting is feasible with similar trees. <i>Henson Park crossing (Option 5a)</i> There would be returned to its pre-construction state on completion of construction (or as otherwise agreed with the relevant road authorities). No trees would be removed as there are no street trees at this location, and trees within the playground would not be affected by the works.	High

Precincts	Sensitivity of receivers	Magnitude of impact	Significance of impact rating
5	High , given a new cable bridge would be seen from Edgeware Road in this precinct and residents are typically a sensitive viewer group, given that they have a proprietary interest in the views from their homes and properties. Recreational users of public open spaces are a sensitive receptor group, as they would be expected to have their attention focussed on the landscape.	 Moderate, given the new bridge would be a new element seen from the lower residential terraces and would be visible to passers-by on Bedwin Road and Edgeware Road due to the cage on top of the bridge. The cable bridge would be consistent with the utilitarian character of the rail corridor. View to the cable bridge from the sports field, coupled with the utilitarian character of the rail corridor, would make the change to the view difficult to see. It is unlikely that the changes would be seen from residences surrounding Camdenville Park due to the distance of viewing (residences on Council Street) and vegetative screening surrounding properties (residences on May Street). However, should the proposed master plan for the park upgrade be implemented, the surrounding landscape would become less 'utilitarian' in character and the cable bridge would potentially be seen in more detail and from closer proximity. 	High
		Some vegetation may have been removed during construction which may open up views seen from Edgeware Road to the rail corridor and the southern portions of the proposed cable bridge as it passes over the rail corridor. The potential loss of trees within Sydney Park would be the greatest change due to the project. However, the park would be returned to its pre-construction state on completion of the project (or as agreed with the relevant authorities) including the replacement of removed vegetation through replanting.	
Sydney South substation	Neutral, given no receivers at Sydney South substation.	Negligible, given no operational infrastructure would be visible to receivers at Sydney South substation.	Negligible

6.3.3.1 Summary

Impacts would be experienced in areas with views of the cable bridges and areas where there is potential loss of street trees. However, in most cases the visual impact rating would reduce during operation, especially if replacement tree planting is feasible to replace trees that may need to be removed during construction. Cable bridges affect the views when they are situated within or near public open space or where they are close to residential properties. However, as these bridges would be installed alongside existing road or rail bridges they do not represent a significant departure from the current character at that location. Given the primarily residential land uses within the local study area, the presence of social infrastructure and recreational areas, and community concern for biodiversity values, the sensitivity of affected receivers to operational visual amenity impacts is considered to be medium. The magnitude of social amenity impacts from visual amenity impacts to amenity is medium.

6.4 Access and connectivity impacts

Prior to operation, all road surfaces and footpaths as well as bus stops affected by the project would be returned to their former state or as otherwise agreed with the relevant roads authority. During operation, there may be minimal disruption to footpaths from maintenance works requiring access to link and sensor boxes in the footpath. Should access to the transmission cable circuit be required to repair a fault, some lane or road closures or diversions may also be required. Inspections of cable bridges would involve maintenance crews and appropriate traffic management measures when undertaking work at the roadside. Operation and maintenance at the substations would be within the existing operating footprint. Any vehicles associated with these works can be accommodated within the substation site.

Overall, the project is likely to have a negligible impact on the traffic network.

6.5 Economic impacts

Uninterrupted electricity supply underpins daily activities for residential, commercial, industrial and local businesses and is vital for the economic productivity of inner Sydney and Sydney's continued participation in global markets. Inner Sydney is a centre of economic activity, industry, tourism and critical infrastructure such as major transport infrastructure including road and public transport. Each of these entities relies on the reliability, affordability and security of uninterrupted electricity supply.

The project is considered to result in significant net benefits, when compared to the 'do nothing' option, as discussed in **Chapter 3 Project development and alternatives** of the EIS. Benefits arise primarily due to the fact that the project avoids substantial costs to consumers from disruption of the electricity supply to inner Sydney.

The project was estimated to have a lower cost compared with the other options considered, based on the use of non-network solutions to defer capital expenditure and the flexibility associated with the staged installation of cables. The capital investment for the project is approximately \$285 million.

6.5.1 Summary

The project would maintain and improve the reliability, affordability and security of electricity supply across the inner Sydney area, for the life of the asset as part of the Powering Sydney's Future program. Given the residential, commercial, industrial and/or local businesses which depend on uninterrupted electricity supply in inner Sydney, the sensitivity of affected receivers is anticipated to be high.

Given the context of inner Sydney as an economic centre, the rate of development within Sydney and the projected rate of population growth anticipated, the magnitude of the economic benefits of the project are considered to be major. Therefore, the significance of the economic benefits of the project is anticipated to be high (positive).

6.6 Electric and magnetic fields

Electric and magnetic fields (EMF) exist wherever electric current flows such as in overhead and underground electrical cables, substations, residential wiring and electrical appliances (e.g. toasters, televisions, hair-dryers and computers).

An EMF study was undertaken to model the magnetic fields likely to be generated during operation of the project. Magnetic fields would not be generated during construction as the cable would not be energised. Electric fields were not assessed as the transmission cables would be shielded by a metallic sheath and from being buried in the ground. The magnetic field predictions from the project were compared to the reference levels for human exposure to magnetic fields as outlined in the guidelines from the International Commission on Non-Ionizing Radiation Protection (ICNIRP). The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), a Federal Government body whose responsibilities include protecting the health and safety of people, and the environment, from Extremely Low Frequency (ELF) EMF have adopted the ICNIRP 2010 Guidelines for limiting exposure to time-varying electric and magnetic fields (1 Hz to 100 kHz) for application in Australia.

The assessment found that the highest level of magnetic fields are expected to occur directly above the transmission cable circuit, joint bay or cable bridge. Magnetic fields are relatively higher at the cable bridges than above the trench, however public access to the cables bridges would be prohibited. The assessment also found that the level of EMF exposure would be short term and below the ICNIRP guideline reference levels for assessing compliance of human exposure to magnetic fields.

The assessment also showed that magnetic fields reduce rapidly with increasing distance from the trench.

Overall, the study found that during operation of the transmission cable circuit, magnetic fields generated would be well within the recommended reference levels for human exposure.

While no risk to human health has been established from long-term magnetic field exposure, TransGrid has adopted an approach of 'prudent avoidance' in accordance with good industry practice. Taking a prudent avoidance approach includes designing and siting electricity infrastructure to reduce long-term public exposure to EMF. TransGrid will continue to consider the following during the project design development:

- maximise cable separation to property boundaries, in particular normally occupied buildings (such as businesses and residences) by locating the cable in the centre of the roadway where practical;
- optimise the trench cross-section (i.e. the conduit arrangement with the trench) to maximise the cancellation of magnetic fields by adopting a trefoil cable arrangement where practical; and
- maximise the magnetic field cancellation effect, such as by reducing the spacing between individual cable phases as far as technically practical through the use of thermally engineered backfill along the route and installing field cancellation measures at non-typical trench configuration locations, such as joint bays, where practical.

6.7 Operational benefits

The project would provide an indirect economic benefit, by contributing to securing Sydney's electricity supply for the future. Both electricity network and land use planning for the Greater Sydney area recognise the need for infrastructure to cater for both increased employment and population growth in the inner Sydney area.

As Sydney continues to grow, increased pressure will be placed on the existing electricity network leading to increased risk of network failures or outages due to increased peak demand. Both the Greater Sydney Vision Plan (Greater Sydney Commission, 2017) and *A Plan for Growing Sydney* (NSW DPE, 2014) recognise the importance of implementing solutions to cater for future growth and the project serves to support these plans. The project would serve to provide continuity and reliability benefits to consumers within the inner Sydney area including additional security for periods of peak demand.

TransGrid are and will continue to consult with relevant stakeholders including government agencies and other project developers to identify opportunities for community improvement projects and other initiatives in the project area.

Furthermore, TransGrid will also establish a project-specific Community Partnerships Program (CPP) aimed at supporting community led projects and initiatives in the project area and to provide a positive project legacy. The CPP would be aligned with community values and needs identified during the EIS consultation. Refer to the Community Consultation Framework in **Appendix C** of the EIS for further information.

6.8 Summary of operational impacts

The areas affected by temporary occupation and changes to land use would be reinstated following construction and would therefore maintain their existing land uses. Where the transmission cable circuit is proposed to be located over two private properties, these properties would potentially be acquired as an easement. This may have the potential to affect the future use and development of the land. Furthermore, the presence of the transmission cable circuit within the road reserve may restrict the planting of street trees due to the potential for tree roots to grow into the trench space and potentially interfere with the operation of the transmission cable. Planting of trees and use of space for car parking may also be restricted within open space and recreation areas such as Camdenville Park or Sydney Park. The tree species to be planted would need to have a root system that is unlikely to interfere with the transmission cable in future.

Given the limited number of receivers who would be affected during operation of the project, and the restricted size of the privately owned land required for the cable bridges, the overall impact to land use is considered to be medium.

Once the transmission cable is installed underground, the project is likely to have a negligible impact on the surrounding visual environment with the exception of permanent cable bridges which would remain in place during operation of the project and potential tree and vegetation loss to accommodate the project construction. The overall impact to visual amenity during operation is considered to be moderate given the small number of affected receivers and the medium change in the visual environment due to the addition of cable bridges and potential tree loss.

All road surfaces and footpaths affected by the project would be returned to their former state or as otherwise agreed with the relevant roads authority. As a result, pedestrian and cycle paths would not be affected during project operation and access to bus stops would be reinstated at the completion of construction in each location. The project would also seek opportunities to enhance pedestrian and cyclist connectivity and safety within the local study area. As such, the overall impact to access and connectivity is considered to be negligible.

The transmission cable would create EMF during operation. These EMF levels would be within the recommended reference levels applied to the general public and occupational exposure levels along the transmission cable route. A prudent avoidance approach has been taken in the design and siting of electricity infrastructure for the project to reduce public exposure to EMF. EMF levels in all locations are well below the reference levels applied to the general public and occupational personnel. As such, the overall significance of impacts from EMF generated by the project is anticipated to be low.

The project would maintain and improve the reliability, affordability and security of electricity supply across inner Sydney, including additional security for periods of peak demand. With the rate of development within Sydney and the projected rate of population growth anticipated, the significance of the economic benefits of the project is anticipated to be high (positive). Furthermore, the project would provide an indirect economic benefit, by contributing to securing Sydney's electricity supply for the future. Overall, the social and economic benefits of the project coincide with the community values and goals identified for each LGA with regard to connectivity, economic growth and safety.

7.0 Assessment of cumulative impacts

Cumulative impacts are the incremental and combined impacts of past, current, and future planned activities. This section provides an assessment of the potential cumulative social impacts of the project, when considered in the context of other relevant activities and existing and proposed developments.

An overview of major developments relevant to the project is provided in **Section 7.2**. An assessment of the broader cumulative impacts of these projects with the project is provided in **Chapter 22 Cumulative impacts** of the EIS.

The active transport network in Sydney's inner west, the Cooks River to Iron Cove Greenway is not considered to be a major project but would coincide with the construction of the proposed project. The construction period for the southern section of the Greenway, near Arlington Light Rail Station in 2021 may overlap with the anticipated construction of the project.

Due to the high volume of construction currently occurring or planned across inner and western Sydney, there is the potential for cumulative impacts to local and regional communities as a result of construction of the project occurring concurrently with the construction of other projects.

Construction of a range of projects within the region has the potential to result in the following broad cumulative socio-economic impacts:

- intensification of noise and vibration, air quality, traffic and transport and visual amenity impacts;
- increased risk of construction fatigue of cumulative construction impacts for the inner and western Sydney communities with extended periods of amenity impacts;
- impacts on the local community's sense of place and perception of local identity, which is influenced by social amenity;
- increased demand for construction workforce with potential to drive increases in wages;
- increased demand for construction materials and equipment with the potential for supply challenges; and
- increased opportunity for local businesses to supply goods or services with potential for increases in local business turnover.

Developments planned or proposed for construction in proximity to the project with potential cumulative impacts are assessed in the following sections.

7.1 Changes to demographic profile

The project would require a construction workforce of approximately 70 personnel which would be sourced from the Greater Sydney area. No additional employees are anticipated to be required as a result of the operation of the project.

Through the local sourcing of construction employees, the project is unlikely to significantly contribute to cumulative impacts relating to increasing population trends projected for the region, and unlikely to result in an associated increased demand for local housing. This is because construction personnel would not be required to move to the area to work on the proposal (given available transport and vehicular access to the project site).

Potential new developments within the region may, if approved, provide increased demand and competition for skilled construction workers. Cumulative construction projects may result in increased demand for construction personnel, with potential to drive increases in wages, increased demand for construction materials and equipment and increased opportunity for local businesses to supply goods or services which could result in increases in local business turnover.

7.2 Review of major development applications

A review of major developments in proximity to the project area was undertaken for the project and developments (proposed or current) considered relevant to the cumulative assessment have been tabled in **Chapter 22 Cumulative impacts**. Of these projects, those relevant to the assessment of cumulative socio-economic impacts are the ones that overlap spatially with the project or are immediately adjacent to the project area. These developments and the relative anticipated workforce requirements and timeframes are presented in **Table 7-1**.

Table 7-1 Overview of major developments in proximity to the project

Project	Proponent	Project status	Location	Approximate distance to project area	Anticipated timeframe/project life	Anticipated workforce
Sydney Metro City and Southwest Sydenham to Bankstown Upgrade	Transport for NSW	Approved 12 December 2018.	Canterbury Bankstown LGA, Inner West LGA	Overlapping	Anticipated construction timeframe 2018-2024.	Average construction workforce of 470 people with up to 1,540 people during peak construction.
Modification to WestConnex M4-M5 Link	Roads and Maritime Services and Sydney Motorway Corporation.	Modification approved 25 February 2019. Project was previously approved 17 April 2018.	Inner West LGA	Overlapping	Anticipated construction timeframe 2018-2023.	Construction workforce of around 1,500 people during peak construction.
WestConnex New M5	Roads and Maritime Services and Sydney Motorway Corporation	Approved 20 April 2016.	Canterbury Bankstown LGA, Inner West LGA, Bayside LGA	Overlapping	Construction is scheduled for completion in 2019.	Peak construction workforce varies by work site, with peaks of 25 to 215 workers depending on work site.

7.3 Amenity impacts

The proposed Sydney Metro City and Southwest Sydenham to Bankstown Upgrade would be located within the local study area and would involve works within or directly adjacent to the existing rail corridor on the T3 Bankstown Line.

Areas surrounding the Edgeware Road/Bedwin Road intersection in Marrickville (Precinct 5) would be subject to the construction of the Sydney Metro project before, during and after the project and may experience construction fatigue from ongoing amenity impacts. This area is also located on the edge of the construction footprint for the WestConnex New M5 project. Based on construction timing, construction activities for the New M5 would occur just prior to the project, further contributing to potential construction fatigue from consecutive construction activities.

Construction fatigue resulting from these three projects would largely be centred around ongoing noise and vibration with minimal respite, reduced visual amenity from multiple construction sites in close proximity, as well as the potential ongoing traffic impacts resulting from local detours, lane and road closures and an increase in heavy vehicles.

Cumulative or extended periods of construction activity may also affect the local community's sense of place and perception of local identity, which is influenced by social amenity. Proposed construction management and mitigation measures are proposed to manage potential amenity impacts (refer to **Section 8.0**). The measures include maintaining access to community facilities and businesses, where possible and management of construction fatigue through ongoing and proactive community consultation throughout the construction period and by ensuring periods of respite for likely affected receivers, where reasonable and feasible.

8.0 Environmental management and mitigation measures

Environmental management and mitigation measures proposed to manage and/or mitigate potential socio-economic impacts of the project are outlined in **Table 8-1**. Social and economic impacts associated with other environmental issues (traffic, noise and vibration, air quality and visual) would be managed in accordance with the measures outlined in their respective assessments. Refer to **Chapter 20 Land use and property** of the EIS for mitigation measures related to land use changes.

The timing column indicates at which stage in the project the proposed measure will be implemented.

Impacts resulting from changes to amenity will be managed in line with mitigation measures identified for other relevant technical disciplines (listed below), as summarised in **Chapter 23 Summary of Environmental Management Measures** of the EIS:

- Traffic and transport;
- Noise and vibration;
- Air quality; and
- Visual amenity.

Table 8-1 Environmental management and mitigation measures

No.	Impact/issue	Management and mitigation measures	Timing
SE1	Community consultation	Implementation of the project Community Consultation Framework (Appendix C of the EIS).	Detailed design and construction
SE2	Social infrastructure	Construction laydown areas within private and public reserves and parks will be planned to minimise impacts on existing recreational and sporting infrastructure, including playground equipment, with construction laydown areas located in areas of open space, where possible. Establishment and use of the laydown areas will consider public safety and maintaining safe access to recreational areas. Private and public reserves and parks proposed for the construction laydown areas will be returned to their original or improved condition following construction (or as otherwise agreed with the relevant authority). Access to community facilities along the transmission cable route and in proximity to construction laydown areas will be maintained at all times unless an alternative solution has been negotiated with the landowner/occupier. Access to areas of reserves and parks not utilised for construction laydown areas will be maintained throughout construction.	Construction

No.	Impact/issue	Management and mitigation measures	Timing
SE3	Access and transport	Opportunities to enhance pedestrian and cyclist connectivity within the local study area, including design of cable bridges to accommodate pedestrian and cyclist movements will be investigated during detailed design, in consultation with relevant stakeholders. The construction workforce will be encouraged to travel to and from work sites via public transport or use car-pooling to reduce impacts on local street parking. Temporary relocation of bus stops will be undertaken in consultation with the relevant road authority, bus operators and Transport for NSW. The relocated bus stops will be reinstated at their original location as construction works are completed in each location. Vehicle access to residential properties will be maintained at all times, where possible. Where restricting access to properties is required to enable construction works, vehicle access will be restored as soon as possible. Where access to a property cannot be maintained, affected owners/occupants will be informed and feasible and reasonable solutions for access to their specific location discussed. Further measures to address potential impacts to vehicle and active transport access and connectivity can be found in Chapter 7 Traffic and transport of the EIS.	Detailed design and construction
SE4	Business impacts	Vehicle access to business properties will be maintained at all times, where possible. Where restricting access to properties is required to enable construction works, vehicle access will be restored as soon as possible. Where access to a property cannot be maintained, consultation will be undertaken with affected landowners/occupants, in accordance with the CCF, to identify appropriate timeframes for restricting access, or to negotiate alternative solutions. Construction activities undertaken in proximity to businesses will maintain visibility of business frontage, associated signage and access points, where possible. Business impacts resulting from changes to amenity or access will be managed in line with mitigation measures identified for other relevant environmental issues.	Construction
SE5	Utilities impacts	Consultation and construction planning with relevant utility/service providers (including councils, Transport for NSW, Sydney Trains, ARTC and Roads and Maritime) and measures such as searches of Dial-Before-You-Dig will be undertaken to minimise the potential for damage or disruption to utilities and services.	Detailed design and construction
SE6	EMF impacts	Information about potential EMF levels and the relevant health guidelines will continue to be provided to stakeholders in proximity to the transmission cable route as part of community consultation undertaken for the project.	Construction
SE7	Sydney Park impacts	Construction works within Sydney Park will be undertaken in stages and appropriate diversions for access provided to minimise disruption to park users and the City of Sydney.	Construction

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9.0 Conclusion

This SEIA provides an overview of the context for the project and identifies socio-economic impacts that are likely to arise as a result of construction and operation of the project.

Community concerns identified through consultation for the project include business and economic impacts associated with the construction of the project, in particular, amenity impacts on local businesses affecting customers, employees or business owners. Other concerns include access and connectivity, amenity impacts to individual receivers and biodiversity impacts (the removal of street trees).

The key social impacts associated with the construction of the project are likely to include impacts of noise and vibration, traffic, air quality, visual amenity and land use.

Amenity impacts experienced as a result of construction of the project are likely to progress linearly along the proposed route as construction works are completed, thereby resulting in temporary impacts on individual receivers. Amenity impacts associated with the construction laydown areas would affect users of selected parks. These impacts would be managed and minimised through the implementation of appropriate management and mitigation measures, as identified in **Section 8.0**.

The key social impacts associated with the operation of the project include areas affected by easements, land use, access, visual amenity (including street tree loss) and EMF impacts. Land disturbed during construction would be reinstated following construction. Easements and cable bridges that would be established have the potential to affect future development but would be managed in line with mitigation measures identified. The project would seek opportunities to enhance pedestrian and cyclist connectivity and safety within the local study area. Visual amenity impacts from the potential loss of street trees would be mitigated through the planting of replacement trees, wherever possible. Community concern regarding the perceived impacts of EMF would be managed through community consultation undertaken for the project and the project would be designed with a prudent avoidance approach.

The project would provide an indirect economic benefit, by contributing to securing Sydney's electricity supply for the future. Both electricity network and land use planning for the Greater Sydney area recognise the need for infrastructure to cater for both increased employment and population growth in the inner Sydney area. The project would serve to provide continuity and reliability benefits to users of electricity within the inner Sydney area including additional security for periods of peak demand.

10.0 References

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Annexure A

Social baseline data

Annexure A Social baseline data

Table A-1 Database searches undertaken

Social Indicator	Source
Population demographics	
Total Population	Estimated Resident Population (ERP), ABS
Age/Gender Breakdown	ABS Quickstats for statistical areas
Household composition	ABS Quickstats for statistical areas
Family Structure	ABS Quickstats for statistical areas
Ethnic composition	ABS Quickstats for statistical areas
Indigenous Population	ABS Quickstats for statistical areas
Population Projections	Department of Planning & Environment (DPE) website
Health & wellbeing	
Need for Assistance	ABS data, Basic Community Profile B18
Socio-Economic Indexes for Areas (SEIFA) - score and relative ranking	Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2011
Housing	
Current housing number and types	ABS Quickstats for statistical areas
Tenure	ABS Quickstats for statistical areas
Housing affordability - Rent weekly payments	ABS Quickstats for statistical areas
Housing affordability - Median mortgage repayments	ABS Quickstats for statistical areas
Education	
Current education attendance	ABS Quickstats for statistical areas
Post-school qualification levels	Basic Community Profile B37
Employment & income	
Average Median Weekly Income	ABS Quickstats for statistical areas
Employment Status/Unemployment Rate	Department of Education, Employment and Workplace Relations (DEEWR) Small Area Labour Markets (this data is more up to date data than ABS)
Employment by industry	ABS Industry of employment
Employment by occupation	ABS Quickstats for statistical areas

Population demographics

Current population

Table A-2 Current population statistics by Local Government Area (community study area)

Regional Area	Current Population Trends					
	2011	2016	% change 2011 - 2016			
City of Sydney (C)	169,505	208,374	+19%			
Inner West (A)	Not available	182,043	Not available			
Strathfield (A)	35,188	40,312	+13%			
Canterbury-Bankstown (A)	Not available	346,302	Not available			
Greater Sydney	4,391,674	4,823,991	+9%			
New South Wales	6,917,658	7,480,228	+8%			

Notes:

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Populations based on Estimated Resident Population (place of usual residence, excluding overseas visitors) sourced from ABS 2006, 2011 and 2016 QuickStats.

Table A-3 Current population statistics by local area (local study area)

Local Area	Current Population Trends		
	2011	2016	% change 2011 - 2016
Alexandria (SSC)	7,050	8,262	+15%
St Peters (SSC)	2,871	3,145	+9%
Newtown (SSC)	14,148	15,029	+6%
Stanmore (SSC)	7,702	7,938	+3%
Marrickville (SSC)	24,613	26,592	+7%
Dulwich Hill (SSC)	12,981	13,715	+5%
Ashfield (SSC)	22,189	23,841	+7%
Ashbury (SSC)	3,134	3,329	+6%
Croydon Park (SSC)	10,742	11,012	+2%

Local Area	Current Population Trends		
	2011	2016	% change 2011 - 2016
Campsie (SSC)	21,218	24,541	+14%
Belfield (SSC)	6,043	6,322	+4%
Belmore (SSC)	12,574	12,718	+1%
Lakemba (SSC)	15,508	17,023	+9%
Greenacre (SSC)	23,213	24,373	+5%
Chullora (SSC)	0	0	0%
Yagoona (SSC)	16,003	18,013	+11%
Potts Hill (SSC)	0	893	+100%
Picnic Point (SSC)	5,608	6,160	+9%
Greater Sydney	4,391,674	4,823,991	+9%
New South Wales	6,917,658	7,480,228	+8%

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales

2. Populations based on Estimated Resident Population (place of usual residence, excluding overseas visitors) sourced from ABS, 2011 and 2016 QuickStats.

Forecast population projections

Table A-4 Current and projected population statistics by Local Government Area (community study area)

Regional Area		Population Projections						
	2011	2016	2021	2026	2031	2036	% change 2011 – 2036	Average Annual % change
City of Sydney (C)	183,300	212,550	245,000	267,500	292,350	315,200	72%	2%
Inner West (A)	180,300	190,500	201,950	210,700	221,700	232,100	29%	1%
Strathfield (A)	37,250	41,250	50,400	55,900	60,200	64,900	74%	2%
Canterbury- Bankstown (A)	335,950	360,350	391,350	426,900	464,950	502,850	50%	2%
New South Wales	7,218,550	7,748,000	8,297,500	8,844,700	9,386,850	9,925,550	38%	1%

Powering Sydney's Future Potts Hill to Alexandria transmission cable project

Notes:

- 1. Projections sourced from the Department of Planning & Infrastructure 2016 Preliminary NSW Population Projections <u>http://www.planning.nsw.gov.au/projections</u>
- 2. Population projections have been rounded to the nearest hundred persons and should not be taken as accurate to that level of detail.
- 3. Population projections are based on Estimated Resident Population statistics sourced from ABS 2011 Census data, and take into account the latest data and expertise on trends in fertility, mortality and migration. However, the DPE notes the uncertainty associated with the forecast projections, as trends in "fertility and migration (and to a lesser extent, mortality) are influenced by a variety of social, economic and political factors, many of which cannot be foreseen with any degree of precision" (DPE, 2013).

Age and gender structure

Table A-5 Gender distribution by local area (local study area)

Area	Population					
	Total 2016 population		ale	Female		
		Total male	% of total	Total female	% of total	
Alexandria (SSC)	8,262	4214	51%	4054	49%	
St Peters (SSC)	3,145	1590	51%	1550	49%	
Newtown (SSC)	15,029	7,523	50%	7,503	50%	
Marrickville (SSC)	26,592	13,030	49%	13,556	51%	
Dulwich Hill (SSC)	13,715	6,540	48%	7,175	52%	
Ashfield (SSC)	23,841	11,773	49%	12,067	51%	
Ashbury (SSC)	3,329	3,329 1,654 50%		1,675	50%	
Croydon Park (SSC)	11,012	5,217	47%	5,801	53%	
Campsie (SSC)	24,541	12,319	50%	12,219	50%	
Belfield (SSC)	6,322	3,054	48%	3,262	52%	
Belmore (SSC)	12,718	6,337	6,337 50%		50%	
Lakemba (SSC)	17,023	9,196	54%	7,827	46%	
Greenacre (SSC)	24,373	12,107	50%	12,268	50%	
Chullora (SSC)	0	N/A	N/A	N/A	N/A	

Area	Population				
	Total 2016 population	Μ	ale	Fem	nale
		Total male	% of total	Total female	% of total
Yagoona (SSC)	18,013	8,999	50%	9,012	50%
Potts Hill (SSC)	893	433	48%	459	51%
Picnic Point (SSC)	6,160	3,006	49%	3,150	51%
Greater Sydney	4,823,991	2,376,766	49%	2,447,221	51%
New South Wales	7,480,228	3,686,014	49%	3,794,217	51%

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Populations based on Estimated Resident Population (place of usual residence, excluding overseas visitors) sourced from ABS 2016 QuickStats.

3. Percentages are rounded to the nearest whole number.

Age profile

Table A-6 Age profile for the Sydney, Inner West, Canterbury-Bankstown and Strathfield LGAs for 2016

Age group	City of Sydney LGA		Inner West LG	4	Strathfield LGA	1	Canterbury-Ba	Canterbury-Bankstown LGA		
	Population	%	Population	%	Population	%	Population	%		
0 – 4 years	6,977	3	10,743	6	2,318	6	24,976	7		
5 – 14 years	7,063	3	17,168	9	3,906	10	46,065	13		
15 – 24 years	36,959	18	19,522	11	6,295	16	46,359	13		
25 – 54 years	124,186	60	93,889	52	19,259	48	143,716	41		
55 – 64 years	16,078	8	18,517	10	3,911	10	36,938	11		
65 years and over	17,110	8	22,197	12	4,633	11	48,251	14		

Notes:

1. Local Government Areas (LGA).

2. Populations based on age profiles sourced from ABS 2016 QuickStats.

3. Percentages are rounded to the nearest whole number.

Median age

Table A-7 Median age by suburb

Area	2011 Median Age	2016 Median Age
Alexandria (SSC)	33	33
St Peters (SSC)	35	34
Newtown (SSC)	32	33
Marrickville (SSC)	37	36
Dulwich Hill (SSC)	36	37
Ashfield (SSC)	35	34
Ashbury (SSC)	41	42
Croydon Park (SSC)	38	39
Campsie (SSC)	35	34
Belfield (SSC)	38	39
Belmore (SSC)	35	37
Lakemba (SSC)	30	31
Greenacre (SSC)	32	33
Chullora (SSC)	N/A	N/A
Yagoona (SSC)	35	34
Potts Hill (SSC)	N/A	30
Picnic Point (SSC)	39	39
City of Sydney (C)	N/A	32
Inner West (A)	N/A	36
Strathfield (A)	N/A	32
Canterbury-Bankstown (A)	N/A	35
Greater Sydney	36	36
New South Wales	38	38

Notes:

1. Statistics for State Suburb Code (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

A-6

2. Sourced from ABS 2011 and 2016 QuickStats for Median Age.

Household composition

Table A-8 Household composition by local area (local study area)

Area	Family households		Single (or lone) households	person	Group househo	Group households		
	No.	% of total	No.	% of total	No.	% of total	No.	
Alexandria (SSC)	2,033	57%	1,047	29%	511	14%	3,591	
St Peters (SSC)	748	61%	288	24%	182	15%	1,218	
Newtown (SSC)	3,085	51%	2,058	34%	960	16%	6,103	
Marrickville (SSC)	6,135	63%	2,528	26%	1,097	11%	9,760	
Dulwich Hill (SSC)	3,361	61%	1,674	31%	435	8%	5,470	
Ashfield (SSC)	5,492	64%	2,225	26%	827	10%	8,544	
Ashbury (SSC)	888	85%	142	14%	19	2%	1,049	
Croydon Park (SSC)	2,884	75%	846	22%	123	3%	3,853	
Campsie (SSC)	6,052	76%	1,348	17%	554	7%	7,954	
Belfield (SSC)	1,595	77%	435	21%	46	2%	2,076	
Belmore (SSC)	3,144	74%	933	22%	180	4%	4,257	
Lakemba (SSC)	3,721	76%	822	17%	360	7%	4,903	
Greenacre (SSC)	5,382	80%	1,281	19%	99	1%	6,762	
Chullora (SSC)	0	0%	0	0%	0	0%	0	
Yagoona (SSC)	4,101	78%	1,028	20%	118	2%	5,247	
Potts Hill (SSC)	212	87%	27	11%	6	2%	245	
Picnic Point (SSC)	1,655	84%	304	15%	21	1%	1,978	
Greater Sydney	1,195,662	74%	351,423	22%	76,795	5%	1,623,880	
New South Wales	1,874,524	72%	620,778	24%	109,004	4%	2,604,306	

Notes:

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 QuickStats for Household Composition.

3. Percentages for each household type have been calculated against the total number of houses for a particular area. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Family composition

Table A-9 Family composition by local area (local study area)

Area	Couple family without children		Couple family	with children	One parent family		Other family	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Alexandria (SSC)	1,283	62%	572	28%	154	8%	55	3%
St Peters (SSC)	398	52%	251	33%	92	12%	21	3%
Newtown (SSC)	1,735	56%	972	31%	309	10%	107	3%
Marrickville (SSC)	2,575	40%	2,556	40%	1,067	17%	180	3%
Dulwich Hill (SSC)	1,346	39%	1,431	42%	582	17%	74	2%
Ashfield (SSC)	2,361	41%	2,341	41%	817	14%	201	4%
Ashbury (SSC)	242	26%	542	59%	113	12%	20	2%
Croydon Park (SSC)	868	29%	1,576	53%	468	16%	66	2%
Campsie (SSC)	2,270	35%	2,899	45%	1,106	17%	185	3%
Belfield (SSC)	444	27%	903	54%	303	18%	26	2%
Belmore (SSC)	945	29%	1,569	48%	690	21%	90	3%
Lakemba (SSC)	887	23%	2,383	61%	540	14%	922	2%
Greenacre (SSC)	1,132	20%	3,421	59%	1,097	19%	109	2%
Chullora (SSC)	0	0	0	0	0	0	0	0
Yagoona (SSC)	1,024	23%	2,385	54%	886	20%	94	2%
Potts Hill (SSC)	68	30%	127	56%	22	10%	9	4%
Picnic Point (SSC)	512	30%	952	56%	231	14%	19	1%
Greater Sydney	416,588	33%	617,424	50%	190,048	15%	22,992	2%
New South Wales	709,524	37%	887,358	46%	310,906	16%	32,438	2%

Notes:

2. Sourced from ABS 2016 QuickStats for Family Composition.

3. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Ethnic diversity

Table A-10 Ethnic diversity within local areas

Area	Total Population	Indigenous pop	Indigenous population		Born Overseas		Households Where a Language Other Than English is Spoken at Home		
		No.	% of total	No.	% of total	No.	% of total		
Alexandria (SSC)	8,262	143	2%	3,408	41%	904	23%		
St Peters (SSC)	3,145	51	2%	1,188	38%	324	24%		
Newtown (SSC)	15,029	171	1%	6,279	42%	1,430	21%		
Marrickville (SSC)	26,592	420	2%	11,856	45%	4,102	39%		
Dulwich Hill (SSC)	13,715	206	2%	5,683	41%	2,070	35%		
Ashfield (SSC)	23,841	155	1%	14,620	61%	4,985	55%		
Ashbury (SSC)	3,329	29	1%	1,154	35%	509	15%		
Croydon Park (SSC)	11,012	78	1%	4,853	44%	2,139	54%		
Campsie (SSC)	24,541	107	0%	17,587	72%	6,744	28%		
Belfield (SSC)	6,322	38	1%	2,764	44%	1,307	61%		
Belmore (SSC)	12,718	102	1%	7,149	56%	3,246	26%		
Lakemba (SSC)	17,023	51	0%	11,675	69%	4,288	83%		
Greenacre (SSC)	24,373	123	1%	11,405	47%	5,195	73%		
Chullora (SSC)	0	0	0%	0	0%	0	0%		
Yagoona (SSC)	18,013	149	1%	8,909	50%	3,780	68%		
Potts Hill (SSC)	893	3	0%	543	61%	12	6%		
Picnic Point (SSC)	6,160	70	1%	1,455	24%	541	9%		
Greater Sydney	4,823,991	70,135	1%	2,071,872	43%	657,730	38%		
New South Wales	7,480,228	216,176	3%	2,581,138	35%	735,563	27%		

Notes:

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

A-9

AECOM

- 2. Sourced from ABS 2016 QuickStats.
- 3. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Health and wellbeing

Need for assistance

Table A-11 Persons with Need for Assistance by local area

Area	Total population	Number of persons with need for	or assistance
		No.	% of total population
Alexandria (SSC)	8,262	125	2%
St Peters (SSC)	3,145	90	3%
Newtown (SSC)	15,029	334	2%
Marrickville (SSC)	26,592	1,742	7%
Dulwich Hill (SSC)	13,715	602	4%
Ashfield (SSC)	23,841	1,387	6%
Ashbury (SSC)	3,329	160	5%
Croydon Park (SSC)	11,012	354	3%
Campsie (SSC)	24,541	1,327	5%
Belfield (SSC)	6,322	441	7%
Belmore (SSC)	12,718	967	8%
Lakemba (SSC)	17,023	961	6%
Greenacre (SSC)	24,373	2,055	8%
Chullora (SSC)	0	N/A	N/A
Yagoona (SSC)	18,013	1,443	8%
Potts Hill (SSC)	893	28	3%
Picnic Point (SSC)	6,160	236	4%
City of Sydney (C)	208,374	5,096	2%
Inner West (A)	182,043	8,168	4%
Strathfield (A)	40,312	1,682	4%

Area	Total population	Number of persons with need for assistance				
		No.	% of total population			
Canterbury-Bankstown (A)	346,302	23,119	7%			
Greater Sydney	4,823,991	236,139	5%			
New South Wales	7,480,228	402,048	5%			

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 Census of Population and Housing Basic Community Profile for each particular area. G18 Core Activity Need for Assistance by Age by Sex.

3. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Socio-Economic Indexes for Areas (SEIFA)

Table A-12 SEIFA score and ranking (2016 Census)

Area	Index of Relative Socio-economic Disadvantage (IRSD)							
	Score	Ranking within NSW	Area decile within NSW					
Alexandria (SSC - 10030)	1,112	3,971	10					
St Peters (SSC - 13644)	1,084	3,686	9					
Newtown (SSC - 12960)	1,072	3,478	9					
Marrickville (SSC - 12504)	1,007	1,954	5					
Dulwich Hill (SSC - 11303)	1,040	2,714	7					
Ashfield (SSC - 10098)	1,005	1,907	5					
Ashbury (SSC - 10093)	1,078	3,583	9					
Croydon Park (SSC - 111355)	1,025	2,360	6					
Campsie (SSC - 10782)	917	484	2					
Belfield (SSC - 10257)	989	1,551	4					
Belmore (SSC - 10279)	915	463	2					
Lakemba (SSC - 12257)	852	150	1					
Greenacre (SSC - 11757)	910	432	2					
Chullora (SSC)	N/A	N/A	N/A					

Area	Index of Relative Socio-economic	ndex of Relative Socio-economic Disadvantage (IRSD)									
	Area decile within NSW										
Yagoona (SSC - 14453)	902	379	1								
Potts Hill (SSC - 13255)	1,028	2,435	6								
Picnic Point (SSC - 13199)	1,078	3,578	9								

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C).

2. Sourced from ABS 2016 Census of Population and Housing: 2033.0.55.001 - Socio-economic Indexes for Areas (SEIFA) Data Cube 2016. Table 2 Index of Relative Socio-economic Disadvantage (IRSD).

3. SEIFA broadly defines relative socio-economic advantage and disadvantage in terms of people's access to material and social resources, and their ability to participate in society. SEIFA helps provide assessment of the welfare of Australian communities and helps in determining areas that require funding and services (ABS, 2013). A low score indicates relatively greater disadvantage in general. For example, an area could have a low score if there are (among other things) many households with low income, many people with no qualifications, or many people in low skill occupations. A high score indicates a relative lack of disadvantage in general. For example, an area may have a high score if there are (among other things) few households with low incomes, few people with no qualifications, and few people in low skilled occupations (ABS, 2013).

Housing

Dwelling type

Table A-13 Dwelling type by local area

Area	Separate Ho	ouse	Semi-detac terrace hou townhouse	se,	Flat, unit or	apartment	Other dwel	ling	Total Occupied Dwellings
	No.	%	No.	%	No.	%	No.	%	No.
Alexandria (SSC)	122	3%	1,227	34%	2,205	61%	16	0%	3,596
St Peters (SSC)	279	23%	558	46%	352	29%	13	1%	1,211
Newtown (SSC)	254	4%	3,296	54%	2,373	39%	150	3%	6,104
Marrickville (SSC)	3,159	32%	1,967	20%	4,411	45%	160	2%	9,759
Dulwich Hill (SSC)	1,695	31%	617	11%	2,952	54%	171	3%	5,467
Ashfield (SSC)	1,983	23%	674	8%	5,665	66%	39	0%	8,540
Ashbury (SSC)	947	89%	91	9%	18	2%	6	1%	1,062
Croydon Park (SSC)	1,735	45%	1,109	29%	979	25%	16	0%	3,859

Area	Separate Ho	use	Semi-detacl terrace hous townhouse		Flat, unit or	apartment	Other dwell	Total Occupied Dwellings	
	No.	%	No.	%	No.	%	No.	%	No.
Campsie (SSC)	1,836	23%	902	11%	5,174	65%	18	0%	7,961
Belfield (SSC)	1,401	67%	522	25%	138	7%	14	1%	2,079
Belmore (SSC)	2,056	48%	437	10%	1,727	41%	23	1%	4,258
Lakemba (SSC)	1,215	25%	191	4%	3,445	70%	25	1%	4,895
Greenacre (SSC)	4,363	65%	1,955	29%	392	6%	26	0%	6,764
Chullora (SSC)	0	0%	0	0%	0	0%	0	0%	0
Yagoona (SSC)	3,548	68%	797	15%	863	16%	14	0%	5,240
Potts Hill (SSC)	118	48%	62	25%	67	27%	0	0%	247
Picnic Point (SSC)	1,508	76%	462	23%	3	0%	0	0%	1,978
City of Sydney (C)	1,717	2%	16,834	20%	65,882	78%	421	0%	84,854
Inner West (A)	17,252	25%	22,583	33%	27,348	40%	1,037	2%	68,220
Strathfield (A)	5,299	34%	808	5%	6,318	41%	132	1%	15,557
Canterbury-Bankstown (A)	61,550	57%	17,309	16%	27,889	26%	622	1%	107,370
Greater Sydney	924,225	57%	227,235	14%	456,231	28%	9,132	1%	1,616,823
New South Wales	1,729,820	66%	317,453	12%	519,390	20%	23,580	1%	2,604,320

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales. Sourced from ABS 2016 QuickStats.

2. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Tenure

Table A-14 Tenure type by local area

Area	Owned outright		Owned wit mortgage	h a	Rented		Other tenu	re type	Tenure type not stated	
	No.	%	No.	%	No.	%	No.	%	No.	%
Alexandria (SSC)	457	13%	1,227	34%	1,805	50%	17	1%	84	2%
St Peters (SSC)	242	20%	462	38%	466	38%	8	1%	34	3%

Area	Owned outright		Owned wit mortgage	:h a	Rented		Other tenu	re type	Tenure type not stated	
	No.	%	No.	%	No.	%	No.	%	No.	%
Newtown (SSC)	966	16%	1,386	23%	3,567	58%	23	0%	163	3%
Marrickville (SSC)	2,361	24%	2,633	27%	4,409	45%	58	1%	298	3%
Dulwich Hill (SSC)	1,383	25%	1,493	27%	2,417	44%	27	1%	148	3%
Ashfield (SSC)	1,921	23%	1,819	21%	4,381	51%	50	1%	372	4%
Ashbury (SSC)	520	50%	386	37%	121	12%	3	0%	17	2%
Croydon Park (SSC)	1,253	33%	1,249	32%	1,240	32%	21	1%	98	3%
Campsie (SSC)	1,685	21%	1,760	22%	4,197	53%	51	1%	266	3%
Belfield (SSC)	699	34%	702	34%	612	29%	14	1%	56	3%
Belmore (SSC)	1,222	29%	1,030	24%	1,855	44%	22	1%	128	3%
Lakemba (SSC)	971	20%	947	19%	2,766	56%	21	0%	198	4%
Greenacre (SSC)	2,087	31%	2,167	32%	2,208	33%	54	1%	247	4%
Chullora (SSC)	0	0%	0	0%	0	0%	0	0%	0	0%
Yagoona (SSC)	1,583	30%	1,618	31%	1,814	35%	35	1%	206	4%
Potts Hill (SSC)	22	9%	140	57%	75	31%	3	1%	5	2%
Picnic Point (SSC)	833	42%	828	42%	270	14%	5	0%	43	2%
City of Sydney (C)	11,964	14%	16,964	20%	53,121	62%	559	1%	2,816	3%
Inner West (A)	16,990	25%	19,565	28%	30,003	44%	319	1%	1,919	3%
Strathfield (A)	3,193	25%	3,563	28%	5,381	43%	67	1%	465	4%
Canterbury-Bankstown (A)	32,497	30%	31,896	30%	39,193	36%	724	1%	3,454	3%
Greater Sydney	472,635	29%	539,917	33%	553,249	34%	14,183	1%	43,899	3%
New South Wales	839,665	32%	840,004	32%	826,922	32%	23,968	1%	73,763	3%

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 QuickStats.

3. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Affordability

Table A-15 Mean mortgage and rental repayments compared with median household income for local areas

Area	Median household income (\$/week)	Median mortgage Ioan repayment (\$/month)	Median mortgage Ioan repayment averaged per week (\$/week)	Loan repayment as a % of household income	Median rental repayment (\$/week)	Rental repayment as a % of household income
Alexandria (SSC)	2,421	2,500	577	24%	590	24%
St Peters (SSC)	2,318	2,600	600	26%	600	26%
Newtown (SSC)	2,080	2,600	600	29%	520	25%
Marrickville (SSC)	1,814	2,383	550	30%	450	25%
Dulwich Hill (SSC)	1,809	2,167	500	28%	450	25%
Ashfield (SSC)	1,632	2,058	475	29%	440	27%
Ashbury (SSC)	2,157	2,500	577	27%	560	26%
Croydon Park (SSC)	1,597	2,167	500	31%	400	25%
Campsie (SSC)	1,239	1,742	402	32%	395	32%
Belfield (SS/C)	1,440	2,378	549	38%	430	30%
Belmore (SSC)	1,192	2,000	462	39%	360	30%
Lakemba (SSC)	1,012	1,600	369	36%	350	35%
Greenacre (SSC)	1,184	2,058	475	40%	370	31%
Chullora (SSC)	N/A	N/A	N/A	N/A	N/A	N/A
Yagoona (SSC)	1,203	2,000	462	38%	380	32%
Potts Hill (SSC)	1,973	2,700	623	32%	550	28%
Picnic Point (SSC)	2,015	2,349	542	27%	525	26%
City of Sydney (C)	1,926	2,499	577	30%	565	29%
Inner West (A)	2,048	2,600	600	29%	480	23%
Strathfield (A)	1,781	2,167	500	28%	470	26%
Canterbury- Bankstown (A)	1,298	2,000	462	36%	380	29%
Greater Sydney	1,750	2,167	500	29%	440	25%

Area	Median household income (\$/week)	Median mortgage Ioan repayment (\$/month)	Median mortgage loan repayment averaged per week (\$/week)	Loan repayment as a % of household income	Median rental repayment (\$/week)	Rental repayment as a % of household income
New South Wales	1,486	1,986	458	31%	380	26%

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 QuickStats.

3. Percentages are rounded to the nearest whole number and as may not sum to 100%.

Occupancy

Table A-16 Occupancy by local area

Area	Number of unoccupied dwellings	Total number of dwellings	% unoccupied dwellings
Alexandria (SSC)	354	4,264	8%
St Peters (SSC)	157	1,490	11%
Newtown (SSC)	775	7,516	0%
Marrickville (SSC)	828	11,304	7%
Dulwich Hill (SSC)	409	6,279	7%
Ashfield (SSC)	625	9,731	6%
Ashbury (SSC)	81	1,162	7%
Croydon Park (SSC)	275	4,281	6%
Campsie (SSC)	501	8,918	6%
Belfield (SSC)	124	2,282	5%
Belmore (SSC)	369	4,868	8%
Lakemba (SSC)	325	5,508	6%
Greenacre (SSC)	484	7,636	6%
Chullora (SSC)	0	0	0%
Yagoona (SSC)	408	5,947	7%
Potts Hill (SSC)	16	295	5%
Picnic Point (SSC)	107	2,168	5%
Greater Sydney	136,055	1,855,734	7%

Area	Number of unoccupied dwellings	Total number of dwellings	% unoccupied dwellings
New South Wales	284,741	3,059,599	9%

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 QuickStats.

3. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Education

Attendance

Table A-17 Attendance at educational facilities by Suburb

Area	Preschool		eschool Primary		Secondary (e.g. TAFE		ion	Univers Tertiary		Other		Not stated		% of total pop ⁿ attending educational facilities	
	Atten dees	%	Atten dees	%	Atten dees	%	Atten dees	%	Atten dees	%	Atten dees	%	Atten dees	%	
Alexandria (SSC)	82	4%	285	14%	184	9%	142	7%	621	30%	88	4%	661	32%	25%
St Peters (SSC)	49	6%	133	16%	82	10%	66	8%	248	29%	17	2%	248	29%	27%
Newtown (SSC)	113	2%	573	11%	379	8%	257	5%	2,102	42%	187	4%	1,443	29%	34%
Marrickville (SSC)	357	5%	1,569	20%	1,030	13%	550	7%	1,971	25%	307	4%	2,041	26%	29%
Dulwich Hill (SSC)	212	5%	968	23%	654	16%	275	7%	913	22%	144	3 %	1,019	24%	31%
Ashfield (SSC)	272	4%	1,126	15%	941	13%	553	7%	2,516	33%	497	7%	1,639	22%	32%
Ashbury (SSC)	68	7%	336	32%	268	26%	43	4%	180	17%	9	1%	145	14%	32%
Croydon Park (SSC)	160	5%	904	28%	755	23%	184	6%	681	21%	75	2%	525	16%	30%

Area	Preschool		Primary		Secondary		Technical or Further Education (e.g. TAFE)		University or Tertiary		Other		Not stated		% of total pop ⁿ attending educational facilities
	Atten dees	%	Atten dees	%	Atten dees	%	Atten dees	%	Atten dees	%	Atten dees	%	Atten dees	%	
Campsie (SSC)	256	3%	1,500	19%	1,305	17%	602	8%	1,032	26%	561	7%	1,577	20%	28%
Belfield (SSC)	116	6%	564	30%	455	25%	107	6%	279	15%	35	2%	302	16%	30%
Belmore (SSC)	183	5%	960	24%	773	20%	308	8%	725	18%	167	4%	844	21%	31%
Lakemba (SSC)	286	5%	1,651	27%	949	15%	428	7%	1,164	19%	386	6%	1,331	22%	36%
Greenacre (SSC)	432	5%	2,396	30%	1,988	22%	464	5%	1,332	15%	247	3%	1,785	20%	37%
Chullora (SSC)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0%
Yagoona (SSC)	307	5%	1,696	28%	1,311	22%	362	6%	893	15%	192	3%	1,312	22%	34%
Potts Hill (SSC)	10	3%	60	20%	50	17%	26	9%	71	24%	5	2%	80	27%	33%
Picnic Point (SSC)	144	7%	420	22%	476	24%	96	5%	281	14%	20	1%	327	17%	32%

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 QuickStats.

3. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

4. Popⁿ – population
Table A-18 Attendance at educational facilities by LGA

Area	Total pop ⁿ	Preschool				Secondary		Technical or Further Education (e.g. TAFE)		University or Tertiary		Total attendanc e	% of total pop ⁿ
		Attendees	% of total pop ⁿ	Attendees	% of total pop ⁿ	Attendees	% of total pop ⁿ	Attendees	% of total pop ⁿ	Attendees	% of total pop ⁿ		
City of Sydney (C)	208,374	1,366	1%	4,521	2%	3,621	2%	5,845	3%	29,206	14%	77,992	37%
Inner West (A)	182,043	2,737	2%	11,809	6%	7,649	4%	3,204	2%	13,879	8%	55,059	30%
Strathfield (A)	40,312	544	1%	2,483	6%	2,438	6%	845	2%	3,635	9%	13,459	33%
Canterbury- Bankstown (A)	346,302	5,679	2%	29,877	9%	23,477	7%	7,156	2%	19,601	6%	113,505	33%
Greater Sydney	4,823,991	83,920	2%	391,441	8%	303,794	6%	92,782	2%	294,017	6%	1,530,182	32%
New South Wales	7,480,228	132,047	2%	607,175	8%	466,853	6%	144,103	2%	376,133	5%	2,325,250	31%

Notes:

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 QuickStats.

3. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Qualifications

Table A-19 Post-school qualifications by LGA (2016 Census)

Area	Total pop ⁿ	Postgraduate degree level		Graduate diploma and graduate certificate level		Bachelor's degree level		Advanced diploma		Level of education not defined		Total attendanc e	% of total pop ⁿ
		Attendee s	% of total pop ⁿ	Attendee s	% of total pop ⁿ	Attendees	% of total pop ⁿ	Attendee s	% of total pop ⁿ	Attendees	% of total pop ⁿ		
City of Sydney (C)	208,374	23,995	12%	4,416	2%	57,191	27%	16,400	8%	1,833	1%	103,835	50%
Inner West (A)	182,043	17,982	10%	4,890	3%	41,396	23%	13,758	8%	1,325	1%	79,351	44%
Strathfield (A)	40,312	3,701	9%	572	1%	8,689	22%	2,812	7%	447	1%	16,221	40%
Canterbury- Bankstown (A)	346,302	12,861	4%	2,915	1%	38,458	11%	23,627	7%	2,841	1%	80,702	23%
Greater Sydney	4,823,991	288,103	6%	70,126	1%	752,774	16%	365,986	8%	335,080	7%	1,812,069	38%
New South Wales	7,480,228	344,490	5%	103,340	1%	976,888	13%	543,142	7%	582,903	8%	2,026,239	27%

Notes:

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 Census of Population and Housing Basic Community Profile for each particular area. G46 (b) – Non-school Qualification Level of Education by Age and Sex.

3. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Level of highest educational attainment

Table A-20 Level of highest educational attainment by suburbs – people aged 15 years and over (2016 Census)

Area	Bachelor's degree level and above		Advanced diploma and diploma level		Certificates (I, II, III, & IV)		Year 12		Year 11	
	Number	% of total pop ⁿ	Number	% of total pop ⁿ	Number	% of total pop ⁿ	Number	% of total pop ⁿ	Number	% of total pop ⁿ
Alexandria (SSC)	3,726	50%	707	10%	583	8%	1,017	14%	116	2%

Area	Bachelor's degree level and above		Advanced diploma and diploma level		Certificates (I, II, III, & IV)		Year 12		Year 11	
	Number	% of total pop ⁿ	Number	% of total pop ⁿ	Number	% of total pop ⁿ	Number	% of total pop ⁿ	Number	% of total pop ⁿ
St Peters (SSC)	1,099	40%	277	10%	296	11%	437	16%	54	2%
Newtown (SSC)	6,542	48%	1,069	8%	912	7%	2,250	17%	203	2%
Marrickville (SSC)	8,104	36%	1,876	8%	1,946	9%	3,715	16%	505	2%
Dulwich Hill (SSC)	4,358	38%	1,062	9%	1,141	10%	1,665	14%	277	2%
Ashfield (SSC)	8,240	39%	1,901	9%	1,463	7%	3,790	18%	395	2%
Ashbury (SSC)	798	30%	251	9%	352	13%	428	16%	76	3%
Croydon Park (SSC)	2,433	27%	841	9%	1,072	12%	1,754	20%	259	3%
Campsie (SSC)	5,207	25%	1,879	9%	1,493	7%	5,515	27%	554	3%
Belfield (SSC)	1,015	20%	485	10%	611	12%	1,079	21%	164	3%
Belmore (SSC)	1,919	18%	896	9%	1,130	11%	2,265	22%	370	4%
Lakemba (SSC)	3,365	26%	890	7%	876	7%	2,783	22%	348	3%
Greenacre (SSC)	2,840	15%	1,442	8%	2,075	11%	4,147	23%	714	4%
Chullora (SSC)	0	0%	0	0%	0	0%	0	0%	0	0%
Yagoona (SSC)	2,095	15%	1,100	8%	1,674	12%	3,154	23%	566	4%
Potts Hill (SSC)	239	24%	80	11%	56	8%	141	20%	12	2%
Picnic Point (SSC)	1,063	22%	490	10%	851	18%	746	16%	142	3%

Area	Year 10			elow	No educati attainment		Not stated		
	Number	% of total pop ⁿ	Number	% of total pop ⁿ	Number	% of total pop ⁿ	Number	% of total pop ⁿ	
Alexandria (SSC)	260	4%	124	2%	26	0%	682	9%	
St Peters (SSC)	146	5%	101	4%	28	1%	261	10%	
Newtown (SSC)	459	3%	362	3%	63	1%	1,468	11%	
Marrickville (SSC)	1,376	6%	1,785	8%	585	3%	2,400	11%	
Dulwich Hill (SSC)	684	6%	782	7%	192	2%	1,123	10%	
Ashfield (SSC)	1,077	5%	1,202	6%	273	1%	1,996	10%	
Ashbury (SSC)	239	9%	252	10%	31	1%	166	6%	
Croydon Park (SSC)	807	9%	767	9%	170	2%	610	7%	
Campsie (SSC)	1,508	7%	1,743	8%	612	3%	1,769	9%	

Area			Year 9 or b	elow	No education attainment	onal	Not stated		
	Number	% of total pop ⁿ	Number	% of total pop ⁿ	Number	% of total pop ⁿ	Number	% of total pop ⁿ	
Belfield (SSC)	523	11%	543	11%	94	2%	368	7%	
Belmore (SSC)	967	9%	1,188	11%	373	4%	1,049	10%	
Lakemba (SSC)	986	8%	1,374	11%	528	4%	1,252	10%	
Greenacre (SSC)	2,249	12%	1,961	11%	575	3%	1,926	10%	
Chullora (SSC)	0	0	0	0	0	0	0	0	
Yagoona (SSC)	1,667	12%	1,646	12%	440	3%	1,334	10%	
Potts Hill (SSC)	35	5%	31	4%	13	2%	80	11%	
Picnic Point (SSC)	615	13%	311	7%	20	0%	380	8%	

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 QuickStats.

3. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Employment and income

Income

Table A-21 Median income by local area

Area	Median Individual Income (\$/week)	Median Household Income (\$/week)	Median Family Income (\$/week)
Alexandria (SSC)	1,341	2,421	2,904
St Peters (SSC)	1,134	2,318	2,654
Newtown (SSC)	1,067	2,080	2,694
Marrickville (SSC)	793	1,814	2,096
Dulwich Hill (SSC)	914	1,809	2,221
Ashfield (SSC)	681	1,632	1,802
Ashbury (SSC)	743	2,157	2,324
Croydon Park (SSC)	680	1,597	1,906
Campsie (SSC)	468	1,239	1,274
Belfield (SSC)	548	1,440	1,675
Belmore (SSC)	504	1,192	1,339

Area	Median Individual Income (\$/week)	Median Household Income (\$/week)	Median Family Income (\$/week)
Lakemba (SSC)	427	1,012	1,052
Greenacre (SSC)	436	1,184	1,334
Chullora (SSC)	N/A	N/A	N/A
Yagoona (SSC)	467	1,203	1,343
Potts Hill (SSC)	785	1,973	1,944
Picnic Point (SSC)	780	2,015	2,214
City of Sydney (C)	953	1,926	2,524
Inner West (A)	957	2,048	2,498
Strathfield (A)	682	1,781	1,894
Canterbury-Bankstown (A)	502	1,298	1,437
Greater Sydney	719	1,750	1,988
New South Wales	664	1,780	1,486

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 QuickStats.

Employment status

Table A-22 Employment status by local area

Area	Total pop ⁿ	Total Labour Force	% of total pop ⁿ	Employed Full Time	% of total Labour Force	Employed Part Time	% of total Labour Force	Employed (other)	% of total Labour Force	Un- employe d	% of total Labour Force
Alexandria (SSC)	8,262	5,874	71%	4,434	75%	993	17%	247	4%	204	3%
St Peters (SSC)	3,145	2,107	67%	1,491	71%	451	21%	84	4%	83	4%
Newtown (SSC)	15,029	9,806	65%	6,609	44%	2,299	15%	448	3%	446	3%
Marrickville (SSC)	26,592	14,787	56%	9,381	63%	3,957	27%	627	4%	822	6%
Dulwich	13,715	7,864	57%	5,121	65%	2,019	26%	350	4%	377	5%

Area	Total pop ⁿ	Total Labour Force	% of total pop ⁿ	Employed Full Time	% of total Labour Force	Employed Part Time	% of total Labour Force	Employed (other)	% of total Labour Force	Un- employe d	% of total Labour Force
Hill (SSC)											
Ashfield (SSC)	23,841	13,153	55%	7,688	58%	4,005	30%	531	4%	926	7%
Ashbury (SSC)	3,329	1,713	52%	1,042	31%	546	16%	66	2%	60	2%
Croydon Park (SSC)	11,012	5,649	51%	3,477	62%	1,652	29%	228	4%	287	5%
Campsie (SSC)	24,541	12,113	49%	6,451	26%	3,967	16%	562	2%	1,128	5%
Belfield (SSC)	6,322	2,910	46%	1,751	60%	871	30%	137	5%	148	5%
Belmore (SSC)	12,718	5,220	41%	3,209	25%	1,699	13%	313	2%	480	4%
Lakemba (SSC)	17,023	6,553	38%	3,242	49%	2,091	32%	338	5%	884	13%
Greenacre (SSC)	24,373	9,023	37%	4,792	53%	2,863	32%	582	6%	797	9%
Chullora (SSC)	0	0	0%	0	0%	0	0%	0	0%	0	0%
Yagoona (SSC)	18,013	7,165	40%	4,024	56%	2,044	29%	399	6%	691	10%
Potts Hill (SSC)	893	453	51%	300	66%	91	20%	34	8%	22	5%
Picnic Point (SSC)	6,160	3,160	51%	1,940	31%	945	15%	153	2%	125	2%
City of Sydney (C)	208,374	124,745	60%	81,454	65%	30,695	25%	5,106	4%	7,493	6%
Inner West (A)	182,043	104,599	57%	67,813	65%	27,388	26%	4,371	4%	5,021	5%
Strathfield (A)	40,312	21,095	52%	12,678	60%	5,981	28%	952	5%	1,473	7%

Area	Total pop ⁿ	Total Labour Force	% of total pop ⁿ	Employed Full Time	% of total Labour Force	Employed Part Time	% of total Labour Force	Employed (other)	% of total Labour Force	Un- employe d	% of total Labour Force
Canterbury - Bankstown (A)	346,302	150,613	43%	85,599	57%	44,841	30%	7,752	5%	12,420	8%
Greater Sydney	4,823,991	2,418,899	50%	1,480,218	61%	682,605	28%	109,898	5%	146,187	6%
New South Wales	7,480,228	3,605,881	48%	2,134,521	59%	1,071,151	30%	174,655	5%	225,546	6%

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 Census of Population and Housing Basic Community Profile for each area. G43 (b) – Labour Force Status by Age and Sex.

3. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Employment by industry

Table A-23 Employment by industry by local area

Area	Alexand	Alexandria SSC		St Peters SSC		Newtown SSC		Marrickville SSC		Hill SSC	Ashfield SSC	
	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total
Agriculture, forestry and fishing	8	0%	3	0%	8	0%	28	0%	10	0%	17	0%
Mining	9	0%	3	0%	9	0%	15	0%	3	0%	9	0%
Manufacturing	161	3%	65	3%	250	3%	629	5%	275	4%	437	4%
Electricity, gas, water and waste services	37	1%	17	1%	42	0%	77	1%	46	1%	52	0%
Construction	250	5%	101	5%	379	4%	726	5%	392	5%	574	5%
Wholesale trade	164	3%	45	2%	184	2%	335	3%	195	3%	305	3%
Retail trade	394	7%	153	8%	596	7%	1,161	9%	564	8%	1,078	9%
Accommodation and	363	7%	131	7%	787	9%	1,049	8%	483	7%	1,403	12%

Area	Alexandr	ia SSC	St Peters	SSC	Newtowr	SSC	Marrickv	ille SSC	Dulwich	Hill SSC	Ashfield	SSC
	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total
food services												
Transport, postal and warehousing	244	5%	92	5%	230	3%	527	4%	296	4%	476	4%
Information media and telecommunications	337	6%	109	6%	585	7%	764	6%	398	6%	417	4%
Financial and insurance services	544	10%	154	8%	603	7%	826	6%	447	6%	798	7%
Rental, hiring and real estate services	103	2%	37	2%	124	1%	183	1%	115	2%	172	1%
Professional, scientific and technical services	955	18%	268	14%	1,568	18%	1,658	12%	849	12%	1,351	12%
Administrative and support services	220	4%	88	5%	298	3%	525	4%	264	4%	580	5%
Public administration and safety	382	7%	143	7%	654	7%	977	7%	549	8%	655	6%
Education and training	468	9%	200	10%	1,000	11%	1,454	11%	911	13%	1,084	9%
Health care and social assistance	450	8%	182	9%	949	11%	1,453	11%	919	13%	1,643	14%
Arts and recreation services	165	3%	72	4%	335	4%	467	3%	214	3%	260	2%
Other services	162	3%	76	4%	353	4%	508	4%	255	4%	338	3%
Total	5,416		1,939		8,954		13,362		7,185		11,649	

Area	Ashbury	SSC	Croydon SSC	Park	Campsie	SSC	Belfield S	SSC	Belmore	SSC	Lakemba	SSC
	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total
Agriculture, forestry and fishing	0	0%	12	0%	18	0%	0	0%	13	0%	8	0%

Area	Ashbury	SSC	Croydon SSC	Park	Campsie	SSC	Belfield	SSC	Belmore	SSC	Lakemba	SSC
	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total
Mining	0	0%	4	0%	3	0%	0	0%	8	0%	0	0%
Manufacturing	56	3%	250	5%	669	6%	118	5%	309	6%	372	7%
Electricity, gas, water and waste services	8	1%	35	1%	27	0%	15	1%	28	1%	27	1%
Construction	158	10%	540	10%	933	9%	332	13%	516	11%	315	6%
Wholesale trade	39	2%	177	3%	324	3%	87	3%	168	3%	145	3%
Retail trade	131	8%	504	10%	1,213	11%	264	10%	513	10%	679	13%
Accommodation and food services	79	5%	345	7%	1,449	13%	199	8%	471	10%	541	10%
Transport, postal and warehousing	77	5%	256	5%	672	6%	168	6%	392	8%	702	14%
Information media and telecommunications	60	4%	140	3%	185	2%	56	2%	95	2%	104	2%
Financial and insurance services	110	7%	284	6%	493	4%	157	6%	247	5%	169	3%
Rental, hiring and real estate services	46	3%	89	2%	142	1%	56	2%	78	2%	40	1%
Professional, scientific and technical services	155	9%	447	9%	603	5%	182	7%	299	6%	320	6%
Administrative and support services	75	5%	186	4%	708	6%	111	4%	258	5%	282	5%
Public administration and safety	103	6%	350	7%	316	3%	143	5%	264	5%	319	6%
Education and training	199	12%	552	11%	517	5%	211	8%	329	7%	260	5%
Health care and social assistance	192	12%	676	13%	1,302	12%	324	12%	619	13%	635	12%
Arts and recreation services	31	2%	88	2%	143	1%	28	1%	80	2%	49	1%

Area	Ashbury	SSC	Croydon SSC	Park	Campsie	SSC	Belfield S	SSC	Belmore	SSC	Lakemba	SSC
	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total
Other services	64	4%	208	4%	423	4%	151	6%	202	4%	211	4%
Total	1,646		5,143		10,986		2,602		4,889		5,178	

Area	Greenac	re SSC	Chullora	SSC	Yagoona	SSC	Potts Hil	I SSC	Picnic Po	oint
	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total
Agriculture, forestry and fishing	20	0%	0	0%	5	0%	0	0%	9	0%
Mining	4	0%	0	0%	5	0%	0	0%	3	0%
Manufacturing	455	6%	0	0%	549	9%	31	8%	167	6%
Electricity, gas, water and waste services	48	1%	0	0%	46	1%	0	0%	43	1%
Construction	962	13%	0	0%	671	10%	43	11%	340	12%
Wholesale trade	273	4%	0	0%	209	3%	14	4%	101	3%
Retail trade	962	13%	0	0%	725	12%	46	12%	249	9%
Accommodation and food services	444	6%	0	0%	353	6%	21	5%	139	5%
Transport, postal and warehousing	690	9%	0	0%	533	9%	27	7%	187	6%
Information media and telecommunications	147	2%	0	0%	103	2%	12	3%	54	2%
Financial and insurance services	388	5%	0	0%	272	5%	28	7%	190	7%
Rental, hiring and real estate services	128	2%	0	0%	84	1%	8	2%	50	2%
Professional, scientific and technical services	437	6%	0	0%	338	6%	36	9%	259	9%
Administrative and	288	4%	0	0%	255	4%	27	7%	95	3%

Area	Greenac	re SSC	Chullora	SSC	Yagoona	SSC	Potts Hill	SSC	Picnic Po	oint
	no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total
support services										
Public administration and safety	362	5%	0	0%	279	5%	23	6%	213	7%
Education and training	669	9%	0	0%	427	7%	20	5%	334	11%
Health care and social assistance	884	12%	0	0%	730	12%	41	10%	295	10%
Arts and recreation services	77	1%	0	0%	87	1%	3	1%	54	2%
Other services	385	5%	0	0%	320	5%	18	5%	126	4%
Total	7,623		0		5,991		398		2,908	

Area	Greater Syc	dney	New South	Wales
	no.	% of total	no.	% of total
Agriculture, forestry and fishing	9,919	0%	72,625	2%
Mining	4,773	0%	31,736	1%
Manufacturing	130,833	6%	197,331	6%
Electricity, gas, water and waste services	17,755	1%	31,881	1%
Construction	186,332	9%	282,491	9%
Wholesale trade	81,471	4%	103,722	3%
Retail trade	211,890	10%	326,396	10%
Accommodation and food services	151,831	7%	239,222	7%
Transport, postal and warehousing	114,594	5%	158,760	5%
Information media and telecommunications	63,423	3%	73,398	2%

Area	Greater Syc	dney	New South	Wales
	no.	% of total	no.	% of total
Financial and insurance services	144,806	7%	167,259	5%
Rental, hiring and real estate services	44,186	2%	59,652	2%
Professional, scientific and technical services	223,708	10%	274,078	9%
Administrative and support services	81,401	4%	117,482	4%
Public administration and safety	124,432	6%	204,173	6%
Education and training	182,770	8%	282,568	9%
Health care and social assistance	263,351	12%	422,195	13%
Arts and recreation services	37,955	2%	51,775	2%
Other services	80,900	4%	124,477	4%
Total	2,156,330		3,221,221	

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 Census of Population and Housing Basic Community Profile for each area. G51 (c) – Industry of Employment by Age by Sex.

3. There are small random adjustments to the statistics value to protect the confidentiality of data. These adjustments may cause the sum of columns to differ by small amounts from the totals (ABS, 2016).

4. Percentages are rounded to the nearest whole number and as such may not sum to 100%.

Employment by occupation

Table A-24 Employment by occupation by local area

Area	Alexandri	a SSC	St Peters	SSC	Newtown	SSC	Marrickvil	le SSC	Dulwich H	Hill SSC	Ashfield S	SSC
	no.	% of tota	l no.	% of total	no.	% of total	no.	% of total	no.	% of total	no.	% of total
Managers	1,077	19%	329	16%	1,444	15%	1,855	13%	1,118	15%	1,266	10%
Professionals	2,300	41%	727	36%	4,033	43%	4,769	34%	2,658	35%	3,766	31%
Technicians and trade workers	412	7%	193	10%	670	7%	1,471	11%	699	9%	1,295	11%
Community and personal services	380	7%	173	9%	857	9%	1,320	9%	649	9%	1,372	11%
Clerical and administrative	737	13%	295	15%	1,132	12%	1,791	13%	1,059	14%	1,640	13%
Sales workers	410	7%	143	7%	599	6%	1,078	8%	583	8%	1,030	8%
Machinery operators and drivers	97	2%	56	3%	150	2%	477	3%	227	3%	464	4%
Labourers	161	3%	83	4%	299	3%	961	7%	397	5%	1,163	10%
Inadequately described/not stated	88	2%	24	1%	166	2%	235	2%	103	1%	238	2%
Total	5,670		2,026		9,359		13,960		7,491		12,225	

Area	Ashbury	SSC	Croydon I	Park SSC	Campsie	SSC	Belfield S	SC	Belmore	SSC	Lakemba	SSC
	no.	% of total	no.	% of total	no.	% of total	no.	% of tota	l no.	% of total	no.	% of total
Managers	245	15%	677	13%	885	8%	337	12%	433	8%	362	6%
Professionals	501	30%	1,430	27%	1,783	16%	555	20%	880	17%	831	15%
Technicians and trade workers	195	12%	646	12%	1,635	15%	394	14%	727	14%	670	12%
Community and personal services	128	8%	482	9%	1,347	12%	244	9%	627	12%	702	12%
Clerical and administrative	259	16%	861	16%	1,269	12%	486	18%	778	15%	563	10%
Sales workers	160	10%	537	10%	1,190	11%	282	10%	516	10%	596	11%

Area	Ashbury	SSC	Croydon I	Park SSC	Campsie	SSC	Belfield S	SC	Belmore \$	SSC	Lakemba	SSC
Machinery operators and drivers	53	3%	263	5%	828	8%	157	6%	465	9%	824	15%
Labourers	91	6%	377	7%	1,743	16%	243	9%	672	13%	902	16%
Inadequately described/not stated	16	1%	85	2%	303	3%	64	2%	134	3%	216	4%
Total	1,646		5,359		10,986		2,766		5,220		5,669	

Area	Greenacre	e SSC	Chullora S	SSC	Yagoona	SSC	Potts Hill	SSC	Picnic Po	int SSC
	no.	% of total	no.	% of total	no.	% of total	no.	% of total	l no.	% of total
Managers	803	10%	0	0%	547	8%	64	15%	486	16%
Professionals	1,450	18%	0	0%	1,065	16%	111	26%	682	22%
Technicians and trade workers	1,260	15%	0	0%	962	15%	41	10%	401	13%
Community and personal services	793	10%	0	0%	681	11%	35	8%	255	8%
Clerical and administrative	1,239	15%	0	0%	1,012	16%	57	13%	624	21%
Sales workers	918	11%	0	0%	636	10%	42	10%	263	7%
Machinery operators and drivers	754	9%	0	0%	654	10%	25	6%	117	4%
Labourers	814	10%	0	0%	755	12%	38	9%	159	5%
Inadequately described/not stated	192	2%	0	0%	158	2%	10	2%	44	1%
Total	8,229		0		6,474		430		3,041	

Area	Greater Sydney		New South Wales	
	no.	% of total	no.	% of total
Managers	311,762	14%	456,084	13%
Professionals	597,798	26%	798,126	24%
Technicians and trade	265,056	12%	429,239	13%

Area	Greater S	ydney	New Sout	n Wales
	no.	% of total	no.	% of total
workers				
Community and personal services	218,206	10%	350,261	10%
Clerical and administrative	331,135	15%	467,977	14%
Sales workers	205,051	9%	311,414	9%
Machinery operators and drivers	128,020	6%	206,839	6%
Labourers	171,450	8%	297,887	9%
Inadequately described/not stated	44,228	2%	62,505	2%
Total	2,272,718		3,380,332	

1. Statistics for State Suburb (SSC), Local Government Area (A) and (C), Greater Sydney and New South Wales.

2. Sourced from ABS 2016 Census of Population and Housing Basic Community Profile for each particular area. G53 – Industry of Employment by Occupation.

3. There are small random adjustments to the statistics value to protect the confidentiality of data. These adjustments may cause the sum of columns to differ by small amounts from the totals (ABS, 2016).

4. Percentages are rounded to the nearest whole number

Annexure B

Community infrastructure and businesses in the study area

Annexure B Community infrastructure and businesses in the study area

The following sections identify community infrastructure and businesses within or in proximity to the project area. Highlighted rows indicate community infrastructure located directly adjacent to the transmission cable route and construction laydown areas. The list of community infrastructure and businesses has been updated as of 2 July 2019. These facilities and businesses may be subject to change after this date.

Educational facilities

Educational facilities provided within or in proximity to the project area predominantly comprise early childhood and primary school education facilities. High school facilities are also available within the LGAs but are located at further distances from the local study area. Some facilities have the same name but are located in different suburbs along the transmission cable route.

Facility	Suburb	Precinct
Little Angels Long Day Care Centre	Greenacre	2
Wangee Road Child Care Centre	Greenacre	2
Pandora Preschool	Greenacre	2
Fantastic Family Day Care	Greenacre	2
KU Karingal Preschool	Greenacre	2
Lakemba Children's Centre	Lakemba	2
Whizz Kidzz Early Childhood Centre	Lakemba	2
Care for Kindies	Belmore	2
Star Academy Kids	Belfield	2
Oz Education Childcare & Preschool	Belfield	2
Campsie Child Care Centre	Campsie	2
CASS Family Day Care	Campsie	2
Little Troopers Childcare Centre	Ashbury	3
Ashbury Kidz Academy	Ashbury	3
Canterbury Community Child Care Centre	Ashbury	3
St Stephanos Child Care Centre	Hurlstone Park	3
Dulwich Hill Preschool	Dulwich Hill	3
Kidzville Early Learning Centre	Marrickville	4
Goodstart Early Learning Marrickville	Marrickville	4
Addison Road Child Care Centre & Community Early Learning Australia	Marrickville	4
Enmore Children's Centre	Marrickville	4
Camdenville Outside School Hours Care	Newtown	4
Camdenville Public School Preschool	Newtown	4

Table B-1 Preschools and child care

Table B-2 Educational facilities

Facility	Suburb	Precinct
Belmore North Public School	Belmore	2
Belmore Boys High School	Belmore	2
St John Vianney Catholic Primary School	Greenacre	2
Al Sadiq College	Greenacre	2

Facility	Suburb	Precinct
St Therese's Catholic Primary School	Lakemba	2
Wangee Park School	Lakemba	2
Canterbury Vale School	Lakemba	2
Hampden Park Public School	Lakemba	2
Harcourt Public School	Campsie	2
Greenacre Public School	Greenacre	2
Rissalah College	Lakemba	2
Ashbury Public School	Ashbury	3
Canterbury Boys High School	Ashbury	3
Yeo Park Infants School	Ashfield	3
Dulwich Hill Public School	Dulwich Hill	3
St Brigid's Catholic Primary School	Marrickville	3
Dulwich High School of Visual Arts and Design	Dulwich Hill	3
Marrickville High School	Marrickville	3
Newington College	Stanmore	3
Marrickville Public School	Marrickville	3
Wilkins Public School	Marrickville	3
Trinity Grammar School	Summer Hill	3
Summer Hill Public School	Summer Hill	3
Canterbury Girls High School	Canterbury	3
St Pius' Catholic Primary School	Newtown	4
TAFE NSW – Design Centre Enmore	Enmore	4
St Peters Public School	St Peters	5
Camdenville Public School	Newtown	5

Health, medical and emergency services

The hospitals which service the local suburbs within or in proximity to the project area are predominantly private. There are numerous medical centres that cater for the care of the community within or in proximity to the project area. These include:

Table B-3 Health and emergency

Facility	Suburb	Precinct
Jayadev Surgery	Greenacre	2
Dr. Alameddin Surgery	Lakemba	2
Greenacre Medical Practice	Greenacre	2
Primary Physiocare	Greenacre	2
Podiatrist (Dr Turner)	Greenacre	2
Dr. Marwan Aloe	Greenacre	2
Greenoaks Medical Centre	Greenacre	2
Greenacre Health Care	Greenacre	2
Dr. Hai Dovan	Lakemba	2
Medical Centre - Dr D Hor	Belmore	2
Greenacre Medical After-Hours Clinic	Greenacre	2
Alameddin Family Practice	Lakemba	2
Dr. Tsang's Surgery	Greenacre	2

Facility	Suburb	Precinct
Belfield Family Medical Practice	Belfield	2
Dr. Martin Lee	Hurlstone Park	3
Terrace Doctors	Dulwich Hill	3
Medkare Medical Centre	Dulwich Hill	3
Dulwich Hill Chiropractic and Therapeutic Centre	Dulwich Hill	3
Dr. Stanton Ian	Dulwich Hill	3
MetroRehab Hospital	Petersham	3
Dr. Alan Leung	Marrickville	3
The Holy Family Medical Centre	Dulwich Hill	3
Dulwich Hill Physiotherapy	Dulwich Hill	3
Inner West Physiotherapy & Sports Injury Centre	Marrickville	3
3 Ways Chiropractic	Marrickville	3
Inner West Endoscopy Centre	Marrickville	3
Marrickville Road Medical Practice	Marrickville	3
First Care Medical Centre	Enmore	4
Enmore Centre For Spine & Musculoskeletal Disorders	Enmore	4
Assure Psychology	Enmore	4
Urban Nature	Enmore	4
Enmore Therapy Clinic	Enmore	4

Aged care and disability care facilities

There are numerous health facilities that cater for the care of the aged and disabled within or in proximity to the project area are predominantly private. These include:

Table B-4 Aged care and disability care facilities

Facility	Suburb	Precinct
Bankstown Aged Care Facility	Greenacre	2
CASS Residential Aged Care Facility	Campsie	2
Opal Wallgrove Aged Care Facility	Lakemba	2
Bupa Aged Care Ashbury	Ashbury	3
Maybanke Aged Care Plus Centre	Dulwich Hill	3
Willandra Aged Care	Marrickville	4
Bethesda Nursing Home Salvation Army	Marrickville	4

Places of worship

Table B-5 Places of Worship

Facility	Suburb	Precinct
Liberty Hill Christian Centre	Chullora	1
Belmore Mosque (Al-Azhar Mosque)	Belmore	2
Hanaro Presbyterian Church	Belfield	2
Kingdom Hall of Jehovah's Witnesses	Campsie	2
St John Vianney Catholic Church	Greenacre	2

Facility	Suburb	Precinct
Liberty Church of Christ	Greenacre	2
Good Shepherd Anglican Church	Greenacre	2
Sydney Full Gospel Church	Greenacre	2
St Therese's Catholic Church	Lakemba	2
Lakemba Mosque	Lakemba	2
Campsie Community Church	Campsie	2
Campsie Chinese Congregational Church	Croydon Park	3
St Matthew's Anglican Church	Ashbury	3
The Ashbury Samoan Uniting Church	Ashbury	3
St Stephanos Greek Orthodox Church	Hurlstone Park	3
Hurlstone Park Vietnamese Baptist Church	Hurlstone Park	3
Hurlstone Park Uniting Church	Hurlstone Park	3
Portuguese Seventh-Day Adventist	Ashfield	3
Holy Trinity Anglican Church	Dulwich Hill	3
Tibetan Buddhist Society Tibetan	Dulwich Hill	3
Catholic Parish of St Brigid Marrickville	Marrickville	3
Marrickville Kingdom Hall of Jehovah's Witnesses	Marrickville	4
St Luke's Anglican Church	Enmore	4
Central Fijian Seventh-Day Adventist	Enmore	4
Greek Church of the Nazarene	Enmore	4
St Pius Catholic Church	Newtown	4

Sporting and recreational facilities

Table B-6Parks and sports fields

Facility	Suburb	Precinct
Potts Park	Yagoona	1
Cooke Park	Belfield	2
Maria Reserve	Belfield	2
Bark Huts Reserve	Belfield	2
Rudd Park	Belfield	2
Gosling Park	Greenacre	2
Northcote Reserve	Greenacre	2
Ethel Pyers Reserve	Greenacre	2
Allum Park and playground	Greenacre	2
Drew Street Playground	Greenacre	2
Flockhart Park	Croydon Park	2
Harcourt Reserve	Campsie	2
Sando Reserve	Croydon Park	2
Fourth Avenue Playground/Federation Reserve	Campsie	2
Flockhart Park and playground	Croydon Park	2
Picken Oval	Croydon Park	2
Rosedale Reserve	Croydon Park	2
Mildura Reserve and playground	Campsie	3

Facility	Suburb	Precinct
Croydon Park	Croydon Park	3
Henson Park	Marrickville	3
Amy Street Playground	Marrickville	3
Lees Park and playground	Ashbury	3
Canterbury Park and playground	Canterbury	3
Lasswade Street Playground	Ashbury	3
Peace Park	Ashbury	3
Blick Oval	Canterbury	3
Yeo Park	Ashfield	3
Morton Park	Lewisham	3
Ryan Playground	Stanmore	3
Hoskins Park	Dulwich Hill	3
Johnson Park and playground	Dulwich Hill	3
J F Laxton Reserve and playground	Dulwich Hill	3
W H Wagener Oval and playground	Ashbury	3
Canterbury Park Racecourse	Canterbury	3
Arlington Recreation Reserve	Dulwich Hill	3
Marrickville Park Playground	Marrickville	3
Marrickville & District Hardcourt Tennis Association	Marrickville	3
Jarvie Park Playground	Marrickville	4
Newington Road Playground	Marrickville	4
Francis Street Park	Enmore	4
Darley Street Playground	Marrickville	4
Francis Street Playground	Enmore	4
Enmore Park and playground	Marrickville	4
Annette Kellerman Aquatic Centre	Marrickville	4
Hawken Street Playground	Newtown	4
Collyer Playground (Pearl Street)	Newtown	4
Enmore TAFE Park	Enmore	4
Simpson Park	St Peters	5
Camdenville Park and oval	St Peters	5
Sheas Field	Alexandria	5
Sydney Park and playground	Alexandria	5

Community services facilities

Table B-6 Community services facilities

Facility	Suburb	Precinct
Greenacre Library	Greenacre	2
Greenacre Senior Citizens Centre	Greenacre	2
Muslim Women Association	Lakemba	2
Lebanese Muslim Association	Lakemba	2
Greenacre Area Community Centre	Greenacre	2
Scouts - Ashbury	Ashbury	3

B-5

Facility	Suburb	Precinct
Scouts - Dulwich Hill 1st	Dulwich Hill	3
Plumtree (Children development)	Marrickville	3
Marrickville Youth Resource Centre	Marrickville	3
Marrickville Intensive English Centre	Marrickville	3
Guthrie House (not-for-profit drug and alcohol rehabilitation service for women)	Enmore	4
Launchpad Youth Community	Erskineville	5

Businesses

Table B-6 Businesses

Business name	Precinct	Address	Location in relation to transmission cable route
Sydney Water	1	20 William Holmes Street, Potts Hill NSW 2143	Within local study area (400 m buffer zone)
Excell Lighting	1	95 Rookwood Road, Yagoona NSW 2199	Within local study area (400 m buffer zone)
Metal Roofing & Flashing	1	97 Rookwood Road, Yagoona NSW 2199	Within local study area (400 m buffer zone)
Various businesses including Radiodetection Australia, ICTechnology, Foober, Appolo's Café, Mr. H2o Plumbing and National Guard & Security Services, Newbold And Collins Bookbinders, etc.	1	101 Rookwood Road, Yagoona NSW 2199	Within local study area (400 m buffer zone)
Coles Express (petrol station)	1	112 Rookwood Road, Yagoona NSW 2199	Within local study area (400 m buffer zone)
Catholic Cemeteries Board	1	118 Rookwood Road, Yagoona NSW 2199	Within local study area (400 m buffer zone)
NEPEAN Building & Infrastructure	1	117-153 Rookwood Road, Yagoona NSW 2199	Within local study area (400 m buffer zone)
Greyhound Social Club	1	140 Rookwood Road Yagoona, NSW 2199	Within local study area (400 m buffer zone)
Premium Tile & Mosaic Outlet	1	Unit 3, 165 Rookwood Road Yagoona NSW 2199	
Various businesses including Anytime Fitness, Hair and Beauty Kingdom, Garlock, Pet Care 2000	1	165 Rookwood Road, Yagoona NSW 2199	Directly adjacent to transmission cable route
Volkswagen Head Office Swiss Deli	1	24 Muir Road, Yagoona NSW 2199	Directly adjacent to transmission cable route
Spicers Paper	1	21 Worth Street, Chullora NSW 2190	Within local study area (400 m buffer zone)
Eagle Eye Solutions Limited ATC IT Supplies	1	20 Worth Street, Chullora NSW 2190	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
Tip Top Bakeries/Factory	1	9 Muir Road, Chullora NSW 2190	Directly adjacent to transmission cable route
Masters Home Improvement	1	Corner Hume Highway, Muir Road Chullora NSW 2190 Australia	Directly adjacent to transmission cable route
News Limited Print Centre	1	26 Hume Highway, Chullora NSW 2190	Directly adjacent to transmission cable route
Chullora Business Park Includes businesses such as Thorn Group Limited, Fantastic Furniture, Allied Express and Masters Home Builders, De First Stop (café), Fleetserve, etc.	1	62 Hume Highway, Chullora NSW 2190	Directly adjacent to transmission cable route
The Palms Hotel	1	167 Hume Highway, Chullora NSW 2190	Within local study area (400 m buffer zone)
Kia Toyota	1	120 Hume Highway, Chullora NSW 2190	Within local study area (400 m buffer zone)
Primo Smallgoods	1	18 Hume Highway, Chullora NSW 2190	Within local study area (400 m buffer zone)
Kenco Tiles & Paint	1	17 Hume Highway, Chullora NSW 2190	Within local study area (400 m buffer zone)
Supercut Concrete Services	1	2B Brunker Road, Chullora NSW 2190	Within local study area (400 m buffer zone)
Various businesses including WDS International, Tobin Electrical Components	1	2C Brunker Road, Chullora NSW 2190	Within local study area (400 m buffer zone)
Pharmacy 4 Less	1	4 Brunker Road, Chullora NSW 2190	Within local study area (400 m buffer zone)
Noble Volkswagen	2	140 Hume Highway, Chullora NSW 2190	Within local study area (400 m buffer zone)
Yummy Seafood (Chinese restaurant)	2	167 Hume Highway, Chullora NSW 2190	Within local study area (400 m buffer zone)
The Palms Hotel			
Theo's Liquor Greenacre			
Bankstown Motel	2	217 Hume Highway, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Cosmopolitan Cars	2	251 Hume Highway, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Vital Home Health Services	2	55A Tennyson Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Liquorland Coles Greenacre Di Pacci Espresso Bar	2	19 Boronia Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Australia Post - Greenacre LPO Beauty on Boronia	2	19 Boronia Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
One Stop Bait & Tackle Shop Sama Beauty Secret Touch Hair Design			
Her Health & Fitness	2	14 Boronia Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Darwich Meat Wholesale	2	12 Boronia Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Domputer	2	76 Chaseling Street, Greenacre NSW 2190	Within local study area (400 m buffer zone)
A Canterbury Bankstown Concrete Pumping	2	91 Chaseling Street, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Perfect Page	2	107 Chaseling Street, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Baraket Taxation Services Limited	2	32 Rawson Road, Greenacre	Directly adjacent to transmission cable route
Forever Perfumery	2	124 Rawson Road, Greenacre	Directly adjacent to transmission cable route
King of Sweets Greenacre Sarah K Designer Evening Wear Coffee @ HQ Rawson Road Mixed Business and Fruit Shop Vougue Couture Rawson Road Quality Meats Divinity Bridal	2	120 Rawson Road, Greenacre	Directly adjacent to transmission cable route
Greenacre Modern Bakery	2	118 Rawson Road, Greenacre NSW 2190	Directly adjacent to transmission cable route
Physio Treatment Centre	2	75 Rawson Road, Greenacre NSW 2190	Directly adjacent to transmission cable route
Budget Auto Parts Greenacre	2	24 Rawson Road, Greenacre	Directly adjacent to transmission cable route
Abdo Florist	2	245 Waterloo Road, Greenacre	Directly adjacent to transmission cable route
Local businesses along Waterloo Road, Greenacre such as Aladdin Butchery, Nassour Taxation & Accounting, Supreme Mixed Business, Oven Bake Greenacre, Elders Real Estate Greenacre, The Back Specialist, etc.	2	100-291 Waterloo Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
New Harmony Chinese Restaurant	2	1/198 Waterloo Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Al Aseel Restaurant	2	183 Waterloo Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Business Relocation Services	2	81 Roberts Road,	Within local study area

Business name	Precinct	Address	Location in relation to transmission cable route
		Greenacre NSW 2190	(400 m buffer zone)
Katalenn	2	85 Roberts Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Oporto - Greenacre	2	89 Roberts Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Caltex Greenacre	2	91 Roberts Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Trojan Classic Motorcycles Urban Tiles	2	117 Punchbowl Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Build Em Up Projects	2	124 Wilbur Street, Greenacre NSW 2190	Within local study area (400 m buffer zone)
A&L Mixed Business	2	156 Wangee Road, Greenacre NSW 2190	Directly adjacent to transmission cable route
Al-Fajr Bakery	2	158 Wangee Road, Greenacre NSW 2190	Directly adjacent to transmission cable route
Axcl Holdings	2	488 Punchbowl Road, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Auto Tyre Centre	0		
Mk Print	2	490 Punchbowl Road, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Chon Seven Stars Service	2	496 Punchbowl Road, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Mourad's Coffee	2	506 Punchbowl Road, Lakemba NSW 2195	Within local study area (400 m buffer zone)
AAA Body & Paint	2	508 Punchbowl Road, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Optimus Health & Fit	2	65 Wangee Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
Dr. Abraham Constantin Dental Surgery	2	41 Wangee Road, Greenacre NSW 2190	Within local study area (400 m buffer zone)
First Impression by Trang	2	17 Vivienne Avenue, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Moussa Bakery	2	10 Pettit Avenue, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Jm Computer Repairs	2	10 Boorea Avenue, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Ask Business Group	2	65 Colin Street, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Caltex Lakemba	2	516 Punchbowl Road, Lakemba NSW 2195	Directly adjacent to transmission cable route
Hamys All Food Mixed Business	2	80 Yangoora Road, Lakemba NSW 2195	Directly adjacent to transmission cable route
Abu Tareo Butchery	2	109 Yangoora Road, Belfield	Directly adjacent to transmission cable route
Businesses on Yerrick Road, Lakemba such as Five Star	2	64-103 Yangoora Road, Lakemba NSW 2195	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
Aluminium, Glade Manufacturing & Sales, Diamond Tannous PTY Ltd, AFK International, Hecham Coffee & Nut Roaster, 5 Stars Coffee & Nut Roaster Co, Sweetcraft, etc.			
Businesses on Lakemba Road, Lakemba such as Ferkh M, Skillnet Australia, Metro Strata Management, Hady's Kebab House, Relief Podiatry, etc.	2	119-195 Lakemba Street, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Businesses on Frazer Road, Lakemba such as Smy Smash Repairs, Regina Auto Repairs, Hume Plasterboard, Fabre Australia, Midel	2	2-6 Frazer Street, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Rad-1 United Plumbing & Drainage	2	112 Benaroon Road, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Western Sydney Lights			
Alpene	2	102 Benaroon Road, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Vincent Buda & Company	2	88 Benaroon Road, Lakemba NSW 2195	Within local study area (400 m buffer zone)
Briteway International PTY Ltd.	2	17 Benaroon Road, Belmore NSW 2195	Within local study area (400 m buffer zone)
Mc Locks & Locksmithing	2	57 Benaroon Road, Belmore NSW 2195	Within local study area (400 m buffer zone)
Oz Shelving Solutions	2	7 Minnie Street, Belmore NSW 2195	Within local study area (400 m buffer zone)
Kenwell	2	11 Minnie Street, Belmore NSW 2195	Within local study area (400 m buffer zone)
Sonic Factory	2	18 Minnie Street, Belmore NSW 2195	Within local study area (400 m buffer zone)
Vebo Pet Supplies	2	20 Minnie Street, Belmore NSW 2195	Within local study area (400 m buffer zone)
Global Textile Supplies	2	22 Minnie Street, Belmore NSW 2195	Within local study area (400 m buffer zone)
Kp Caps Australia	2	15 Hugh Street, Belmore NSW 2195	Within local study area (400 m buffer zone)
Ack Consulting	2	2A Yangoora Road, Belmore NSW 2195	Within local study area (400 m buffer zone)
Glory Interiors	2	37 High Street, Belmore NSW 2195	Within local study area (400 m buffer zone)
Australian Academy of Gymnastics	2	1 Knox Street, Belmore NSW 2192	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
Starmart	2	4 Knox Street, Belmore NSW 2192	Within local study area (400 m buffer zone)
Ayman's Pizzeria	2	8 Knox Street, Belmore NSW 2192	Within local study area (400 m buffer zone)
Knox Convenience Store	2	41 Knox Street, Belmore NSW 2192	Within local study area (400 m buffer zone)
Kingstone Roofing	2	61 Lakemba Street, Belmore NSW 2192	Within local study area (400 m buffer zone)
Belmore Tyres	2	71 Lakemba Street, Belmore NSW 2192	Within local study area (400 m buffer zone)
Sydney Machinery Hire	2	77 Lakemba Street, Belmore NSW 2192	Within local study area (400 m buffer zone)
Tcr Automotive Centre	2	83 Lakemba Street, Belmore NSW 2192	Within local study area (400 m buffer zone)
Barber & Hairdressing Supply	2	89 Lakemba Street, Belmore NSW 2192	Within local study area (400 m buffer zone)
Belmore Autosmash	2	99 Lakemba Street, Belmore NSW 2192	Within local study area (400 m buffer zone)
Belfield Service Centre	2	4 Carter Street, Belfield NSW 2191	Directly adjacent to transmission cable route
Campsie Service Centre	2	128 Brighton Avenue, Campsie NSW 2194	Directly adjacent to transmission cable route
The Mason (display suite)	2	31 Punchbowl Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Tk Mechanical Repairs	2	35 Punchbowl Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Pronto Building & Landscape Supplies	2	47 Punchbowl Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Malubel	2	49 Punchbowl Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
BP Belfield	2	57 Punchbowl Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Lube Masters Mechanical	2	117 Punchbowl Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Smooth Laser & Beauty	2	310 Punchbowl Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Concept Mechanical Services	2	312 Punchbowl Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Kaczanowski & Co	2	33 Madeline Street, Strathfield South NSW 2136	Within local study area (400 m buffer zone)
Rolyn Logistics	2	38 Madeline Street, Strathfield South NSW 2136	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
Rainbow Floor Services	2	65 Madeline Street, Strathfield South NSW 2136	Within local study area (400 m buffer zone)
Pro-Axle Enfield Aussie Skips	2	108 Madeline Street, Strathfield South NSW 2136	Within local study area (400 m buffer zone)
Wrappit	2	112 Cosgrove Road, Strathfield South NSW 2136	Within local study area (400 m buffer zone)
Southern Cross Jet Blasting	2	114 Cosgrove Road, Strathfield South NSW 2136	Within local study area (400 m buffer zone)
K&S Freighters	2	1 Hope Street, Strathfield South NSW 2136	Within local study area (400 m buffer zone)
Austland Tiles & Bathroom	2	23 Water Street, Strathfield South NSW 2136	Within local study area (400 m buffer zone)
Hamiltons Hospitality	2	29 Water Street, Strathfield South NSW 2136	Within local study area (400 m buffer zone)
Euroset Trading	2	33 Water Street, Strathfield South NSW 2136	Within local study area (400 m buffer zone)
Ted & June	2	192 Burwood Road, Belmore NSW 2192	Within local study area (400 m buffer zone)
Sin Scissors Hairdresser	2	121 Burwood Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Mint Property Agents	2	1 Burwood Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Belfield Hotel	2	2 Burwood Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Saouma's School Uniform & Fashion Wear	2	3A Burwood Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Belfield Newsagency	2	4 Burwood Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Bridge of Belfield Pharmacy	2	7 Burwood Road, Belfield NSW 2191	Within local study area (400 m buffer zone)
Selena's Hair and Beauty			
Sydmont Limited	2	81 Water Street, Belfield NSW 2191	Within local study area (400 m buffer zone)
Metro Vision Business	2	87 Baltimore Street, Belfield NSW 2191	Within local study area (400 m buffer zone)
Pho	2	108 Beamish Street, Campsie NSW 2294	Within local study area (400 m buffer zone)
Kar Pro Campsie	2	106 Beamish Street,	Within local study area

Business name	Precinct	Address	Location in relation to transmission cable route
		Campsie NSW 2294	(400 m buffer zone)
Various local businesses such as Little Pinocchio, Campsie Face & Body Therapy, Affinity Beauty Salon, Oriental Traditional Chinese Medicine, etc.	2	94 Beamish Street, Campsie NSW 2294	Within local study area (400 m buffer zone)
Lizz D Hair Braiding	2	78 Beamish Street, Campsie NSW 2294	Within local study area (400 m buffer zone)
Ohcastra Oceania	2	74 Beamish Street, Campsie NSW 2294	Within local study area (400 m buffer zone)
Meat Mart	2	62 Beamish Street, Campsie NSW 2294	Within local study area (400 m buffer zone)
Beamish Supermarket	2	53 Beamish Street, Campsie NSW 2294	Within local study area (400 m buffer zone)
A Abbott Locksmiths	2	228 Brighton Avenue, Campsie NSW 2294	Within local study area (400 m buffer zone)
Personel Touch	2	184 Brighton Avenue, Campsie NSW 2294	Within local study area (400 m buffer zone)
Campsie Service Centre	2	128 Brighton Avenue, Campsie NSW 2294	Within local study area (400 m buffer zone)
Campsie Convenience Store	2	72 Seventh Avenue, Campsie NSW 2294	Directly adjacent to transmission cable route
Ottogi Supermarket	2	47 Eighth Avenue, Campsie NSW 2294	Within local study area (400 m buffer zone)
H R D Contracting	3	34 Trelawney Street, Croydon Park NSW 2133	Within local study area (400 m buffer zone)
Stylish by Metina	3	213 Queensborough Road, Croydon Park NSW 2133	Within local study area (400 m buffer zone)
Paesani Restaurant	3	40 Hampton Street, Croydon Park NSW 2133	Within local study area (400 m buffer zone)
P S Plumbing	3	7 Morris Avenue, Croydon Park NSW 2133	Within local study area (400 m buffer zone)
Carina Florist	3	125 Holden Street, Croydon Park NSW 2133	Within local study area (400 m buffer zone)
Ashbury Convenience	3	15 Crieff Street, Croydon Park NSW 2133	Within local study area (400 m buffer zone)
Complete Fire Door Specialist	3	171 Milton Street, Croydon Park NSW 2133	Within local study area (400 m buffer zone)
Lear Plumbing & Bathrooms	3	51 Cheviot St, Ashbury	Within local study area

Business name	Precinct	Address	Location in relation to transmission cable route
		NSW 2193	(400 m buffer zone)
First Street Pantry	3	66 First Street, Ashbury NSW 2193	Directly adjacent to transmission cable route
Cycling Projects	3	86-88 King Street, Ashbury NSW 2193	Directly adjacent to transmission cable route
Oceanmaster Ashbury	3	51 King Street, Ashbury NSW 2193	Within local study area (400 m buffer zone)
Mick's Glass & Glazing Service	3	45 King Street, Ashbury NSW 2193	Within local study area (400 m buffer zone)
Organic Hair Culture	3	41 King Street, Ashbury NSW 2193	Within local study area (400 m buffer zone)
Dr Auto Mech Repairs	3	39 King Street, Ashbury NSW 2193	Within local study area (400 m buffer zone)
Ashfield Automotive	3	1 Hardy Street, Ashfield NSW 2131	Within local study area (400 m buffer zone)
Dr Samuel Zagarella (dermatologist)	3	252 Queen Street, Ashfield NSW 2131	Within local study area (400 m buffer zone)
Excelsior Jones	3	139 Queen Street, Ashfield NSW 2131	Within local study area (400 m buffer zone)
Accelerated Performance Training	3	41 Hanks Street, Ashfield NSW 2131	Within local study area (400 m buffer zone)
Western Union - Market Solutions Asia	3	875 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Bilingual Bookshop	3	837 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Rave Real Estate	3	789 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Victor Marques Upholstery	3	749 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Various local businesses along New Canterbury Road, Hurlstone Park such as Domino's Hurlstone Park, Golden Rice Chinese Take Away, 7-Eleven Hurlstone Park, Celebration Cakes, etc.	3	646 – 831 New Canterbury Road, Hurlstone Park NSW 2193	Within local study area (400 m buffer zone)
Dulwich Hill Smash Repairs	3	541 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
KFC	3	500 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
Yaghi Fastfoods	3	502 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Dulwich Hill Collision Centre FP Wells & Sons	3	541 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Kim's Ceramics	3	480 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Candlelight Confectionery	3	476 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Newtown Sewing Centre I M S Apparel Equipment	3	474 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Aussie's Car Wash & Cafe	3	473 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Sewing Machines Australasian	3	460 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Dulwich Hill Convenience	3	451 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
St Mark's Laundry	3	446 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Sydney Tools	3	429 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
My Hair Space	3	428 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Mikson Foods Lt	3	426 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Abla Pastry	3	425 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Juliet's Balcony	3	423 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Catherine Colubriale Couture	3	424 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Emboss Hair & Beauty	3	421 New Canterbury Road, Dulwich Hill NSW	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
		2203	
Sydney Accounting Services	3	420 New Canterbury	Within local study area
Strawberry Fields Patisserie		Road, Dulwich Hill NSW 2203	(400 m buffer zone)
Gowland Legal			
Clouting & Son	3	414 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Fantastic Beauty & Nail	3	411 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
The Hub House Diner	3	409 New Canterbury	Within local study area
Oricco Charcoal Chicken		Road, Dulwich Hill NSW 2203	(400 m buffer zone)
Eva's Hair & Body Boutique	3	407 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
More Rice	3	406 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
IGA Dulwich Hill	3	398 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Dulwich Hill Hot Bread Shop	3	396 New Canterbury	Within local study area
Luigi's Bakery		Road, Dulwich Hill NSW 2203	(400 m buffer zone)
Dulwich Hill Newsagents	3	394 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Connie Dimas-Jewellery by Hand	3	390 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Family First Chiropractic			
Mick's Meats	3	380 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Van Long Xuong Hot Bread	3	374 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Zeus Dulwich Hill	3	372 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Tella Balls	3	370 New Canterbury Road, Dulwich Hill NSW 2203	Directly adjacent to transmission cable route
Prestige Diagnostics	3	360 New Canterbury	Directly adjacent to
Tyrepower Dulwich Hill		Road, Dulwich Hill NSW	transmission cable route

Business name	Precinct	Address	Location in relation to transmission cable route
		2203	
Realistic Real Estate NSW	3	355 New Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Gopher Graphics & Printing Services	3	352 Canterbury Road, Hurlstone Park NSW 2193	Within local study area (400 m buffer zone)
Merilux Paint 'N' Paper	3	342 Canterbury Road, Hurlstone Park NSW 2193	Within local study area (400 m buffer zone)
Light Up Canterbury	3	338 Canterbury Road, Hurlstone Park NSW 2193	Within local study area (400 m buffer zone)
McDonald's Hurlstone Park	3	312 Canterbury Road, Hurlstone Park NSW 2193	Within local study area (400 m buffer zone)
Habitat Furniture Warehouse	3	38 Canterbury Road, Hurlstone Park NSW 2193	Within local study area (400 m buffer zone)
Canterbury Hurlstone Park RSL Club	3	26 Canterbury Road, Hurlstone Park NSW 2193	Within local study area (400 m buffer zone)
Artsabout	3	24 Herbert Street, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Izmir Market	3	5 Seaview Street, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
S G Lenton Dental	3	355 Old Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Friendly's Chemist	3	302 Old Canterbury Road, Ashfield NSW 2131	Within local study area (400 m buffer zone)
The Woods Technique	3	275 Old Canterbury	Within local study area
Precision Laser Therapy		Road, Dulwich Hill NSW 2203	(400 m buffer zone)
Carole Weston Beauty Therapy	3	213 Old Canterbury Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Trinity Delmar Gallery	3	144 Victoria Street, Summer Hill NSW 2130	Within local study area (400 m buffer zone)
Robert Bruce Apparel	3	36 Hercules Street, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Rosedale Street Gallery	3	2A Rosedale Street, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Hanako Floral Designs	3	62 Constitution Road, Dulwich Hill NSW 2203	Directly adjacent to transmission cable route

Business name	Precinct	Address	Location in relation to transmission cable route
Rockpool Publishing	3	24 Constitution Road, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Sideways Deli Café	3	37 Constitution Road, Dulwich Hill NSW 2203	Directly adjacent to transmission cable route
Salvos Dulwich Hill	3	54 Dulwich Street, Dulwich Hill NSW 2203	Within local study area (400 m buffer zone)
Various local businesses on Marrickville Road, Dulwich Hill including Dulwich Hill Pharmacy, Seymour Dental, Sentas T & J - Fruit Shops & Greengrocers, King Hot Bread, Campos Dulwich, Minh Vietnamese Restaurant, Gino & Mary Continental Deli, Gladstone Hotel, etc.	3	311-395, 449-572 Marrickville Road, Dulwich Hill 2203	Within local study area (400 m buffer zone)
Anousheh's Good Health Clinic	3	13 Durham Street, Dulwich Hill 2203	Within local study area (400 m buffer zone)
Dulwich Hill Motors	3	230 Denison Road, Dulwich Hill 2203	Within local study area (400 m buffer zone)
Psychlinx Consulting	3	227 Denison Road, Dulwich Hill 2203	Within local study area (400 m buffer zone)
Vip Automotive Repairs	3	207 Denison Road, Dulwich Hill 2203	Within local study area (400 m buffer zone)
F Anissa & Associates	3	157A Wardell Road, Dulwich Hill 2203	Within local study area
Tadros Travel Service			(400 m buffer zone)
Supplement Mania	3	238 Sydenham Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Zeus International Martial Arts Academy	3	78 Livingstone Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Bespoke and Grind	3	80 Livingstone Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Convenience Store	3	132 Livingstone Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Samos Hardware	3	117 Addison Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
ABC Newsagency	3	123 Addison Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Addison Fruit and Vegetables	3	130 Addison Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Jehds Hairdressing	3	140 Addison Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Reverse Garbage Co-Operative Eat Play Live	3	142 Addison, Marrickville NSW 2204	Within local study area (400 m buffer zone)
The Bower Reuse and Repair			

Business name	Precinct	Address	Location in relation to transmission cable route
Centre			
Stirr Up Gallery & Cafe			
The Fair-Trade Emporium			
Marrickville Organic Food & Farmers' Market			
Australian Martial Arts and Fitness Academy			
De Lanna Thai Street Cuisine	3	220 Addison, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Bright Spark Media	3	31 Middle Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Textile Cleaning & Protection	3	11 England Avenue, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Illi Hill	4	72 Illawarra Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Henson Park Hotel	4	91 Illawarra Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Frost Tech Air Conditioning	4	93 Illawarra Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Umbro	4	101 Illawarra Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Oldtimer Centre	4	103 Illawarra Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Jimmy's Brake Service	4	107 Illawarra Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Maru-Maru Pet Services	4	88 Cavendish Street, Stanmore NSW 2048	Within local study area (400 m buffer zone)
Cheminee	4	118 Stanmore Road, Stanmore NSW 2048	Within local study area (400 m buffer zone)
Cyprus Community of NSW	4	58 Stanmore Road, Stanmore NSW 2048	Within local study area (400 m buffer zone)
Amazing Hands	4	70 Newington Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Dong Lin Furniture	4	1 Rich Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
R & S Trading Company	4	4 Rich Street,	Within local study area
Marrickville Taxi Centre		Marrickville NSW 2204	(400 m buffer zone)
Southern Cross Supplies	4	6 Rich Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Carpet Tiles	4	3 Cook Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Taxi Fleet Transport	4	4 Cook Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
Croydon Consolidated Industries		20 Cook Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Mammoth Merchandise	4	24 Cook Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Chempower Australia	4	29 Cook Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Nikmar Pressing Service & Dry Cleaners	4	30 Cook Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Intercolonial Tyre Services	4	40 Cook Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Adana Leathergoods	4	42 Cook Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Wilson Labels	4	46 Cook Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Glow Worm Bicycles	4	117 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Car Lovers - The Ultimate Carwash	4	110 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Café 2204	4	106 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Faye Cahill Cake Design	4	104 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Nsc Auto Centre	4	99 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Metro Petroleum Exel Car Rental	4	93 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Alpino Continental Gelato	4	90 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Espresso Connect	4	86 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Carbon8	4	72-78 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Colonial State Realty	4	71 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Barzaari	4	65 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Rasko Linen Services	4	64-66 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Link Elevators	4	62 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Snowball Australia	4	58 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Savoy Salon Supplies	4	48 Addison Road,	Directly adjacent to
Business name	Precinct	Address	Location in relation to transmission cable route
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Tower Fasteners		Marrickville NSW 2204	transmission cable route
Ampco Automotive Empco Services	4	11 Jabez Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
White Boar Direct Link Worldwide	4	7 Jabez Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Quik Glass Limited Showcraft	4	4 Jabez Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Wateridge	4	1 Jabez Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Businesses on Smith Street, Marrickville such as Booth Printing, Napoli Food & Wines, A&E Metal Merchants, Lore Coffee, PJ Ward Smash Repairs, etc.	4	21-68 Smith Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Jr Packaging Aust	4	4 Brompton Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Businesses on Shepherd Street, Marrickville such as Vanessa Megan Skincare, The Wood Roaster, Abilio Motors, Marrickville Prestige Smash Repairs, Oriental Rug Care of Australia, etc.	4	1-80 Shepherd Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Businesses on Mitchell Street, Marrickville such as All Language Communications, Patient Handling Australia, Miss Donna Herbs, Ensign International, Addison Jeans, Green Frog Roofing, Bourke Street Bakery	4	1-11 Mitchell Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Businesses on Chalder Street, Marrickville such as Cleana Service, Exhibition Builder, etc.	4	25-47 Chalder Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Johnstons Transport Industries	4	56 Fitzroy Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Graheme Sheldrick & Associates	4	82 Fitzroy Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Businesses on Murray Street, Marrickville such as Metromovers, Prestons Taxis Service, The Natural Floorcovering Centre	4	8-48 Murray Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Businesses on Farr Street, Marrickville such as Laboratory Equipment, Clemanco, Lex Skin	4	16-47 Farr Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
Care Products			
Marrickville Metro Shopping Centre	4	34 Victoria Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Miss Petty Cash Café	4	68 Victoria Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
P&n Motor Repairs	4	91 Victoria Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Prime Automotive Repairs	4	96 Victoria Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Tom's Auto Care	4	97 Victoria Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
King Street Automotive	4	99 Victoria Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
J&i Smash Repairs	4	104 Victoria Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
The Factory Theatre	4	105 Victoria Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Marmonyx Stone Nunes Building Supplies	4	108 Victoria Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Electromaster	4	127 Victoria Rd, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Petersham Automotive Services & Spares CHiLLi PiP Custom Made Lounge Designs & Manufacturer	4	135 Victoria Rd, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Gripmasta	4	136 Victoria Rd, Marrickville NSW 2204	Within local study area (400 m buffer zone)
At Ruben's Esprit Martial Arts	4	137 Victoria Rd, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Bridgestone Select Tyre & Auto - Marrickville	4	140 Victoria Rd, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Yonex Australia		146 Victoria Rd, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Pr King & Sons	4	155 Victoria Rd, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Roastville	4	157 Victoria Rd, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Kennards Self Storage Marrickville	4	64 Chapel St, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Mud Australia Limited.	4	78 Chapel St, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Mpc Retail	4	82 Chapel St, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Meher Auto Service Centre	4	88 Chapel St,	Within local study area

Business name	Precinct	Address	Location in relation to transmission cable route
		Marrickville NSW 2204	(400 m buffer zone)
Crete Automotive Engineering	4	96 Chapel St, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Two Chaps	4	122 Chapel St, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Globe Mills	4	11-23 Gordon Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Portugal Madeira Club	4	1 Denby Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Luso Liquors	4	5 Denby Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Automotive Fleet Services	4	9-17 Denby Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Australian Disc Brakes	4	9-11 Jabez Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
The Wood Roaster	4	9 Shepherd Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Ming On Trading Co	4	35-41 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
M&G Seafood Wholesalers	4	38-48 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Coffee Alchemy	4	24 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Golden Horn Halal Butchery	4	11 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Pink the House of Coffee & Tea Silver Trak Digital Buff Dubs	4	10 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
A1 Instant Printing	4	9 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
The Vic On the Park	4	2 Addison Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Supplement Mania Online	4	238 Sydenham Road, Marrickville NSW 2204	Directly adjacent to transmission cable route
Coffee Tank	4	395 Marrickville Rd, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Kellerman's Cafe	4	27 Black Street, Marrickville	Within local study area (400 m buffer zone)
West Juliett Café	4	30 Llewellyn Street, Marrickville	Directly adjacent to transmission cable route
Lou Mccallum Consulting	4	22 Llewellyn Street, Marrickville	Within local study area (400 m buffer zone)
Pinnacle Martial Arts Academy	4	23 Yabsley Avenue	Within local study area

Business name	Precinct	Address	Location in relation to transmission cable route
		Marrickville NSW 2204	(400 m buffer zone)
Warren View Hotel	4	2 Stanmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
7-Eleven Enmore Stanmore Road	4	22 Stanmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Australia Post - Enmore LPO	4	184 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
O'le	4	188 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Morse For Hair	4	192 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
IGA	4	193 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Faheem Fast Food	4	196 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
H&D Anderson Bros Drycleaners LeBake	4	197 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Enmore Bizzarre Bargains	4	202 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Feet First	4	204 Enmore Road,	Within local study area
Aimee's Hair Design		Enmore NSW 2042	(400 m buffer zone)
Scrambled Cafe	4	205 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Chirorelief	4	208 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
The Washing Done	4	209 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Enmore 7 Day Pharmacy	4	211 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Drums & Percussion	4	230 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Stix And Pita	4	263 Enmore Road,	Within local study area
Wheelhaus		Enmore NSW 2042	(400 m buffer zone)
Serendipity Ice Cream	4	333-339 Enmore Road, Enmore NSW 2042	Directly adjacent to transmission cable route
Addisons Travellers Lodge	4	371 Enmore Road, Enmore NSW 2042	Directly adjacent to transmission cable route
Tooth and Nail	4	373 Enmore Road, Enmore NSW 2042	Directly adjacent to transmission cable route
Supreme Gourmet Pizza Bar	4	377 Enmore Road, Enmore NSW 2042	Directly adjacent to transmission cable route
Metro Petroleum	4	379 Enmore Road,	Within local study area

Business name	Precinct	Address	Location in relation to transmission cable route
		Enmore NSW 2042	(400 m buffer zone)
The Grifter Brewing Co Dark Eh & Son	4	391 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Nam Electronic Services			
Royalet Australia			
That Vintage Shop	4	395 -397 Enmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Two Chaps	4	122 Chapel Street, Enmore NSW 2042	Within local study area (400 m buffer zone)
DC Events	4	10 Stanmore Road, Enmore NSW 2042	Within local study area (400 m buffer zone
Golden Barley Hotel	4	168 Edgeware Road, Enmore NSW 2042	Directly adjacent to transmission cable route
The Wolf & Honeybee	4	174 Edgeware Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Marrickville Auto Repairs Ironbin Limited	4	211 Edgeware Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Art of Chinese Medicine	4	230 Edgeware Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Injury Management & Rehabilitation	4	330 Edgeware Road, Enmore NSW 2042	Within local study area (400 m buffer zone)
Heart Head Hand Newtown	4	124 Lord Street, Newtown NSW 2042	Within local study area (400 m buffer zone)
Top Hat Roofing	4	175 Lord Street, Newtown NSW 2042	Within local study area (400 m buffer zone)
Tom, Dick & Harry	4	60 Alice St, Newtown NSW 2042	Within local study area (400 m buffer zone)
Physio on Alice	4	107 Alice St, Newtown NSW 2042	Within local study area (400 m buffer zone)
Synergy Voice and Data Systems	4	175 Alice St, Newtown NSW 2042	Within local study area (400 m buffer zone)
Nomad Blinds	4	3 Smidmore Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
NRMA Car Servicing Marrickville	4	54 Smidmore Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Wolverton Scrap Metals	4	58 Smidmore Street, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Shiny	4	122-130 Edinburgh Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Printportal	4	112 Edinburgh Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
KCM Australia Ht Quality Printing Chai Sing Tong Kung Fu	4	80 Edinburgh Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Kass Smash Repairs	4	30 Edinburgh Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Profile Plaster & Metal Treimpetti	4	28 Edinburgh Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
T & M Ferraro Joinery Falco Australia	4	22 Edinburgh Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Jd Smash & Auto Repairs	4	20 Edinburgh Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Pnm (packaging supplies and materials)	4	15 Edinburgh Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Metro Storage	4	11A Edinburgh Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
Metro Service Centre	4	3 Edinburgh Road, Marrickville NSW 2204	Within local study area (400 m buffer zone)
ASLAN Coffee Roasters	5	1 Council Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Signature Prints	5	Caroline Lane, St Peters NSW 2044	Within local study area (400 m buffer zone)
Delkor	5	75 Hutchinson Street, St Peters	Within local study area (400 m buffer zone)
Suzy Spoon's Vegetarian Butcher	5	49-51 Hutchinson Street, St Peters	Within local study area (400 m buffer zone)
Dance Domain	5	Studio 4, 1-7 Unwins Bridge Road, St Peters	Within local study area (400 m buffer zone)
Town and Country Hotel	5	2 Unwins Bridge Road, St Peters	Within local study area (400 m buffer zone)
Various businesses at 7 Unwins Bridge Road St Peters such as Sydney Trapeze School, GBR Realty, Gracie Barra St Peters Brazilian Jiu-Jitsu & Self Defence, Absolute Party Hire Sydney, Temple and Webster Head Office, Sydney Indoor Climbing Gym, Kings Security Doors, etc.	5	7 Unwins Bridge Road, St Peters	Within local study area (400 m buffer zone)
Nightingales Wedding Planning	5	Unit 4, 1 Unwins Bridge Road, St Peters	Within local study area (400 m buffer zone)
J R K Constructions	5	101 Hutchinson Street, St Peters NSW 2044	Within local study area (400 m buffer zone)
S&I Mechanical & Smash	5	37 Hutchinson Street, St	Within local study area

Business name	Precinct	Address	Location in relation to transmission cable route
Repairs		Peters NSW 2044	(400 m buffer zone)
Arcade Screen Printing	5	17 Hutchinson Street, St Peters NSW 2044	Within local study area (400 m buffer zone)
Wolfsburg Motor Engineers	5	67 Campbell Street, St Peters NSW 2044	Within local study area (400 m buffer zone)
Modelcraft	5	61 Campbell Street, St Peters NSW 2044	Within local study area (400 m buffer zone)
Unique Plaster	5	59 Campbell Street, St Peters NSW 2044	Within local study area (400 m buffer zone)
Aust & Asia Plastic Bags	5	112 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Topouzian Manufacturing Limited	5	96 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Electrician to the Rescue	5	88 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Mr Washer Plumbing and Electrical Services	5	88 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Wholesale Roofing Supplies	5	70-74 May Street, St Peters	Directly adjacent to transmission cable route
Definitive Group	5	53 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Sublitech	5	58 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
A & F Drive Shafts	5	49 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
De Novo Foods	5	30-34 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Copper Café	5	29 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Primal Nrg Fitness	5	17 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Latin Motion Dance Academy	5	15 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Dancing Warrior Yoga	5	11 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Graffic Art Mount	5	9 May Street, St Peters NSW 2044	Directly adjacent to transmission cable route
Various businesses on King Street such as Darley Street Bistro – Newtown, One Stop Fruit Shop, Botany View Hotel, Fiji Market, St Peters Laundry & Dry Cleaning, Cheapest Load Of Rubbish, Sydney Park Hotel, Albertos Pizzeria, Pets Palace	5	575 - 633 King Street, Newtown NSW 2042	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
Australia, Release-Wellness Centre, etc.			
Masterpiece Pictures	5	672 King Street,	Within local study area
The Fitness Playground		Erskineville NSW 2043	(400 m buffer zone)
My Fantastic Funeral	5	221 Sydney Park Road, Erskineville NSW 2043	Within local study area (400 m buffer zone)
Yiamas Greek Taverna	5	1/1-5 Princes Highway, St Peters NSW 2044	Directly adjacent to transmission cable route
BP St Peters	5	2 Princes Highway, St Peters NSW 2044	Directly adjacent to transmission cable route
Louise Lister Photography	5	65 Goodsell Street, St Peters NSW 2044	Within local study area (400 m buffer zone)
Simply Bowen Therapy	5	21 Goodsell Street, St Peters NSW 2044	Within local study area (400 m buffer zone)
Southern Cross Veterinary Clinic	5	60 Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Newtown Aquarium & Reptiles	5	66A Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Doggy Splash	5	76 Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
The Balanced Body Centre	5	76A Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Seduce Group Australia (fashion designer)	5	51 Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Sydney Park Cyclery (used bicycle shop)	5	83-85 Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Motociclo (motorcycle dealer)	5	95-97 Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Sydney Hardware Euro Abrasives	5	90-114 Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Graeme Cooper Automotive (auto parts store)	5	99 Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Osmal Products Pty Ltd (clothing store)	5	129 Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Icon Foods (manufacturer)	5	81-83 Princes Highway, St Peters NSW 2044	(400 m buffer zone) (400 m buffer zone)
Procycles (motorcycle dealer)	5	140 Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Doors Plus			``````````````````````````````````````
Australian Black Sheep	5	145 Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Garden Life (garden centre)	5	158 Princes Highway, St Peters NSW 2044	Within local study area (400 m buffer zone)
Knives and Stones (kitchen supply store)	5	2/2 Bishop Street, St Peters NSW 2044	Within local study area (400 m buffer zone)
McDonald's St Peters	5	Corner of Princes Highway and Bishop Street, St Peters NSW 2044	Within local study area (400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
Ibis Budget St Peters	5	178 Princes Highway, St	Within local study area
		Peters NSW 2044	(400 m buffer zone)
KFC St Peters	5	180 Princes Highway, St	Within local study area
		Peters NSW 2044	(400 m buffer zone)
Collective Roasting Solutions	5	5/47 Applebee Street, St	Within local study area
		Peters NSW 2044	(400 m buffer zone)
Datum Commercial Interiors	5	39 Applebee Street, St	Within local study area
		Peters NSW 2044	(400 m buffer zone)
PG Glass & Aluminium	5	37 Applebee Street, St	Within local study area
		Peters NSW 2044	(400 m buffer zone)
Brads on Tap Plumbing Services	5	36 Albert Street, St	Within local study area
		Peters NSW 2044	(400 m buffer zone)
The Balanced Body Centre	5	76A Princes Highway, St	Within local study area
		Peters NSW 2044	(400 m buffer zone)
Australia Post - St Peters LPO	5	91 Princes Highway, St	Within local study area
		Peters NSW 2044	(400 m buffer zone)
White Horse Hotel	5	161 Princes Highway, St	Within local study area
		Peters NSW 2044	(400 m buffer zone)
City Star Motors	5	85 Crown Street, St	Within local study area
		Peters NSW 2044	(400 m buffer zone)
Complete Cleaning Supplies Pty	5	15/17 Barwon Park	Directly adjacent to
Ltd		Road, St Peters NSW	transmission cable route
		2044	
City of Sydney – Sydney Park	5	54 Barwon Park Road,	Directly adjacent to
Nursery Depot		St Peters NSW 2044	transmission cable route
Major & Tom Props Hire	5	45 Barwon Park Road,	Directly adjacent to
(photography)		St Peters NSW 2044	transmission cable route
Marlin Australia (manufacturer)	5	41 Barwon Park Road,	Directly adjacent to
Carrycode Pty Ltd		St Peters NSW 2044	transmission cable route
(manufacturer)			
Kg Instruments	5	2 Bishop Street, St	Within local study area
Wichard Pacific		Peters NSW 2044	(400 m buffer zone)
Top Vision Eyewear			
W.F.O'broem Maintenance			
Bravo Repair Centre	<i>_</i>	05 Oracum Otra at Ot	
City Star Motors	5	85 Crown Street, St	Within local study area
Cuda au Dade Kie als	<i>_</i>	Peters NSW 2044	(400 m buffer zone)
Sydney Park Kiosk	5	Sydney Park Road, St	Within local study area
CoolDrive Auto Dorto	F	Peters NSW 2044 1/182-190 Euston Road,	(400 m buffer zone)
CoolDrive Auto Parts	5		Directly adjacent to
Elorobollo Importo	5	Alexandria NSW 2015	transmission cable route Within local study area
Florabelle Imports	5	122 Euston Road, Alexandria NSW 2015	(400 m buffer zone)
Eddoral Exprass	5	213 Euston Road,	Within local study area
Federal Express	5	Alexandria NSW 2015	(400 m buffer zone)
Locksmiths Warehouse	5	24 Burrows Road, St	Within local study area
	5	Peters NSW 2044	(400 m buffer zone)
Pk Fabrics	5	26 Burrows Road, St	Within local study area
Mr Plywood	5	Peters NSW 2044	(400 m buffer zone)
Rebecca Taxi Base	5	28 Burrows Road, St	Within local study area
NODOUU TUNI DADE	5	Peters NSW 2044	(400 m buffer zone)
Gem Auto Services	5	30 Burrows Road, St	Within local study area
	5	Peters NSW 2044	(400 m buffer zone)
Dial A Dump	5	32 Burrows Road, St	Within local study area

Business name	Precinct	Address	Location in relation to transmission cable route
Taxi Central Pty Ltd	5	33 Burrows Road, St	Within local study area
Furnomics	5	Peters NSW 2044	(400 m buffer zone) Within local study area
Furnomics	5	36 Burrows Road, St Peters NSW 2044	(400 m buffer zone)
Canalside Interiors	5	38 Burrows Road, St	Within local study area
	Ū	Peters NSW 2044	(400 m buffer zone)
Magic Glass Limited			(,
Fulton Hogan	5	40 Burrows Road, St	Within local study area
		Peters NSW 2044	(400 m buffer zone)
Kennards Hire Lift & Shift	5	53 Burrows Road, Alexandria NSW 2015	Within local study area (400 m buffer zone)
Feenix Balustrades	5	57 Burrows Road, St	Directly adjacent to
		Peters NSW 2044	transmission cable route
Braemac Energy	5	61 Burrows Road,	Within local study area
		Alexandria NSW 2015	(400 m buffer zone)
SOS Print and Media	5	65 Burrows Road,	Within local study area
		Alexandria NSW 2015	(400 m buffer zone)
J.B.'S Mechanical Repairs	5	71 Burrows Road,	Within local study area
Trilegy Orgon Densire and	<i>г</i>	Alexandria NSW 2015	(400 m buffer zone)
Trilogy Smash Repairs and Mechanical Services	5	72 Burrows Road, Alexandria NSW 2015	Within local study area
	_		(400 m buffer zone)
Wrights the Butcher	5	73 Burrows Road,	Within local study area
KD Electric	<i>_</i>	Alexandria NSW 2015	(400 m buffer zone)
KP Electric	5	73A Burrows Road,	Within local study area
Genesis Waste Transfer	5	Alexandria NSW 2015 76 Burrows Road,	(400 m buffer zone) Within local study area
Certesis Waste Transfer	5	Alexandria NSW 2015	(400 m buffer zone)
Coffex Coffee	5	Burrows Road,	Within local study area
		Alexandria NSW 2015	(400 m buffer zone)
NDD Distribution	5	196 Bourke Road,	Within local study area
		Alexandria NSW 2015	(400 m buffer zone)
All Sorts Indoor Sports Centre	5	190 Bourke Road,	Within local study area
		Alexandria NSW 2015	(400 m buffer zone)
BMW Sydney Service Facility	5	190 Bourke Road,	Within local study area
	5	Alexandria NSW 2015	(400 m buffer zone)
All Sorts Fitness & Wellbeing Centre	5	184 Bourke Road, Alexandria NSW 2015	Within local study area (400 m buffer zone)
The Australian Quadriplegic	5	184 Bourke Road,	Within local study area
Association	5	Alexandria NSW 2015	(400 m buffer zone)
Astori's Café	5	182 Bourke Road,	Within local study area
Sydney Body Therapies		Alexandria NSW 2015	(400 m buffer zone)
Rocks Brewing Co	5	160 Bourke Road,	Within local study area
Live Telecom		Alexandria NSW 2015	(400 m buffer zone)
Albatrans Intl Freight Forwarders			
Commander Centre Sydney East	5	136 Bourke Road,	Within local study area
, , ,		Alexandria NSW 2015	(400 m buffer zone)
Pearl Catering	5	79 Bourke Road,	Within local study area
		Alexandria NSW 2015	(400 m buffer zone)

Business name	Precinct	Address	Location in relation to transmission cable route
Aircruising Services	5	77 Bourke Road,	Within local study area
Gillie and Marc		Alexandria NSW 2015	(400 m buffer zone)
T's Textbooks			
CSR Gyprock	5	63 Bourke Road, Alexandria NSW 2015	Within local study area (400 m buffer zone)