

1. Introduction

1.1 Background

The New South Wales (NSW) Government is implementing *Sydney's Rail Future*, a plan to transform and modernise Sydney's rail network so that it can grow with the city's population and meet the needs of rail customers into the future.

Sydney Metro is a new, standalone rail network identified in *Sydney's Rail Future*, providing 66 kilometres of metro rail line and 31 metro stations. The NSW Government is currently delivering the first two stages of Sydney Metro, shown in Figure 1.1, which consist of Sydney Metro Northwest (between Rouse Hill and Chatswood) and Sydney Metro City & Southwest (between Chatswood and Bankstown).

Sydney Metro Northwest is currently under construction. Sydney Metro Northwest services will start in the first half of 2019, with a metro train running every four minutes in the peak period. Services will operate between a new station at Cudgegong Road (beyond Rouse Hill) and Chatswood.

Sydney Metro City & Southwest will extend the Sydney Metro system beyond Chatswood to Bankstown, delivering about 30 kilometres of additional metro rail, a new crossing beneath Sydney Harbour, new railway stations in the lower North Shore and Sydney central business district (CBD), and the upgrade of existing stations from Marrickville to Bankstown. Sydney Metro City & Southwest comprises two core components (shown in Figure 1.1):

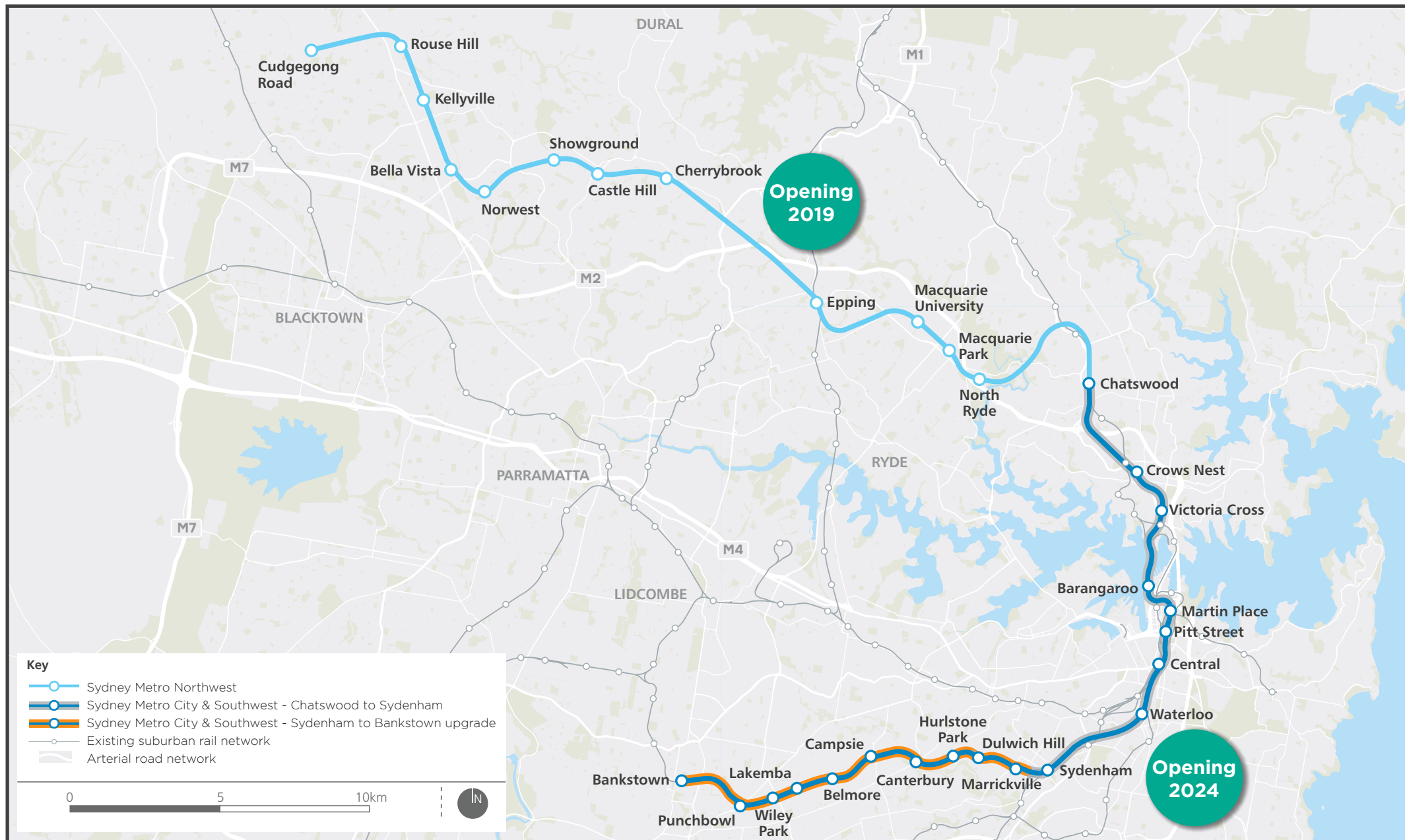
- the Chatswood to Sydenham project
- the Sydenham to Bankstown upgrade (the subject of this Environmental Impact Statement).

Planning approval for the Chatswood to Sydenham project, which includes 15.5 kilometres of new underground rail line and seven new stations between Chatswood and Sydenham, was received in January 2017, with construction activities commencing in 2017. The approved Chatswood to Sydenham project includes the dive structure and tunnel portal located between Sydenham Station and Bedwin Road, Marrickville (the Marrickville dive structure). The approved project does not currently include changes to Sydney Trains tracks in the vicinity of Sydenham (at Sydenham Junction), works to Sydenham Station, or the provision of stabling facilities (the Sydney Metro Trains Facility).

The Sydenham to Bankstown State Significant Infrastructure Application Report noted that works to support the phased opening of the Chatswood to Sydenham project could be accelerated under a separate planning approval. To enable this to occur, Transport for NSW proposes to include the works at Sydenham Junction and Sydenham Station, and construction of the Sydney Metro Trains Facility, as part of the scope of the Chatswood to Sydenham project. A modification to the Chatswood to Sydenham project is currently underway to include these works as part of the scope of that project.

Planning for Sydney Metro West is also currently underway. Sydney Metro West is proposed to be an underground metro railway that will link the Parramatta and Sydney CBDs, and communities in between.

The Sydney Metro Delivery Office, part of Transport for NSW, is managing the planning, procurement and delivery of the Sydney Metro network, as shown in Figure 1.2.



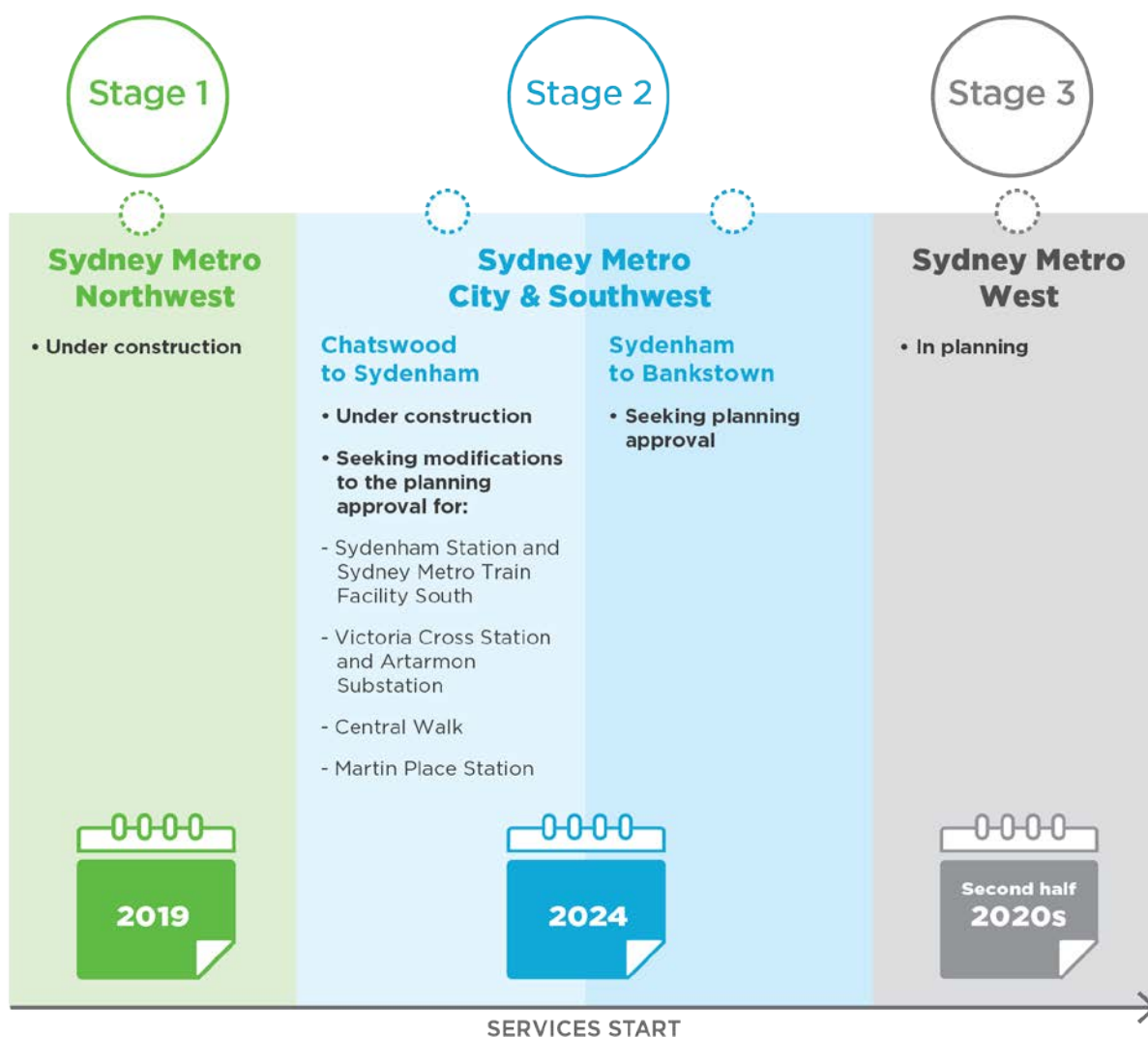


Figure 1.2 The Sydney Metro network – status

1.2 The project for which approval is sought

1.2.1 The project

To further progress implementation of *Sydney's Rail Future* and Sydney Metro City & Southwest, Transport for NSW ('the proponent') is seeking approval to construct and operate the Sydenham to Bankstown upgrade component of Sydney Metro City & Southwest ('the project').

The project involves upgrading 10 existing stations west of Sydenham (Marrickville to Bankstown inclusive), and a 13 kilometre long section of the Sydney Trains T3 Bankstown Line, between west of Sydenham Station and west of Bankstown Station, to improve accessibility for customers and meet the standards required for metro operations. The project would enable Sydney Metro to operate beyond Sydenham, to Bankstown.

A key element of the project is upgrading stations along the corridor from Marrickville to Bankstown, to allow better access for more people, by providing new concourses, level platforms, and lifts at all stations. These upgrades aim to provide a better, more convenient, and safer experience for public transport customers, by delivering:

- stations that are accessible to people with a disability or limited mobility, the elderly, people with prams, and people travelling with luggage
- upgraded station buildings and facilities for all transport modes that meet the needs of a growing population

- interchanges that support an integrated transport network and allow seamless transfers between different modes for all customers.

In December 2015, Sydney Metro City & Southwest (including the project) was declared to be critical State significant infrastructure by the NSW Minister for Planning under *State Environmental Planning Policy (State and Regional Development) 2011*. As critical State significant infrastructure, the project is permissible without development consent, and is subject to assessment and approval by the Minister for Planning under Part 5.1 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.2.2 Location

The location of the project is shown in Figure 1.3. The key elements of the project are located mainly within the existing rail corridor, from about 800 metres west of Sydenham Station in Marrickville, to about one kilometre west of Bankstown Station in Bankstown. The project is located in the Inner West and Canterbury-Bankstown local government areas.

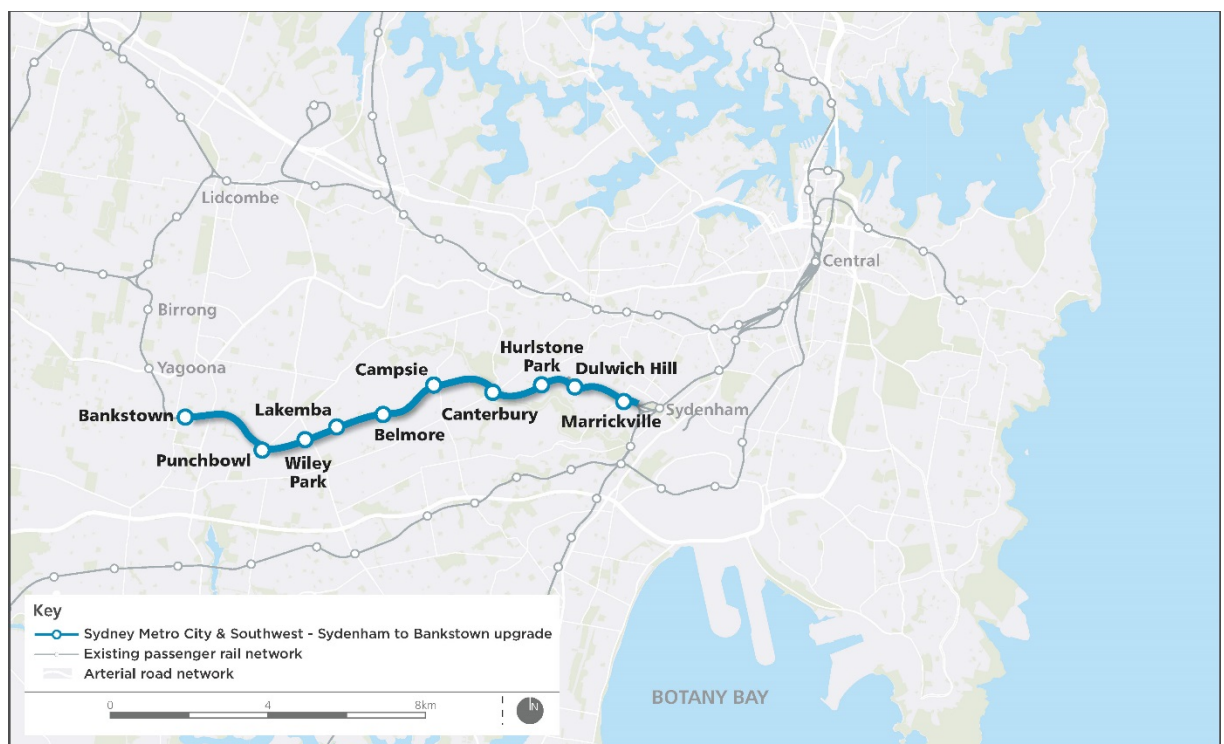


Figure 1.3 Location of the project

1.2.3 Key features of the project

The key features of the project are summarised below and are shown in Figure 1.4.

Works to upgrade access at stations

The project includes upgrading the 10 stations from Marrickville to Bankstown as required, to meet legislative requirements for accessible public transport, including the requirements of the *Disability Discrimination Act 1992* and the *Disability Standard for Accessible Public Transport 2002*. The proposed works include:

- works to platforms to address accessibility issues, including levelling and straightening platforms
- new station concourse and station entrance locations, including:
 - new stairs and ramps

- new or relocated lifts
- provision of additional station facilities as required, including signage and canopies.

Works would also be undertaken in the areas around the stations to better integrate with other modes of transport, improve travel paths, and meet statutory accessibility requirements. This would include provision of pedestrian, cyclist, and other transport interchange facilities; as well as works to the public domain, including landscaping.

Works to convert stations and the rail line to Sydney Metro standards

Station works

In addition to the station upgrades to improve accessibility, works to meet the standards required for metro services would be carried out, including:

- installation of platform screen doors
- provision of operational facilities, such as station services buildings.

Track and rail system facility works

Upgrading the track and rail systems to enable operation of metro services would include:

- track works where required along the rail corridor, including upgrading tracks and adjusting alignments, between west of Sydenham Station and west of Bankstown Station
- new turn back facilities and track crossovers
- installing Sydney Metro rail systems and adjusting existing Sydney Trains rail systems
- overhead wiring adjustments.

Other works

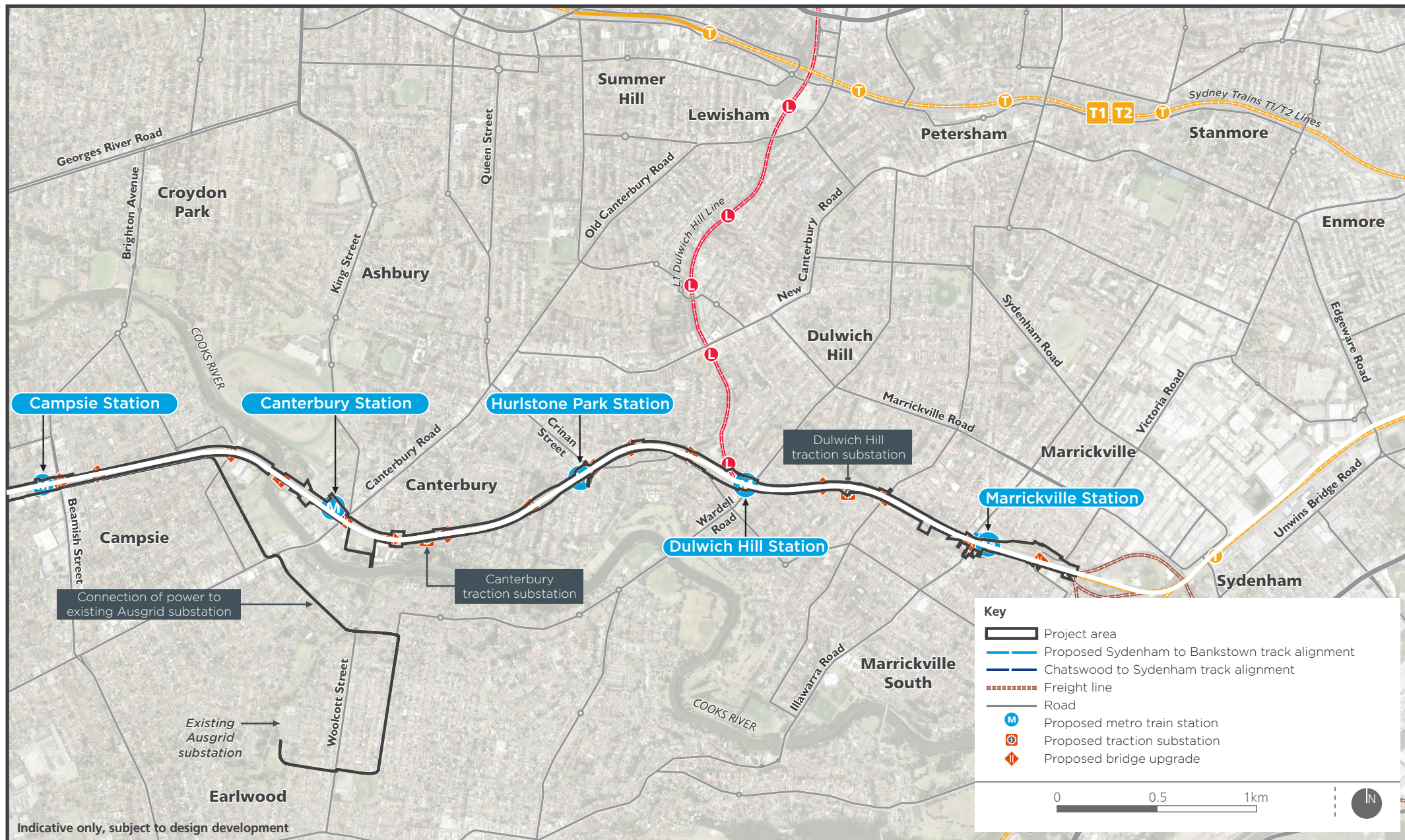
Other works proposed to support Sydney Metro operations include:

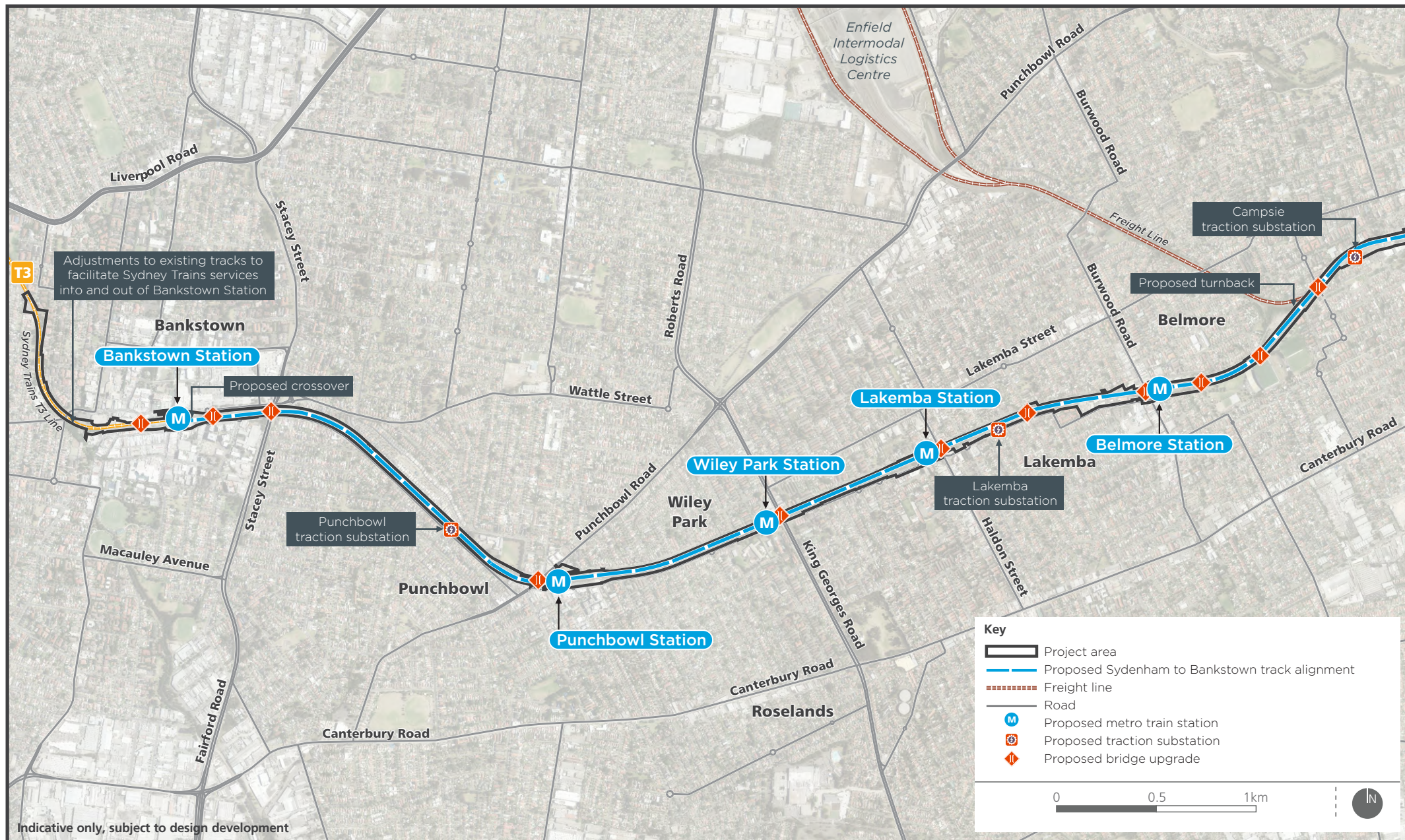
- upgrading existing bridges and underpasses across the rail corridor
- installation of security measures, including fencing
- installation of noise barriers where required
- modifications to corridor access gates and tracks
- augmenting the existing power supply, including new traction substations and provision of new feeder cables
- utility and rail system protection and relocation works
- drainage works to reduce flooding and manage stormwater.

Active transport corridor and future rail corridor development

The project would also deliver:

- sections of an active transport corridor located around the station areas, to facilitate walking and cycling connections to each station and between Marrickville and Bankstown
- enabling works to support future development at Campsie Station (future development would be subject to separate approval).





Temporary works during construction

During construction, the project would involve:

- provision of temporary facilities to support construction, including construction compounds and work sites
- implementation of alternative transport arrangements for rail customers during possession periods and/or station closures, guided by the Temporary Transport Strategy.

1.2.4 Project objectives and aims

The primary objectives of the project are to:

- improve the quality of the transport experience
- provide a system that is able to satisfy long-term demand
- improve the resilience of the transport network.

Secondary objectives are to:

- grow public transport patronage and mode share
- support the productivity of the Global Economic Corridor
- serve and stimulate urban development
- improve the efficiency and cost effectiveness of the public transport system
- implement a feasible solution recognising impacts, constraints and delivery risks.

The project also aims to

- deliver accessible, modern, secure and integrated transport infrastructure
- contribute to the accessibility and connectivity of existing and future communities.

1.2.5 Construction

Construction of the project would commence once all necessary approvals are obtained (anticipated to be in 2018). Upgraded stations would be progressively delivered from 2019 until 2024, with the main station upgrade works estimated to take about two years for each station. During this period, works to upgrade other infrastructure, such as tracks, bridges, embankments and drainage, would also be undertaken.

The T3 Bankstown Line and freight tracks operated by Australian Rail Track Corporation (ARTC) (between Marrickville and west of Campsie) would remain operational for the majority of the construction period. However, to ensure the station and infrastructure upgrade works are completed as efficiently and safely as possible, and to accommodate works that cannot be undertaken when trains are operating, it would be necessary to undertake some work during rail possession periods, when trains are not operating. It is anticipated that these rail possession periods would comprise the routine weekend maintenance possessions scheduled by Sydney Trains (and ARTC), together with some longer possession periods during periods of reduced patronage such as school holidays.

A final, longer possession of about three to six months would also be required. This would involve full closure of the line to enable it to be converted to metro operations. This final possession period is to enable works that can only be completed once Sydney Trains services are not operating. It would include works such as the installation of new signalling, communication systems, and platform screen doors.

During each possession period, a temporary transport management plan would be implemented to provide alternative transport arrangements and ensure that customers can continue to reach their destinations.

1.2.6 Operation

The project would connect with the Chatswood to Sydenham project within the existing rail corridor, about 800 metres to the west of Sydenham Station.

The project would operate in conjunction with Sydney Metro Northwest and the Sydney Metro City & Southwest Chatswood to Sydenham project, which, subject to the modification described in Section 1.1, is proposed to extend from Chatswood Station to Sydenham Station.

Sydney Metro Northwest will be operational between Cudegong Road and Chatswood stations by 2019. Sydney Metro City & Southwest would be fully operational by 2024, with the opportunity for operation to commence in two phases. Initially, Sydney Metro Northwest services would be extended by the City & Southwest project, and would operate from Chatswood Station to Sydenham Station. Some months later, metro operations would extend from Sydenham Station to Bankstown Station, with both phases planned to be completed before the end of 2024. The opportunity for phased opening of the project would enable metro trains to operate from Cudegong Road Station to Sydenham Station prior to the final conversion of the T3 Bankstown Line to metro operations.

Once the project is operational, Sydney Trains services would no longer operate between Sydenham and Bankstown stations. Metro trains would run between Sydenham and Bankstown stations in each direction, at least every four minutes in peak periods, averaging around 15 trains per hour. Customers would be able to interchange with Sydney Trains services at Sydenham and Bankstown stations. Sydney Trains services to and from Bankstown Station to Liverpool and Lidcombe stations would not be affected.

More information on the project is provided in Chapter 8 (Project description – operation) and Chapter 9 (Project description – construction).

1.2.7 Project cost estimate

The indicative cost range for Sydney Metro City & Southwest, comprising both the Chatswood to Sydenham project and the Sydenham to Bankstown upgrade, is estimated to be \$11.5 to \$12.5 billion. The final project budget will be confirmed once all major contracts have been awarded, following the same process used for the \$8.3 billion Sydney Metro Northwest.

1.3 Project need and benefits

1.3.1 Transforming Sydney

Over the next 15 years, NSW will require infrastructure to support 40 per cent more train trips, 30 per cent more car trips and 31 per cent more households.

Sydney's current suburban rail system can reliably carry 24,000 people an hour per line. Sydney Metro, together with signalling and infrastructure upgrades across the existing Sydney rail network, will increase the capacity of train services entering the Sydney CBD – from about 120 services an hour today, up to 200 services beyond 2024. This is an increase of up to 60 per cent across the network to meet demand. Sydney Metro, including the project, will have a long-term target capacity of about 40,000 customers per hour in each direction, similar to other metro systems worldwide.

Sydney Metro, Australia's largest public transport project, will transform Sydney, cutting travel times, reducing congestion, and delivering economic and social benefits for generations to come. It will boost economic activity by more than \$5 billion a year, supporting major jobs and business

growth along its route with better connectivity and urban renewal opportunities, and greatly improving business logistics, especially for knowledge-based businesses.

With at least 15 trains an hour in the peak when services start in 2024, the conversion of the T3 Bankstown Line to metro operations would address one of Sydney's biggest rail bottlenecks, delivering benefits across Sydney's rail network. These benefits would further increase when the number of trains increases to 20 per hour as part of the ultimate operations.

The T3 Bankstown Line effectively slows down the Sydney Trains network because of the way it merges with other railway lines close to the city, including the T2 Airport, Inner West & South Line.

Parts of the T3 Bankstown Line are over 120 years old with existing infrastructure in varying conditions. A key challenge for this line is customer accessibility, with five of the stations not having lifts. In addition, a number of these stations have larger than desirable gaps between the platforms and trains, which makes access difficult for some customers, particularly the disabled, elderly, and those travelling with young children, prams or luggage.

Further information on the need for and benefits of the project is provided in Chapter 5 (Project need).

1.3.2 Customer experience

The design and delivery of Sydney Metro is centred on the customer and focussed on their needs, at each stage of their journey. Sydney Metro's commitment is to provide a reliable transport solution that will make it easy for all customers to get to where they need to go.

Sydney Metro is being designed to deliver a service that is on time, clean, safe, comfortable, efficient, convenient, accessible and easy for customers to use. It will also be seamlessly integrated with other transport modes, including interchanges with the existing Sydney Trains network, as well as buses, light rail and ferries.

Customer benefits of Sydney Metro include:

- no timetable – customers can just turn up and go, with services every four minutes in the peak
- opal ticketing – fares set and controlled by the NSW Government, the same as the rest of Sydney
- customer service assistants at every station and moving through the network during the day and night
- Australian-first platform screen doors (running the full length of all metro platforms and only opening at the same time as the train doors), which keep people and objects away from the edge, improving customer safety and allowing trains to get in and out of stations faster
- continuous mobile phone coverage throughout the metro network
- 98 per cent on time running
- clean platforms and trains
- two multi-purpose areas per train for prams, luggage, and bicycles
- wheelchair spaces, separate priority seating, and emergency intercoms inside trains
- safety benefits, including security cameras on trains, and the ability for customers to see inside the train from one end to the other
- video help points at platforms, connecting directly with train controllers – an Australian first
- level access between the platform and train, and three double doors per side per carriage, for faster loading and unloading

- heating and air-conditioning in all metro trains
- on-board real time travel information and live electronic route maps.

As Australia's first fully automated railway, customer safety is a priority of Sydney Metro. At all times, a team of expert train controllers will monitor the network, making sure everything runs smoothly.

1.4 Purpose and structure of the Environmental Impact Statement

This Environmental Impact Statement supports an application for approval of the project as critical State significant infrastructure under Part 5.1 of the EP&A Act. It addresses the environmental assessment requirements of the Secretary of the Department of Planning and Environment (the 'Secretary's environmental assessment requirements'), dated 23 March 2017 (refer to Appendix A).

The Environmental Impact Statement (volume 1) is structured in four parts as follows:

- **Part A Introduction and background:**
 - an introduction to the environmental impact assessment (**Chapter 1**)
 - a description of the project area and a concise description of its general biophysical and cultural environment (**Chapter 2**)
 - an overview of the project's statutory context, in terms of relevant assessment and approval requirements (**Chapter 3**)
 - a summary of previous and proposed community and stakeholder consultation (**Chapter 4**).
- **Part B The project:**
 - an overview of the strategic context and need for the project (**Chapter 5**)
 - a summary of the strategic alternatives to Sydney Metro as a whole and the options considered during design development (**Chapter 6**)
 - a description of how the project design was developed, including how urban design, place making, heritage, and other environmental considerations formed part of the design process (**Chapter 7**)
 - a description of the project features and operation (**Chapter 8**), including design features and infrastructure proposed, operations, acquisition requirements, and maintenance
 - an indicative description of the likely construction process and activities (**Chapter 9**).
- **Part C Environmental assessment:**
 - the results of the assessment of the key environmental issues identified by the Secretary's environmental assessment requirements, including information on the existing environment, potential construction and operation impacts, and proposed mitigation measures (**Chapters 10 to 27**).
- **Part D Conclusion:**
 - provides a synthesis of the findings of the Environmental Impact Statement, a description of the proposed approach to environmental management during construction and operation, and a consolidated list of mitigation measures (**Chapter 28**).

Other appendices in volume 1 provide supporting information.

The specialist technical reports prepared as an input to the Environmental Impact Statement are provided in volumes 2 to 6.

2. Location and setting

This chapter describes the project's location. It defines the project area for the purpose of the Environmental Impact Statement, and provides a summary of the key features of the environment of the project area, and the broader study area in which it is located. The Environmental Impact Statement assesses the potential impacts of the project on the project area and, where relevant, the broader study area. These terms are defined in the chapter.

The Secretary's environmental assessment requirements addressed in this chapter are listed in Table 2.1. A full copy of the assessment requirements and where they are addressed in the Environmental Impact Statement is provided in Appendix A.

Table 2.1 Secretary's environmental assessment requirements – location and setting

| Ref | Secretary's environmental assessment requirements – location and setting | Where addressed |
|--------|---|-----------------|
| 2.1(i) | A concise description of the general biophysical and socio-economic environment that is likely to be impacted by the project (including offsite impacts). | This chapter |

2.1 Definitions used in this Environmental Impact Statement

The following are the key locational descriptor definitions used in this Environmental Impact Statement.

2.1.1 Project area

The term 'project area' is used in this Environmental Impact Statement to refer to the area where the project would be undertaken. The project area is the area that would be directly disturbed by construction of the project (for example, as a result of ground disturbance and the construction of foundations for structures). It includes the location of construction activities, compounds and work sites, areas that may be affected by alternative transport arrangements during construction, and the location of operational infrastructure. A description of the project area is provided in Section 2.2.2.

2.1.2 Study area

The study area is defined as the wider area including and surrounding the project area, with the potential to be directly or indirectly affected by the project (for example, by noise and vibration, visual, or traffic impacts). The actual size and extent of the study area varies according to the nature and requirements of each assessment and the relative potential for impacts. For example, the study area for the heritage assessment is generally restricted to the area with the potential for heritage impacts, extending for a distance of about 25 metres on either side of the project area. In comparison, the study area for the noise and vibration assessment is based on noise catchment areas, and extends for a distance of about 100 metres on either side of the majority of the project area, and 200 metres around construction compounds.

A concise description of the general biophysical, social, and cultural environment of the study area is provided in Sections 2.3 and 2.4.

2.1.3 Station area

The station area is the area surrounding the stations, within which works are required to provide facilities associated with the upgraded stations. Works are proposed in the station area to meet

statutory accessibility requirements, better integrate the station with other modes of transport, and improve travel paths. As noted in Section 1.2, this would include providing pedestrian, cyclist, and other transport interchange facilities, as well as works to the public domain, such as landscaping. The extent of the station area around each station is shown in Figure 2.1.

2.2 Location of the project and the project area

2.2.1 Location

The project is located in Sydney's inner to middle ring western/south-western suburbs, between about seven and 17 kilometres south-west of the Sydney CBD (extending from west of Sydenham Station to west of Bankstown Station respectively). At its closest point (at Bankstown Station), the project area is located about 11 kilometres south of the Parramatta CBD.

The location of the project is shown on Figure 1.3 and Figure 1.4.

2.2.2 The project area

The project area is shown in Figure 2.1. It extends for about 13 kilometres along the rail corridor, from west of Sydenham Station in Marrickville, to west of Bankstown Station in Bankstown.

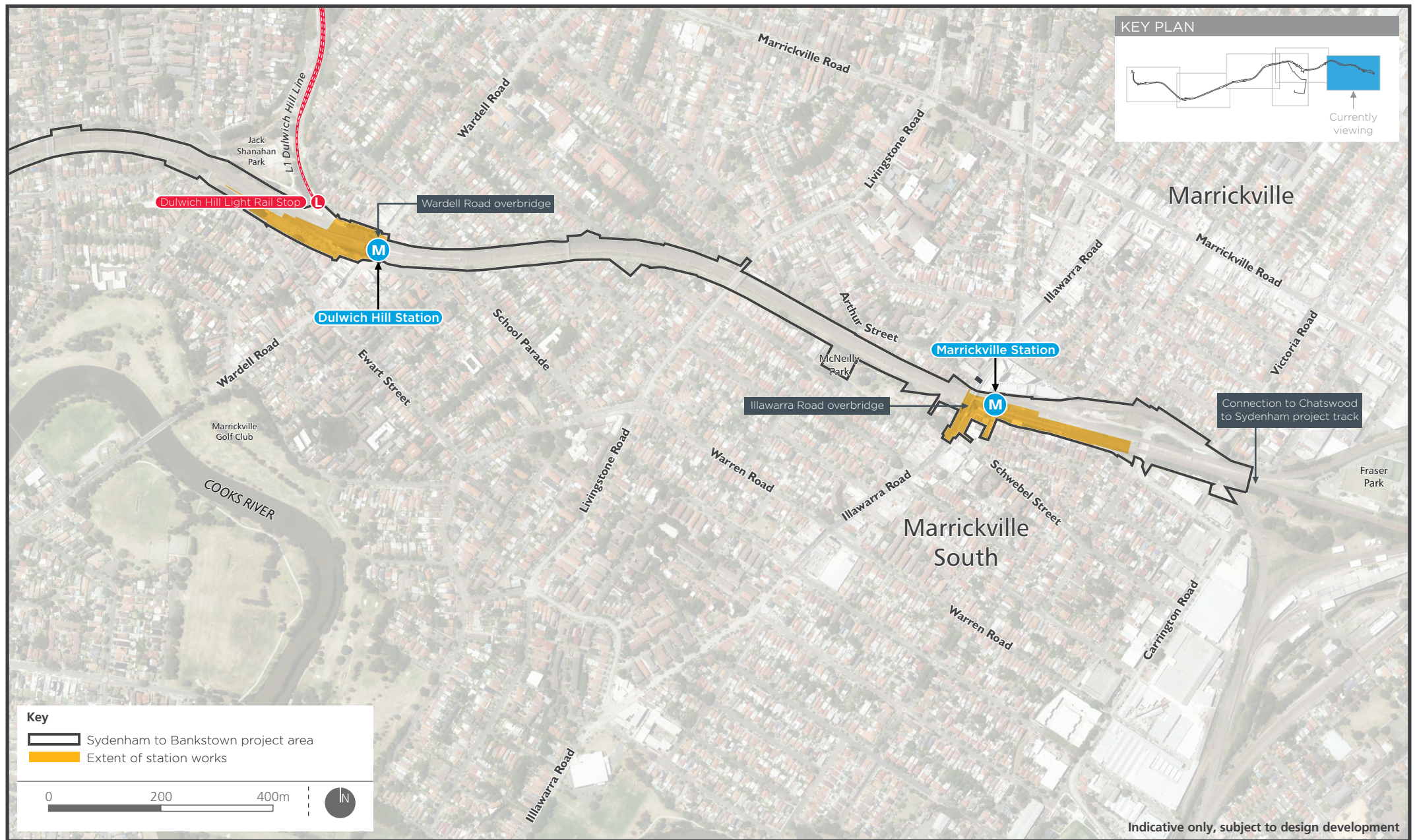
The eastern end of the project area is located within the rail corridor, about 800 metres west of Sydenham Station and about 500 metres east of Marrickville Station, to the west of Fraser Park (near Meeks Road). From this location, the project area extends west along the T3 Bankstown Line. In some locations, the project area extends beyond the rail corridor to provide for the location of construction compounds, construction worksites, station work areas, and ancillary infrastructure.

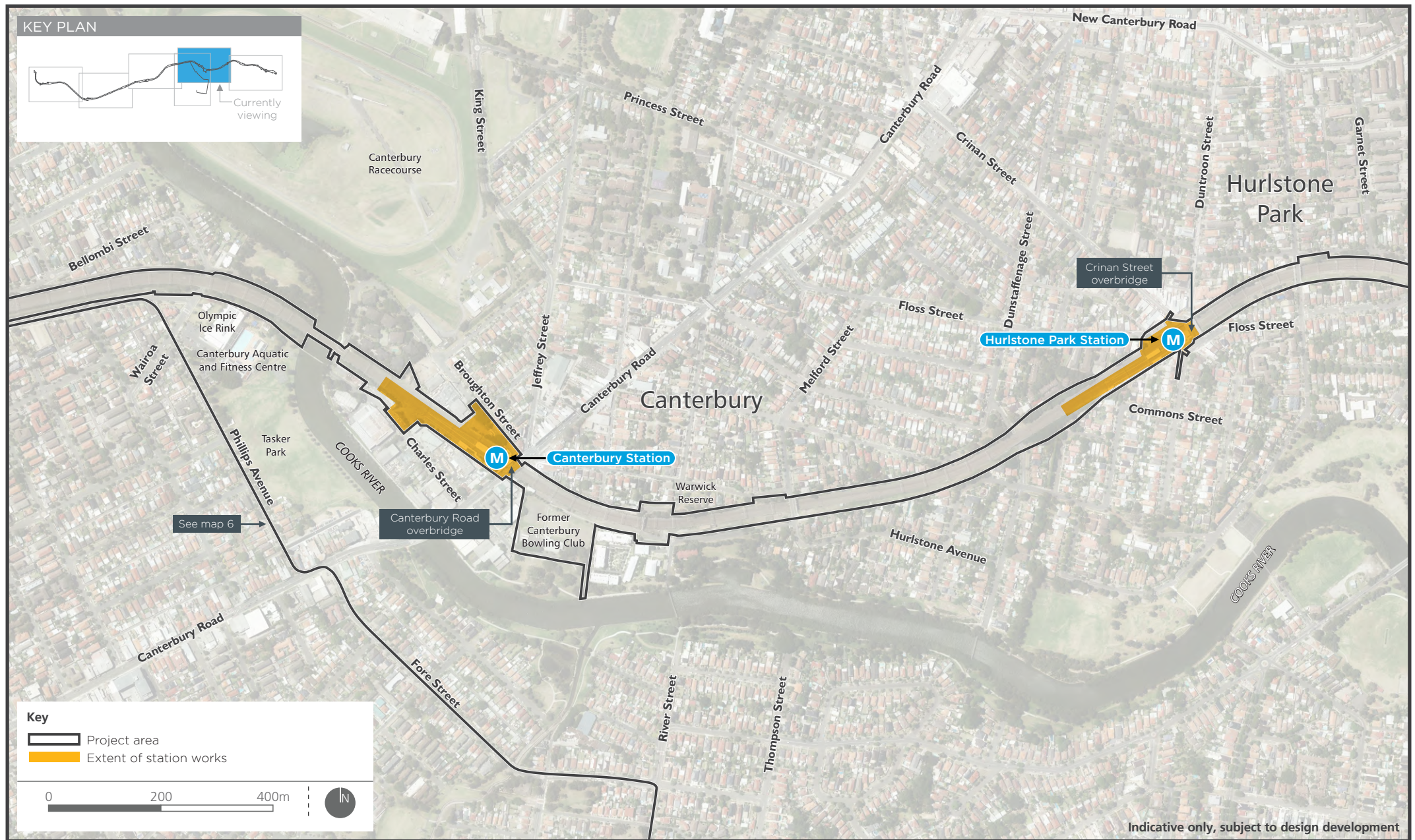
The western end of the project area is located within the rail corridor about one kilometre to the west of Bankstown Station, near Carmen Street, Bankstown.

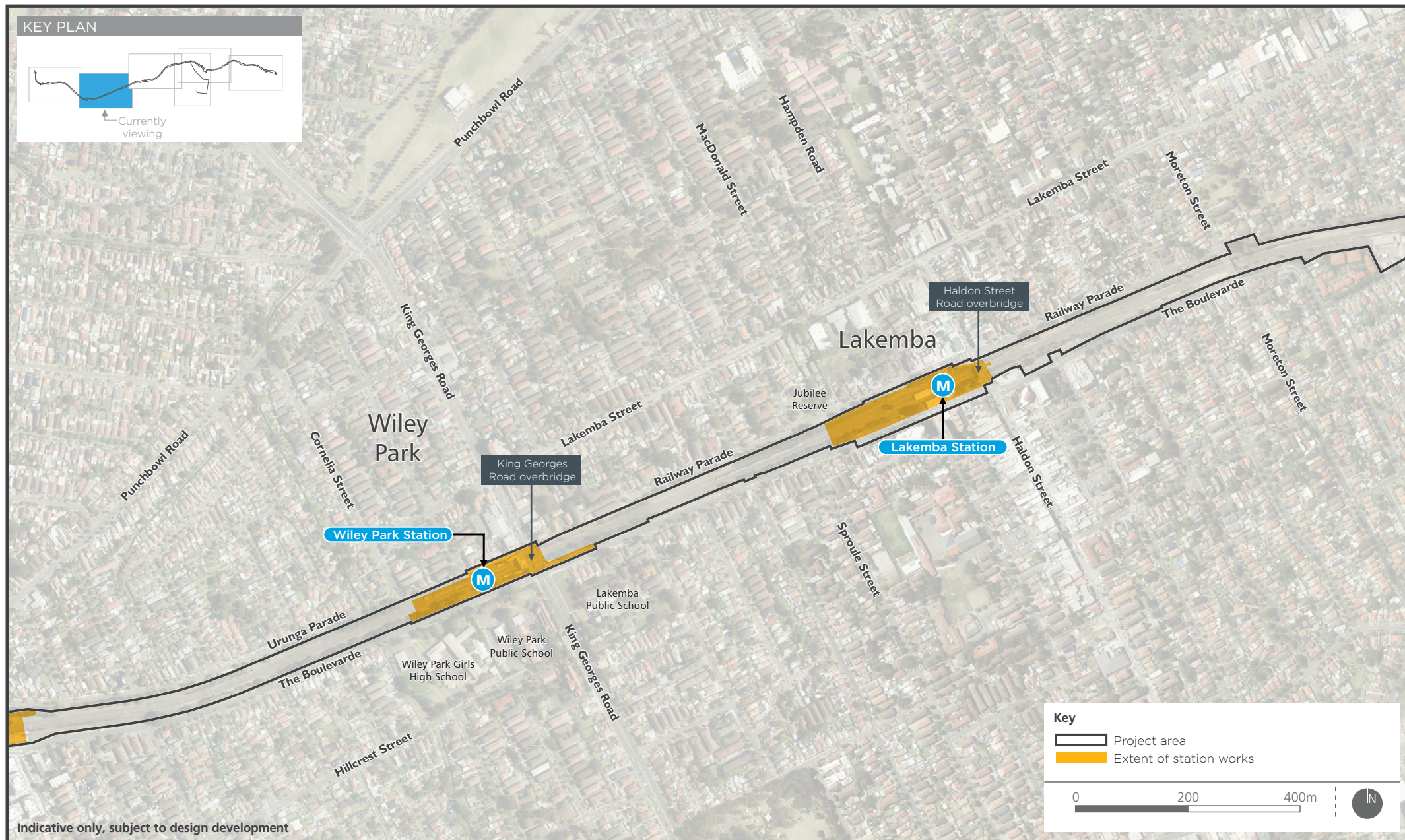
The project is as described in this Environmental Impact Statement, and is generally located within the suburbs of Marrickville, Sydenham, Tempe, Dulwich Hill, Hurlstone Park, Canterbury, Campsie, Belmore, Lakemba, Wiley Park, Punchbowl, and Bankstown, in accordance with the critical State significant infrastructure declaration. Further information on the permissibility of the project is provided in Section 3.1.1.

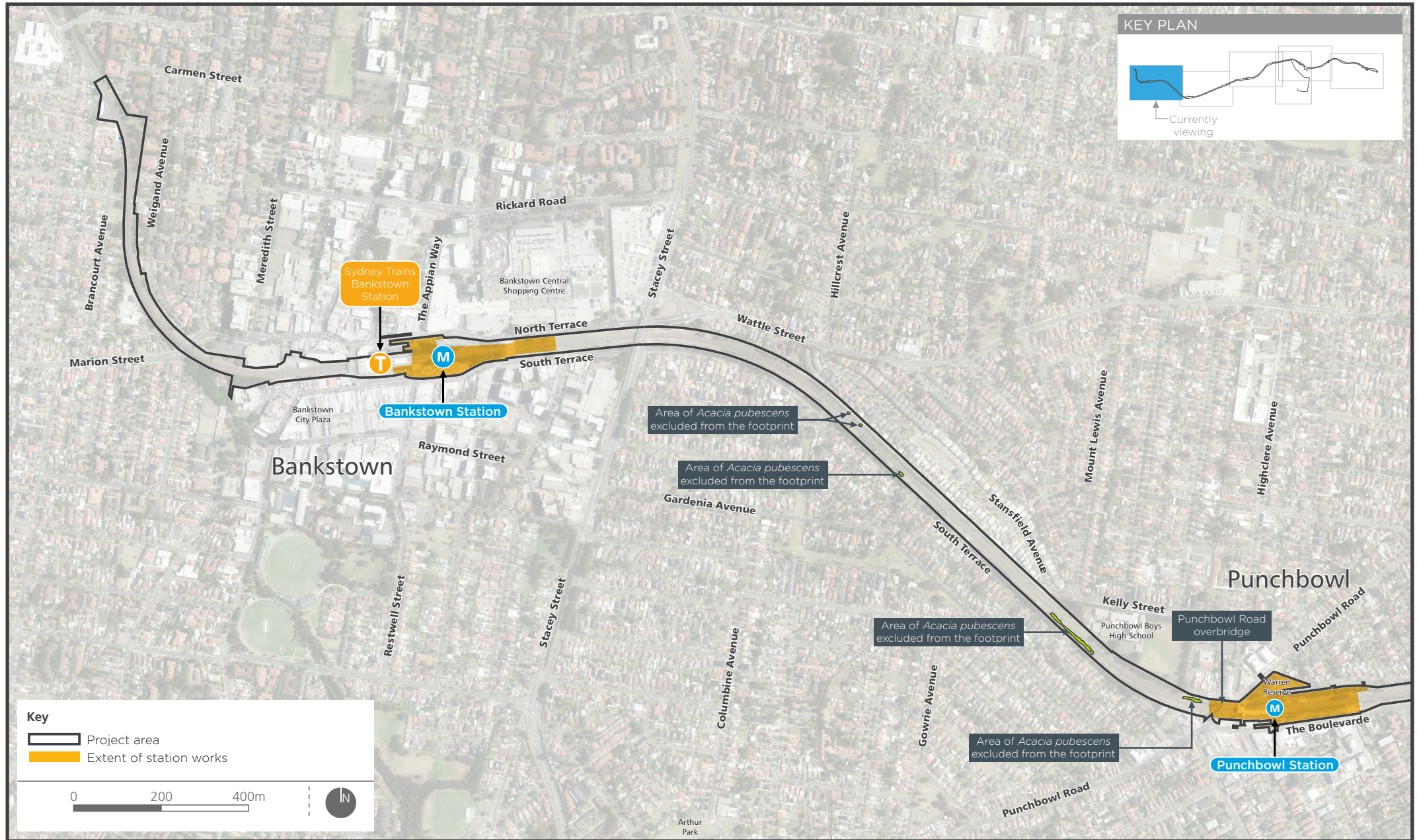
The project area generally includes:

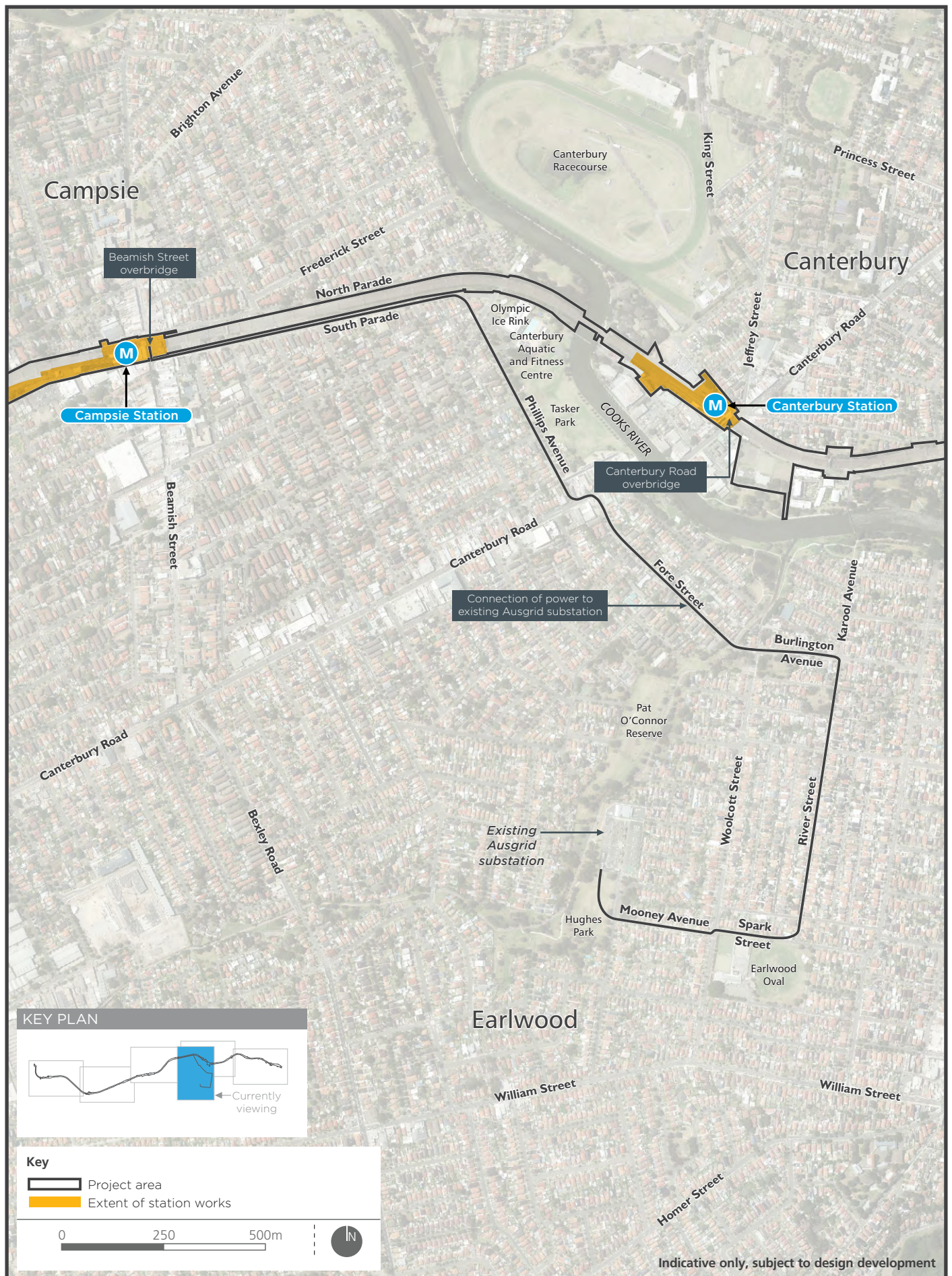
- the existing rail corridor from west of Sydenham Station to west of Bankstown Station
- Marrickville, Dulwich Hill, Hurlstone Park, Canterbury, Campsie, Belmore, Lakemba, Wiley Park, Punchbowl, and Bankstown stations
- bridges crossing the rail corridor where works are proposed as part of the project (described in Section 8.1.3)
- the proposed locations of construction compounds and work sites (described in Section 9.8 and shown in Figure 9.1)
- the location of the proposed new 33 kilovolt electricity feeder cable between Campsie Station and Ausgrid's Canterbury Substation (described in Section 8.1.3 and shown in Figure 2.1)
- works required to prepare the road network and station surrounds for the implementation of temporary transport management plans (described in Sections 9.2.3 and 10.3.1).
- works required to prepare the road network for the movement of heavy vehicles during construction, including works at certain intersections (described in Section 10.3.3) to allow vehicles to make safe turns.











2.3 General biophysical environment

A summary of the general biophysical characteristics of the study area is provided below.

2.3.1 Soils

Sandstone and shale geological units underlie the majority of the project area. There are some alluvium deposits and volcanic intrusions along the project area. The majority of the project area is located on the Blacktown soil landscape, which generally has low soil fertility and poor drainage. Between Canterbury and Marrickville stations, the project area is located on the Gynea soil landscape, which is highly erodible, highly permeable, and has low soil fertility. Isolated areas of the Birrong soil landscape are located along drainage lines that cross the project area, with this landscape subject to localised flooding.

Within the rail corridor, the majority of the project area consists of fill associated with railway embankments, or exposed bedrock associated with cuttings and overlain with rail ballast or fill. Saline soils are located west of Punchbowl Station, with some isolated areas of high salinity potential. Acid sulphate soils are located along the Cooks River.

A preliminary contamination assessment undertaken as part of the design process identified that there is a low to medium risk of contamination along the majority of the project area, with a medium to high risk in three areas (between Sydenham and Marrickville stations, between Campsie and Belmore stations, and between Punchbowl and Bankstown stations).

Further information on soils is provided in Chapter 20.

2.3.2 Water

Between Marrickville and Punchbowl stations, the project area is located within the Cooks River catchment. The project area crosses the Cooks River about 400 metres west of Canterbury Station. The proposed location of the electricity feeder cable from the Canterbury Substation crosses Cup and Saucer Creek, which is a tributary of the Cooks River. Between Punchbowl and Bankstown stations, the project area is located within the Salt Pan Creek catchment.

Within both catchments, water generally drains to nearby watercourses via stormwater drainage infrastructure.

Water quality within the two catchments is generally poor because of the influence of run-off from urban areas. However, water quality improves in downstream areas within both catchments.

Around Marrickville Station, the rail corridor and surrounding lands are subject to regular and extensive flooding. Other areas where flooding of the rail corridor may occur are located to the west of Campsie Station, between Campsie and Canterbury stations, and to the east of Canterbury Station, however the frequency and extent is less than at Marrickville. Flooding issues generally result from the limited capacity of existing drainage infrastructure, including infrastructure within and crossing the rail corridor.

Further information on hydrology, flooding, and water quality is provided in Chapter 21.

2.3.3 Biodiversity

The majority of the study area has been heavily modified by past and ongoing disturbances associated with urban development and the active rail corridor. Vegetation within the project area is dominated by grasses, small shrubs, and a variety of weeds, with some scattered trees. The majority of vegetation comprises exotic or planted native species on highly modified landforms. This includes vegetation in the form of street trees in the vicinity of stations and also along the corridor. There are small isolated patches of remnant or regrowth native vegetation in small portions of the study area associated with rail cuttings with less disturbed soil profiles.

Two threatened ecological communities, listed under the *Threatened Species Conservation Act 1995* (TSC Act), occur in the project area:

- Sydney Turpentine Ironbark Forest in the Sydney Basin Bioregion
- Shale Gravel Transition Forest.

There is limited riparian vegetation at the location where the Cooks River is crossed by the rail corridor.

One threatened fauna species, the Grey-headed Flying-fox, was recorded in the study area during site surveys. Four other species listed as vulnerable under the TSC Act are likely to occur at least on occasion: the Eastern Bentwing Bat, Large-footed Myotis, Eastern Freetail Bat and Yellow-bellied Sheath-tail Bat.

Potential habitat for the endangered Long-nosed Bandicoot population is present in parts of the study area. Despite a number of targeted searches and different methods being employed, no individuals were recorded.

The rail corridor also contains around 650 stems of the endangered Downy Wattle, which is listed as a vulnerable species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the TSC Act. These stems are located between Punchbowl and Bankstown stations.

Further information on biodiversity is provided in Chapter 22.

2.4 General social and cultural environment

A summary of the general social and cultural characteristics (including land use, heritage, and socio-economic) of the study area is provided below.

2.4.1 Land use and property

The study area consists of a varied and relatively dense mix of land uses, including residential, commercial, industrial, transport infrastructure, community, health, education, and recreation. The majority of the project area is located within an active rail corridor used for transport (rail) purposes. This includes suburban rail uses (the T3 Bankstown Line), and regional rail freight uses. Other land uses include commuter car parks at various stations along the corridor, and businesses operating within some stations.

Land uses surrounding the project area mainly include a mix of residential and commercial land uses, with other land uses scattered throughout the study area. Low to medium density residential areas are located in the vicinity of most stations and between stations. Higher density residential areas are concentrated around a number of stations, including Canterbury, Campsie, Lakemba, and Bankstown stations.

Commercial development is generally focused within local and neighbourhood centres, located in the vicinity of stations. Campsie and Bankstown stations are located within larger regional centres.

The vast majority of the project area is located on publicly owned land.

Further information on land use and property is provided in Chapter 16.

2.4.2 Heritage

Non-Aboriginal heritage

Urban development in the vicinity of the project area increased between 1892 and 1939 with the construction of the rail line between Sydenham and Bankstown. The line was opened in three stages, with the Sydenham to Belmore section opening in 1895, and extensions to Bankstown and

Regents Park in 1909 and 1939 respectively. Development of the line coincided with development of land adjacent to the line.

The project area contains substantial historical resources of significance. All 10 railway stations in the project area are heritage listed. Three stations (Marrickville, Canterbury and Belmore stations) are listed on the State Heritage Register, and the others are subject to listings on local environmental plans and/or a State agency Section 170 heritage register.

Two items listed on the State Heritage Register (Sewage Pumping Station 271 in Marrickville and the Old Sugarmill in Canterbury) are located adjacent to the project area. A number of other locally listed items are located adjacent to, or within 25 metres of the project area. In addition, the project area passes through or adjacent to two heritage conservation areas.

Further information on non-Aboriginal heritage is provided in Chapter 14.

Aboriginal heritage

The project area is located within an area thought to have been occupied by the Wangal clan, whose territory extended between the Parramatta River and the Cooks River, from Darling Harbour to Rosehill.

There are no listed Aboriginal heritage sites located within the project area.

The closest previously recorded Aboriginal heritage site is a potential archaeological deposit (PAD) (the Fraser Park PAD) located about 650 metres north-east of the project area boundary. Two areas of potential archaeological deposits were identified during field surveys near Belmore and Punchbowl stations (S2B PAD 01 and S2B PAD 02 respectively).

The archaeological significance of the project area located within the existing rail corridor is considered to be low as a result of the high levels of ground disturbance. S2B PAD 01, which is located outside the project area is considered to have low to moderate significance, while S2B PAD 02 is considered to have moderate significance, and low to moderate potential for intact archaeological deposits to be identified.

Further information on Aboriginal heritage is provided in Chapter 15.

2.4.3 Socio-economic

The project area extends through a highly urbanised, densely populated, and ethnically diverse area. It is located within 11 suburbs in the Inner West and the Canterbury-Bankstown local government areas. According to the 2011 census¹, the combined population of both local government areas was 542,514 people (ABS, 2011) with about 35 per cent of the population living in the Inner West LGA (comprising the former Ashfield, Leichhardt and Marrickville LGAs), and around 65 per cent in the Canterbury-Bankstown LGA (comprising the former Canterbury and Bankstown LGAs).

The Inner West local government area is characterised by densely populated, older, inner-city suburbs, with numerous significant heritage and cultural items. The local government area also contains substantial industrial and commercial areas, many of these being historic areas that are gradually converting to other uses. Since the 1970s, the area has experienced significant urban renewal and gentrification.

The former Canterbury local government area is densely populated and culturally diverse. Parks, historical sites, open space, and sport and recreational facilities contribute to the amenity of the area. These include Belmore Oval, Canterbury Racecourse, Canterbury Ice Rink, Canterbury

¹ At the time of the assessment, the 2016 Census data had not yet been released

Aquatic and Fitness Centre, and open space corridors surrounding the Cooks River, Wolli Creek, and Salt Pan Creek. A designated cycle path and walking track is located along the Cooks River.

The character of the former Bankstown local government area is largely residential. It has a commercial core (the Bankstown town centre) adjacent to Bankstown Station.

Further information on the existing socio-economic environment is provided in Chapter 17.

2.4.4 Businesses

Ten business precincts were identified within the study area. These precincts vary in size and the proportion of land used for business purposes, with distinct differences in business and industry profiles. According to the 2011 census, the Sydenham to Bankstown corridor provided about 19,700 jobs. About 45 per cent of the employment was attributed to three major industry sectors, being health care and social assistance (18 per cent), retail trade (16 per cent), and accommodation and food services (11 per cent).

Bankstown's status as a regional centre is reflected in its role as the largest retail employer in the study area, employing nearly 1,700 people. Bankstown is also the location of a major regional shopping centre, the Bankstown Central Shopping Centre, which is located about 150 metres north-east of Bankstown Station. Campsie is the second largest centre along the rail corridor. Other stations adjoin local centres.

Businesses of varying types are located close to each station. A small retail business is located at six stations (Dulwich Hill, Belmore, Lakemba, Wiley Park, Canterbury, and Punchbowl). Campsie Lakemba stations are also directly adjoined by a number of buildings (located on land owned by the NSW Government) that are used for a variety of retail/commercial purposes.

Further information on the existing business environment is provided in Chapter 18.

2.4.5 Transport infrastructure

Transport infrastructure in the study area includes rail infrastructure, other public transport infrastructure, numerous regional and local roads, and active transport facilities. A brief overview of the existing infrastructure is provided below. Further information on transport infrastructure within and near the project area, including local and regional infrastructure, and existing active and public transport networks, is provided in Chapter 10.

Rail

Rail infrastructure in the study area consists of Sydney Trains suburban rail lines and a freight rail line. The Sydney Trains T3 Bankstown Line is located within the project area. Other rail lines operated by Sydney Trains in the vicinity of the project area pass through Sydenham Station to the east of the project area. These include the T2 Airport, Inner West & South and the T4 Eastern Suburbs & Illawarra lines.

It is noted that the NSW Government is currently implementing the More Trains, More Services program, which involves delivering extra services and upgraded rail infrastructure to the Sydney Trains rail network. As part of the program, a refreshed rail network map has been developed. Changes to the network, including new line names and additional services, will be implemented in late 2017 and 2018. Line names used in this Environmental Impact Statement reflect the existing naming conventions.

A rail line forming part of the Sydney Metropolitan Freight Network (managed by ARTC) runs within the rail corridor in the project area, adjacent to the T3 Bankstown Line, between about 500 metres east of Marrickville Station, and about 700 metres west of Campsie Station.

Other public transport

A number of bus routes cross the project area and serve stations within the project area. Major concentrations of bus routes are focussed around Canterbury, Campsie, and Bankstown stations. This includes a major bus interchange at Bankstown Station.

The light rail line travelling to/from the inner west (the L1 Dulwich Hill Line) terminates near the project area at the Dulwich Hill light rail stop, located about 130 metres to the north-west of Dulwich Hill Station.

Roads

Classified main roads close to and/or crossing the project area via road overbridges include Illawarra Road, Canterbury Road, Beamish Street, King Georges Road, Punchbowl Road, and Stacey Street. A number of local roads also cross the project area via road overbridges, generally in a north–south direction.

Stacey Street (part of the A6) and King Georges Road (part of the A3) connect with Canterbury Road and the South Western Motorway (the M5) located to the south of the project area.

The M5 and the M5 East, which are located between around 1.5 and three kilometres to the south, run roughly parallel to the project area. Marrickville Station is located about 1.5 kilometres to the north-west of the Princes Highway (the A36). The Hume Highway (the A22) is located about one kilometre north of Bankstown Station.

Active transport

The pedestrian network consists of footpaths and dedicated road crossings. Both signalised and un-signalised pedestrian crossing facilities are located throughout the footpath/road network.

The majority of local cycling connections are on-road mixed environments or pathways through recreation areas/parks. Bike parking facilities are provided at a number of stations in the project area.

3. Planning and assessment process

This chapter provides a review of the statutory context and approval pathway for the project. It addresses the Secretary's environmental assessment requirements listed in Table 3.1.

Table 3.1 Secretary's environmental assessment requirements - planning and assessment

| Ref | Secretary's environmental assessment requirements – planning and assessment | Where addressed |
|--|---|--|
| 1. Environmental Assessment Process | | |
| 1.1 | The Environmental Impact Statement must be prepared in accordance with Part 3 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> (the Regulation). | Section 3.1.3 |
| 1.2 | It is the Proponent's responsibility to determine whether the project needs to be referred to the Commonwealth Department of the Environment for an approval under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). | No approval is required Requirements under the EPBC Act are considered in Section 3.2.2 |
| 2. Environmental Impact Statement | | |
| 2.1 | (p) Statutory context of the project as a whole, including: <ul style="list-style-type: none"> how the project meets the provisions of the EP&A Act and EP&A Regulation a list of any approvals that must be obtained under any other Act or law before the project may lawfully be carried out | Section 3.1 Section 3.2 |

3.1 NSW environmental planning approvals

The EP&A Act and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) are the primary pieces of legislation regulating land use planning and development assessment in NSW. A range of environmental planning instruments, including State environmental planning policies (SEPPs) and local environmental plans, support the legislation.

As described below, the project is critical State significant infrastructure that is permissible without development consent. It is subject to the assessment and approval provisions of Part 5.1 of the EP&A Act.

3.1.1 Permissibility of the project

Clause 79 of *State Environmental Planning Policy (Infrastructure) 2007* provides that development for the purpose of a railway or rail infrastructure facilities may be carried out by or on behalf of a public authority without consent on any land. The project is characterised as development for the purpose of a railway or rail infrastructure facilities, and would be carried out by or on behalf of Transport for NSW, a public authority, accordingly, development consent under Part 4 of the EP&A Act is not required for the project.

Section 115U(4) of the EP&A Act provides that specified development on specified land is State significant infrastructure if it is specifically declared to be State significant infrastructure by a SEPP or by an order of the Minister that amends a SEPP for that purpose.

Section 115V of the EP&A Act provides that any State significant infrastructure may also be declared to be critical State significant infrastructure if it is of a category that, in the opinion of the Minister, is essential for the State for economic, environmental or social reasons.

The *Environmental Planning and Assessment Amendment (Sydney Metro City and Southwest Project) Order 2015*, which was made on 10 December 2015, amended Schedule 5 of the *State Environmental Planning Policy (State and Regional Development) 2011*, by adding clause 5, which describes Sydney Metro City and Southwest. The effect of this was that:

- development for the purposes of Sydney Metro City & Southwest was specifically declared to be State significant infrastructure by an order of a Minister that amends a SEPP under section 115U(4) of the EP&A Act
- this State significant infrastructure was also declared to be critical State significant infrastructure, under section 115V of the EP&A Act.

The project is development for the purpose of Sydney Metro City & Southwest. Hence, the project is State significant infrastructure and critical State significant infrastructure. It does not require development consent under Part 4 of the EP&A Act, but it does require the approval of the Minister under Part 5.1 of the EP&A Act.

Transport for NSW will review the scope of the declaration to ensure consistency with the project area and all elements of the project.

3.1.2 Planning approval process under Part 5.1 of the EP&A Act

Part 5.1 of the EP&A Act regulates the assessment and approval process for critical State significant infrastructure. An overview of the process is shown in Figure 3.1.

As required by Section 115X of the EP&A Act, Transport for NSW submitted a State Significant Infrastructure application and supporting State Significant Infrastructure Application Report to the Secretary of the Department of Planning and Environment on 16 February 2017. The Secretary's environmental assessment requirements for the project were issued (as per Section 115Y of the EP&A Act) on 23 March 2017. The Secretary's environmental assessment requirements are provided in full in Appendix A.

The Department of Planning and Environment will place this Environmental Impact Statement on public exhibition for a minimum of 30 days (as per Section 115Z of the EP&A Act). During the exhibition period, interested parties can review the Environmental Impact Statement and make a written submission to the Department of Planning and Environment for consideration during the assessment process.

At the completion of the public exhibition period, the Department of Planning and Environment will collate and provide Transport for NSW a copy of all submissions received. After reviewing the submissions, Transport for NSW will prepare a submissions report that responds to the relevant issues raised. If changes are required to the project to respond to the issues raised or to minimise environmental impacts, a preferred infrastructure report may also be required. This report would be made available to the public.

Approval from the Minister for Planning is required before Transport for NSW can proceed with the project (as per section 115ZB of the EP&A Act).

STAGE 1 EARLY CONSULTATION

Early project consultation undertaken prior to the commencement of the formal assessment process.

Project refined on the basis of the early project consultation.

Initial scoping of EIS investigations undertaken on the basis of early project consultation.

STAGE 2 ENVIRONMENTAL IMPACT STATEMENT

Transport for NSW prepares and submits a State significant infrastructure application to the Secretary of the NSW Department of Planning and Environment (DP&E), which includes a supporting document outlining the project and its likely impacts.

Planning focus meeting with key government stakeholders and community engagement.

DP&E issues Secretary's environmental assessment requirements (SEARs) for EIS with focus on key issues.

EIS prepared addressing the matters outlined in the SEARs.

STAGE 3 EXHIBITION CONSULTATION AND REVIEW

DP&E exhibits the EIS for a minimum of 30 days and invites public submissions.

Secretary may require proponent to respond to submissions and submit a preferred infrastructure report outlining proposed changes to minimise environmental impacts or address any other issues raised during assessment of the application.

STAGE 4 ASSESSMENT AND DETERMINATION

Assessment by DP&E, draft Secretary's environmental assessment report prepared with recommended conditions or refusal. Agencies and councils consulted by DP&E.

Secretary's environmental assessment report finalised with recommendations and submitted to Minister for Planning.

Determination by the Minister, including if approved, any conditions of approval.

Post approval implementation and compliance (if project approved).

3.1.3 Environmental Planning and Assessment Regulation 2000

This Environmental Impact Statement has been prepared in accordance with the requirements of clauses 6 and 7 of Schedule 2 of the EP&A Regulation. These requirements, and where they are addressed in the Environmental Impact Statement, are provided in Appendix B.

Clause 193 of the EP&A Regulation includes the provisions for owner's consent and notification requirements for State significant infrastructure projects. As the application for the project is being made by a public authority and is for linear transport infrastructure, the consent of individual landowners will not be required to make the application. However, the proponent needs to give notice of the application in accordance with the requirements of clause 193(4).

3.1.4 NSW environmental planning instruments

Section 115ZF of the EP&A Act provides that environmental planning instruments do not apply to critical State significant infrastructure projects (with some exceptions, including how they apply to the declaration of critical State significant infrastructure). As described in Section 3.1.1, the project is declared critical State significant infrastructure, and is listed on Schedule 5 of the State and Regional Development SEPP. As critical State significant infrastructure, the project is permissible without consent under clause 16(a) of the State and Regional Development SEPP.

3.1.5 Approvals process for future rail corridor development

The project has identified future rail corridor development opportunities at Campsie where an existing commercial property is to be removed to allow the upgrading of Campsie Station.

Provision for future rail corridor development may include foundation work, retaining walls, concrete slabs, providing building services (such as water, sewer, power, etc.), and providing adequate space and access routes for pedestrian, cyclists, and vehicles.

All future rail corridor development would be subject to a separate planning and approvals process. Subject to the size, scale, and type of rail corridor development, this could include local or regional development (with the local council or a regional planning panel as the consent authority) or State significant development (with the Minister for Planning as consent authority).

3.2 Requirements under other legislation

3.2.1 NSW approval requirements

Approvals that would otherwise apply

In accordance with sections 115ZG and 115ZH of the EP&A Act, some environment and planning legislation does not apply to critical State significant infrastructure or must be applied consistently.

Section 115ZG of the EP&A Act specifies authorisations that are not required for approved State significant infrastructure. Approvals of potential relevance to the project include:

- permits under sections 201, 205 and 219 of the *Fisheries Management Act 1994* (FM Act)
- approvals under Part 4, excavation permits under section 139 and Division 8 of Part 6 of the *Heritage Act 1977*
- Aboriginal heritage impact permits under section 90 of the *National Parks and Wildlife Act 1974*
- various approvals under the *Water Management Act 2000*, including water use approvals under section 89, and activity approvals (other than aquifer interference approvals) under section 91.

Similarly, section 115ZG of the EP&A Act specifies directions, orders or notices that cannot be made or given so as to prevent or interfere with the carrying out of approved critical State significant infrastructure. These include:

- an interim protection order (within the meaning of *National Parks and Wildlife Act 1974* or the *Threatened Species Conservation Act 1995*)
- an order under Division 1 (Stop work orders) of Part 6A of the *National Parks and Wildlife Act 1974*, Division 1 (Stop work orders) of Part 7 of the *Threatened Species Conservation Act 1995* or Division 7 (Stop work orders) of Part 7A of the *Fisheries Management Act 1994*
- an environment protection notice under Chapter 4 of the *Protection of the Environment Operations Act 1997*
- an order under section 124 of the *Local Government Act 1993*.

Section 115ZH of the EP&A Act identifies approvals or authorisations that cannot be refused if they are necessary to carry out approved State significant infrastructure and are substantially consistent with the Part 5.1 approval. Those of potential relevance to the project include:

- an environment protection licence under Chapter 3 of the *Protection of the Environment Operations Act 1997*
- consent under section 138 of the *Roads Act 1993*.

Consideration of requirements under relevant NSW legislation

NSW environmental planning related legislation relevant to the project is identified in Table 3.2.

Table 3.2 Consideration of requirements under relevant NSW legislation

| Legislation | Requirement | Relevance to the project |
|--|--|---|
| <i>Contaminated Land Management Act 1997</i> | Section 60 of the Act outlines the circumstances in which notification of the Environment Protection Authority (EPA) is required in relation to the contamination of land. | The EPA would be notified in writing of contamination identified within the project area, in accordance with the requirements of section 60 of the Act. |
| <i>Fisheries Management Act 1994</i> | Section 199 of the Act requires a public authority to notify the Minister prior to carrying out dredging or reclamation (defined by section 198A). | The project would require works adjacent to the Cooks River at Canterbury, which may trigger the notification requirements of the Act. Further information on the works required is provided in Chapters 8 and 9 (Project description – operation and construction). The potential impacts on the river are considered in Chapter 21 (Hydrology, flooding and water quality). The Minister for Primary Industries would be notified in writing if dredging or reclamation work is required, in accordance with the requirements of section 199. |
| <i>Heritage Act 1977</i> | Section 146 requires that the Heritage Council be notified if a relic is uncovered, where it is reasonable to believe that the Heritage Council is unaware of the location of the relic. | The Heritage Council would be notified in writing of relics uncovered during construction, in accordance with the requirements of section 146. |
| <i>Land Acquisition (Just Terms Compensation) Act 1991</i> | Specifies the procedures and requirements for the acquisition of land for a public purpose. | Chapter 16 (Land use and property) provides information on the acquisition of private property required for the project. Acquisition would be undertaken in accordance with this Act. |

| Legislation | Requirement | Relevance to the project |
|--|---|--|
| <i>Noxious Weeds Act 1993</i> | Under Part 3 Division 1 of the Act, public authorities are required to control noxious weeds on their land. | The approach to managing weeds during construction is provided in Chapter 22 (Biodiversity). |
| <i>Protection of the Environment Operations Act 1997</i> (POEO Act) | An environment protection licence (EPL) is required for scheduled activities or development work listed by the POEO Act. Scheduled activities requiring a licence relevantly include: (1) railway systems activities (clause 33) meaning: (a) the installation, on site repair, on site maintenance or on site upgrading of track, including the construction or significant alteration of ancillary works, or (b) the operation of rolling stock on track. | A separate EPL would be required for construction and operation of the project. |
| <i>Roads Act 1993</i> | Section 138 requires approval from the relevant roads authority to impact, or carry out work on or over, a public road. Clause 5(1) of Schedule 2 to the Roads Act exempts public authorities from this requirement, except in relation to works on or over classified and Crown roads. | The project would impact on classified roads, including Illawarra Road, Canterbury Road, Beamish Street, King Georges Road, Punchbowl Road, and Stacey Street. Further information is provided in Chapter 10 (Construction traffic and transport). Approval would be required under section 138 for works to these roads. |
| <i>Waste Avoidance and Resource Recovery Act 2001</i> | Encourages the most efficient use of resources to reduce environmental harm. | As described in Chapter 26 (Waste management), waste resulting from the project would be managed in accordance with the requirements of this Act. |
| <i>Water Management Act 2000</i> and the <i>Water Act 1912</i> (the Water Act) | Temporary dewatering and construction activities that interfere with aquifers are generally identified as aquifer interference activities in accordance with the Water Management Act and the <i>NSW Aquifer Interference Policy</i> (DPI, 2012). However, the aquifer interference approval provisions of the Water Management Act have not commenced, and licensing of these activities is carried out under Part 5 of the Water Act. A licence under Part 5 is required for dewatering activity that would require the extraction of more than three megalitres of groundwater per year. | Excavation would be undertaken to construct the project. Although groundwater may be intercepted, it is unlikely that dewatering would exceed three megalitres of groundwater per year. A licence would be obtained if required. |

3.2.2 Commonwealth legislation

Environment Protection and Biodiversity Conservation Act 1999

Under Part 3 of the EPBC Act, approval from the Australian Government Minister for the Environment and Energy would be required for an action that:

- has, will have, or is likely to have a significant impact on a matter of national environmental significance
- is undertaken on Commonwealth land and has, will have, or is likely to have a significant impact on the environment
- is undertaken outside Commonwealth land and has, will have or is likely to have a significant impact on the environment of Commonwealth land
- is undertaken by the Commonwealth and has, will have or is likely to have a significant impact on the environment.

Matters of national environmental significance comprise:

- world heritage properties
- national heritage places
- wetlands of international importance
- Commonwealth-listed threatened species and ecological communities
- Commonwealth-listed migratory species
- Commonwealth marine areas
- the Great Barrier Reef Marine Park
- nuclear actions (including uranium mines)
- a water resource, in relation to coal seam gas development and large coal mining development.

No world, national or Commonwealth heritage items have been identified within or adjacent to the project area.

The potential for impacts on ecological matters of national environmental significance are considered in Chapter 22 (Biodiversity). No potential significant impacts were identified.

The project would not impact on Commonwealth marine areas or the Great Barrier Reef Marine Park, and it does not involve a nuclear action or coal seam gas/coal mining.

As no significant impacts on matters of national environmental significance or Commonwealth land are predicted, and the project is not being undertaken by a Commonwealth agency, approval under the EPBC Act is not required.

Native Title Act 1993

The main objective of the *Native Title Act 1993* is to recognise and protect native title. Section 8 states that the Native Title Act is not intended to affect the operation of any law of a State or a Territory that is capable of operating concurrently with the Act. Searches of the register maintained by the National Native Title Tribunal indicated that there are no native title claims registered with respect to land within the project area. The project also would not directly affect Crown land that is currently the subject of a native title claim.

Disability Discrimination Act 1992

The *Disability Discrimination Act 1992* aims to eliminate as far as possible discrimination against persons on the ground of disability in areas including access to premises and the provision of facilities, services and land. The project has been, and would continue to be, designed to be independently accessible and comply with the objectives and requirements of the Act. The design guidelines for the project (*Sydney Metro City & Southwest Sydenham to Bankstown Design Guidelines* – provided in Appendix C) are consistent with the objectives of this Act.

Disability Standards for Accessible Public Transport 2002

Section 33.1 of the *Disability Standards for Accessible Public Transport 2002* requires all new public transport premises, infrastructure, and conveyances to comply with the requirements of the standards, unless unjustifiable hardship is incurred by implementation. The project would continue to be designed to comply with these standards.

3.3 Summary of approval and notification requirements

In summary:

- The project is critical State significant infrastructure, requiring approval from the Minister for Planning under Part 5.1 of the EP&A Act.
- The project is permissible without consent.
- Environment protection licences under the POEO Act are required to construct and operate the project.
- Approval under section 138 of the Roads Act is required for works to classified roads.
- A licence would be sought under Part 5 of the Water Act if extraction of more than three megalitres of groundwater per year is required to construct the project.

4. Stakeholder and community consultation

This chapter describes the consultation undertaken to date, and that proposed during the detailed design and delivery of the project. The Secretary's environmental assessment requirements relevant to consultation, together with a reference to where they are addressed in this chapter and the Environmental Impact Statement, are provided in Table 4.1.

Table 4.1 Secretary's environmental assessment requirements – consultation

| Ref | Secretary's environmental assessment requirements - consultation | Where addressed |
|------------------------|--|---|
| 4. Consultation | | |
| 4.1 | The project and its assessment must be informed by consultation, including with relevant government agencies, (including the Department of Planning and Environment (Growth, Designs and Programs) and within the Transport for NSW cluster (such as Roads and Maritime Services and Sydney Trains), local councils, infrastructure and service providers, special interest groups, affected landowners, businesses and the community. The consultation process must be undertaken in a manner commensurate with expected levels of impact and stakeholder significance. | This chapter |
| 4.2 | The Proponent must document the consultation process, and demonstrate how the project has responded to the inputs received (inclusive of a strategy of engagement with key stakeholders on key design elements of the project). | Consultation undertaken to date is described in Sections 4.1 and 4.2 The key issues raised, and a summary of how the design has responded to the issues raised by key stakeholders, is provided in Section 4.3 and Chapter 7 (Design development and place making) |
| 4.3 | The Proponent must describe the timing and type of community consultation proposed during the design and delivery of the project, the mechanisms for community feedback, the mechanisms for keeping the community informed, and procedures for complaints handling and resolution. | Section 4.4 |

4.1 Consultation approach and objectives

4.1.1 Approach

Stakeholder and community consultation for Sydney Metro is an ongoing process that commenced with the release of *Sydney's Rail Future* in 2012. Consultation undertaken since June 2014 for the Sydney Metro City & Southwest project has played an important role in informing and scoping the design of the project and this Environmental Impact Statement.

Transport for NSW is implementing a comprehensive community and stakeholder consultation program for Sydney Metro, to engage proactively with local communities and key stakeholders.

Key stakeholders for the project include:

- NSW Government agencies and elected representatives
- Inner West and Canterbury-Bankstown councils
- directly affected communities, including residents and businesses
- business and industry groups
- community groups
- utility and service providers
- Sydney Trains customers
- the broader community.

4.1.2 Communication objectives

The communication objectives for Sydney Metro are to:

- communicate the rationale for Sydney Metro and the broader network benefits it will deliver, including how it fits with the NSW Government's plans to increase Sydney's rail capacity
- communicate the Sydney Metro concept and timing
- build community and stakeholder relationships and maintain goodwill
- provide information about the planning approvals process and encourage community participation
- clearly communicate the property acquisition process.

4.2 Consultation and engagement activities to date

Consultation for Sydney Metro City & Southwest, including the Sydenham to Bankstown upgrade, has included:

- early stakeholder consultation between June 2014 and June 2015
- project scope consultation following the announcement of Sydney Metro City & Southwest in June and July 2015 and design development for Sydney Metro City & Southwest (described below)
- consultation during preparation and exhibition of the Environmental Impact Statement for the Chatswood to Sydenham project, between June 2015 and June 2016 (which also captured feedback on the Sydenham to Bankstown upgrade - refer to Table 4.3 for relevant issues raised)
- consultation as part of lodgement of the State Significant Infrastructure Application Report for the Sydenham to Bankstown upgrade, between February and June 2017
- consultation during preparation of the design and Environmental Impact Statement for the Sydenham to Bankstown upgrade, between February 2016 and July 2017.

A summary of consultation undertaken for Sydney Metro City & Southwest (including the Sydenham to Bankstown upgrade) is provided in Section 4.2.1. Further information on consultation undertaken prior to exhibition of the Environmental Impact Statement for the Chatswood to Sydenham project is provided in the State Significant Infrastructure Application Report for that project.

4.2.1 Consultation during development of Sydney Metro City & Southwest

Community consultation

On 4 June 2015, the Premier of NSW announced that funding had been secured to progress the Sydney Metro City & Southwest project. The announcement also initiated a round of community consultation undertaken to:

- collect stakeholder and community feedback on the project
- inform the Environmental Impact Statement for the Chatswood to Sydenham project
- inform the planning and design process for the Sydenham to Bankstown upgrade.

During this period, consultation was undertaken along the project corridor between Chatswood and Bankstown, to proactively engage with the community prior to the commencement of the formal environmental impact assessment process for both components of Sydney Metro City & Southwest. Engagement activities have continued since then.

Consultation activities included:

- provision of contact details including an information line (toll free), email address, website and postal address
- establishment of a mobile community information centre
- appointing Place Managers
- community information sessions (June and July 2015)
- interactive online forums (June to August 2015)
- industry consultation and briefings (June 2015, September 2016, and April 2017)
- media releases
- advertisements in local newspapers including foreign language newspapers
- issue of various project collateral (eg newsletter and project updates)
- preparation of an animation/fly-through.

Stakeholder consultation

Consultation was undertaken with a wide range of stakeholders as an input to the design and environmental impact assessment process. Consultation included the interface between Sydney Metro City & Southwest and assets owned by relevant stakeholders, and general briefings.

Stakeholders consulted included:

- Inner West and Canterbury-Bankstown councils
- Sydney Trains and NSW Trains
- Roads and Maritime Services and Sydney Co-Ordination Office
- Department of Planning and Environment
- Office of the Environment and Heritage
- Office of the Government Architect
- Australian Rail Track Corporation
- utility providers including Transgrid, Ausgrid, Qenos, and Sydney Water
- Sydney Motorway Corporation (in relation to WestConnex).

A summary of the key issues discussed with the various stakeholders and the design and assessment responses is provided in Section 7.4.

4.2.2 Consultation during preparation of this Environmental Impact Statement

The objective of consultation before public exhibition of the Environmental Impact Statement was to ensure stakeholders were aware of the project and the design and assessment process. The key engagement activities undertaken are described below.

Stakeholder identification and analysis mapping

A desktop search and site visit was undertaken to identify stakeholders within/close to the project area and those likely to have an interest in the construction and operation of the project.

Community contact and information tools

The community contact and information tools available during the preparation of the Environmental Impact Statement are listed in Table 4.2. These will remain in place for the duration of the project.

Table 4.2 Community contact and information points available during the planning and approval process

| Activity | Detail |
|--|--|
| Community information line (toll free) | 1800 171 386 |
| Community email address | sydneymetro@transport.nsw.gov.au |
| Website | http://www.sydneymetro.info/ |
| Postal address | Sydney Metro City & Southwest PO Box K659, Haymarket, NSW 1240 |
| Place Managers | Contact details are provided at http://www.sydneymetro.info/ |

State Significant Infrastructure Application Report

On 16 February 2017, the State Significant Infrastructure Application Report was made available to the public on the Department of Planning and Environment's Major Projects website. The statutory advertisement was placed in three daily newspapers and three local papers. It was also translated and placed in six non-English news publications to ensure that the culturally and linguistically diverse communities in the vicinity of the project area were made aware of the project and its status.

Project update

After lodgement of the State Significant Infrastructure Application Report, the Sydney Metro City & Southwest project update was delivered to 70,000 properties located in the vicinity of the project area on 16 February 2017. The update provided information about the project, the next steps, consultation mechanisms and the State Significant Infrastructure Application Report. The project update was also made available on the Sydney Metro website.

Copies of the update were distributed to relevant ethnic community organisations. The update was also translated into Arabic, Vietnamese, Greek, Mandarin, Bengali, Hindi, and Korean.

Door knocks

Members of the project team visited properties potentially affected by acquisition and those located adjacent to the stations. Occupants were provided information on the release of the State Significant Infrastructure Application Report, what it means for them and the upcoming stages of the environmental assessment and acquisition process.

Community information display

Community information displays were held to provide up to date information on the project (and the Sydney Metro in general) and to provide the opportunity for community members to ask questions and provide feedback. The information displays were held at the following events and locations (total number of visitors is included in brackets):

- Sydney Festival at Barangaroo in January 2017 (31,000 visitors)
- Bankstown Central in March 2017 (1,452 visitors)
- Lakemba Markets in April 2017 (175 visitors)
- Sydney Royal Easter Show in April 2017 (88,882 visitors)
- Campsie Shopping Centre in May 2017 (806 visitors)
- Marrickville Metro in May 2017 (820 visitors).

A summary of the questions asked and issues raised is provided in Table 4.3.

Station information flyers

In May and June 2017, over 5,600 information flyers were handed out at the following stations during the morning and afternoon peak periods:

- Hurlstone Park Station
- Canterbury Station
- Dulwich Hill Station
- Wiley Park Station
- Belmore Station
- Punchbowl Station.

The aim of the flyers was to provide information about Sydney Metro, including future benefits, service frequency, and estimated travel times. Members of the community were also encouraged to engage with the Place Managers and share their comments and feedback.

Key issues raised during this activity are included in Table 4.3.

Community survey on the Sydney Metro website

A survey was developed and uploaded onto the Sydney Metro website seeking feedback from the community regarding existing travel habits, the use of rail replacement buses during Sydney Trains scheduled possessions, and potential alternative transport arrangements during the project construction period. The survey included the following questions:

- How often do you catch train services on the Bankstown Line on weekdays?
- How often do you catch train services on the Bankstown Line on weekends?
- Have you ever wanted to catch the train on the weekend, but found that rail replacement buses were operating?
- In the future, if rail replacement bus services are provided during temporary closures of the Bankstown Line on either weekdays or weekends, what will be most important to you?
- What else would make catching rail replacement buses more appealing?
- How would you like to be informed about the temporary closure of the rail line?

Between 14 May and 12 June 2017, a total of 35 responses to the survey were received.

Alternative transport arrangements would be implemented to convey rail customers to their destinations during periods where temporary station or track closures are required, including provision of temporary rail replacement buses and other services during rail possession periods. Information on alternative transport arrangements is provided in Section 9.11.

Planning focus meeting

A planning focus meeting was held with government agency stakeholders on 27 February 2017 to provide information on the project and the scope of the Environmental Impact Statement, and to assist agencies in their response to the Department of Planning and Environment in relation to issues relevant to the Secretary's Environmental Assessment Requirements. Representatives of the Inner West and Canterbury-Bankstown councils and a number of NSW State government agencies, attended the meeting.

A summary of issues formally raised by agencies as an input to the Secretary's Environmental Assessment Requirements is provided in Table A.3 of Appendix A.

Customer focus groups

Transport for NSW conducted research with customers in early 2017 to understand their perspectives and receive feedback on the preliminary station designs. Areas of focus for customer feedback included usability, safety, efficiency, interchange, the station role in the community, and the challenges faced by people with accessible transport needs. This early customer engagement provided key insights that have informed the ongoing design of the stations. There would be further customer research and testing during key stages of design development. Further information on how the design developed is provided in Chapter 7.

Government agency consultation

Ongoing consultation has been undertaken with specific groups, including regular meetings with:

- Heritage Working Group – this group was consulted on the station designs, including options and design drivers influencing heritage, potential project impacts on heritage items, and management strategies. The group includes heritage specialists and representatives from the Department of Planning and Environment, Transport for NSW, Sydney Trains and the Office of Environment and Heritage. Further information on heritage was considered during design development is provided in Chapter 7.
- Sydney Metro Roads Integration Working Group - this group was consulted on the traffic and transport assessment, the potential project impacts and management strategies. The group includes the Sydney Co-ordination Office and Roads and Maritime Services.

Transport for NSW's government agency consultation focussed on cross-agency integration and communication. Regular meetings were held with a variety of government stakeholders to ensure key issues were appropriately addressed in the Environmental Impact Statement, including (but not limited to):

- Department of Planning and Environment
- Environment Protection Authority
- Office of Environment and Heritage
- Department of Primary Industries
- Department of Premier and Cabinet

- UrbanGrowth NSW
- Sydney Motorway Corporation (WestConnex)
- Inner West Council
- Canterbury-Bankstown Council
- Sydney Water
- Ausgrid.

Major stakeholder consultation

Transport for NSW's stakeholder consultation team was responsible for ensuring local members of parliament, councils, peak bodies, and industry groups were proactively engaged and informed about the project. Regular briefings were held to keep stakeholders informed and to ensure key issues raised were addressed.

Community design workshops

The Hurlstone Park Association and the Save Dully Action Group raised a number of issues and concerns about the potential impact the proposed station upgrades on the character of Hurlstone Park and Dulwich Hill. In response, Transport for NSW held interactive design workshops to seek feedback from the groups on the following dates:

- Hurlstone Park Association – 24 May 2017
- Save Dully Action Group – 29 June 2017.

The workshops covered:

- current station designs
- explaining negotiable and non-negotiable elements of the design, and those aspects that could be influenced, such as accessibility and maintenance requirements
- opportunities, constraints, and challenges.

The participants were also encouraged to provide feedback on what they liked and disliked about the existing station, their concerns, priorities for the upgrade, ideas for the station precincts, materials to be used, and areas to be enhanced and preserved. Where possible, feedback provided has been incorporated into the design.

4.3 Results of consultation relevant to this Environmental Impact Statement

Key issues raised during consultation relevant to the Environmental Impact Statement, including the potential impacts to be considered and the information to be provided, are summarised in Table 4.3. A summary of the issues raised by agencies in response to the request by the Department of Planning and Environment for input to the Secretary's environmental assessment requirements is provided in Appendix A. It is noted that these lists present a summary of the key issues raised.

Table 4.3 Summary of key community issues raised relating to the Environmental Impact Statement

| Issue category | Issues raised | Where addressed in the EIS |
|-------------------------------|--|-----------------------------|
| Project scope | • What does the project involve and where is it located? | Chapters 1, 2 and 8 |
| | • Public domain improvements proposed | Section 8.1 |
| | • What other transport facilities are included? Is the bus interchange at Bankstown included in the scope? | Section 8.1.1 |
| | • What other facilities are required (eg external storage sites outside the corridor)? | Section 9.8 |
| | • Will there be any acquisition or divestment of lands? | Section 8.2 |
| | • Why is this section not underground like in the city? | Section 6.3.4 |
| | • Infrastructure ownership and nature of private operating contract | Section 8.3 |
| | • Project cost and who is paying for it | Section 1.2.1 |
| | • Suitability of existing stations for Sydney Metro operations | Section 8.1 |
| | • Will the project result in the permanent closure of any stations? | Section 8.1 |
| Project design and features | • Station design (location, access, platform length etc) | Section 8.1 |
| | • Train/carriage design (numbers of seats, heating/air conditioning etc) | Sections 8.3.4 and 8.3.5 |
| | • Security on trains (if no driver) and at stations | Section 8.3.4 |
| | • Emergency and mechanical failure response arrangements | Section 8.3 |
| Project need/justification | • Reason for/purpose of the project | Section 5.1 |
| | • Journey to work benefits | Sections 5.3.4 and 5.3.5 |
| | • The project is not needed - the cost should be allocated to other transport projects, as there is already rail services along the T3 Bankstown Line | Chapter 5 |
| Operation of the project | • How the project would operate, including timing of operation and frequency of services | Section 8.3.2 |
| | • Future travel times to the city | Section 5.3.5 |
| | • Interface with the Sydney Trains network | Section 11.4.2 |
| | • Cost of fares and use of Opal cards | Section 8.3.6 |
| | • Routes and service patterns – including future travel routes and services; for example, impacts on direct access to stations, including City Circle stations (Museum/St James/Circular Quay/Wynyard/Town Hall), and St Peters and Erskineville stations, services beyond Bankstown | Section 11.4.2 |
| Construction | • Construction timing and duration | Section 9.7.1 |
| | • Service disruptions (timing and duration) during construction | Sections 9.7.2 and 9.7.3 |
| | • Transport strategies and bus services that would be provided during construction to replace trains | Section 9.11 and Chapter 10 |
| Traffic, transport and access | • Impacts on accessibility, including ‘whole of journey’ | Section 11.4.2 |
| | • Impacts on/benefits for traffic during operation | Section 11.4 |

| Issue category | Issues raised | Where addressed in the EIS |
|-------------------------------------|--|-----------------------------|
| | • Access to pedestrian and cycling links | Chapters 10 and 11 |
| | • Integration with other modes of transport, such as buses and light rail | Sections 8.1.1 and 11.4 |
| Noise | • Construction noise and vibration | Chapter 12 |
| | • Noise during operation | Chapter 13 |
| Heritage | • Impacts of upgrading stations on heritage listed stations, and impacts on heritage overall | Section 7.3.7 Chapter 14 |
| Socio-economic and business impacts | • Impacts on employment, including employment of rail staff/train drivers | Chapter 17 |
| | • Impacts on businesses around stations | Chapter 18 |
| | • Access for customers and staff | Chapter 18 |
| Landscape and visual amenity | • How many trees would need to be removed, and would these be replaced | Sections 9.3.2 and 9.4.4 |
| Hydrology and flooding | • Impacts on existing flooding situation – would the project make it worse? | Section 21.3 |
| Land use and future planning | • Interface with the Sydenham to Bankstown urban renewal corridor strategy | Section 16.3 |
| Air quality | • Air quality impacts of additional traffic during construction | Section 23.3.2 |

4.4 Future consultation and engagement

4.4.1 Public exhibition of the Environmental Impact Statement

The Department of Planning and Environment will place this Environmental Impact Statement on public exhibition for a minimum of 30 days. During the exhibition period, government agencies, project stakeholders and the community will be able to review the Environmental Impact Statement and make a written submission to the Department of Planning and Environment for consideration in its assessment of the project.

Advertisements will be placed in newspapers to advise of the public exhibition, where the Environmental Impact Statement can be viewed and details of community consultation activities and information sessions.

Consultation activities during public exhibition will include:

- environmental impact statement overview document
- media releases
- information sessions
- community event stalls
- door knocks
- newsletter letterbox drop
- project website updates
- newspaper advertising
- displays at local councils
- stakeholder meetings

- local business engagement
- translated materials
- government stakeholder engagement.

The activities to be implemented are listed in Table 4.4.

At the completion of the public exhibition period and after reviewing the submissions, Transport for NSW will prepare a submissions report and/or a preferred infrastructure report. This report would be made available to the public. Further information on the approvals process is provided in Section 3.1.

4.4.2 Ongoing consultation and engagement activities

Consultation activities

Transport for NSW will continue to work with stakeholders and the community to ensure they are informed about the project and have opportunities to provide feedback to the project team.

The existing community contact and information tools (listed in Table 4.2) would remain in place throughout the duration of the project. Translated materials and content will continue to be provided on the Sydney Metro website. All publications provide information on translation services available through TIS National and where appropriate, Sydney Metro will take translators to face-to-face meetings with stakeholders.

A list of the proposed activities and timing is provided in Table 4.4.

Consultation and complaints handling during construction

The Construction Environmental Management Framework (Appendix D) sets out the environmental, stakeholder and community management requirements for construction. It provides a linking document between the planning approval documentation and the construction environmental management plan to be developed by the construction contractor/s.

The Construction Environmental Management Framework requires the construction contractor/s to develop a Community Communications Strategy for construction and the framework sets out the main elements required to be included and implemented as part of the plan. These include a complaints handling procedure. The Sydney Metro Construction Complaints Management System will be used to record, manage and where required escalate and mediate complaints. Further information is provided in Appendix D.

Table 4.4 Ongoing consultation and engagement activities

| Activity | Timing | EIS exhibition | Design | Construction | Operation |
|--|------------------------------|----------------|--------|--------------|-----------|
| Awareness and marketing campaign to engage future customers | Ongoing | ● | ● | ● | ● |
| Community event stalls/community information displays | Ongoing | ● | ● | ● | |
| Community information sessions | During exhibition of the EIS | ● | | | |
| Community and business forums | As required | | | ● | |
| Overarching Community Communication Strategy for Sydney Metro City & Southwest | Existing | | | ● | |

| Activity | Timing | EIS exhibition | Design | Construction | Operation |
|--|--|----------------|--------|--------------|-----------|
| Community Communication Strategy for project | Prior to construction | | | ● | |
| Translated materials | Ongoing | ● | ● | ● | ● |
| Construction complaints management system | Existing | | | ● | |
| Construction notifications | Seven days prior to construction starting | | | ● | |
| Displays at council offices | During exhibition of the EIS | ● | | | |
| Door knocks | As required | ● | ● | ● | ● |
| Email updates | At relevant milestones | ● | ● | ● | ● |
| Enquiries and complaints information line | Ongoing | ● | ● | ● | ● |
| Environmental Impact Statement overview document | During exhibition of the EIS | ● | | | |
| Fact sheets | As required | ● | ● | ● | ● |
| Government stakeholder engagement | As required | ● | ● | ● | ● |
| Local business engagement | As required | ● | ● | ● | ● |
| Media releases | At relevant milestones | ● | ● | ● | ● |
| Newsletter | During exhibition of the EIS and other relevant milestones | ● | ● | ● | ● |
| Newspaper advertising | During exhibition of the EIS and other relevant milestones | ● | ● | ● | ● |
| Operation communications plan | Prior to operation | | | | ● |
| Place Managers | Ongoing | ● | ● | ● | |
| Project briefings and presentations | Relevant milestones | ● | ● | ● | |
| Project overview document | Relevant milestones | ● | ● | ● | |
| Site signage | Prior to construction | | | ● | |
| Social media updates | Ongoing | ● | ● | ● | ● |
| Stakeholder meetings | As required | ● | ● | ● | ● |
| Website, animations and online forums | Ongoing | ● | ● | ● | |