

LCZ 32 – St Peters Triangle precinct

This LCZ is between Princes Highway, Campbell Street and the Bankstown Rail Line. It has been and still is undergoing a transition from its industrial past and is the subject of a Master Plan (released in 2009) which has a focus on developing the LCZ into a diverse, mixed use precinct.

The LCZ comprises a mix of residential and industrial buildings with land uses that include light industry and urban support services, retail, residential, freight and logistics, office, artist studios and creative industries (see **Figure 5-98**). May Lane is a focus for street art and the May Lane Art Project is an outdoor gallery space.

The predominant building height in the precinct is one to two storeys. Building heights across the precinct range from single storey residential and industrial buildings, to three to four storey commercial/industrial buildings and a six storey residential flat building on the southern corner of May Street and Princes Highway. The upper levels of these buildings have views across the wider area, particularly towards the south as the land gently slopes away in this direction.

This precinct contains the Goodsell Estate Heritage Conservation Area. A variety of local open space and sports fields are available at Simpson Park and Camdenville Park.

Aboriginal and non-Aboriginal heritage

Non-Aboriginal heritage conservation areas and heritage items located within this LCZ are listed in **Table 5-29** and are shown on **Figure 5-99**. There are no registered Aboriginal heritage sites located within this LCZ.

Table 5-29 LCZ 32 non-Aboriginal heritage

Figure ID reference	Item Name	Significance	Listing
C16	Goodsell Estate Heritage Conservation Area	Local	Marrickville LEP 2011 (C16)
1273	Terrace housing, including interiors	Local	Marrickville LEP 2011 (I273)



Figure 5-98 A typical street within the LCZ showing a combination of dwellings, commercial and artistic spaces, view looking north along Hutchison Street



Railway station

LCZ 33 – St Peters interchange precinct

This LCZ currently comprises an active construction site for the St Peters interchange project currently under development as part of the New M5 project.

Once completed, the area will consist of motorway control complexes, ventilation facilities, distribution substation, fire pump rooms and deluge tanks and the interchange road network (see **Figure 5-100**). The approved design for the interchange (as delivered by the New M5 project), along with the proposed Campbell Road motorway operations complex (MOC 5) to be delivered by the M4-M5 Link project, would result in new open space, created by remediating the former landfill site and creation of an 'urban forest', capable of competing with the scale of the proposed interchange.

Large areas of new tree planting will be incorporated on both sides of the New M5 ramps and above the portals to present a continuous canopy and create a sense of green immersion for the motorist upon entry or exit from the tunnel. Landscape treatments surrounding the Campbell Road motorway operations complex will also focus on creating a defined street edge with street tree planting, and feature fig tree plantings to offer increased 'green volume' and help define a sense of landscape character for the site.

Roads and Maritime, as the proponent for the New M5 project, has responsibility for the urban design of the St Peters interchange. This includes a land bridge connecting Sydney Park to the St Peters interchange to be delivered upon completion of the M4-M5 Link. Roads and Maritime have developed an active recreation strategy for the new open space area which would include a full size multipurpose field, four multi-purpose courts, space for more passive recreation and a walking circuit.

A small part of the north-west corner of this LCZ will be utilised as a construction site for the M4-M5 Link project.

Aboriginal and non-Aboriginal heritage

Non-Aboriginal heritage conservation areas and heritage items located within this LCZ are listed in **Table 5-30** and shown on **Figure 5-101**. There are no registered Aboriginal heritage sites in this LCZ.

Table 5-30 LCZ 33 non-Aboriginal heritage

Figure ID reference	Item Name	Significance	Listing
1312	Service garage	Local	Marrickville LEP 2011 (I276)



Figure 5-100 Artists impression of part of the New M5 St Peters interchange, birds eye view looking north (source: McGregor Coxall, New M5 Draft Urban Design and Landscape Plan)



 Existing features
 Landscape character zone
 Sensitive receivers

 •••• Railway
 Boundary
 Community facility
 Community facility E Heritage item 💶 ltem

5.4 Other areas of project land

The following sites would be used during construction only and would be subject to the Residual Land Management Plan (RLMP). Following construction, these sites would be rehabilitated and retained for a separate future development and/or use.

Parramatta Road West and East

The Parramatta Road West civil and tunnel site (C1b) is located west of Parramatta Road between around Alt Street and Bland Street at Ashfield. The site is currently occupied by several commercial properties that would be demolished to facilitate construction. A construction site for the M4 East project is located to the south on the opposite side of Bland Street. Some residential properties including single storey detached dwellings and two, three-storey apartment blocks are located to the immediate west and south, and contain mature, tall trees at their boundary.

The Parramatta Road East civil site (C3b) is located on the east side of Parramatta Road at Haberfield, between north of Alt Street and Bland Street. The site is occupied by several commercial premises that would be demolished to facilitate construction. A construction site for the M4 East project is located to the south. Single storey detached residential properties are located to the immediate east and north.

Both sites comprise large areas of open hardstand at ground level, associated with the current use. The buildings are single storey show rooms and offices. They are located along Parramatta Road, which is defined by the heavily trafficked corridor and commercial properties, interspersed with residential properties. The Parramatta Road corridor exhibits a number of road and advertising signage, limited street tree planting and is generally of low amenity.

Pyrmont Bridge Road

The Pyrmont Bridge Road tunnel site (C9) is located between Parramatta Road and Pyrmont Bridge Road at Annandale on land that currently comprises commercial and industrial businesses.

The site and its immediate surrounds represent one of the few well defined and intact pockets of industrial land within the Leichhardt Municipality. Pyrmont Bridge Road contains a mix of contemporary industrial development interspersed with original factory buildings. The industrial buildings are generally two to three storeys with their consistent height and location on the street alignment providing a "hard building edge."

Interspersed within the industrial development adjoining and adjacent to the site are small pockets of remnant residential development. Along the eastern section of Pyrmont Bridge Road, a row of two storey Victorian terraces sit alongside a corner store and Federation period warehouse.

A number of moderate to high scale residential apartments and offices are located adjacent to the site on Parramatta Road and Mallett Street. Two multi-storey apartment buildings are located on the northern and southern sides of the intersection of Booth Street/Mallett Street and Pyrmont Bridge Road. Two additional multi-storey apartment buildings are located near the construction site on the southern side of Parramatta Road. Bridge Road School is also located adjacent to the site across Parramatta Road.

6 Assessment of construction visual impacts

This section assesses potential visual impacts on various receptors during construction. The methodology for assessing visual impacts is identified in **section 3.3.2**. Site layouts and dimensions of structures and buildings mentioned in this section are approximate at this stage and would be confirmed during detailed design and construction planning. The construction assessment has been based on the description provided in **Chapter 6** (Construction work) of the EIS.

Visual impacts during the construction stage would result from the introduction of construction activities and construction ancillary facilities into the existing landscape. This would include night lighting for sites that contain tunnelling activities or that support tunnelling activities. The methodology used for the assessment is outlined in **section 3.3.2**.

Proposed construction hours would be managed in six broad categories:

- Tunnelling and tunnelling support activities, including spoil handling and haulage, deliveries and underground construction and fitout works. These activities would be carried out up to 24 hours a day and seven days a week
- Out-of-hours construction activities that cannot be conducted during standard construction hours for safety or traffic operational reasons. These activities would include integration works (with the M4 East and New M5 projects, and the surface road network at Rozelle), and some utility works and upgrade works to the surface road network
- Most other surface construction activities, which would be carried out within standard construction hours
- Blasting and rock breaking, which would be carried out within reduced construction hours and subject to provision of respite periods
- Minor or ancillary activities that would not generate a noise impact above acceptable levels, or are otherwise authorised by an environmental protection licence under the *Protection of the Environment Operations Act 1997* (NSW) (POEO Act)
- Activities that are required to be conducted under direction from a relevant authority (such as Police) or are required to prevent an imminent loss of life or environmental damage.

The majority of above ground construction works, with the exception of those mentioned above, would occur during the standard working hours of between:

- 7.00 am and 6.00 pm Monday to Friday
- 8.00 am and 1.00 pm on Saturdays.

Receptors with views to construction ancillary facilities and activities could include:

- Industrial neighbours
- Residential neighbours low, medium or high density
- Commercial neighbours/users of commercial areas
- Recreational (active and passive) users
- Motorway users (motorists and cyclists).

The duration of the construction works would be around five years. In some areas such as Haberfield and St Peters this would result in an extended construction period in addition to the construction period for the M4 East and New M5 projects that could have cumulative landscape character and visual impacts for some receptors (see **Chapter 8**).

Further details about the land uses at these sites following the construction period are provided in **Chapter 5** (Project description) and **Chapter 12** (Land use and planning) of the EIS. The visual impact assessment for each construction ancillary facility (including night time lighting) is provided in **Table 6-1** to **Table 6-21** and is summarised at **section 6.14**.

6.1 Wattle Street civil and tunnel site (C1a)

The Wattle Street civil and tunnel site would be located above and below ground within Wattle Street at Haberfield between Parramatta Road and Ramsay Street. This construction ancillary facility would use land above ground that is currently being used as a construction zone for the M4 East project.

Structures, equipment and construction activities likely to be visible from surrounding receptor locations include site offices and amenities, laydown and storage of materials, construction vehicle access driveways, temporary fences and/or hoarding and light vehicle parking. A detailed description of this construction ancillary facility is provided in **Chapter 6** (Construction work) of this EIS. An indicative construction site layout for the Wattle Street civil and tunnel site is shown in **Figure 6-1**.

The Wattle Street interchange entry and exit ramps that will be constructed as part of the M4 East project would be used for spoil removal. Spoil handling on the site would occur 24 hours-a-day, seven days-a-week. While spoil removal would be favoured during standard daytime construction hours, spoil removal may occur outside these hours to minimise the length of the construction period.

These uses represent a significant downgrade from the use of the site for the M4 East project which utilised a much larger footprint and higher levels of above ground activity such as demolition works and other activities associated with the construction the new Wattle Street road alignment. The visual impact assessment undertaken for the construction ancillary facilities for M4 East project found that:

- For residents at Wattle Street, Walker Avenue, Ramsay Street, Martin Street and Dobroyd Parade, the overall visual impact rating during construction would be High
- For pedestrians at Reg Coady Reserve, Wattle Street, Walker Avenue, Ramsay Street, Martin Street, Dobroyd Parade and Parramatta Road, the overall visual impact rating during construction would be Moderate
- For motorists at Wattle Street, Walker Avenue, Ramsay Street, Martin Street, Dobroyd Parade and Parramatta Road, the overall visual impact rating during construction would be Moderate.

Appendix L of the M4 East EIS provides further details regarding the assessment.

Given the existing environment (including land uses), construction activities and construction footprint has changed since this initial assessment; a new assessment based on the current environment and new construction ancillary facility specifications has been carried out and is detailed in **Table 6-1**.

For an assessment of the cumulative impacts of the two consecutive construction projects see **section 8.1**. Representative receptor locations have been identified as described in **Table 6-1** and shown in **Figure 6-1**. Night lighting impacts are assessed in **Table 6-2**.

6.1.1 Visual impacts

Table 6-1 Wattle Street civil and tunnel site visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C1a-1 Religious congregation – Wattle Street. Provides a representative view for the Jehovah's Witnesses Kingdom Hall adjacent to the construction ancillary facility.	The Kingdom Hall is a place of worship located on a busy road (Wattle Street), with most of the grounds required for parking. The quality of the existing view from the site is low, with the duration of viewing likely generally to be limited to walking to and from the car. A front verandah with adjoining small landscaped area could be used as a location for informal gathering before entering and after leaving the building. On balance, the sensitivity of this receptor to the proposed change is considered to be Low.	The area where the construction activities would be taking place is currently a construction site for the purposes of the M4 East project. The visibility of construction work would be reduced given that much of the work would take place underground within the cut and cover tunnel sections. However, construction activity would take place over a period of around 3.5 years. Therefore, on balance, the magnitude of the visual impact to the proposed change is considered to be Moderate.	Moderate- Low
C1a-2 Residents – Wattle Street, Walker Avenue and Ramsay Street. Provides a representative view for residential receptors adjoining and adjacent to the construction ancillary facility.	Most of the residential development facing the project is on busy Wattle Street, in addition to a small number of residences on Ramsay Street. Residents on Walker Avenue would have views from rear areas of homes and backyards. This comprises a high number of typically sensitive residential receptors. The quality of these views is typically low within the busy road context, but would be seen on a daily basis. A number of houses on Walker Street also back onto the civil site. Within this context the sensitivity of residents is therefore considered to be High.	The area where the construction activities would be taking place is currently a construction site for the purposes of the M4 East project. The visibility of construction work would be reduced over that for the M4 East project given that much of the work would take place underground. A number of residents on Wattle Street and Ramsay Street would have direct views to the construction ancillary facility from front rooms and gardens, with a number on Walker Street potentially having partial views to construction activity from back gardens. Construction activity would take place over a period of around 3.5 years. Therefore, on balance the magnitude of the visual impact to the proposed change is considered to be Moderate.	High– Moderate

Receptor	Sensitivity	Magnitude	Rating
C1a-3 Motorists on Wattle Street, Ramsay Street and Parramatta Road. Provides a representative view for motorists using Parramatta Road, Wattle Street and Ramsay Street.	There is likely to be a moderate number of receptors on Ramsay Street and high levels of receptors, particularly during peak periods, on Parramatta Road and Wattle Street. Motorists using Wattle Street will be exposed for slightly longer periods of time than motorist using Parramatta Road of Ramsay Street, however, the sensitivity of motorists to change is considered to be Low due to the generally short viewing time within the context of a longer journey, the focus of the driver on the road, the current low level of amenity provided by the M4 East construction works and the context of the view within a busy road environment.	Motorists would have views to hoarding at close range and limited views above to construction activities. The area is currently a construction site for the M4 East project. The construction works for the project would be significantly downgraded from the M4 East works however, construction activity would take place over a period of around 3.5 years. Therefore, on balance the magnitude of the visual impact to the proposed change is considered to be Low.	Low
C1a-4 Pedestrians –, Wattle Street, Walker Avenue, Ramsay Street and Parramatta Road. Provides a representative view for pedestrians walking past and near to the construction ancillary facility.	Pedestrians walking for passive recreational purposes are likely to use alternative routes away from main roads and therefore relatively low receptor numbers are anticipated. Within this context, and given the current low level of amenity provided by the M4 East construction works, the sensitivity of this receptor group is considered to be Low.	The area is currently a construction site for the M4 East project. However, the visibility of construction work would be reduced given that much of the work would take place underground. The work would take place over a period of around 3.5 years. Therefore, on balance, the magnitude of the visual impact to the proposed change is considered to be Low.	Low

6.1.2 Night lighting impacts

The visual setting of the construction ancillary facility includes lighting associated with Parramatta Road, local streets and associated vehicular traffic, and illuminated windows of the residential properties. The project lighting during construction would occur when necessary to support tunnelling work and be associated with site offices and amenities, laydown and storage of materials, construction vehicle access driveways and car parking. Lighting would be designed to minimise light spill, which would reduce the amount of light trespass onto adjoining residential properties.

Receptor	Sensitivity	Magnitude	Rating
C1a-1 Religious congregation – Wattle Street Provides a representative view for the congregation at the Jehovah's Witnesses place of worship adjacent to the construction ancillary facility.	Low. Refer to Table 6-1 .	The magnitude of lighting change relative to the existing construction ancillary facility activities as part of the M4 East project would be low. The congregation members would have existing views from a limited number of front windows across a car parking area to a busy road. However, construction activity would take place over a period of around 3.5 years. Therefore, on balance the magnitude of the visual impact to the proposed change is considered to be Low.	Low
C1a-2 Residents – Wattle Street, Walker Avenue and Ramsay Street Provides a representative view for residential receptors adjoining and adjacent to the construction ancillary facility.	Most of the residential development facing the project is on busy Wattle Street, in addition to a small number of residences on Ramsay Street. Residents on Walker Avenue would have views from rear areas of homes and backyards. Residential receptors would typically be focussed on activities within the house at night. Within this context and given the current low level of amenity provided by the M4 East construction works, the sensitivity of residents is therefore considered to be Low.	The area is currently a construction site for the M4 East project, and the visibility of construction work would be reduced given that much of the work would take place underground. Lighting would be designed to reduce spill, and the predominantly single storey dwellings would have limited views over hoarding. However, construction activity would take place over a period of around 3.5 years. Therefore, on balance, the magnitude of the visual impact to the proposed change is considered to be Moderate.	Moderate– Low

Receptor	Sensitivity	Magnitude	Rating
C1a-3 Motorists on Wattle Street, Ramsay Street and Parramatta Road Provides a representative view for motorists using Parramatta Road, Wattle Street and Ramsay Street.	There is likely to be a moderate number of receptors on Ramsay Street and high levels of receptors, particularly during peak periods, on Parramatta Road and Wattle Street. Motorists using Wattle Street will be exposed for slightly longer periods of time than motorist using Parramatta Road of Ramsay Street, however, the sensitivity of motorists to change is Low due to the generally short period of viewing time as part of a longer journey, the focus of the driver on the activity of driving, the current low level of amenity provided by the M4 East construction works and the context of the view within a busy road environment.	Motorists would be afforded views to hoarding at close range and due to being seated in vehicles would have limited views above to construction activities. The area where the construction activities would take place is currently a construction site for the purposes of the M4 East project. The visibility of construction work would be reduced given that much of the work would take place underground. Lighting would be designed to reduce spill. However, construction activity would take place over a period of some 4.5 years. Therefore, on balance the magnitude of the visual impact to the proposed change is considered to be Low.	Low
C1a-4 Pedestrians –Wattle Street, Walker Avenue, Ramsay Street and Parramatta Road Provides a representative view for pedestrians walking past and near to the construction ancillary facility.	Pedestrians walking for passive recreational purposes are likely to use alternative routes away from main roads and therefore relatively low receptor numbers are anticipated. Within this context, and given the current low level of amenity provided by the M4 East construction works the sensitivity of this receptor group is considered to be Low.	The area is currently a construction site for the purposes of the M4 East project, and the visibility of construction work would be reduced given that much of it would take place underground and views would be of limited duration from this receptor. However, the work would take place over a period of around 3.5 years. Therefore, on balance, the magnitude of the visual impact to the proposed change is considered to be Low.	Low



Figure 6-1 Wattle Street civil and tunnel site (C1a) visual visual receptor locations

6.2 Haberfield civil and tunnel site (including the Haberfield ventilation facility) (C2a)

The Haberfield civil and tunnel site would be located above and below ground around the southeastern corner of the Parramatta Road and Wattle Street intersection, extending along Parramatta Road between Wattle Street and Walker Avenue. This construction ancillary facility would use land above ground that is currently being used as a construction ancillary facility for the M4 East project.

Structures, equipment and construction activities that would be likely to be visible from surrounding receptor locations include site offices and amenities, laydown and storage of materials, construction vehicle access driveways, temporary fences and/or hoarding and light vehicle parking.

A detailed description of this construction ancillary facility is provided in **Chapter 6** (Construction work) of the EIS. An indicative construction site layout for the Haberfield civil and tunnel site is shown in **Figure 6-2**.

Heavy vehicles delivering materials and equipment would enter and exit the Haberfield civil and tunnel site via the westbound Wattle Street carriageways. Light vehicles would access and egress the site via Wattle Street and Walker Avenue. Workforce car parking for this area would also be located at the Northcote Street civil site (C3a).

These proposed construction activities represent a significant downgrade from the use of the site for the M4 East project. Where previously the construction site had a larger footprint with greater levels of above ground work, activities as part of the M4-M5 project will primarily consist of below ground works. In addition, the Parramatta Road ventilation facility will be constructed at this location as part of the M4 East project and will be present on a portion of this site when construction of the M4-M5 Link commences. The landscape and visual impact assessment undertaken for the M4 East project found that:

- For residents at Wattle Street and Walker Avenue, the overall visual impact rating during construction would be High
- For pedestrians at Wattle Street and Walker Avenue, the overall visual impact rating during construction would be Moderate
- For motorists at Wattle Street and Walker Avenue, the overall visual impact rating during construction would be Moderate.

Appendix L of the M4 East EIS provides further details regarding the assessment.

Given the existing environment (including land uses), construction activities and construction footprint have changed since this initial assessment; a new assessment based on the current environment and new construction ancillary facility layout has been carried out and is detailed in **Table 6-3**.

For an assessment of the cumulative impacts of the two consecutive construction projects, please refer to **section 8.1**. Representative receptor locations have been identified as described in **Table 6-3** and shown in **Figure 6-2**. Night lighting impacts are detailed in **Table 6-4**.

6.2.1 Visual impacts

Table 6-3 Haberfield civil and tunnel site visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C2a-1 Motorists on Wattle Street, Walker Avenue and Parramatta Road Provides a representative view for motorists using Parramatta Road, Wattle Street and Walker Avenue.	There is likely to be a moderate number of receptors on Walker Avenue and high levels of receptors, particularly during peak periods, on Parramatta Road and Wattle Street. However, the sensitivity of motorists to change is considered to be Low due to the short viewing time within the context of a longer journey, the focus of the driver on the activity of driving, the current low level of amenity provided by the M4 East construction works and the context of the view within a busy road environment.	Motorists would be afforded views to hoarding at close range and due to being seated in vehicles would have limited views above to construction activities. The area is currently a construction site for the purposes of the M4 East project. However, construction activity would take place over a period of around 3.5 years. Therefore, on balance, the magnitude of the visual impact to the proposed change is considered to be Low.	Low
C2a-2 Religious congregation – Wattle Street Provides a representative view for the congregation at the Jehovah's Witnesses place of worship adjacent to the construction ancillary facility.	The Kingdom Hall is a place of worship located on a busy road (Wattle Street), with most of the grounds required for parking. The quality of the existing view from the site is low, with the duration of viewing likely generally to be limited to walking to and from the car. A front verandah with adjoining small landscaped area would be expected at times to provide a location for informal gathering before entering and after leaving the building. Most of the religious activity associated with this site would be expected to occur in a private setting within the building. On balance, the sensitivity of this receptor to the proposed change is considered to be Low.	The area where the construction activities would be taking place is currently a construction site for the purposes of the M4 East project. The congregation would have views from a limited number of front windows across a car parking area. The visibility of construction work would be reduced given that much of the work would take place underground. However, construction activity would take place over a period of around 3.5 years. Therefore, on balance, the magnitude of the visual impact to the proposed work is considered to be Moderate.	Moderate- Low

Receptor	Sensitivity	Magnitude	Rating
C2a-3 Residents – Wattle Street and Walker Avenue Provides a representative view for residences around the construction ancillary facility site.	Most of the residential development facing the project is on busy Wattle Street, in addition to a small number of residences on Walker Avenue. This comprises a high number of typically sensitive residential receptors. The quality of these views is typically low within the busy road context, but would be seen on a daily basis. A number of houses on Walker Avenue also back onto the site. Within this context the sensitivity of residents is therefore considered to be High.	The area is currently a construction site for the purposes of the M4 East project. The visibility of construction work would be reduced over that for the M4 East project given that much of the work would take place underground. However, construction activity would take place over a period of around 3.5 years. Therefore, on balance, the magnitude of the visual impact to the proposed change is considered to be Moderate.	High– Moderate
C2a-4 Pedestrians – Wattle Street, Walker Avenue and Parramatta Road Provides a representative view for pedestrians walking past the construction ancillary facility.	Pedestrians walking for passive recreational purposes are likely to use alternative routes away from main roads and therefore a relatively low receptor numbers are anticipated. Within this context, and given the current low level of amenity provided by the M4 East construction works the sensitivity of this receptor group is considered to be Low.	The area is currently a construction site for the M4 East project. However, the visibility of construction work would be reduced given that much of the work would take place underground. The work would take place over a period of around 3.5 years. Therefore, on balance, the magnitude of the visual impact to the proposed change is considered to be Moderate.	Moderate- Low

6.2.2 Night lighting impacts

The visual setting of the construction ancillary facility includes lighting associated with Parramatta Road, local streets and associated vehicular traffic, and illuminated windows of the residential properties and also the commercial buildings along Parramatta Road.

Lighting during construction would occur when necessary to support tunnelling work and be associated with temporary site offices and amenities, laydown and storage of materials, construction vehicle access driveways and parking. Lighting would be designed to minimise light spill, which would reduce the amount of light trespass onto adjoining residential properties.

Receptor	Night lighting visual impact assessment Sensitivity	Magnitude	Rating
C2a-1 Motorists on Wattle Street, Walker Avenue and Parramatta Road Provides a representative view for motorists using Parramatta Road, Wattle Street and Walker Avenue.	Low. See Table 6-3.	The area is currently a construction site for the purposes of the M4 East project. The visibility of construction work would be reduced over that for the M4 East project given that much of the work would take place underground. Lighting would be designed to reduce spill. However, construction activity would take place over a period of around 3.5 years. On balance, the magnitude of the visual impact to the proposed change is considered to be Low.	Low
C2a-2 Religious congregation – Wattle Street Provides a representative view for the congregation at the Jehovah's Witnesses place of worship adjacent to the construction ancillary facility.	Low. See Table 6-3 .	The magnitude of lighting change relative to the existing construction ancillary facility activities as part of the M4 East project would be low. However, construction activity would take place over a period of around 3.5 years. On balance, the magnitude of the visual impact to the proposed change is considered to be Moderate.	Moderate– Low

Table 6-4 Haberfield civil and tunnel site night lighting visual impact assessment

Receptor	Night lighting visual impact assessment Sensitivity	Magnitude	Rating
C2a-3 Residents – Wattle Street and Walker Avenue Provides a representative view for residences around the construction ancillary facility site.	Most of the residential development facing the project is on busy Wattle Street, in addition to a small number of residences on Walker Avenue. Residential receptors would typically be focused on activities within the house at night. Within this context the sensitivity of residents is considered to be Low.	The area is currently a construction site for the purposes of the M4 East project, and the visibility of construction work would be reduced over that for the M4 East project given that much of the work would take place underground. Lighting would be designed to reduce spill, and the predominantly single storey dwellings would have limited views over hoarding. However, construction activity would take place over a period of around 3.5 years. Therefore, on balance, the magnitude of the visual impact is considered to be Moderate.	Moderate- Low
C2a-4 Pedestrians – Wattle Street, Walker Avenue and Parramatta Road Provides a representative view for pedestrians walking past the construction ancillary facility.	Low. See Table 6-3 .	The area is currently a construction site for the M4 East project. The visibility of construction work would be reduced over that for the M4 East project given that much of it would take place underground. However, the work would take place over a period of around 3.5 years. Therefore, on balance, the magnitude of the visual impact to the proposed change is considered to be Low.	Low



6.3 Northcote Street civil site (C3a)

The Northcote Street civil site at Haberfield would be located between Wattle Street and Wolseley Street at Haberfield. This construction ancillary facility would use land that is currently being used as a construction ancillary facility for the M4 East project. The site would be used for construction workforce parking and to support construction activities at the nearby civil and tunnel sites, including laydown and storage of materials. A tall hoarding in the order of 3.6 metres high would be located along the residential edge of the civil site. A detailed description of this construction ancillary facility is provided in **Chapter 6** (construction work) of the EIS. An indicative construction site layout for the Northcote Street civil site is shown in **Figure 6-3**.

The use of the laydown area and light vehicle parking would occur 24 hours-a-day, seven days-aweek. Feasible and reasonable management strategies would be investigated to minimise the volume of heavy vehicles using the laydown area at night. This could include the provision of temporary barriers along the boundary with adjoining residential properties.

These uses represent a significant downgrade from the use of the site for the M4 East project. The large scale acoustic shed established for use by the M4 East project would be dismantled before construction of the M4-M5 Link project commences as would storage, workshop and double stacked office buildings and a water treatment plant. The landscape character and visual impact assessment undertaken for the M4 East project found that:

- For residents at Wattle Street, Northcote Street, Wolseley Street, Parramatta Road, the overall visual impact rating would be Moderate
- For pedestrians at Wattle Street, Northcote Street, Wolseley Street, Parramatta Road, Page Avenue, Earle Avenue, Frederick Street, the overall visual impact rating would be Moderate–Low
- For motorists at Wattle Street, Parramatta Road, the overall visual impact rating would be Low.

Appendix L of the M4 East EIS provides further details regarding the assessment for this project.

Given the existing environment (including land uses), construction activities and construction footprint has changed since this initial assessment; a new assessment based on the current environment and new construction ancillary facility layout has been carried out and is detailed in **Table 6-5**.

For an assessment of the cumulative impacts of the two consecutive construction projects, please refer to **section 8.1**. Representative receptor locations have been identified as described in **Table 6-5** and shown in **Figure 6-3**. Night lighting impacts are detailed in **Table 6.6**.

6.3.1 Visual impacts

Table 6-5 Northcote Street civil site visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C3a-1 Religious congregation – Wattle Street Provides a representative view for the congregation at the Jehovah's Witnesses place of worship adjoining the south-western corner of the construction ancillary facility.	The Kingdom Hall is a place of worship located on busy road, with most of the grounds required for parking. The quality of the existing view from the site is low, with the duration of viewing likely generally to be limited to walking to and from the car. A front verandah with adjoining small landscaped area would be expected at times to provide a location informal gathering. However, views to the construction ancillary facility from these locations would be primarily be at an angle past a row of mature trees and over an adjoining fence. Most of the religious activity associated with this site would be expected to occur in a private setting within the building. On balance, the sensitivity of this receptor to the proposed change is considered to be Low.	The area is currently a construction site for the M4 East project. The view of the project would be limited to that of a tall hoarding in the order of 3.6 metres high. However, construction activity would take place over a period of around 3.5 years. On balance, the magnitude of the visual impact to the proposed change is considered to be Low.	Low
C3a-2 Motorists – Wattle Street, Parramatta Road Provides a representative view for motorists using Parramatta Road and Wattle Street.	There is likely to be a high number of receptors, particularly during peak periods, on Parramatta Road and Wattle Street. The sensitivity of motorists to change is considered to be Low due to the short viewing time within the context of a longer journey, the focus of the driver on the activity of driving, the current low level of amenity provided by the M4 East construction works and the context of the view within a busy road environment.	Motorists would be afforded views to hoarding at close range and due to being seated in vehicles would have limited views above to construction activities. The area where the construction activities would be taking place is currently a construction site for the purposes of the M4 East project. However, the existing acoustic shed would be removed, reducing the scale of infrastructure visible. Nonetheless construction activity would take place over a period of around 3.5 years. On balance, the magnitude of the visual impact to the proposed change is considered to be Low.	Low

Receptor	Sensitivity	Magnitude	Rating
C3a-3 Residents – Wattle Street, Northcote Street, Wolseley Street, Parramatta Road Provides a representative view for residences around the construction ancillary facility.	The civil site adjoins or is in close proximity to a limited number of residential properties with back and front gardens, and rooms facing towards the site. However, the number of affected receptors is relatively low, as is the quality of the existing view, given that the area is currently a construction site for the M4 East project. The view from the closed off end of Northcote Street would be seen daily by a number of residents. Within this context, the sensitivity of residents to the construction ancillary facility is considered to be Moderate.	Views for nearby residents to the hoarding would predominantly be from side windows, and front/back gardens. However, the existing acoustic shed would be removed, reducing the scale of infrastructure visible. Little of the activity taking place within the civil site would be expected to be visible from these receptors. However, the hoarding would be in place for a period of up to 3.5 years. On balance, the magnitude of the visual impact is considered to be Low.	Moderate- Low
C3a-4 Pedestrians – Wattle Street, Northcote Street, Wolseley Street, Parramatta Road, Page Avenue, Earle Avenue, Frederick Street Provides a representative view for pedestrians walking past the construction ancillary facility.	Pedestrians walking for passive recreational purposes are likely to use alternative routes away from main roads and therefore a relatively low receptor numbers are anticipated. Within this context, the sensitivity of this receptor group to the construction works is considered to be Low.	The area is currently a construction site for the M4 East project. However, the existing acoustic shed would be removed, reducing the scale of infrastructure visible. Nonetheless, the work would take place over a period of around 3.5 years. On balance, the magnitude of the visual impact to the proposed change is considered to be Low.	Low

6.3.2 Night lighting visual impacts

The visual setting of the construction ancillary facility includes lighting associated with Parramatta Road, Wattle Street, local streets and associated vehicular traffic, and illuminated windows of the residential properties and also the commercial buildings along Parramatta Road. The civil site would be bounded by tall hoarding.

Lighting during construction would occur when necessary to support tunnelling work and would be associated with construction workforce parking and laydown and storage of materials. Lighting would be designed to minimise light spill, which would reduce the amount of light trespass onto adjoining residential properties.

Table 6.6 Northcote Street civil site night lighting visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C3a-1 Religious congregation – Wattle Street Provides a representative view for the congregation at the Jehovah's Witnesses place of worship.	Low. Refer Table 6-5.	The magnitude of lighting change relative to the existing construction ancillary facility activities as part of the M4 East project would be low. A tall hoarding in the order of 3.6 metres high would be located along the residential edge of the civil site and lighting within the adjoining car park would be expected to be low level. However, construction activity would take place over a period of around 3.5 years. On balance, the magnitude of change in night lighting impact is considered to be Low.	Low
C3a-2 Motorists – Wattle Street, Parramatta Road Provides a representative view for motorists using Parramatta Road and Wattle Street.	Low. Refer Table 6-5 .	Motorists would be afforded views to hoarding at close range and would have limited views above to construction activities. The area is currently a construction site for the M4 East project. Lighting would be designed to reduce spill. However, construction activity would take place over a period of around 3.5 years. On balance, the magnitude of the visual impact to the proposed change is considered to be Low.	Low

Receptor	Sensitivity	Magnitude	Rating
C3a-3 Residents – Northcote Street, Wolseley Street Provides a representative view for residences adjoining and opposite the construction ancillary facility.	The civil site adjoins or is in close proximity to a limited number of private residential properties with back and front gardens, and rooms facing towards the project. However, the number of affected receptors is relatively low, as is the quality of the existing view to a construction site for the M4 East project. Residents would typically be focussed on activities within the house at night. Within this context the sensitivity of residents is considered to be Low.	The area is currently a construction site for the M4 East project. A tall hoarding in the order of 3.6 metres high would be located along the residential edge of the civil site. Lighting would be designed to reduce spill, and the predominantly single storey dwellings would have limited views over hoarding. However, construction activity would take place over a period of around 3.5 years. Therefore, on balance, the magnitude of the visual impact to the proposed change is considered to be Moderate.	Moderate-Low
C3a-4 Pedestrians – Wattle Street, Northcote Street, Wolseley Street, Parramatta Road Provides a representative view for pedestrians walking past the construction ancillary facility.	Low. Refer Table 6-5 .	The area is currently a construction site for the M4 East project. However, the work would take place over a period of around 3.5 years. On balance, the magnitude of the visual impact to the proposed change is considered to be Low.	Low



6.4 Parramatta Road West civil and tunnel site (C1b)

The Parramatta Road West civil and tunnel site (C1b) would be located west of Parramatta Road, between north of Alt Street and Bland Street at Ashfield. The site is currently occupied by several commercial properties that would be demolished to facilitate construction. Residential properties including single dwellings and apartment blocks are located to the immediate west and north. A construction site for the M4 East project is located to the south on the opposite side of Bland Street.

A detailed description of this construction ancillary facility is provided in **Chapter 6** (Construction work) of the EIS. An indicative construction site layout for the Parramatta Road West civil site is shown in **Figure 6-4**.

Structures, equipment and construction activities that would be likely to be visible from surrounding receptor locations include demolition of existing buildings and structures, removal and installation of utilities, site offices, amenities, temporary infrastructure, delivery of materials, laydown and storage of materials, plant and equipment, an acoustic shed and, spoil haulage.

Construction traffic would enter and exit the site to and from the western (northbound) carriageway of Parramatta Road via new driveways. Spoil handling on the site would occur 24 hours a day, seven days a week, within an acoustic shed. Heavy vehicle movements associated with the removal of spoil from tunnelling would only occur via Parramatta Road.

Representative receptor locations have been identified as described in **Table 6-7** and shown in **Figure 6-4**. Night lighting impacts are detailed in **Table 6-8**.

6.4.1 Visual impacts

Table 6-7 Parramatta Road West civil and tunnel site visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C1b-1 Motorists on Alt Street, Bland Street and Parramatta Road Provides a representative view for motorists using Parramatta Road, Alt Street and Bland Street.	There is likely to be a moderate number of receptors on Bland Street and Alt Street and a high number of receptors, particularly during peak periods, on Parramatta Road. However, the sensitivity of motorists to change is considered to be Low due to the busy Parramatta Road context, short periods of viewing as part of a longer journey, and the focus of the driver on the road.	The magnitude of change is considered to be Moderate due to the removal of existing structures, the scale of the acoustic shed compared to existing built form at the site and its proximity to the road, the visual prominence of the site, and the about a four -year timeframe over which the works would take place.	Moderate-Low
C1b-2 Residents – Alt Street, Bland Street and Parramatta Road This receptor is located on Alt Street north of Parramatta Road and provides a representative view for residential receptors around the construction ancillary facility.	The northern edge of the civil and tunnel site adjoins a mix of residential and commercial development fronting onto Parramatta Road. The western edge of the site is adjoined by two, three storey apartment complexes that would have views over the site, and rows of single storey freestanding residential development fronting onto Alt Street. This results in a high number of receptors. Residents would have varying views to the construction ancillary facility from front yards, back yards and the sides of properties, as well as from within residences. Many of these residents would have regular views of the project. The quality of the existing view is moderate to high in that it looks into vegetation canopies, or through vegetation/deciduous trees, or potentially in some cases over the top of adjacent buildings. Within the context of the above, the sensitivity of these residential receptors to the civil and tunnel site is considered to be High.	The proposed acoustic shed would be in the order of 10 metres high, with its back wall at the western site boundary, causing the removal of substantial trees. This would result in a loss of solar access to a number of adjoining residential properties, noting that solar access is already reduced to varying degrees by the trees. The acoustic shed would result in impacts to views from the adjoining residential properties over a period of about four years. The magnitude of change would therefore be considered High.	High

Receptor	Sensitivity	Magnitude	Rating
C1b-3 Pedestrians – Alt Street, Bland Street and Parramatta Road Provides a representative view for pedestrians walking near the construction ancillary facility.	Pedestrians walking for passive recreational purposes (sensitive receptors) are likely to use alternative routes away from main roads. This type of receptor is considered generally to have low levels of sensitivity to their surroundings given their familiarity with the travel route and the busy Parramatta Road context. Pedestrians are also likely to comprise low to moderate numbers. Within this context, the sensitivity of this receptor group to the construction works is considered to be Low.	The magnitude of change is considered to be Moderate due to: the scale of the acoustic shed, its proximity to the receptors; the visual prominence of the acoustic shed visible above hoardings including from height for pedestrians using the bridge across Parramatta Road near Bland Street and the up to about a four-year timeframe over which the works would take place.	Moderate-Low

6.4.2 Night lighting impacts

The visual setting of the construction ancillary facility includes lighting associated with Parramatta Road, local streets and associated vehicular traffic, and illuminated windows of the residential properties. The project lighting during construction would occur when necessary to support tunnelling work and be associated with the acoustic shed, site offices, amenities, temporary infrastructure, delivery of materials, laydown and storage, plant and equipment and spoil haulage. Lighting would largely be contained within the acoustic shed and would be designed to minimise light spill, which would reduce the amount of light trespass onto adjoining residential properties.

 Table 6-8 Parramatta Road West civil and tunnel site night lighting visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C1b-1 Residents – Alt Street, Bland Street and Parramatta Road Provides a representative view for residential receptors around the construction ancillary facility.	This view is seen from living areas, including balconies. However, residential receptors would typically be focussed on activities within the house at night. Within this context the sensitivity of residents is considered to be Low.	The multi storey apartment buildings to the west of the site would largely be shielded from lighting within the construction ancillary facility as it would be contained within the acoustic shed. Lighting of outdoor areas would be designed to reduce spill, with adjacent single storey residences unlikely to view much activity above the boundary hoarding. However, upper storey residences along this boundary would be expected to have views at a distance of the laydown area on the north-west corner	Moderate– Low

Receptor	Sensitivity	Magnitude	Rating
		of Alt Street and Parramatta Road. Further, construction activity (and therefore the duration of the view) would take place over a period of some four years. Within this context the sensitivity of residents is considered to be Moderate.	
C1b-2 Motorists on Alt Street, Bland Street and Parramatta Road Provides a representative view for motorists using Parramatta Road, Alt Street and Bland Street.	The sensitivity of motorists to change is Low due to the short period of viewing time as part of a longer journey, and the focus of the driver on the activity of driving, within a busy road environment.	Lighting would be designed to reduce spill, and likely set back from and below the level of the perimeter hoarding. This lighting would be seen within the context of the well- lit Parramatta Road corridor. Lighting within the acoustic shed would only be visible when the truck entry/exit doors were open. However, construction activity would take place over a period of about four years. On balance, the magnitude of the visual impact to the proposed change is considered to be Low.	Low
C1b-3 Pedestrians – Alt Street, Bland Street and Parramatta Road Provides a representative view for pedestrians walking near the construction ancillary facility.	Low. Refer Table 6-7 .	The magnitude of change is considered to be Low due to its location along a busy road corridor, and as views to the construction activities would predominately be shielded via a hoarding structure and located within the acoustic shed. Pedestrians using the bridge across Parramatta Road near Bland Street would be substantially shielded from construction lighting by the acoustic shed.	Low



6.5 Haberfield civil site (C2b)

The Haberfield civil site (C2b) would be used to support civil construction of a substation and fitout of permanent operational infrastructure including the Parramatta Road ventilation facility (being constructed as part of the M4 East project). The site would include temporary site offices, workshop and storage facilities, laydown areas, ingress and egress for heavy and light vehicles, workforce amenities and car parking.

The surface construction activities proposed for the Haberfield civil site (C2b) scenario would result in less infrastructure located on the site compared to Option A. As such, the assessment undertaken in **section 6.2** is considered a representative worst case scenario for receptors in the vicinity of the Haberfield civil site (C2b arrangement). As such, no specific additional assessment has been undertaken for Option B. Please refer to **section 6.2** for the assessment of Option A.

6.6 Parramatta Road East civil site (C3b)

The Parramatta Road East civil site (C3b) would be located east of Parramatta Road at Haberfield, between north of Alt Street and Bland Street. The site is occupied by several commercial premises that would be demolished to facilitate construction. Residential properties are located to the immediate east and north. A construction site for the M4 East project is located to the south.

The Parramatta Road East civil site (C3b) would be used to support tunnelling construction activities that would occur at the Parramatta Road West civil and tunnel site (C1b) and to provide construction workforce parking. The site would include temporary site offices, ingress and egress for light vehicles, workforce amenities and car parking.

Structures, equipment and construction activities that would be likely to be visible from surrounding receptor locations include site offices, amenities, temporary infrastructure including temporary noise barriers, demolition of existing structures, removal and installation of utilities, construction vehicle access driveways, temporary fences and/or hoarding and light vehicle parking.

A detailed description of this construction ancillary facility is provided in **Chapter 6** (Construction work) of the EIS. An indicative construction site layout for the Parramatta Road East civil site (C3b) is shown **Figure 6-5** representative receptor locations have been identified as described in **Table 6-7** and shown in **Figure 6-5**. Night lighting impacts are detailed in **Table 6-8**.

6.6.1 Visual impacts

Table 6-9 Parramatta Road east civil site visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C3b-1 Motorists – Alt Street, Bland Street and Parramatta Road Provides a representative view for motorists using Parramatta Road, Alt Street and Bland Street.	There is likely to be a moderate number of receptors on Alt Street and Bland Street and a high number of receptors, particularly during peak periods, on Parramatta Road. However, the sensitivity of motorists to change is considered to be Low due to the busy Parramatta Road context, short periods of viewing as part of a longer journey, and the focus of the driver on the road.	The magnitude of change is considered to be Moderate due to the scale of the perimeter hoarding and its proximity to the road, the visual prominence of the site, and the timeframe of four years over which the works would take place.	Moderate– Low
C3b-2 Residents – Alt Street, Bland Street and Parramatta Road Provides a representative view for residences around the construction ancillary facility.	The civil site adjoins or is in close proximity to a limited number of residential properties with back and front gardens, and rooms facing towards the project, in addition to several houses at the end of Bland Street near Parramatta Road which face toward the civil site. Within this context, views towards the civil site would regular and for extended durations. The quality of the existing view of the car yard and display building is low. Within this context, the sensitivity of residents to the construction ancillary facility is considered to be Moderate.	The visual prominence of the hoarding is moderate given its proximity and it may impact on existing views. None of the activity taking place within the civil site would be expected to be visible from this receptor, other than at access and exit points to the site. However, the hoarding would be in place for a period of up to four years. On balance, the magnitude of the visual impact is considered to be Moderate.	Moderate

Receptor	Sensitivity	Magnitude	Rating
C3b-3 Pedestrians – Alt Street, Bland Street and Parramatta Road Provides a representative view for pedestrians walking near the construction ancillary facility.	Pedestrians walking for recreational purposes (sensitive receptors) are likely to use alternative routes away from main roads. Travel may be non- recreational focussed including commuters walking to and from the nearby bus stops as part of a longer work commute and pedestrians walking to and from the local school on Bland Street. This type of receptor is considered generally to have low levels of sensitivity to their surroundings given their familiarity with the travel route, and the work related context of the journey. Within this context, the sensitivity of this receptor group to the civil construction site is considered to be Low.	The magnitude of change is considered to be Low due to its location along a busy road corridor, and as views to the construction activities would predominately be set back from and shielded by a hoarding structure. Pedestrians using the bridge across Parramatta Road near Bland Street would have short but extensive views into the site as they crossed the bridge.	Low

6.6.2 Night lighting visual impacts

The visual setting of the construction ancillary facility includes lighting associated with Parramatta Road, Alt Street and Bland Street with associated vehicular traffic, and illuminated windows of the residential properties. The civil site would be bounded by hoarding to screen the site.

Lighting during construction would occur when necessary to support tunnelling work and would be associated with site offices, amenities, temporary infrastructure, construction vehicle access driveways and parking. Lighting would be designed to minimise light spill, which would reduce the amount of light trespass onto adjoining residential properties.

Table 6-10 Parramatta Road East civil site night lighting visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C3b- 1 Motorists – Parramatta Road Provides a representative view for motorists using Parramatta Road.	The sensitivity of motorists to change is Low due to the short period of viewing time as part of a longer journey, and the focus of the driver on the activity of driving, within a busy road environment.	Lighting would be designed to reduce spill. However, construction activity would take place over a period of some four years. The magnitude of the visual impact to the proposed change is considered to be Low.	Low

Receptor	Sensitivity	Magnitude	Rating
C3b-2 Residents – Alt Street, Bland Street Provides a representative view for residences adjoining and opposite the construction ancillary facility.	Residents would typically be focused on activities within the house at night. Within this context the sensitivity of residents is considered to be Low.	Hoarding would be located along the residential edge of the civil site. Lighting would be designed to reduce spill, and the predominantly single storey dwellings would have limited views over the hoarding. However, construction activity would take place over a period of some four years. Therefore, on balance, the magnitude of the visual impact to the proposed change is considered to be Moderate.	Moderate– Low
C3b-3 Pedestrians – Alt Street, Bland Street, Parramatta Road Provides a representative view for pedestrians walking past the construction ancillary facility.	Pedestrians walking for recreational purposes (sensitive receptors) are likely to use alternative routes away from main roads. Travel would therefore be expected to be more origin-destination focused, with the project comprising part of a longer journey. The pedestrian overbridge provides views to the construction site, however with relatively low receptor numbers. Within this context, the sensitivity of this receptor group to the construction works is considered to be Low.	The magnitude of change is considered to be Low due to its location along a busy road corridor. Pedestrians using the bridge across Parramatta Road near Bland Street would experience lighting impacts within the context of this busy road.	Low


6.7 Darley Road civil and tunnel site (C4)

The Darley Road civil and tunnel site would be located between the Inner West Light Rail to the north and Darley Road to the south. The site is currently occupied by a commercial premise and associated car parking facilities. Immediately adjacent in the north-east corner of the site is the Leichhardt North light rail stop.

The site would be used for tunnelling support during construction, and would also involve the construction of the Darley Road motorway operations complex (MOC1). During construction the site would include temporary site offices, a workshop and storage facilities, a laydown area, entry and exit points for construction traffic, a temporary substation, temporary ventilation for the tunnels, an acoustic shed, a temporary water treatment plant and sediment pond, workforce amenities and car parking. A detailed description of this construction ancillary facility is provided in **Chapter 6** (Construction work) of the EIS. An indicative construction site layout for the Darley Road civil site is shown in **Figure 6-6**.

Spoil haulage associated with the tunnelling works, supported by the site would occur during standard construction hours only.

Representative receptor locations have been identified as described in **Table 6-11** and shown in **Figure 6-6**. Night lighting impacts are detailed in **Table 6-12**.

6.7.1 Visual impacts

Table 6-11 Darley Road civil and tunnel site visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C4-1 Pedestrians – Darley Road, City West Link pedestrian bridge Provides representative views for pedestrians walking past the site along Darley Road and using the pedestrian bridge across City West Link near Charles Street.	Local residents would likely view the site as they walk to and from the light rail stop, to and from the recreational areas near Hawthorne Canal and Blackmore Oval and as they cross the pedestrian bridge across City West Link. This would amount to a high number of receptors however; these views would only be experienced in passing as part of a longer journey. As a result, it is considered that the sensitivity of these receptors is Low.	The site and associated activities would be viewed within the context of the busy City West Link and moderately busy Darley Road. This along with the existing sites use as a commercial premise which is of a similar scale and built form to the proposed acoustic shed would result in a Low magnitude of impact.	Low
C4-2 Motorists – Darley Road Provides a representative view for motorists using Darley Road.	The site would generally only be visible for a short period of time as motorists pass through the area and the driver's attention would be focused on the road; however, increased traffic resulting from construction may lead to increased short delays in the peak periods. The sensitivity of motorists is therefore considered to be Moderate.	Temporary hoarding, an acoustic shed and site offices and amenities would be visible. Given the acoustic shed would have similar scale and built form to the existing commercial premise, the magnitude of change is considered to be Low.	Moderate- Low
C4-3 Residents – Darley Road, Charles Street, Hubert Street (south of Darley Road), Francis Street (south of Darley Road) and James Street Provides a representative view for residences adjacent to the construction site.	The sensitivity of nearby residents to the civil and tunnel site is considered to be High due to the potentially long duration of the view from the receptor, the proximity of the residences (particularly along Darley Road) and potential for views toward the site from the upper floors of residences in adjacent streets.	Construction infrastructure including temporary hoarding, site offices and amenities and an acoustic shed would replace the existing landscape of a commercial building and associated car parking. The residents would potentially have views of these construction elements from front yards, back yards and the sides of properties. There would also be an increase in the numbers of vehicles (construction traffic) using Darley Road to access the site. The magnitude of change is considered to be High as a result of these factors.	High.

Receptor	Sensitivity	Magnitude	Rating
C4-4 Light rail users – Leichhardt North light rail stop Provides a representative view for light rail users (at the station and on the light rail) of the Leichhardt North light rail stop.	The sensitivity of the receptor at this location would be Low given these receptors would primarily be commuting, resulting in the construction ancillary facility only being visible for a short period of time (whilst users are waiting for or alighting from light rail services).	The magnitude of change is considered to be High as the receptors would be in immediate proximity to the site providing high visibility (particularly from the entrance stairwell which is elevated above the site) for these periods. Temporary hoarding would constitute a change from the existing fencing at the site which provides open views to the commercial building and associated car parking and vegetation near Darley Road.	Moderate

6.7.2 Night lighting impacts

The existing visual setting of this construction ancillary facility includes lighting associated with the Leichhardt North light rail stop, City West Link, Darley Road, local streets, traffic, illuminated windows of surrounding residential properties and a commercial premises. City West Link runs to the north elevated above and separated from the residential area to the south. Lighting along City West is predominantly screened by a vegetated buffer, a high noise wall and the commercial premises. This premise is open to 8.30 pm three nights a week, 8pm three nights a week and 7pm one night a week. The light rail operates from 6am to 11pm Sunday to Thursday and until midnight Friday to Saturday.

Lighting during construction would occur when necessary to support tunnelling work and be associated with temporary site offices, workshop and storage facilities, a laydown area, entry and exit points for construction traffic, an acoustic shed, workforce amenities and car parking.

 Table 6-12 Darley Road civil and tunnel site night lighting visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C4-1 Pedestrians – Darley Road, City West Link pedestrian bridge Provides representative views for pedestrians walking past the site along Darley Road and using the pedestrian bridge across City West Link near Charles	Local residents would likely view the site at night as they walk to and from the light rail stop, to and from the recreational areas near Hawthorne Canal and as they cross the pedestrian bridge across City West Link. As these views would only be experienced in passing, it is considered that the sensitivity of these receptors is Low.	Lighting at the site would be viewed within the context of the busy City West Link and moderately busy Darley Road. Due to this and having regard to the site's existing use as a commercial premise which operates into the night, the magnitude of impact is considered to be Low.	Low

Receptor	Sensitivity	Magnitude	Rating
Street.			
C4-2 Motorists – Darley Road Provides a representative view for motorists using Darley Road.	The sensitivity of motorists is anticipated to be Low given the limited time they would be viewing the lighting from the construction ancillary facility site compared to the length of their journey and as the driver's attention would be focused on the road.	As a result of existing road lighting associated with traffic as well as the lighting currently associated with the commercial premise which operates into the night, the magnitude of change is considered to be Low	Low
C4-3 Residents – Darley Road, Charles Street, Hubert Street (south of Darley Road), Francis Street (south of Darley Road) and James Street Provides a representative view for residences adjacent to the construction site.	The sensitivity of nearby residents to the civil and tunnel site is considered to be High due to the potentially long viewing period of receptors at close proximity, particularly along Darley Road. Residents would potentially have views from front yards, back yards and the sides of properties. While there are a number of residents in close proximity, residents would be predominately indoors at night and are unlikely to view the construction ancillary facility.	Lighting associated with the construction ancillary facility would replace the existing lighting associated with the commercial premise which operates into the night. The 24/ operation of the commercial premise would result in night lighting impacts but would be designed to minimise light spill to residences. Although the existing lighting environment includes street lighting and operation of the commercial site, the construction site and activities would be of different type and scale. The magnitude of change is considered to be Moderate.	High- Moderate
C4-4 Light rail users – Leichhardt North light rail stop Provides a representative view for light rail users of the Leichhardt North light rail stop.	Low. Refer Table 6-11 .	The magnitude of change is considered to be Moderate as the receptors would be in immediate proximity to the site providing high visibility (particularly from the entrance stairwell which is elevated above the site) for these periods. Temporary hoarding would constitute a change from the existing fencing at the site which provides open views to the commercial premise and associated car parking and vegetation near Darley Road. However, this location would be subject to existing lighting within the context of the light rail stop and City West Link corridor.	Moderate- Low



--- Light rail Boundaries

Light rail stop

Project footprint Access road Ancillary facility Laydown area Surface works ZZ Acoustic shed

Mainline tunnel Temporary access tunnel

Surface construction Underground construction Access and egress Vehicle movements Receiver location → Light vehicle Site gate → Heavy vehicle

- Light rail
- Motorists
 - Pedestrians
 - Residents

Figure 6-6 Darley Road civil and tunnel site (C4) visual receptor locations

6.8 Rozelle civil and tunnel site (C5)

The Rozelle civil and tunnel site would be located between Lilyfield Road to the north, City West Link to the south, Victoria Road to the east and the Sydney CBD and South East Light Rail Rozelle maintenance depot to the west. A detailed description of this construction ancillary facility is provided in **Chapter 6** (Construction work) of the EIS. An indicative construction site layout for the Rozelle civil and tunnel site is shown in **Figure 6-7**.

The site would be predominantly located on disused land that forms part of the Rozelle Rail Yards. The site would also use land adjacent to Lilyfield Road and Gordon Street at Rozelle that is currently occupied by commercial and industrial properties. These properties would be acquired for the project and demolished to facilitate construction of the Rozelle interchange.

Structures, equipment and construction activities likely visible from surrounding receptor locations include:

- Utility, drainage and road treatments
- Site offices, amenities and temporary construction hoarding (including acoustic hoarding if required)
- Acoustic sheds
- Construction of the cut-and-cover structures including piling, concrete works, excavation of dive structures and installation of a precast concrete roof
- Tunnel excavation of the Rozelle interchange, Iron Cove Link and proposed future Western Harbour Tunnel and Beaches Link tunnel stubs using roadheaders, as well as stockpiling of excavated material and spoil haulage.

Representative receptor locations have been identified as described in **Table 6-13** and shown in **Figure 6-7.** Night lighting impacts are detailed in **Table 6-14**.

6.8.1 Visual impacts

 Table 6-13 Rozelle civil and tunnel site visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C5-1 Motorists – City West Link Provides representative views for motorists using City West Link.	The sensitivity of motorists to change is considered to be Moderate. The view may be less readily noticed over time, and when in free-flowing traffic the driver's attention would be focused on the road.	A separate project (the Rozelle Rail Yards site management works as outlined in section 8.2) will have cleared vegetation within the Rozelle Rail Yards boundary alongside City West Link that provides intermittent screening to the site. This combined with the removal of the vegetation outside this boundary as part of the project would result in direct views to temporary hoarding as well as parts of the acoustic sheds and permanent infrastructure being constructed (including ventilation facilities). The magnitude of change is therefore considered to be Moderate.	Moderate.
C5-2 Residents – Foucart Street and Cecily Street Provides a representative view for residents on Foucart Street and Cecily Street.	The topography slopes steeply down towards the site along these two streets providing a moderate number of residents with diagonal views across parts of the construction site. Residents would potentially have views from living areas, front yards, back yards and verandahs, particularly at upper levels further up the slope. The sensitivity of these nearby receptors is therefore considered to be High.	There are street trees on both sides of Lilyfield Road that provide intermittent screening. Some of these trees would be removed during construction which would provide direct views to fencing and hoarding and larger elements within the construction site such as the acoustic shed and the ventilation facility. The magnitude of the visual impact would therefore be High.	High
C5-3 Residents – Lilyfield Road near Denison Street Provides a representative view for residences on Lilyfield Road near Denison Street.	A number of two and three storey houses are located at the corner of Lilyfield Road near Denison Street. They are situated on a rising slope and are oriented towards Lilyfield Road with views across the site and to the city skyline. The residences have windows and balconies facing the site. Other residences both upslope and along Denison Street also have similar views. The sensitivity of nearby residents is therefore considered to be High.	There are mature street trees on Lilyfield Road adjoining the northern boundary of the site which currently provide intermittent screening. The majority of these trees are anticipated to be removed during construction which would provide direct views to fencing and hoarding, an acoustic shed and a ventilation facility as well as other construction elements which would impact on their current views over a prolonged period. The magnitude of change is considered therefore to be High.	High

Receptor	Sensitivity	Magnitude	Rating
C5-4 Residents – Breillat Street, Annandale Provides a representative view for residences on Breillat Street.	Breillat Street slopes steeply down towards the site and would provide some residents with partially obscured views from their front or back rooms across the construction site. There is dense vegetation along Railway Parade and mature street trees along Pritchard Street and Breillat Street that would provide screening to some residences. The sensitivity of nearby receptors is considered to be Moderate.	Some buildings, such as the acoustic shed and ventilation facilities would likely be visible for a number of residents above/through tree cover. There is some separation from the site provided by City West Link, the light rail line, Whites Creek and Railway Parade. The magnitude of the visual impact would therefore be Low.	Moderate– Low
C5-5 Recreational users – Easton Park Provides a representative view for recreational users of Easton Park.	The sensitivity of the receptor at this location would be Moderate given the proximity to the site and its flat topography, which provides large areas with unimpeded views out towards the construction site. Currently the edge of the proposed site along Lilyfield Road comprises a number of industrial buildings, providing poor amenity.	The magnitude of change is considered to be High given the proximity and extent of the construction site, and the number of construction elements that would likely be visible above the hoarding.	High– Moderate
C5-6 Recreational users – Glebe Foreshore Parklands Provides a representative view for recreational users of Glebe Foreshore Parklands.	Users of this space are engaged in both active and passive recreation activities, and are likely to be there for prolonged periods of time, and be present in high numbers, particularly on weekends. The moderate to long range view of the site provides a sweeping panorama across Rozelle Bay comprising an extensive water element of the view. The wider view includes a diverse range of features including Anzac Bridge, the Glebe Island grain silos and the White Bay Power Station in the foreground, and the residential tower blocks at Pyrmont, and highly modulated backdrop of areas of Rozelle and Balmain. Within this context, the sensitivity of visual receptors to the project is considered to be High.	The magnitude of change is considered to be Moderate given: the works would extend from beyond the existing corner of The Crescent to the approaches of Anzac Bridge; the works can be expected to be moderately visually prominent with the exception of taller elements such as the ventilation facility which would be highly visually prominent from this receptor location; and would take place over a period of up to five years.	High- Moderate

6.8.2 Night lighting impacts

The visual setting of the construction ancillary facility includes lighting associated with City West Link, Lilyfield Road, Victoria Road and Catherine Street as large arterial roads, local streets, associated traffic and illuminated windows of the residential properties. The Glebe parklands are also associated with harbour lighting (boats, marina), city lighting (commercial and residential buildings), park and street lighting and sports field lighting.

Lighting during construction would occur when necessary to support tunnelling and would be associated with site offices, amenities, acoustic sheds, tunnel excavation stockpiling of excavated material and spoil haulage. Lighting would be designed to minimise light spill, which would reduce the amount of light trespass to adjoining residential properties.

Receptor	Sensitivity	Magnitude	Rating
C5-1 Motorists – City West Link Provides representative views for motorists using City West Link.	Low. Refer Table 6-13.	A separate project (the Rozelle Rail Yards site management works as outlined in section 8.2) will clear the vegetation within the Rozelle Rail Yards boundary alongside City West Link that provides intermittent screening to the site. This combined with the removal of the vegetation outside this boundary as part of the M4- M5 Link project would mean some views into the site and additional lighting. The magnitude of change is therefore considered to be Moderate.	Moderate– Low.
C5-2 Residents – Foucart Street and Cecily Street Provides a representative view for residents on Foucart Street and Cecily Street.	The sensitivity of the residents is considered to be Moderate given many of the homes are elevated and look over the site, which would be in operation 24 hours a day. However, in most instances residents would be predominately indoors at night and are unlikely to view the construction ancillary facility	A number of residences directly adjacent to the construction ancillary facility are elevated and can look into the construction site over the boundary hoarding. Although elevated, many of these residences look into the street and would be expected to have little or no night-time visibility of the C5 construction site. Within this context, the magnitude of lighting impacts is considered to be Moderate.	Moderate

Receptor	Sensitivity	Magnitude	Rating
C5-3 Residents – Lilyfield Road near Denison Street	High. Refer Table 6-13	There are mature street trees on Lilyfield Road adjoining the northern boundary of the site which currently provide intermittent screening. The majority of these trees are	High
Provides a representative view for residences on Lilyfield Road near Denison Street.		would potentially provide during construction which would potentially provide direct views into the site to construction lighting elements. The magnitude of change is considered to be High.	
C5-4 Residents – Breillat Street, Annandale	Low. Refer Table 6-13	Some lighting would potentially be visible for a number of residents above/through tree cover. There is some	Low
Provides a representative view for residences on Breillat Street.		separation from the site provided by City West Link, the light rail line, Whites Creek and Railway Parade. The magnitude of the visual impact would be Low.	
C5-5 Recreational users – Easton Park Provides a representative view for recreational users of	The sensitivity for this receptor is Low given the likely low number of recreational users of the park at night, and likely short duration of stay.	The magnitude of change is considered to be High within the context of the proximity and extent of the construction site, and the number of construction lighting elements that would be visible above the boundary hoarding.	Moderate
Easton Park.			

Receptor	Sensitivity	Magnitude	Rating
C5-6 Recreational users – Glebe Foreshore Parklands Provides a representative view for recreational users of Glebe Foreshore Parklands	Users of this space are engaged in both active and passive recreation activities. Active recreation at night would primarily consist of use of the sporting facilities which have lighting. Passive recreation would be set within the context of street, park, harbour and city lighting. There would also likely be minimal views to lighting of the construction ancillary facility from this receptor location as they would primarily be contained within acoustic sheds and behind hoarding, and would comprise moderate to long range views from the site. It is therefore considered that the sensitivity of this receptor is Low.	The magnitude of change is considered to be Low given the lighting context of the receptor location and the likelihood that lighting of the construction ancillary facility would be obscured by hoarding and within acoustic sheds.	Low



Figure 6-7 Rozelle civil and tunnel site (C5) visual receptor locations

6.9 The Crescent civil site (C6)

The Crescent civil site (C6) would be located between The Crescent and Rozelle Bay on land owned by Roads and Maritime. A detailed description of this construction ancillary facility is provided in **Chapter 6** (Construction work) of the EIS. An indicative construction site layout for the Crescent civil site is shown in **Figure 6-8**.

The site would be cleared and include the establishment of temporary site offices, workshops and storage facilities, laydown areas, entry and exit driveways for construction traffic, internal access roads, temporary water treatment sediment ponds, workforce amenities and car parking.

The Crescent civil site would be established on land immediately adjacent to Rozelle Bay and Whites Creek and would support construction activities in and adjacent to these waterways. Representative receptor locations have been identified as described in **Table 6-15** and shown in **Figure 6-8**. A night time lighting impact assessment has not been undertaken for this site as it will operate during standard daytime construction hours only.

Table 6-15 The Cre	scent civil site vis	ual impact assessment
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Receptor	Sensitivity	Magnitude	Rating
C6-1 Residents – Bayview Crescent and Johnston Street Provides a representative view for residences on Bayview Crescent and within the apartments at 300 Johnston Street.	A number of single and two storey houses are located along Bayview Crescent. They are situated on an escarpment which drops down significantly to The Crescent. The residences have windows, porches and balconies facing the site. The apartments on Johnston Street at the southern end of Bayview Crescent are separated from the construction site by the light rail line. Despite this, upper levels of the apartments have clear views toward the construction site and a number of residents would be affected. The quality of the existing view in this location is high. The sensitivity of nearby residents is therefore High.	A row of mature street trees on Bayview Crescent between Buruwan Lane and Johnston Street provide a moderate level of screening to the construction site. Views of the civil site would be available between the trees. There are also some mature trees located within the construction footprint which would be removed. The residences at the southern end of Bayview Crescent and Johnston Street would have clear views across the light rail line and The Crescent to the construction site. The construction of the new pedestrian/cycle bridge would also be seen from this location. The magnitude of change is considered therefore to be High.	High
C6-2 Motorists – The Crescent Provides representative views for motorists using The Crescent.	The sensitivity of motorists to change is considered to be Low due to the relatively short period of time elements of the civil site would be visible within the context of their overall trip, and also as the driver's attention would be focused on the road.	Mature trees currently provide intermittent screening to the site however these would be removed as part of the construction work. There would be unobstructed views to temporary hoarding as well as the construction of the pedestrian/cycle bridge. The magnitude of change is therefore considered to be Moderate.	Moderate– Low
C6-3 Recreational users – Rozelle Bay Provides a representative view for recreational users of Rozelle Bay.	This would predominantly consist of boat users. The bay would most likely used by people leaving or returning their boats to the moorings. In some cases, they may also be stationary in the bay for periods of time for maintenance or recreation. Recreational users are likely to be focused on the open areas of the Bay and Glebe Foreshore Parklands. The sensitivity of visual receptors to the project is therefore considered to be Moderate.	The magnitude of change is considered to be Moderate as although the tree removal, hoarding and pedestrian/cyclist bridge would alter the existing character, there is currently a lack of visual amenity both in terms of the derelict condition of the site and the busy transport corridors which are adjacent to it.	Moderate

Receptor	Sensitivity	Magnitude	Rating
C6-4 Recreational users – Glebe Foreshore Parklands Provides a representative view for recreational users of the Glebe Foreshore Parklands.	Users of this space are engaged in both active and passive recreation activities, and are likely to be there for prolonged periods of time, and be present in high numbers, particularly on weekends. The moderate to long range view of the site provides a sweeping panorama across Rozelle Bay comprising an extensive water element of the view. The wider view includes a diverse range of features including Anzac Bridge, the Glebe Island grain silos, and the White Bay Power Station in the foreground, and the residential tower blocks at Pyrmont, and highly modulated backdrops of parts of Rozelle and Balmain seen through the middle to background of the view. Within the context of existing tall infrastructure in the view, the sensitivity of visual receptors to the project is considered to be High.	The magnitude of change is considered to be Moderate given the works would take place on what is currently a derelict site that provides poor visual amenity both in terms of the derelict condition of the site and the busy transport corridors which are adjacent to it. The works would take place in close proximity to the park, and notwithstanding upkeep of hoardings the site would comprise an obvious construction compound within which loading and unloading of materials would be likely to be visible, and the duration of viewing would potentially be High. However, the compound would not obstruct key features, and comprise a relatively small element within the broader view.	High– Moderate



6.10 Victoria Road civil site (C7)

The Victoria Road civil site (C7) would be located on the western side of Victoria Road between Quirk Street and Lilyfield Road on land occupied by commercial properties. A detailed description of this construction ancillary facility is provided in **Chapter 6** (Construction work) of the EIS. An indicative construction site layout for the Victoria Road civil site is shown in **Figure 6-9**.

The existing buildings and other structures on the site would be demolished to facilitate establishment of temporary site offices, a laydown area, workforce amenities and car parking. Representative receptor locations have been identified as described in **Table 6-16** and shown in **Figure 6-9**. A night time lighting impact assessment has not been undertaken for this site as it will operate during standard daytime construction hours only.

Table 6-16 Victoria Road civil site visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C7-1 Residents – Lilyfield Road Provides a representative view for residents on Lilyfield Road.	Lilyfield Road curves towards the construction ancillary facility which limits some views of the construction site from residences that front this street. Some houses may have direct views from verandahs such as those around Denison Street which are oriented to the south towards the site whereas other homes, particularly those oriented to the east and west, would likely have oblique views. However, views towards this location currently focus on Victoria Road and the existing commercial building, comprising an immediate environs view of low quality. The sensitivity of these nearby receptors is therefore considered to be Moderate.	There is currently an existing two-storey, warehouse style commercial building located at the construction site on the corner of Lilyfield Road which has no setbacks. This would be demolished and replaced with temporary site offices, a laydown area, workforce amenities and car parking, fencing and hoarding. However, the extent of visibility of the change would be relatively low given the long frontage to Victoria Road, and the project would not be expected to further obstruct views from residences. Within this context the magnitude of the visual impact would be Moderate.	Moderate
C7-2 Residents – Hornsey Street and Quirk Street Provides a representative view for residents on Hornsey Street and Quirk Street.	The topography slopes down towards the site along these two streets. This would mean a number of residents would have views across the construction site, albeit an oblique view. The exception to this would be the seven storey apartment building immediately adjoining the construction site at the corner of Hornsey Street. The mid and upper levels of this building that face east and south would all have views down to and across the construction site from front living areas and verandahs. The sensitivity of these nearby receptors is therefore considered to be High.	There is currently a commercial building with shop top housing and rooftop parking located at the construction site on the corner of Hornsey Street, which has no setbacks. This would be demolished and replaced with temporary site offices, a laydown area, workforce amenities and car parking, fencing and hoarding. The site would be subject to extensive overlooking from residences. Within this context the magnitude of the visual impact would be High.	High
C7-3 Motorists – Victoria Road	Provides representative views for motorists using Victoria Road and the local roads for Lilyfield, Hornsey and Quirk Streets. The sensitivity of motorists to change is considered to be Low due to the relatively short period of time elements of the civil site would be visible within the context of their overall trip and the focus of the driver on the activity of driving.	Temporary site offices, workforce amenities and car parking would potentially be seen above fencing and hoarding. These would replace the existing landscape of two storey commercial premises. The magnitude of change is therefore considered to be Low.	Low



6.11 Iron Cove Link civil site (C8)

The Iron Cove Link civil site (C8) would be located along the southern side of Victoria Road at Rozelle between Byrnes Street and Springside Street.

The site would be located on land currently occupied by Victoria Road and residential and commercial properties which are to be acquired to the south. The site would be mainly used to support the construction of tunnel entry and exit ramps that would connect Victoria Road with the Iron Cove Link, and the widening of Victoria Road. The site may be used to support limited excavation of the initial sections of the Iron Cove Link tunnels.

Key construction activities to be carried out at the Iron Cove Link civil site would include:

- Vegetation clearing and removal
- Demolition of existing structures including residential and commercial buildings that have been acquired, and clearing of vegetation
- Establishment of site offices, amenities and temporary infrastructure including temporary noise barriers
- Utility, drainage and road treatments
- Stockpiling of material and limited spoil haulage
- Construction of the Iron Cove Link motorway operations complex (MOC4) and ventilation facility
- Construction of the bioretention facility and improved car park works at King George Park (adjacent to Manning Street).

A detailed description of this construction ancillary facility is provided in **Chapter 6** (Construction work) of the EIS. An indicative construction site layout for the Iron Cove Link civil site is shown in **Figure 6-10**.

The site would include temporary site offices, a workshop and storage facilities, sediment basin and construction water treatment plant, a temporary substation, workforce amenities and car parking. Heavy and light vehicles would enter and exit the site to and from the southern (westbound) Victoria Road carriageway.

The westbound pedestrian and cyclist route along the southern side of Victoria Road would be temporarily relocated during construction. Following the completion of construction, the pedestrian and cyclist network would be reinstated. During construction, a small section of King George Park adjacent to Iron Cove Bridge would be used to support the widening works along Victoria Road. A section of The Bay Run would be temporarily realigned to ensure pedestrian and cycle connectivity with the Iron Cove Bridge is retained, and the existing arrangement would be reinstated at the completion of construction.

Representative receptor locations have been identified and are detailed in **Table 6-17** and shown in **Figure 6-10**. A night time lighting impact assessment has not been undertaken for this site as they will be carried out during standard daytime construction hours.

Table 6-17 Iron Cove Link civil site visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C8-1 Recreational users – King George Park Provides a representative view for recreational users of King George Park.	The construction of a bioretention facility and car park in Manning Street and proposed temporary changes to the Bay Run, which is well known for its exceptional views, would have a high number of receptors associated with recreational users who use the Bay Run and King George Park. These receptors would view the site over relatively short periods of time. Within this context, the sensitivity of this receptor is considered to be Moderate.	The bioretention facility and car park works area would be subject to limited screening by a row of mature trees. Users of the Bay Run would have views to the site, albeit only in passing. Users of the play equipment at the north- western edge of the park would have closer views and these are likely to be over longer periods. The fences and hoarding would constitute a noticeable visual change, although the footprint for this work would be relatively minor. The duration of the works for the bio retention facility and car park would be relatively low, over a period of months, whereas the works adjoining the Iron Cove Bridge would be in place over a period of years. Within this context, the magnitude of change from of the project is considered to be Moderate.	Moderate
C8-2 Pedestrians and cyclists – path across Iron Cove Bridge Provides a representative view for pedestrians using the footpath across Iron Cove Bridge heading south-east towards the project.	The sensitivity of the receptor to this change would be considered to be Low given the bulk of the civil construction ancillary facility is set within the Victoria Road corridor which is already of low visual quality, the view is not an important one within the context of the Bay Run, and is seen for a relatively short period of time as part of a much longer, scenic journey. The primary receptors impacted would be pedestrians and cyclists travelling in an eastbound direction	The bridge would provide an elevated viewing location to the construction works, although seen at distance. Viewing times would be short in duration but would be in high contrast to the existing view The magnitude of change is considered to be High given the scale of the construction ancillary facility in conjunction with temporary noise barriers, fences and hoarding.	Moderate
C8-3 Pedestrians – footpath near Byrnes Street	Provides a representative view for pedestrians using the path to King George Park from Victoria Road, adjacent to Byrnes Street. The sensitivity of the receptor at this location would be Low.	The magnitude of change would be moderate given the proximity to the construction ancillary facility. However, from this location potentially little of the overall construction ancillary facility would be visible above the hoarding.	Moderate– Low

Receptor	Sensitivity	Magnitude	Rating
C8-4 Residents – Callan Street, Springside Street, Toelle Street and Clubb Street Provides a representative view for residences on the southern side of Victoria Road.	The sensitivity of residents closer to Victoria Road is considered likely to be High given their proximity to the construction site and the duration of the construction period. The streets to the south of Victoria Road all slope down towards King George Park, restricting views for residents further south. Those residents located closer to Victoria Road however have relatively unobstructed views to the construction site.	Existing buildings along Victoria Road would be demolished as part of the construction works. The demolition of these structures and construction of larger elements such as the ventilation facility, ventilation outlet, and substation, in conjunction with temporary noise barriers/hoarding would constitute a High magnitude of visual impact.	High.
C8-5 Residents – Nagurra Place, Terry Street and Victoria Road Provides a representative view for apartments on Nagurra Place and Terry Street with views to Victoria Road.	A six storey apartment complex is located within three separate buildings and has frontages to Nagurra Place, Warayama Place and Terry Street. As the topography slopes down towards Victoria Road, the upper south facing levels have windows and balconies with views to Iron Cove, the parklands and toward the construction site. The sensitivity of these residents, particularly at the upper levels, is considered to be Moderate, given the open views to much of the construction activities.	The construction area would comprise a relatively small portion of the overall view available to these residents, which is currently of low amenity due to the busy road environment of the Victoria Road corridor and the associated industrial/commercial built form. The view from these residences would comprise more distant district views including the historic hilltop Callan Park Kirkbride building complex, and parts of Iron Cove. Within this context, the magnitude of change is considered to be Moderate	Moderate
C8-6 Motorists – Victoria Road Provides representative views for motorists driving on Victoria Road.	The sensitivity of motorists is considered to be Low due to the relatively short period of time the civil site would be visible within a longer journey, the driver's attention being focused on the road, and the existing low amenity character of Victoria Road.	The magnitude of change is considered to be Moderate given the extent of the Victoria Road corridor that would be subject to works, and the construction duration.	Moderate- Low



6.12 Pyrmont Bridge Road tunnel site (C9)

The Pyrmont Bridge Road tunnel site (C9) would be located between Parramatta Road and Pyrmont Bridge Road at Annandale on land that currently comprises commercial and industrial businesses (which are to be acquired). The construction ancillary facility would be mainly used to support tunnelling construction activities.

The site would include temporary site offices, a workshop and storage facilities, a laydown area, entry and exit points for construction traffic, a temporary substation, temporary ventilation for the tunnels, a temporary water treatment plant and sediment pond, workforce amenities and car parking. Spoil handling associated with the tunnelling works supported by the site would occur 24 hours a day, seven days a week. Where practical, spoil would be handled below ground and removed during the day, outside of peak periods. A detailed description of this construction ancillary facility is provided in Chapter 6 (Construction work) of the EIS. An indicative construction site layout for the Pyrmont Bridge Road tunnel site is shown in **Figure 6-11**.

Representative receptor locations have been identified as described in **Table 6-18** and shown in **Figure 6-11.** Night lighting impacts are detailed in **Table 6-19**.

6.12.1 Visual impacts

Table 6-18 Pyrmont Bridge Road tunnel site visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C9-1 Residents – Pyrmont Bridge Road Provides a representative view for residences on Pyrmont Bridge Road.	There are two rows of terraces adjoining and adjacent to the site to the south and north of Pyrmont Bridge Road respectively. The residences that adjoin the construction site currently back onto a large industrial style building, (separated by Bignell Lane) and adjoin a large warehouse building to the west. The residences on the northern side of Pyrmont Bridge Road overlook the residential terraces and the warehouse building on the opposite side of the road. While these residents are in close proximity to the construction site and would potentially have views to it from within the residences, the current commercial/industrial land uses and frontage to busy Pyrmont Bridge Road comprise a landscape of relatively low amenity. The sensitivity of these nearby residents to the proposed change is therefore considered to be Moderate.	The extent of visibility of the construction site, ancillary works and construction traffic would be high and would be in close proximity. However, the duration of viewing would generally be low. The demolition of the warehouse building (as well as others adjoining it), construction of an acoustic shed, and the presence of temporary noise barriers, fences and hoarding would comprise a contrasting view to the existing. Within this context, the magnitude of change is considered to be High.	High– Moderate
C9-2 Residents – Booth Street and Mallett Street Provides a representative view for residences on the eastern side of Booth Street and Mallett Street.	Two apartment buildings are located near the construction site on the northern and southern sides of the intersection of Booth Street/Mallett Street and Pyrmont Bridge Road. The buildings are around 15 storeys high (Booth Street) and about five to six storeys high (Mallett Street) respectively. Both buildings have balconies and windows that overlook the site, the mid to upper levels of which would be have views across Mallett Street and intervening buildings to the construction site. Due to their elevated position and view of the site, the sensitivity of receptors at this location is therefore considered to be High.	The extent of the of the project visible from this receptor would generally be high. The view of the project would primarily affect the lower floors of the 15 storey building and up to the mid floors of the six storey building, with the project comprising a primary part of the view. However, the primary aspect of the 15 storey building is west, looking past the construction site which is to the south-west. The number of most affected residences would therefore be relatively low. Within this context, the magnitude of change is considered to be Moderate.	High– Moderate

Receptor	Sensitivity	Magnitude	Rating
C9-3 Motorists – Parramatta Road Provides representative views for motorists driving on Parramatta Road.	The sensitivity of motorists is considered to be Low due to the relatively short period of time the civil site would be visible within the context of their overall trip, and also as the driver's attention would be focused on the road.	Temporary noise barriers, fences and hoarding as well as facilities such as an acoustic shed would replace the existing view of two to three storey commercial premises. The magnitude of change is therefore considered to be Low.	Low
C9-4 Residents – Parramatta Road Provides a representative view for residences on south side of Parramatta Road.	Two apartment buildings are located near the construction site on the southern side of Parramatta Road. The buildings are four storeys and six storeys high respectively. The four storey building is located opposite the site with windows and balconies facing north toward it, but there is a low number of affected apartments. The six storey building is located a block to the west and has some side windows that face toward the construction site, however the apartments are primarily oriented north (away from the site), and has a higher number of affected apartments. On balance, the sensitivity of these receptors is considered to be Moderate.	Currently views at the location comprise a relatively consistent height two storey frontage of commercial buildings. The provision of hoarding and an acoustic shed would comprise a high level of contrast with the existing view. Views to the project would primarily affect the residences opposite with their balconies facing it, and comprising their primary view. The number of most affected residences would therefore be relatively low. Within this context, the magnitude of change is considered to be Moderate.	Moderate

6.12.2 Night lighting impacts

The visual setting of the construction ancillary facility includes lighting associated with Parramatta Road and Pyrmont Bridge Road as large arterial roads, local streets, related traffic and illuminated windows of the residential and commercial properties.

Lighting during construction would occur when necessary to support tunnelling and would be associated with the acoustic shed, temporary site offices, a workshop and storage facilities, a laydown area, entry and exit points for construction traffic, workforce amenities and car parking. Lighting would be designed to minimise light spill, which would reduce the amount of light trespass onto adjoining residential properties.

Receptor	Sensitivity	Magnitude	Rating
C9-1 Residents – Pyrmont Bridge Road Provides a representative view for residences on Pyrmont Bridge Road.	The terrace houses on both sides of the road are located within a relatively low lit setting compared with high light setting of Parramatta Road. A low to moderate number of residents would be expected to be affected by the project. The project would be in place for up to five years. Most of the night time activity associated with these residences would be expected to be focussed indoors. Within this context the sensitivity to increased night lighting arising from the project is considered to be Low	Visibility of night lighting from this receptor is considered likely to be low given the much of it within the compound will be shielded / well directed or within buildings such as the acoustic shed. Much of the lighting would be expected to come from spoil removal trucks which would not enter and leave the site via Mallett Street. Within this context the magnitude of increased night lighting arising from the project and affecting this receptor is considered to be Low.	Low-
C9-2 Residents – Booth Street and Mallett Street Provides a representative view for residences on the eastern side of Booth Street and Mallett Street.	Given the district and regional views available from many of these dwellings, night viewing from balconies would be expected to occur. Many of these residents would have views into the project site, but these would in most cases not be expected to generally be the focus of viewing, which would be expected to look above the site to the more distant and regional highly lit night-time setting. Notwithstanding, a high number of residents would have views looking into the site, with the project in place for up to five years. Within this context the sensitivity to increased night lighting arising from the project is considered to be Moderate.	The magnitude of lighting impacts is considered to be Low given that although a large number of surrounding residents in apartment buildings would overlook the site, this would be within the context of a brightly lit night-time landscape, including Parramatta Road	Moderate- Low

Receptor	Sensitivity	Magnitude	Rating
C9-3 Motorists – Parramatta Road Provides representative views for motorists driving on Parramatta	The sensitivity of motorists is considered to be Low due to the relatively short period of time the civil site would be visible within the context of an overall trip, and also as the driver's attention would be focused on the road.	Lighting within the construction ancillary facility would primarily be shielded from this receptor group by hoarding and the acoustic shed. The magnitude of change is therefore considered to be Low.	Low
Road.			
C9-4 Residents – Parramatta Road	The key residential receptors comprise those within the apartment building opposite the project. These receptors	Within the context of the highly lit Parramatta Road with associated glare, the degree of contrast with the existing	Low
Provides a representative view for residences on the south side of Parramatta Road.	moderate to heavy traffic volumes. The quality of this existing view is considered to be low, with the number of residents able to access this view likely to be moderate to low. Within this context, the sensitivity of the residents is considered to be Low.	magnitude of lighting impacts arising from the project is considered to be Low	



6.13 Campbell Road civil and tunnel site (C10)

The Campbell Road civil and tunnel site (C10) would be located within the St Peters interchange site on the southern side of Albert Street and Campbell Road in St Peters. The Campbell Road civil and tunnel site would use land that is being used as a construction site for the New M5 project. This land would be handed over to the project in a staged manner once it is no longer needed for New M5 construction. An additional area at the eastern end of the Campbell Road civil and tunnel site would be made available in 2020, following the completion of the use of this area for construction of the New M5 project.

The site would be used to support tunnelling and for construction of the Campbell Road motorway operations complex (MOC5) including the Campbell Road ventilation facility. On completion of construction, the remainder of the site would be rehabilitated and landscaped in accordance with the UDLP for the New M5 project.

The construction site would include temporary site offices, a workshop and storage facilities, a laydown area, entry and exit points for construction traffic, a temporary substation, temporary ventilation for the tunnels, a temporary water treatment plant and sediment pond, workforce amenities and car parking. Spoil handling associated with tunnelling work supported by the site would occur 24 hours a day, seven days a week. A detailed description of this construction ancillary facility is provided in **Chapter 6** (Construction work) of the EIS. An indicative construction site layout for the Campbell Road civil and tunnel site is shown in **Figure 6-12**.

These uses represent a significant downgrade from the use of the site for the New M5 project both in terms of footprint and intensity of construction activity. The landscape and visual impact assessment for the New M5 construction site found that:

- For residents at Campbell Road, the overall visual impact rating during construction would be High or Moderate
- For active and passive recreation at Sydney Park, the overall visual impact rating during construction would be High-Moderate
- For residents at Barwon Park Road, the overall visual impact rating during construction would be High.

Chapter 13 of the New M5 EIS provides further details regarding the assessment.

Given the existing environment (including land uses), construction activities and construction footprint has changed since this initial assessment; a new assessment based on the current environment and new construction ancillary facility specifications has been carried out and is detailed in **Table 6-20**.

For an assessment of the cumulative impacts of the two consecutive construction projects, please refer to **section 8.1**.

Representative receptor locations have been identified as described in **Table 6-20** and shown in **Figure 6-12.** Night lighting impacts are detailed in **Table 6-21**.

6.13.1 Visual impacts

Table 6-20 Campbell Road civil and tunnel site visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C10-1 Residents – houses on Campbell Street adjacent to the western end of the project site. Provides a representative view for the row of houses (predominately terraces) on the northern side of Campbell Street adjacent the western end of the project site.	The location of these residences is obliquely opposite the project with potential views available from within these dwellings. Residents would obtain daily views of the project as they left and returned to their homes. The number of residential receptors would potentially be high. Within this context, the sensitivity of residents to the project is considered to be High.	Currently housing along Campbell Street has views to the New M5 construction site. The receptors existing view is therefore one of very low amenity. The construction of an acoustic shed, ventilation facility and associated infrastructure as part of the M4-M5 Link project would be likely to result in a significant change of the existing view. At its closest point, the residences would be about 70 metres from the project, across Campbell Street and Albert Street. The magnitude of change is therefore considered to be High.	High
C10-2 Residents – corner of Barwon Park Road and Campbell Street Provides a representative view for residences on Barwon Park Road near the project site.	A four storey building is located opposite the construction site on the corner of Barwon Park Road, the top storey of which is set back from Barwon Park Road. The front of the building faces east on to Barwon Park Road and Sydney Park opposite. However, the building also has angled views to the south east toward part of the construction site. There appear to be no living area windows on the south side of the apartment building, and therefore no sensitive direct views from the four apartments adjoining at the south end wall of the building. Nonetheless, the number of affected residents would be high, with the project in place for a period of up to five years. Within this context, the sensitivity of receptors at this location is considered to be High.	The construction of an acoustic shed, ventilation facility and associated infrastructure as part of the M4-M5 Link project would be likely to result in increased visual prominence of construction elements as viewed from the opposite side of Campbell road. However, direct views to these construction elements would be primarily angled views as a result of the orientation of the apartment building to the east. The magnitude of change for this receptor is therefore considered to be Moderate.	High– Moderate

Receptor	Sensitivity	Magnitude	Rating
C10-3 Pedestrians – Campbell Road Provides representative views for pedestrians walking past the site.	Local residents would likely view the site as they walk to and from Sydney Park and other nearby locations. As these views would only be experienced in passing and as construction elements would be partially obscured by fencing and hoarding, it is considered that the sensitivity of these receptors is Moderate.	Pedestrians would have the option of travelling on the north side of Campbell Street/Road separated from the construction site. Pedestrians would also be at street level and so their views into the site would be screened to some degree by hoardings around the perimeter of the site. The magnitude is therefore considered to be Low.	Moderate– Low
C10-4 Residents – terraces on Campbell Road adjacent to the eastern end of the project site. Provides a representative view for the row of terraces on the northern side of Campbell Road adjoining Sydney Park.	At completion of the New M5 project in 2020, an avenue of trees would have been planted to both sides of Campbell Road, which would over time partially screen the M4-M5 Link construction works area. However, as the construction site is scheduled to commence begin late 2018, no significant level of vegetative screening from the New M5 project is likely to be in place for some years after that date. Residents would therefore have direct visibility from south facing windows and balconies towards the construction site. The area opposite these dwellings would comprise a materials laydown and construction worker car park set behind a tall hoarding. The sensitivity of residents is considered to be High.	At the time of writing, the terraces have views to the New M5 construction site which includes fencing and hoarding, an acoustic shed, site offices and large mounds of soil. Additionally, as part of the New M5 project Campbell Road would be subject to major upgrading works, extending to the front boundary of the residential lots, and along the length of Campbell Street/Campbell Road. The receptors at this location would still be in relatively close proximity to the site, with views from living areas, bedrooms and balconies in the front of the house and front garden to the construction site located opposite. However, the main construction facilities would be located around 150 metres west of these dwellings, viewed at an oblique angle, and above the construction hoarding. Within this context the magnitude of change is considered to be Moderate.	High– Moderate
C10-5 Motorists – Campbell Road Provides representative views for motorists driving on Campbell Road.	The sensitivity of motorists is considered to be Low due to the relatively short period of time the construction site would be visible within the context of their overall trip, and also as the driver's attention would likely be focused on the road.	Temporary noise barriers, fences and hoarding as well as acoustic shed and construction of ventilation facilities would be visible, replacing the existing New M5 construction site. The magnitude of change is therefore considered to be Low.	Low

6.13.2 Night lighting impacts

Lighting during construction would occur when necessary and would be associated with site offices, a workshop and storage facilities, a laydown area, entry and exit points for construction traffic, workforce amenities and car parking. Fixed lighting would be designed to minimise light spill, which would reduce the amount of light spill onto adjoining residential properties.

Table 6-21 Campbell Road civil and tunnel site night lighting visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
C10-1 Residents – houses on Campbell Street adjacent to the western end of the project site. Provides a representative view for the row of houses (predominately terraces) on the northern side of Campbell Street adjacent the western end of the project site.	The location of these residences is obliquely opposite the project. As outlined in section 5.1.3 , residents would have high levels of visibility to the construction site during the construction period from the likely location of main living areas and bedrooms as well as views experienced when entering and leaving the residences. The number of residential receptors would potentially be high. However, in most cases residents would be considered likely to be focussed on activities within their homes at night. The project would be ongoing for up to five years. On balance, the sensitivity of residents to night lighting from the project is considered to be Low	Residences would be subject to existing lighting impacts associated with the completed New M5 project, specifically the surface road upgrade of Campbell Street. This would be expected to cause some reduction in the visual prominence of lighting from the construction site. Further, given the high to moderate traffic levels along Campbell Street, the duration of viewing towards the project from the ground floor living areas would likely be limited. Within this context, the magnitude of change is therefore considered to be Low.	Low
C10-2 Residents – corner of Barwon Park Road and Campbell Street Provides a representative view for residences on Barwon Park Road near the project site.	A four storey residential apartment building is located on the corner of Barwon Park Road opposite the south-west corner of Sydney Park. In most cases residents would be considered likely to be focussed on activities within their homes at night, particularly given Sydney Park is largely unlit. The project would be in place for a period of about five years, with the number of affected residents being high. Within this context, the sensitivity of receptors at this location is considered to be Moderate	The front of the building faces east to Barwon Park Road and Sydney Park opposite. However, the apartments are orientated south east towards the construction site. Views would incorporate the completed New M5 Campbell Street / Road upgrade which would be subject to potentially high levels of street lighting commensurate with a substantial transport artery. This would be expected to cause some reduction in the visual prominence of lighting from the construction site. Within this context, the magnitude of change is therefore considered to be Low.	Moderate- Low

Receptor	Sensitivity	Magnitude	Rating
C10-3 Pedestrians – Campbell Road Provides representative views for pedestrians walking past the site	Local residents would likely view the site as they walk to and from Sydney Park and other nearby locations. As these views would only be experienced in passing and as lighting would be generally obscured by fencing and hoarding, it is considered that the sensitivity of these receptors is Low.	Pedestrians would have the option of travelling on the north side of Campbell Street / Road separated from the construction site. Pedestrians would also be at street level and so their views into the site would be screened to some degree by hoardings around the perimeter of the site. The magnitude is therefore considered to be Low	Low
C10-4 Residents – terraces on Campbell Road adjacent to the eastern end of the project site. Provides a representative view for the row of terraces on the northern side of Campbell Road adjoining Sydney Park.	No significant level of vegetative screening from the New M5 project is likely to be in place for the majority of the construction period and so a small number of residents would therefore have visibility towards the construction site. The area opposite these dwellings would comprise a materials laydown and construction worker car park set behind a tall hoarding. Notwithstanding, the sensitivity of residents is considered to be High.	The receptors at this location are in close proximity to the site, with views from living areas, bedrooms and balconies in the front of the house and front garden. Currently, the housing has views to the New M5 construction site. Within this context, the magnitude of change is therefore considered to be Moderate.	High– Moderate
C10-5 Motorists – Campbell Road Provides representative views for motorists driving on Campbell Road.	The sensitivity of motorists is considered to be Low due to the relatively short period of time the civil site would be visible within the context of their overall trip, and also as the driver's attention would be focused on the road.	Given the current use as the New M5 construction site, the magnitude of change is considered to be Low.	Low



6.14 Summary of visual impacts during construction

6.14.1 Construction visual impacts

A summary of the construction visual impact assessments for the relevant receptor groups impacted by the project is provided below in **Table 6-22**. Mitigation measures for the Moderate and High impact areas are outlined in **Chapter 9**.

Table 6-22 Summary of construction visual impacts

	Receptor	Sensitivity to change	Magnitude of change	Overall rating	Sensitivity to change	Magnitude of change	Overall rating		
		Construction			Night lighting				
Wattle	e Street civil and tunnel site (C1a)								
1	Religious congregation – Wattle Street	Low	Moderate	Moderate-Low	Low	Low	Low		
2	Residents – Wattle Street, Walker Avenue and Ramsay Street	High	Moderate	High–Moderate	Low	Moderate	Moderate-Low		
3	Motorists on Wattle Street, Ramsay Street and Parramatta Road	Low	Low	Low	Low	Low	Low		
4	Pedestrians – Wattle Street, Walker Avenue, Ramsay Street and Parramatta Road	Low	Low	Low	Low	Low	Low		
Haberfield civil and tunnel site (C2a)									
1	Motorists – Wattle Street, Walker Avenue and Parramatta Road	Low	Low	Low	Low	Low	Low		
2	Religious congregation – Wattle Street	Low	Moderate	Moderate-Low	Low	Moderate	Moderate-Low		
3	Residents – Wattle Street and Walker Avenue	High	Moderate	High–Moderate	Low	Moderate	Moderate-Low		
4	Pedestrians – Wattle Street, Walker Avenue and Parramatta Road	Low	Moderate	Moderate-Low	Low	Low	Low		
	Receptor	Sensitivity to change	Magnitude of change	Overall rating	Sensitivity to change	Magnitude of change	Overall rating		
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North	Northcote Street civil site (C3a)								
1	Religious congregation – Wattle Street	Low	Low	Low	Low	Low	Low		
2	Motorists – Wattle Street, Parramatta Road	Low	Moderate	Moderate-Low	Low	Low	Low		
3	Residents – Wattle Street, Northcote Street, Wolseley Street, Parramatta Road	Moderate	Moderate	Moderate	Low	Moderate	Moderate-Low		
4	Pedestrians – Wattle Street, Northcote Street, Wolseley Street, Parramatta Road, Page Avenue, Earle Avenue, Frederick Street	Low	Low	Low	Low	Low	Low		
Parra	matta Road West civil and tunnel site	(C1b)			- -				
1	Residents – Alt Street, Bland Street and Parramatta Road	High	High	High	Low	Moderate	Moderate-Low		
2	Motorists on Alt Street, Bland Street and Parramatta Road	Low	Moderate	Moderate-Low	Low	Low	Low		
3	Pedestrians – Alt Street, Bland Street and Parramatta Road	Low	Moderate	Moderate-Low	Low	Low	Low		
Parra	matta Road East civil site (C3b)				-				
1	Motorists – Alt Street, Bland Street and Parramatta Road	Low	Moderate	Moderate-Low	Low	Low	Low		
2	Residents – Alt Street, Bland Street and Parramatta Road	Moderate	Moderate	Moderate	Low	Moderate	Moderate-Low		
3	Pedestrians – Alt Street, Bland Street and Parramatta Road	Low	Low	Low	Low	Low	Low		

	Receptor	Sensitivity to change	Magnitude of change	Overall rating	Sensitivity to change	Magnitude of change	Overall rating
Darley Road civil and tunnel site (C4)							
1	Pedestrians – Darley Road, City West Link pedestrian bridge	Low	Low	Low	Low	Low	Low
2	Motorists – Darley Road	Moderate	Low	Moderate-Low	Low	Low	Low
3	Residents – Darley Road, Charles Street, Hubert Street (south of Darley Road), Francis Street (south of Darley Road) and James Street	High	High	High	High	Moderate	High-Moderate
4	Light rail users – Leichhardt North light rail stop	Low	High	Moderate	Low	Moderate	Moderate-Low
Rozel	e civil and tunnel site (C5)						
1	Motorists – City West Link	Moderate	Moderate	Moderate	Low	Moderate	Moderate-Low
2	Residents – Foucart Street and Cecily Street	High	High	High	Moderate	Moderate	Moderate
3	Residents – Lilyfield Road near Denison Street	High	High	High	High	High	High
4	Residents – Breillat Street, Annandale	Moderate	Low	Moderate-Low	Low	Low	Low
5	Recreational users – Easton Park	Moderate	High	High–Moderate	Low	High	Moderate
6	Recreational users – Glebe Foreshore Parklands	High	Moderate	High-Moderate	Low	Low	Low
The C	rescent civil site (C6)						
1	Residents – Bayview Crescent and Johnston Street	High	High	High	NA	NA	NA
2	Motorists – The Crescent	Low	Moderate	Moderate-Low	NA	NA	NA
3	Recreational users – Rozelle Bay	Moderate	Moderate	Moderate	NA	NA	NA
4	Recreational users – Glebe Foreshore Parklands	High	Moderate	High–Moderate	NA	NA	NA

	Receptor	Sensitivity to change	Magnitude of change	Overall rating	Sensitivity to change	Magnitude of change	Overall rating
Victor	ia Road civil site (C7)						
1	Residents – Lilyfield Road	Moderate	Moderate	Moderate	NA	NA	NA
2	Residents – Hornsey Street and Quirk Street	High	High	High	NA	NA	NA
3	Motorists – Victoria Road	Low	Low	Low	NA	NA	NA
Iron C	ove Link civil site (C8)						
1	Recreational users – King George Park	Moderate	Moderate	Moderate	NA	NA	NA
2	Pedestrians – footpath across Iron Cove Bridge	Low	High	Moderate	NA	NA	NA
3	Pedestrians – footpath near Byrnes Street	Low	Moderate	Moderate-Low	NA	NA	NA
4	Residents – Callan Street, Springside Street, Toelle Street and Clubb Street	High	High	High	NA	NA	NA
5	Residents – Nagurra Place, Terry Street and Victoria Road	Moderate	Moderate	Moderate	NA	NA	NA
6	Motorists – Victoria Road	Low	Moderate	Moderate-Low	NA	NA	NA
Pyrmo	ont Bridge Road tunnel site (C9)						
1	Residents – Pyrmont Bridge Road	Moderate	High	High-Moderate	Low	Low	Low
2	Residents – Booth Street and Mallett Street	High	Moderate	High–Moderate	Moderate	Low	Moderate-Low
3	Motorists – Parramatta Road	Low	Low	Low	Low	Low	Low
4	Residents – Parramatta Road	Moderate	Moderate	Moderate	Low	Low	Low

	Receptor	Sensitivity to change	Magnitude of change	Overall rating	Sensitivity to change	Magnitude of change	Overall rating
Camp	bell Road civil and tunnel site (C10)						
1	Residents – houses on Campbell Street adjacent to the western end of the project site.	High	High	High	Low	Low	Low
2	Residents – corner of Barwon Park Road and Campbell Street	High	Moderate	High-Moderate	Moderate	Low	Moderate-Low
3	Pedestrians – Campbell Road	Moderate	Low	Moderate-Low	Low	Low	Low
4	Residents – terraces on Campbell Road adjacent to the eastern end of the project site.	High	Moderate	High–Moderate	High	Moderate	High-Moderate
5	Motorists – Campbell Road	Low	Low	Low	Low	Low	Low

7 Assessment of operational impacts

7.1 Impacts avoided through design

The project has gone through a process of design development and refinement resulting in the concept design that is presented within the EIS. The concept design has been developed to avoid or minimise impacts where possible, including:

- The majority of road infrastructure is located below ground
- The Rozelle interchange was moved mostly underground, reducing visual impacts associated with at grade and above ground motorway connections and facilitating the provision of open space including two major north south pedestrian / cycle crossing points of City West Link, connecting Lilyfield with Rozelle and one east west pedestrian / cycle connection under Victoria Road, with potential for future connection to The Bays Precinct
- Proposed ramps on Parramatta Road at Camperdown (the Camperdown interchange) were removed from the project which avoided visual impacts in a heritage sensitive area adjacent to the University of Sydney and Victoria Park
- Development of urban design master plans for Rozelle and Iron Cove, to guide future creation of landscaping and open space. Development of the landscaping and open space would be subject to UDLP as part of the detailed design of the project
- Relocation of proposed construction sites to avoid construction impacts to Easton Park, Blackmore Oval and Sydney Secondary College (Leichhardt)
- Revised design in the area east of Victoria Road to reduce land take surrounding the White Bay Power Station which is a State heritage listed item
- Re-use of existing construction sites from the M4 East and New M5, to avoid further property acquisitions in those areas
- Use of the M4 East and New M5 mainline tunnels (when open to traffic) to remove/reduce spoil haulage from the surface road network where possible
- Where feasible, ventilation facilities have been located to provide reasonable separation distance to the closest sensitive receivers (at Rozelle, Iron Cove and St Peters).

7.2 Landscape character impact assessment

This section assesses impacts of the project on the landscape character zones described in **section 5.3**, which have been identified in those areas that have the potential to be impacted by the surface components of the project both directly and indirectly, during operation. This assessment therefore focuses on sites containing permanent operational infrastructure within the central west, central east, northern and southern landscape character zones. The project elements described within this section would be further developed through the detailed design.

7.2.1 Central west landscape character zones

A total of three landscape character zones have been identified for the Darley Road motorway operations complex (MOC1). Refer to **Chapter 5** (Project description) of the EIS for full description of the infrastructure proposed as part of the Darley Road motorway operations complex (MOC1).

LCZ 1 – Darley Road residential precinct

Project effects

The project adjoins part of the northern boundary of the Darley Road residential precinct. The key effects of the project on this LCZ would be:

• The loss of the large 'warehouse' building, revealing an existing retaining wall to the elevated light rail corridor

- The addition of a smaller group of project buildings and associated infrastructure elements (water treatment plant and substation), security fencing and vehicle access and parking to the western end of the site forming the motorway operations complex, in conjunction with low landscaping and street trees to the Darley Road frontage
- The disturbed areas on the remaining part of the site which are not used for permanent operational infrastructure would be rehabilitated for future development/use. These areas are termed remaining project land and would be subject to the Residual Land Management Plan.

Desired future character	Assessment
The desired future character for this LCZ as detailed in the Leichhardt DCP 2013 (LDCP 2013) and is set out for a broader precinct (Helsarmel Estate precinct) which includes preserved and enhanced views (both of city landmarks and local features), enhanced and encouraged landscaping in the front building setbacks and potentially higher density development along Darley Road.	The proposed operational elements such as the water treatment facility and associated fencing would be located outside of this LCZ and would not impact its desired future character.

Landscape character impact assessment

	Table 7-1 LCZ 1 – Darley Ro	oad residential precinct	landscape character assessment
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Sei	nsitivity	Ма	gnitude	Rating
The res cor folle	e sensitivity of the Darley Road idential precinct to the project is isidered to be Low due to the owing:	Th pro foll	e magnitude of change arising from the oject is considered to be Low due to the owing:	Low
•	The landscape comprises generally	•	The project is abutting part of one edge of the residential LCZ	
•	well presented, predominantly Federation/post-war period housing on small lots, with wide tree lined streets, and is considered to have a high to moderate local level of value The project is considered to have a high capacity for absorption within the landscape, given the relationship with the adjoining elevated light rail corridor and City West Link and the separation to the adjacent residential precinct provided by Darley Road.	•	The existing large-scale warehouse building and existing trees will be removed and replaced by the water treatment plant which would be of different built form but of overall smaller scale The addition of the motorway operations complex comprising a water treatment plant and associated infrastructure elements is broadly congruent with the scale and to a lesser extent the form of LCZ 1	
	· · · · · ·	•	Operational infrastructure at the site would be viewed against the backdrop of the elevated light rail corridor and landscaping of its embankment.	

LCZ 2 – Darley Road commercial precinct

Project effects

The key effects of the project on the Darley Road commercial precinct would comprise:

- The removal of trees in the eastern portion of the site and removal of the large 'warehouse' building and parking. The remaining disturbed part of the site not required for the project following the completion of construction would be rehabilitated for future development These areas are termed remaining project land and would be subject to the Residual Land Management Plan
- Landscape works along the Darley Road motorway operations complex (MOC1) frontage, security fencing and vehicular access.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 is set out for a broader precinct of which the LCZ forms a small part and includes preserved and enhanced views (both of city landmarks and local features), new developments with built form and styles that complement the existing, maintained prevalence of street trees in addition to mature and visually significant trees on private land, street tree planting, landscaping in the front building setbacks and potentially higher, more dense development along Darley Road.	The motorway operations complex would comprise a new, low scale infrastructure element adjoining the Leichhardt light rail precinct. The western part of this LCZ is proposed for permanent operational infrastructure and would be subject to the UDLP for the project, which would allow the desired future character to be further considered during detailed design.

Landscape character impact assessment

Table 7-2 LCZ 2 – Darl	ey Road commercia	l precinct landscape	character assessment

Sensitivity	Magnitude	Rating
The sensitivity of the Darley Road commercial precinct is Moderate, due to the following:	The magnitude of change arising from the project is considered to be Moderate due to the following:	Moderate
• The warehouse / factory building has been re-purposed and has maintained a design that reflects the site's industrial context. This is considered to comprise an inherent landscape value for the LCZ, in conjunction with its location adjoining the light rail line and the Charles Street Underbridge (listed on the S170 heritage conservation register).	 The loss of the large-scale warehouse building and existing trees will provide an open outlook from within this LCZ, including opening views to the light rail corridor and City West Link retaining/noise wall. However, future development on UDLP land may reduce the extent of this change in outlook The addition of the water treatment plant and associated infrastructure elements would change the character of the LCZ 	
• The landscape is considered to have a moderate capacity for absorption within the landscape, given the relationship with the adjoining elevated light rail corridor and City	within its immediate surrounds. This is in part due to the change of use to a private facility in what was previously open areas (parking) that could be accessed by the general public.	
West Link, the separation to the adjacent residential precinct provided by Darley Road, and the	• A design for the facility would be finalised during detailed design, however given that the facility would be designed in	

Sensitivity	Magnitude	Rating
footprint and scale of the existing commercial building on the site.	accordance with the M4-M5 Link UDLP, it would be likely to provide positive visual amenity and comprise an architecturally well-considered, relatively small group of buildings and ancillary infrastructure.	
	It is recommended that the UDLP consider design principles that are congruent with the desired future character of the LCZ.	

LCZ 3 – Leichhardt light rail precinct

Project effects

The effects of the project on the Leichhardt light rail precinct would comprise an opening of the site to the light rail stop to Darley Road. It can however be expected that the character of this zone would remain broadly intact as a result of the project.

Desired future character

Desired future character	Assessment
The desired future character for the western part of this LCZ (to Charles Street) as detailed in the LDCP 2013 includes preserved and enhanced views (both of city landmarks and local features). There is no specific desired future character outlined for the eastern part of the LCZ in the LDCP 2013. However, based on zoning objectives set out in LLEP 2013 it is suggested that the future character include appropriate design that minimises amenity impacts to the light rail entry, support the vitality of a local centre, and prevention of development that is not compatible with or that may detract from the provision of infrastructure.	The project would not impact views to city landmarks and local features. The operational infrastructure at the site would be subject of urban design to ensure it minimises amenity impacts and does not detract from the surrounding residential development.

Landscape character impact assessment

Table 7-3 LCZ 3 – Le	eichhardt light rail land	scape character assessment
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Sensitivity	Magnitude	Rating
The sensitivity of the landscape is rated as Low, due to the following:	The magnitude of change arising from the project is rated as Low, due to the following:	Low
• The landscape value of the Leichhardt light rail LCZ is considered to be inherently low within the context of it being a highly contained, linear element with screening vegetation, precluding views from the elevated rail line to the surrounding landscape. In addition, the setting of the station between the City West Link retaining	 There would be no physical change or additional project elements within this LCZ The project removes the existing warehouse building and substantial tree cover from part of the adjoining commercial precinct LCZ, temporarily opening up the view to the Darley Road residential LCZ, and conversely a view from the Darley Road residential precinct 	

Sensitivity		Ма	gnitude	Rating
 Sensitivity wall/noise wall an warehouse buildir amenity value The form, scale a character of the L capacity to accom change envisaged on its character. 	d the back of the ng provides a low nd utilitarian CZ has the modate the type of d without impacts	•	LCZ to the light rail stop The type of replacement development that would occur within the UDLP land is unknown at this stage. The site is zoned for B2 Local Centre purposes however which sets out objectives for such land to provide for commercial, residential and community uses that reinforce and enhance the role, function and identity of a local centre. It also identifies the objective to ensure that development is	Rating
			appropriately designed to minimise amenity impacts.	

7.2.2 Central east landscape character zones (Rozelle interchange)

A total of 14 landscape character zones have been identified for the Rozelle interchange. For a description of each landscape character zone within this area, refer to **section 5.3.2**. Refer to **Chapter 5** (Project description) of the EIS and **Appendix L** (Urban Design Report) of the EIS for full description of the works associated with Rozelle interchange.

LCZ 4 – Glebe Foreshore Parklands precinct

Project effects

The Glebe Foreshore Parklands comprise a highly valued open space setting, used regularly by large numbers of predominantly passive recreational receptors. The long foreshore edge provides extensive views towards the project from Glebe Point at the eastern end of the bay to the 'beach' and pontoon setting at the western end adjacent to The Crescent.

A diverse range of features are contained within this view including Anzac Bridge, the Glebe Island grain silos, the White Bay Power Station, the working port edge opposite, and the highly modulated backdrop of parts of the Rozelle hillside and Balmain, comprising generally individual small housing and commercial buildings within a well vegetated landscape.

The key effects of the project on the Glebe Foreshore Parklands precinct would comprise:

- Two new pedestrian/cycle bridges crossing City West Link, one at The Crescent and one further west near Brenan Street and Whites Creek. Both would sit below the Rozelle ridgeline
- Three ventilation outlets located near City West Link. The ventilation outlets are 35 metres above existing ground level and project well above the Rozelle ridgeline. The ventilation outlets are of prominent scale within the context of a new and extensive open space setting. However, the outlets do have congruency with other proximate tall built elements that also project above the skyline including:
 - White Bay Power Station with its two tall chimneys
 - Grain silos which comprise large formal groupings of cylindrical objects with high visual mass
 - Anzac Bridge
 - Working waterfront on the opposite (north) side of Rozelle Bay with large boat storage facility and substantial new buildings along the water's edge
- Bridges over Whites Creek at The Crescent and at Victoria Road near White Bay Power Station which are set relatively low within the overall landscape.

Desired future character	Assessment
The desired future character for this LCZ as detailed in the SDCP 2012 includes clear and legible connections to Jubilee Park with a foreshore walk that continues Sydney's open space network. It also includes the protection of views and access between the parklands and the waterfront.	The Rozelle masterplan incorporates a share pathway system around the northwest corner of Rozelle Bay within the vicinity of the intersection of The Crescent with City West Link. This would assist in the continuation of the foreshore walk with the new bridge across City West Link and active transport link through the Rozelle Rail Yard site providing an effective connection between Easton Park at Rozelle and the open space along the Glebe foreshore. The project would not interfere with views and access between the open space and the waterfront, and would enhance connections to Jubilee Park.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-4 C7 4 -	Glebe Foreshor	Parklands	precinct landsca	ne character	assessment
	Glebe I Oleanon	e Faikianus	precinct lanusca	pe character	assessment

Sei	nsitivity	Ма	agnitude	Rating
The Pai cor foll	e sensitivity of the Glebe Foreshore rklands precinct to the project is nsidered to be Moderate, due to the owing: The landscape comprises a highly valued open space setting, used regularly by large numbers of predominantly passive recreational users. The harbourside setting of the park and extensive views from this location comprise an important element of its inherent landscape value	Th prc the •	e magnitude of change arising from the oject is considered to be Moderate, due to a following: The scale and character of some elements of the project is strongly contrasting with this LCZ (particularly the ventilation outlets) The outlook from the Glebe Foreshore Parklands would comprise a generally well vegetated landscape with substantial tree cover.	Moderate
•	The landscape is well vegetated and has the ability to absorb project elements as a result of existing tree cover.			

LCZ 5 – Johnston Street precinct

Project effects

The project effects on the Johnston Street precinct would be limited to the additional right hand turn lane on The Crescent at the intersection with Johnston Street. This would entail:

- Widening of The Crescent along its eastern side
- Cutback of the existing kerb on the eastern side of Johnston Street below the light rail bridge
- Relocation of traffic signals
- Pavement and line marking works.

These works would not impact on the light rail bridge (including the piers). No widening would occur along Johnston Street and works would be constrained to the existing road reserve. The project results in a minor 'hardening' of the intersection of Johnston Street with The Crescent, through the additional paving and reduction of landscaping area.

Desired future character

De	sired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 encompasses:		The works proposed within this LCZ would not impact its character or identity as it would take
•	Land uses and urban design that enhance and contribute to the character and identity of the LCZ whilst protecting Heritage Items and Heritage Conservation Areas that help create	would be of low scale and would not significantly impact any heritage items. There would be no significant changes to amenity
	of the historic subdivision pattern of the LCZ;	Annandale from this LCZ. Views to and from 'The
•	Lower scale development complementary to the existing streetscape,	the project.
•	Improved environmental amenity and interest for pedestrians accessing the area,	
•	Preservation of views over the city, Rozelle Bay, Leichhardt and Annandale,	
•	Redevelopment of the TAFE College site for residential use consistent with the existing scale in the northern section of the LCZ;	
•	Preservation of mature, regularly spaced street trees as well as mature and visually significant trees on private land;	
•	Preservation and integration of natural rocky outcrops into the landscape of the area, particularly where visible from public place, ensure future neighbouring developments do not negatively affect the aspect to and from the group of buildings known as 'The Witches' Houses'.	

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-5 LCZ 5 – Johnston Street precinct landscape character assessment

Sensitivity	Magnitude	Rating
The sensitivity of the Johnston Street LCZ to the project is considered to be High, due to the following:	The magnitude of change arising from the project is rated as Negligible, due to the following:	Negligible
• The landscape value of Johnston Street is high as Johnston Street itself is recognised for its landscape heritage, and several dwellings within the neighbourhood are	• There would be a minor loss of a landscape area adjoining the intersection and reinstatement of existing footpath, resulting in a minor 'hardening' of the intersection	
recognised for their architectural heritage. This LCZ falls within the Annandale Heritage Conservation	There would be no direct impact to the heritage conservation area or heritage	

Sensitivity	Magnitude	Rating
Area and contains the heritage listed Annandale (Johnston Street) Underbridge.	listed underbridgeThe project causes a minor change within this LCZ.	

LCZ 6 – Annandale Street and Young Street precinct

Project effects

The project would have limited direct effects on this LCZ. The key effects of the project on the Annandale Street and Young Street precinct would comprise:

- The loss of trees to the Rozelle Bay edge where it adjoins The Crescent and within Buruwan Park resulting in a minor change to the outlook from Bayview Crescent along the northern edge of the LCZ
- The crossing of City West Link and associated pedestrian bridge crossing
- The ventilation outlets.

The future use of this site is not known at the time of writing and is assumed to be graded and grassed upon completion of the project, and retained for future road infrastructure projects.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 encompasses maintained and enhanced street trees, preserved and enhanced public and private views out over Rozelle Bay, Annandale and the city skyline and improved environmental amenity and interest for pedestrians accessing the area.	The project would not result in the loss of any street trees within this LCZ however trees adjacent to the northern boundary of the LCZ would be removed. Elements of the project such as the new pedestrian bridge and ventilation facilities would be visible from much of Bayview Crescent and likely be partially visible from the upper levels of some buildings in other nearby streets.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

 Table 7-6 LCZ 6 – Annandale Street and Young Street precinct landscape character assessment

Sensitivity	Magnitude	Rating
The sensitivity of this LCZ to the project is considered to be Moderate, due to the following:	The magnitude of change arising from the project is considered to be Low due to the following:	Moderate- Low
• Although the inherent landscape value of this LCZ is high, as recognised by most of it being located within the Annandale Heritage Conservation Area, the landscape is considered to have a high capacity for 'fit' with the project, with the exception of the Bayview Crescent northern extremity of the LCZ.	 The project would result in the loss of existing tree cover (outside the LCZ) which would change the outlook from a small section of the northern edge of this LCZ While relatively close to the project, the LCZ is isolated from the changes by landform, existing planting and built form of residential development The changes resulting from the Rozelle interchange would fall outside this LCZ and 	

Sensitivity	Magnitude	Rating
	it would not directly adjoin the project (it is separated by City West Link and the elevated light rail corridor).	

LCZ 7 – Whites Creek Valley precinct

Project effects

The project effect on this LCZ would be limited to the location of the pedestrian bridge linking Lilyfield Road near Ryan Street in Lilyfield, through the project open space, across City West Link and light rail corridor and landing near Brenan Street and the Whites Creek corridor. The pedestrian bridge would result in the loss of some trees and would be a new feature in the LCZ.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 includes preserved and enhanced views, particularly towards the city.	Elements of the project such as the pedestrian bridge would enhance views, particularly towards the city.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-7 C7 7 -	- Whites Creek \	Valley precinct	landscape ch	aracter assessment
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Sensitivity	Magnitude	Rating
The sensitivity of this LCZ to the project is considered to be High, due to the following:	The magnitude of change arising from the project is considered to be Low due to the following:	Moderate
• This precinct has an intrinsically high landscape value as recognised by the heritage items located within it, and the landscaped character of the parkland along the Whites Creek corridor.	 There would be no physical change or addition of any project elements within this LCZ There would be a minor change in outlook with the loss of some trees and presence of the new pedestrian bridge landing at Brenan Street 	
	• The assumed well-considered architectural detailing of the pedestrian bridge would comprise a good visual 'fit' with the Whites Creek Valley parkland.	

LCZ 8 – Catherine Street precinct

Project effects

The key effects of the project on the Catherine Street precinct would be limited to a change in outlook and comprise:

- The Rozelle West motorway operations complex (MOC2) which includes a proposed air intake substation building
- The proposed placement of tall tree planting within the vicinity of the proposed air intake.

Desired future character	Assessment
The desired future character for this LCZ as	Elements of the project such as the proposed air
detailed in the LDCP 2013 encompasses the	intake substation may be visible from some
preservation of mature and/or regularly spaced	elevated locations within this LCZ, particularly
street trees and the preservation and	along Brenan Street and upper levels of buildings
enhancement of views, particularly towards the	in elevated areas. No street trees would be
city.	removed from this LCZ as part of the project.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Sei	nsitivity	Magnitude	Rating
The is c the	e sensitivity of this LCZ to the project considered to be Moderate, due to following:	The magnitude of change arising from the project is considered to be Negligible due to the following:	Negligible
•	The landscape comprises substantial changes in elevation across the precinct and prevailing low scale character and consistency of residential form in the area, and is considered to have a high landscape value. Notwithstanding the precinct does not fall within a heritage conservation area. The landscape is considered to have a high capacity to absorb the project given the separation of the	 There would be no loss, change or addition of any feature within this LCZ The built form elements would be relatively distant and have a low presence from within the LCZ. 	
	LCZ and in the context of the adjacent elevated light rail corridor.		

LCZ 9 – Catherine Street neighbourhood centre precinct

Project effects

The key project effects for the Catherine Street neighbourhood centre precinct would be experienced by the change in the outlook from the residential apartments on the corner with City West Link, with:

- Proximity of the proposed open space
- Widening of City West Link
- Rozelle West motorway operations complex (MOC2)
- Presence of the pedestrian/cyclist bridge crossings of City West Link.

Desired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 includes the preservation of mature and/or regularly spaced street trees and the preservation and enhancement of views, particularly towards the city.	Elements of the project such as the pedestrian bridge, substations, portals and ventilation facilities may impact on some existing views within this LCZ, particularly at the corner of Catherine Street and City West Link. However, the soft landscape works and creation of open space would result in greater visual amenity and vistas than is currently afforded. Views towards the city would be conserved and enhanced.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-9 LCZ 9 – Catherine Street neighbourhoo	d centre precinct landscape character assessment
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Sensitivity	Magnitude	Rating
The sensitivity of this LCZ is Low, due to the following:	The magnitude of change arising from the project is considered to be Low due to the following:	Low
 This LCZ comprises a well visited neighbourhood centre with gathering areas, community facilities and commercial enterprises set within period buildings, and contained within a relatively small corridor. The project would have a moderate level of congruency with the existing derelict setting of the rail yards with intermittent large industrial sheds and laydown areas, given it would comprise an open space area with substantial landscape planting, and two localised nodes of operational infrastructure and built form. 	 There would be no physical change or addition of any project elements within this LCZ The proximity of project elements to the LCZ would result in a positive change in outlook with respect to the new open space created by the project, but would not change the landscape character of the LCZ. 	

LCZ 10 – Balmain Road precinct

Project effects

The effect of the project on the Balmain Road precinct is negligible because of its location some distance to the west of the site.

Desired f	uture	chara	cter
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Desired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 includes the preservation of mature and/or regularly spaced street trees and the preservation and enhancement of views, particularly towards the city.	No street trees would be removed from this LCZ as part of the project. Elements of the project such as the ventilation facilities may be partially visible in the distance from some locations this LCZ however views towards the city would be preserved.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-10 LCZ 10 – Balmain Road	precinct landscape character assessment
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Sensitivity		Ма	gnitude	Rating
The sensitivity of precinct to the precinct to the precinct to the precinct to the precision of the top of t	of the Balmain Road project is considered to the following:	The proj the	e magnitude of change arising from the ject is considered to be Negligible, due to following:	Negligible
The inherer significantly regular road pattern and	nt landscape character is r influenced by the d layout and subdivision vistas along the road	•	There would be no physical change or addition of any project elements within this LCZ.	
The LCZ has absorb the at distance	as a high capacity to project given it is located from this LCZ.			

LCZ 11 – Nanny Goat Hill residential precinct

Project effects

The project is immediately adjacent to the LCZ along Lilyfield Road. The key project effects of the Nanny Goat Hill residential precinct would be:

- The removal of existing street tree planting along Lilyfield Road, which would be replaced as part of the project
- Greater proximity to proposed motorway infrastructure (including Rozelle West motorway operations complex (MOC2), tunnel portals and ventilation outlets) through the Rozelle Rail Yards
- Opportunities for improved outlooks to new Rozelle open spaces.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 includes ensuring the availability of views and glimpses of local and distant landmarks as well as scenic vistas from public place are maintained, significant views and vistas from rear lanes are retained, the preservation and enhancement of the value of Heritage Items and Heritage Conservation Areas (as identified in Leichhardt Local Environmental Plan 2013) and the preservation and enhancement of mature street trees, as well as mature and/or visually significant trees on private land.	Elements of the project such as the pedestrian bridges, road structures, substation, portals and ventilation facilities may impact on some existing views from this LCZ, particularly along Lilyfield Road and upper levels of buildings on elevated areas on nearby streets. The project would also result in the removal of some mature street trees from this LCZ along Lilyfield Road. The removal of industrial buildings near Lilyfield Road and the creation of open space areas and landscaping as part of the project however would result in greater visual amenity and vistas than is currently available. No heritage items or heritage conservation areas within this LCZ would be impacted by the project.

Landscape character impact assessment

Table 7-11 LCZ 11 – Nann	v Goat Hill residential	precinct landsca	oe character assessment
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Sensitivity	Magnitude	Rating
 The sensitivity of the Nanny Goat Hill residential precinct to the project is considered to be Low, due to the following: While part of the precinct adjacent to the project is considered to have high landscape values due to it being incorporated into the Brennan's Estate Heritage Conservation Area, the project is considered to have a high level of congruency with the precinct, within the context of the proposed open space area and landscaping with localised infrastructure elements within it. 	 The magnitude of change arising from the project is considered to be Low, due to the following: The street trees required to be removed along Lilyfield Road would be replaced resulting in little change to the present character over time New open space and landscaping would be provided as part of the Rozelle interchange. 	Low

LCZ 12 – Halloran Street commercial precinct

Project effects

The project would have no significant effect on this LCZ, which is located some 150 metres to the west of the project. A small number of large street trees on Lilyfield Road within the vicinity the LCZ may require removal as part of the project. The LCZ is by landform and the orientation of the built form facing away from the project.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 includes ensuring the availability of views and glimpses of local and distant landmarks as well as scenic vistas from public place are maintained, significant views and vistas from rear lanes are retained, the preservation and enhancement of the value of Heritage Items and Heritage Conservation Areas (as identified in Leichhardt Local Environmental Plan 2013) and the preservation and enhancement of mature street trees, as well as mature and/or visually significant trees on private land.	The project would result in the removal of some mature street trees adjacent to this LCZ along Lilyfield Road. The new open space and landscape works at the project site however would result in improved visual amenity and vistas than is currently provided. No heritage Items or heritage conservation areas within this LCZ would be impacted by the project.

Landscape character impact assessment

Sensitivity	Magnitude	Rating	
The sensitivity of the LCZ to the project is considered to be Low, due to the following:	The magnitude of change arising from the project is considered to be Negligible, due to the following:	Negligible	
• The inherent landscape value of the	There would be no physical change or		
WestCoppey – MI-M5 Link 216			

Sensitivity	Magnitude	Rating
precinct is considered to be moderate given the built form and setting of the small industrial precinct within the LCZ	addition of any project elements within this LCZ.	
• However, the project is considered to have a high level of 'fit' with this precinct, within the context that it does not detract from it in any way.		

LCZ 13 – Easton Park residential precinct

Project effects

The project is immediately adjacent to the LCZ along Lilyfield Road. The key project effects on the Easton Park residential precinct would be:

- Replacement of adjacent industrial development on the south side of Lilyfield Road with open space, wetland area and landscaping
- The introduction of new elements within the outlook of this LCZ, including views to new infrastructure facilities at Rozelle interchange comprising: ventilation facility, water treatment plant and pedestrian/cycle bridge.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 encompasses preserving view lines to the south and east.	Elements of the project such as the pedestrian bridges and ventilation facilities may impact on some existing views from this LCZ, particularly views to the south toward Lilyfield Road. The removal of industrial buildings near Lilyfield Road and the proposed open space and landscape works at the project site however would result in improved visual amenity and vistas than currently provided.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-13 LCZ 13 – Easton Park residential precinct landscape character assessment

Ser	sitivity		Magnitude	Rating
The is c follo	e sensitivity of this LCZ to the project onsidered to be High, due to the owing:	The pro the	e magnitude of change arising from the ject is considered to be Moderate, due to following:	High- Moderate
•	The precinct is of cultural importance, incorporating part of Brennan's Estate, in addition to the Easton Park and Hornsey Street Heritage Conservation Areas	•	There would be a minor addition to this LCZ as a result of the Victoria Road realignment and shared path The proposed ventilation facility would comprise an uncharacteristic element in	
•	importance, providing Easton Park and other small parks for recreation.		built-form elements within the proposed open space would be considered likely to be accommodated with minimal impacts on	

Sensitivity	Magnitude	Rating
	landscape character	
	• Over time the prominence of the ventilation facility would be expected to decrease with vegetation growth and the maturing of the open space landscape (refer to visual impact assessment, section 7.3.2).	

LCZ 14 – Victoria Road south precinct

Project effects

The project would have a direct effect on this LCZ. The key effects of the Victoria Road south precinct would be:

- Removal of pedestrian/cycle bridge crossing of Victoria Road at Lilyfield Road intersection
- Removal of existing Victoria Road Bridge identified as a potential local heritage item, and replacement with a new bridge, with potential for increased prominence from Glebe Foreshore Parklands
- Increased width of carriageway and complexity of Victoria Road intersection with City West Link.
- Creation of active transport link and landscape edge to the west side of Victoria Road between Quirk Street and the northern boundary of the proposed Rozelle open space area.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 encompasses preserving view lines to the south and east.	It is unlikely that the project would interfere with any south or east view lines from within this LCZ.

Landscape character impact assessment

Sensitivity	Magnitude	Rating
The sensitivity of the LCZ to the project is considered to be Low, due to the following:	The magnitude of change arising from the project is considered to be Moderate, due to the following:	Moderate- Low
• The existing context of the busy Victoria Road and adjacent commercial development is of low inherent landscape value.	• The project would be congruent with the proposed change given that it retains the existing major arterial road function of the precinct	
	The project would remove the existing Victoria Road bridge and existing pedestrian/cycle overpass which comprises a substantial landscape character element	
	• The project would increase the width of the Victoria Road carriageway at its intersection with City West Link	
	The new Victoria Road bridge would	

Sensitivity	Magnitude	Rating
	comprise a minor increase in height compared to the existing bridge, which would may also marginally provide an increased presence from Glebe Foreshore Parklands.	

LCZ 15 – White Bay Power Station precinct

Project effects

The White Bay Power Station is a State heritage listed item which acts as a highly recognisable landmark within this locality. The existing Victoria Road bridge crossing of the disused rail line is located within proximity of the power station (about 100 metres), and has been identified as a potential heritage item². Two other items are identified in the Conservation Management Plan for the White Bay Power Station, but are not heritage listed. These are the southern penstock and former hotel site.

The project would have a direct effect on the White Bay Power Station precinct. The key effects of the project on this LCZ would be:

- Widening of the City West Link carriageway and approach to Anzac Bridge, resulting in loss of tree cover
- Replacement and minor realignment of the Victoria Road bridge through the precinct, including anew active transport link beneath the bridge connecting to Anzac Bridge and Bays Precinct
- Replacement planting at the interface between the new Victoria Road bridge and White Bay Power Station, subject to detailed design.

Desired future character

Desired future character	Assessment
This LCZ falls within the bounds of a broader strategic planning area known as The Bays Precinct (the Bays). As outlined in Chapter 4 , there are a number of sub-precincts within the Bays which each have their own vision. This LCZ is located within the White Bay Power Station sub-precinct. Work is currently underway to determine the specific desired future character for the White Bay Power Station and broader Bays Precinct. In the interim, the Sydney Regional Environmental Plan 26 – City West (SREP 26) provides high level planning principles for the entire Bays development area. Of relevance, the SREP states that the siting and form of development must consider creating, retaining and enhancing views and vistas from the water and public domain.	The proposed planting of trees north east of the Victoria Road/City West Link intersection would be located within the visual curtilage of the White Bay Power Station, and has potential to visually remove the alignment of the historic rail link to the White Bay Power Station from future opportunities for public domain within this precinct. However, the proposed soft landscape works approach would be readily amenable to modification in conjunction with the future design of The Bays Precinct. Landscaping in this area should be designed with respect to the heritage significance of the White Bay Power Station precinct and the proposed active transport connection with the Bays Precinct.

² GML, 2017, refer to Appendix U (Technical working paper: Non-Aboriginal Heritage) of the EIS

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

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Sensitivity	Magnitude	Rating
The sensitivity of the White Bay Power Station precinct to the project is considered to be High, due to the following:	The magnitude of change arising from the project is considered to be Moderate, due to the following:	High- Moderate
• The inherent landscape value of the state heritage listed White Bay Power Station is considered to be high	heritage curtilage of the White Bay Power Station, the proposed level of tree planting east of White Bay Power Station would have a low level of congruency with the	
 The landscape comprises existing vegetation that borders the precinct along Victoria Road and City West link, providing a sense of enclosure. 	and its historic rail/port setting curtilage and linkages. Landscaping in this area should be designed with respect to the heritage significance of the White Bay Power Station precinct and the proposed active transport connection with the Bays Precinct	
	• The project would cause a change to the existing landform of the state heritage listed White Bay Power Station adjacent to the Victoria Road/City West Link intersection and from the loss of the existing Victoria Road bridge	
	• The southern penstock which is associated with the heritage values of White Bay Power Station would be protected.	

LCZ 16 – Rozelle Bay wharves precinct

Project effects

The Rozelle Bays wharves precinct is characterised by a flat topography and working harbour industrial activities. Key project effects would comprise:

- Widening of the carriageway approach to Anzac Bridge which projects marginally into the LCZ
- Loss of a long corridor of planting along the south side of Anzac Bridge/City West Link to the east of James Craig Road.

Desired future character

Desired future character	Assessment
This LCZ falls within the bounds of a broader strategic planning area known as The Bays Precinct (the Bays). As outlined in Chapter 4 , there are a number of sub-precincts which each have their own vision. This LCZ is located within the Rozelle Bay and Bays Waterways, Glebe Island and White Bay sub-precincts. Work is currently underway to determine the specific desired future character for these sub-precincts and broader Bays Precinct.	Loss of the landscape screening edge around the White Bay Power Station and along the approach to Anzac Bridge would be likely to open up some views to the project from areas to the north and south.
In the interim, the Sydney Regional Environmental Plan 26 – City West (SREP 26) provides high	

Desired future character	Assessment
level planning principles for the entire Bays development area. Of relevance, the SREP states that the siting and form of development must consider creating, retaining and enhancing views and vistas from the water and public domain.	

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-16 LCZ 16 – Rozelle Bay wharves precinct landscape character assessment

Sensitivity	Magnitude	Rating
The sensitivity of the Rozelle Bay wharves precinct to the project is considered to be Low, due to the following:	The magnitude of change arising from the project is considered to be Moderate, due to the following:	Moderate– Low
 The LCZ comprises a working port edge that provides a contrasting landscape to the surrounding, predominantly residential setting to the north, south and west In the context of existing infrastructure within this LCZ, the landscape is considered to have a moderate capacity to absorb project effects. 	 The project would result in the widening of the carriageway of the Victoria Road and City West Link approaches to Anzac Bridge, causing the loss of screening road side vegetation The proposed open space component of the project would be considered a good fit with the precinct given that it would provide a supporting land use to the broader residential setting and would increase the complexity and interest of this landscape. It would also provide a clearly legible edge to the western part of this LCZ. 	

LCZ 17 – City West Link precinct

Project effects

The key project effects of City West Link precinct would be:

- Widening of sections of City West Link, The Crescent and Victoria Road
- A new, signalised intersection on City West Link around 300 metres west of The Crescent to provide a connection to the M4-M5 Link mainline tunnels
- Raising City West Link by up to 1.5 metres around the intersection with The Crescent to address drainage and flooding constraints
- Modification of the intersection of City West Link and The Crescent including a new bridge over Whites Creek
- Modification of the intersection of City West Link and James Craig Road
- Realignment, widening and resurfacing of the intersection of The Crescent and Victoria Road and new bridge
- Loss of existing corridor edge vegetation along City West Link much of which would be replaced on completion of the works.

Desired future character	Assessment
There is no detail relating to desired future character for this LCZ in the LDCP 2013 that is specifically relevant to both a) landscape and visual impact and b) the project.	N/A

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-17 LCZ 17 – City West Link precinct landscape character

Sensitivity	Magnitude	Rating
The sensitivity of the City West Link precinct to the project is considered to be Low, due to the following:	The magnitude of change arising from the project is considered to be Moderate, due to the following:	Moderate– Low
• The inherent landscape value of this LCZ is considered to be low within the context of its major arterial road function and limited landscape value of the intermittent, corridor of tree planting.	 The project would be congruent with the proposed change given that it retains the existing major arterial road function of the precinct 	
	• The project would result in a substantial change adjacent to the LCZ, associated with new motorway scale elements (primarily the ventilation facility and outlets, water treatment plant and substation buildings). However, all of these facilities would be subject to varying levels of visual screening, subject to detail design, and are contextual with that of a motorway interchange	
	• The quality of urban design would play a significant part in mediating landscape character effects of the development within this LCZ.	

LCZ 18 – Rozelle light rail corridor and Whites Creek canal precinct

Project effects

The Rozelle light rail corridor and Whites Creek canal precinct contains dense screen tree planting between the Lilyfield and Rozelle Bay light rail stops. The project would retain the existing noise walls on the southern edge of City West Link west of The Crescent and seek to minimise removal of vegetation. However, a number of trees would be removed from Buruwan Park in the 'triangle' of land north of Railway Parade, and where the pedestrian bridge linking this precinct with Lilyfield Road in Rozelle would land near Brenan Street. These elements would be subject to detail design, which would seek to maximise the retention of high value trees where possible within the area, as identified within the project arborist's report (refer to Annexure G of **Appendix S** (Technical working paper: Biodiversity) of the EIS).

The key effects of the project on the Rozelle light rail corridor and Whites Creek canal precinct would comprise:

• Removal of tree cover adjoining the northern edge of the Rozelle Bay light rail stop to facilitate the intersection of The Crescent with City West Link

• Widening of the intersection of The Crescent with City West Link with a new bridge over the Whites Creek channel.

The ventilation facility, water treatment plant, pedestrian/cycling bridge would also be obliquely visible from sections of the light rail corridor.

Desired future character

Desired future character	Assessment
There is no detail relating to desired future character for this LCZ in the LDCP 2013 that is specifically relevant to both a) landscape and visual impact and b) the project.	N/A

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-18 LCZ 18 – Rozelle light rail corridor and Whites Creek canal precinct landscape charac	ter
assessment	

Sensitivity	Magnitude	Rating
The sensitivity of this LCZ to the project is considered to be Moderate, due to the following:	The magnitude of change arising from the project is considered to be Moderate, due to the following:	Moderate
• The inherent landscape value of this LCZ is considered to be high within the context of the heritage items located within it	• The project would result in the loss of a substantial stand of trees at the south-west corner of City West Link and The Crescent which would change the character and	
• The form, character and quality of the experience of light rail users is also considered to have high landscape value given the vegetation lining parts of the light rail corridor and the views available to Rozelle Bay, open space areas, various heritage items, Anzac Bridge and the city skyline	 exposure of this precinct to the project, including to the ventilation facility and other motorway scale elements. However, this change occurs over only a small length of the overall light rail corridor, and in area where the focus of views is likely to be on the existing open harbour landscape with city skyline backdrop The built-form elements of the project would be existed to use it and the project would be existed to use it and the project of th	
• The bridge across Whites Creek and new pedestrian bridge landing near Brenan Street would be subject to detail design, which would seek to maximise the retention of high value trees within the area, and is considered to provide for a moderate ability for the project to be absorbed into the landscape.	would be subject to well-considered architectural design.	

LCZ 19 – Rozelle Rail Yards precinct

Project effects

The key effects of the project on the Rozelle Rail Yards precinct would comprise:

• Removal of industrial/commercial buildings along Lilyfield Road

- A new interchange connecting the mainline tunnels with the Iron Cove Link and the surface road network at City West Link and Victoria Road/Anzac Bridge
- New infrastructure including:
 - Ventilation facility
 - Water treatment plant
 - Substation and pump house
 - Constructed wetland
 - Naturalised stormwater drainage channels
- New pedestrian and cycle bridges over City West Link at intersection with The Crescent and adjacent to Brenan Street, Lilyfield
- New areas of public open space, including tree cover, areas suitable for sports fields and contiguous connection with Easton Park
- Pedestrian pathways and active transport connection
- Replacement of street trees removed from along Lilyfield Road.

Desired future character	Assessment
This LCZ falls within the bounds of a broader strategic planning area known as The Bays Precinct (the Bays). As outlined in section 4 , there are a number of sub-precincts within the Bays each with its own vision. This LCZ is located within the Rozelle Rail Yards sub-precinct. Work is currently underway to determine the specific desired future character for the Rozelle Rail Yards and broader Bays Precinct.	Elements of the project such as the pedestrian bridges, road structures, substation, portals and ventilation facilities would comprise new elements within this LCZ. The removal of industrial buildings near Lilyfield Road and the soft landscape works at the project site however would result in greater visual amenity and vistas than are currently available.
In the interim, the Sydney Regional Environmental Plan 26 – City West (SREP 26) provides high level planning principles for the entire Bays development area. Of relevance, the SREP states that the siting and form of development must consider creating, retaining and enhancing views and vistas from the water and public domain.	

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-19 LCZ 19 – Rozelle Rail Yards precinct landscape character assessment

Sensitivity	Magnitude	Rating
The sensitivity of this LCZ to the project is considered to be Low, due to the following:	to the project The magnitude of change arising from the project is considered to be Moderate, due to the following:	
• The inherent landscape value of this LCZ is considered to be low within the context of it comprising a disused and degraded brownfield site, notwithstanding the presence of two heritage listed items within the site, located on Lilyfield Road,	 Removal of industrial/commercial buildings along the south side of Lilyfield Road that are visually incongruent with the surrounding landscape setting The project with its extensive and well connected open space setting would comprise a good fit for the site within the 	

Sensitivity	Magnitude	Rating
opposite Easton Park.	context of adjacent residential areas	
	• The project would result in the loss of two heritage items ('Cadden Le Messurier', 84 Lilyfield Road), the Lilyfield (Catherine Street) overbridge and potentially the Lilyfield stormwater canal subject to further heritage inspection	
	• The project would comprise the addition of new built form features in the LCZ. Of particular note would be the ventilation facility, which would comprise an uncharacteristic element in terms of form, scale and mass.	

7.2.3 Northern landscape character zones (Iron Cove Link)

A total of six landscape character zones have been identified for the Iron Cove Link. For a description of each landscape character zone within this area, refer to **section 5.3.3**. Refer to **Chapter 5** (Project description) of the EIS and **Appendix L** (Urban Design Report) of the EIS for full description of the works associated with Iron Cove Link.

LCZ 20 – Victoria Road north precinct

Project effects

The project would commence from the eastern approaches to Iron Cove Bridge, widening to contain four Iron Cove Link eastbound and westbound lanes with associated portals and retaining walls, and a further three surface lanes either side of these for Victoria Road. East of Toelle Street, the widened carriageway would gradually realign with the existing Victoria Road alignment at Springside Street.

The key effects of the project on the Victoria Road north precinct would comprise:

- Retaining walls located at the southern edge of part of the Victoria Road corridor and adjacent to the Iron Cove Link portals
- Widening of the road carriageway comprising areas of both hard landscape and soft landscape works to centre median areas east of Toelle Street and along the southern side of Victoria Road
- The ventilation facility building on the south side of Victoria Road and associated buffer tree planting between it and adjoining housing
- The ventilation outlet (around 20 metres above existing ground level) located east of Terry Street, within a central median area and landscape setting
- Land along the southern boundary of the project used for an active transport link and landscaping areas subject to UDLP.

There would be localised significant changes in level at the northern end of Clubb Street and Byrnes Street. Design issues addressing these changes in level would be addressed in an integrated manner in preparing the UDLP.

The character of the corridor would change from that of a busy arterial road set at grade between commercial development and a range of contemporary and period housing, to a wider corridor including both portal dive structures and arterial road surface lanes, subject to changes in level and associated retaining walls within the vicinity of the portals. The project also provides opportunity for improved landscaping for example around the new ventilation outlet and central median, and an enhanced active transport link and landscaping along the southern side of Victoria Road.

Des	sired future character	As	sessment
As cha	outlined in the LDCP 2013, the desired future tracter for this LCZ encompasses:	The des	e project would be in parts be in keeping with sired future character as:
•	Improved streetscape amenity through improved design and layout of buildings as well as increased attention to site usage and ancillary uses	•	The proposed design would improve streetscape amenity through landscape works and tree planting, particularly at the Toelle Street/Terry Street and Victoria Road
•	A mix and variety of uses and building styles that enhance and contribute to the character and identity of the neighbourhood, whilst protecting significant prominent buildings and the townscape	•	No prominent buildings would be impacted by the design Through landscape works and tree planting, as well as creating a more pedestrian friendly
•	Predominant bulk, scale and siting of buildings compatible with adjoining development and the neighbourhood		connection across Victoria Road, the project would enhance vibrancy and visual interest on Victoria Road
	Retention of traditional shonfronts	•	The new road infrastructure being developed as part of the project would be generally in
•	Enhanced vibrancy and visual interest on		keeping with the current character of the LCZ.
	Victoria Road	The	e project would not be aligned with the desired
•	Maintained and enhanced character of the area through retention of original buildings, where appropriate, and new development that is complementary in architectural style, form and materials	•	The ventilation facilities would depart from the surrounding built form bulk and scale as well as differ in current land use. This may detract from the character and identity of the
•	Appropriate lighting compatible with the predominant type along each local area section	•	Original buildings would be removed as part of the project.
•	Development that relates well to the street		
•	View sharing between existing and proposed developments		
•	Appropriate materials that relate to the established built form		
•	Visual privacy incorporated into the design of all residential developments		
•	Improved streetscape through limiting inappropriate colour schemes and encouraging colour schemes that complement the streetscape		
•	A maximum building wall height of 10 metres, taken from the street frontage for buildings along Victoria Road		
•	Buildings that cover the full width of the lots with a nil setback to Victoria Road		
•	Developments serviced and vehicle access provided from side streets and laneways and openings to service bays. Work areas and storage areas not directly visible from the street.		

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-20 LCZ 20 – Victoria	Road north precinct	landscape character assessment
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Sensitivity	Magnitude	Rating
The sensitivity of the Victoria Road not precinct to the project is considered to be Low, due to the following:	th The magnitude of change arising from the project is considered to be Moderate, due to the following:	Moderate– Low
 The inherent landscape value affected by the project is low, characterised primarily by a mix of later 1900s industrial style building Victorian style two storey shops ar residences, and housing from the inter war your 	• The substantial soft landscape treatments to the southern edge and centre median areas of the project would complement the existing tree and shrub planting alongside the frontage of the Balmain Shores residential apartments	
 The project would have a high leve of congruency with the existing arterial corridor in relation to scale and form, notwithstanding the introduction of new portal elements Parts of the LCZ adjoining Victoria 	• The project would result in the loss of a limited number of commercial premises, and freestanding residential development along the southern side of Victoria Road; a substantial localised widening of the road including the addition of portal dive structures, ventilation outlet and ventilation	
Road and contained within the Iror Cove Heritage Conservation Area would retain sufficient curtilage, particularly within the context of th ridgeline setting, to maintain the integrity of their character.	 facility outlet building; and addition of a significant landscape works component The ventilation outlet in particular comprises an uncharacteristic element in terms of form, scale and mass. However, within the context of this major road corridor landscape, the form, scale and central setting of this new element within the widened carriageway is considered to have an appropriate level of fit 	
	• The project would be further refined through the detail design process. In particular, the ventilation outlet, ventilation facility building, motorway portals and associated retaining walls, would be subject to the UDLP. As such, these elements can reasonably be expected to comprise well-considered design elements within the context of both the project corridor and broader road corridor landscape.	

LCZ 21 – Victoria Road light industrial precinct

Project effects

The key effects of the project on the Victoria Road light industrial precinct would comprise:

- Widening of the road carriageway comprising areas of both hard landscape and soft landscape works to centre median areas east of Toelle Street and along the southern side of Victoria Road
- The ventilation facility building on the south side of Victoria Road and associated buffer tree planting between it and adjoining housing

• The ventilation outlet located east of Terry Street, within a central median are and landscape setting.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 includes improved landscaping quality through encouraging appropriate landscaping of development.	The project would provide landscape works/tree planting to centre median areas of Victoria Road between Terry Street and Crystal Street. This would provide a moderate level of landscaping within proximity of the LCZ, in addition to a landscape backdrop of street tree planting along the southern side of Victoria Road between Springside Street and Byrnes Street.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Sei	nsitivity	Magnitude	Rating
The sensitivity of this LCZ to the project is considered to be Moderate, due to the following:		The magnitude of change arising from the project is considered to be Negligible, due to the following:	Negligible
•	The landscape value of the LCZ is considered to be moderate within the historical context of mid to late 1800's light industrial/factory precincts being within close proximity to and often highly integrated with working class residential areas	• The project would not result in the loss, change or addition of any feature within the LCZ that would adversely affect its character.	
•	The LCZ is industrial in character and would have a moderate ability to absorb the contrasting project elements.		

LCZ 22 – Iron Cove residential precinct

Project effects

The key effects of the project on the Iron Cove residential precinct would comprise:

- Addition of new elements including: additional traffic lanes within the vicinity of tunnel portals near Terry Street; ventilation facilities comprising a ventilation building on the southern side of Victoria Road between Springside Street and Callan Street, and a ventilation outlet located east of Terry Street in the centre of Victoria Road to the centre of the carriageway
- Addition of street tree planting and pedestrian / cycle paths along the southern side of Victoria Road and landscape plantings within the centre median of Victoria Road east of Terry Street.

Desired future character	Assessment
There is no detail relating to desired future character for this LCZ in the LDCP 2013 that is specifically relevant to both a) landscape and visual impact and b) the project.	N/A

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-22 LCZ 22 – Iron	Cove residential	precinct landscape	character assessment
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Sensitivity	Magnitude	Rating
The sensitivity of the Iron Cove residential precinct to the project is considered to be Low, due to the following:	The magnitude of change arising from the project is considered to be Moderate, due to the following:	Moderate- Low
 The inherent landscape value of this LCZ is considered to be high within the context of most of it being 	 There would be no physical change or addition of any project elements within this LCZ 	
incorporated within the Iron Cove Heritage Conservation Area, in addition to a number of heritage listed items. However, the project adjoins only a relatively small, well vegetated edge of the LCZ along the northern side of Victoria Road	However, it would result in a likely localised adverse change (subject to future architectural and urban design inputs) with the tunnel portals, retaining walls and ventilation outlet forming part of the adjacent streetscape. The project can reasonably be expected to comprise well- considered design elements given the	
• The LCZ is considered to have a moderate level of congruency given the existing character and low amenity of the busy Victoria Road.	architectural and urban design inputs that would continue to be applied to be compatible with the predominantly contemporary character of the built form.	

LCZ 23 – King George Park precinct

Project effects

A bioretention facility would be located within King George Park adjacent to Manning Street in the location of an existing informal grassed car parking area. The bioretention facility would be the subject of a well-considered urban design process, integrating the structure within a formalised car parking arrangement that would incorporate landscape planting and maintain existing parking numbers. No trees would be removed as part of this work.

The bioretention facility and parking area would be subject to detail design in accordance with the provisions of the UDLP. Re-alignment of Victoria Road and reconnection of the Bay Run path would occur in the north eastern part of the LCZ.

Desired future character	Assessment
The LDCP 2013 acknowledges the importance of the interface between the Iron Cove open space area and the adjacent dwellings and notes that it contributes significantly to the character of these residential streets. It states that the open space provides important streetscape values to the locality and that the desired future character for the LCZ is that this should be retained.	The proposed stormwater treatment and parking area would be located in an area between the edge of the park and adjacent residences. This would be subject to detail design in accordance with the provisions of the UDLP, and as such would be likely to provide positive amenity.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-23 LCZ 23 – King George Park precinct landscape character assessment

Sensitivity		Magnitude	Rating
The s precir be Mo	ensitivity of the King George Park act to the project is considered to oderate, due to the following:	The magnitude of change arising from the project is considered to be Moderate, due to the following:	Moderate
• T a: -	his LCZ has high landscape values ssociated with: The proximity of recreational waterways and open space The Iron Cove Bay Run	• The project would comprise the addition of a stormwater treatment facility of a broadly regular shape, enclosed along two sides by formal parking bays. This has the potential to alter the character of the public domain in the LCZ	
- - al gi cc of	The well vegetated backdrop to the west and south which provides a sense of enclosure The substantial, bayside children's playground The connectivity of the parkland site with the harbour the LCZ has a moderate capacity to psorb the project effects within it, ven the project elements would be ongruent with the existing character to king George Park.	 The project would result in minor changes along Victoria Road and the Iron Cove Bay Run within the LCZ, which are existing elements The project would be subject to well-considered urban design inputs in accordance with the M4-M5 Link UDLP, and therefore has the potential for a substantial degree of congruency with existing landscape character. 	

LCZ 24 – Callan Park residential precinct

Project effects

The key project effects on the Callan Park residential precinct would occur along the northern edge of the precinct, comprising the following:

- Closer proximity of existing residences to Victoria Road: This would have the effect of bringing the Victoria Road traffic noticeably closer to the residences at the northern end of Callan Street, Toelle Street, Clubb Street and Byrnes Street
- A significant change in built form character along the southern side of Victoria Road. The existing built form edge, which provides some protection to the residential areas behind, would be replaced by a new enhanced active transport link and landscaping areas

- Ventilation outlet, building and substation building
- Closure of the northern end of Clubb Street, and modified cul-de-sac to Byrnes Street
- The existing extent of vegetation at the northern end of Byrnes Street would be reduced.

De	sired future character	As	sessment	
As outlined in the LDCP 2013, the relevant aspects of the desired future character for this		The project would in parts be in keeping with desired future character as:		
•	 Development that follows the topography of 	•	The project would broadly follow the topography of the area	
	on the mid slopes and mixed one and two storey scale at the top and bottom of the	•	The area would be landscaped in accordance with the UDLP	
•	slope Regular lot sizes, subdivision pattern and	•	The ventilation facility and outlets would be subject to detailed design and subject to urban design inputs.	
	houses with a prevalence of hipped and gabled roofs	The futu	e project would not be aligned with the desired ure character for this LCZ in part as:	
•	Preservation of the established setbacks for each street	•	The project would create irregular lot sizes along Victoria Road	
•	Preserve and enhance public and private views over the King George Park and Iron Cove	•	The grassed area within the car park that would be transformed into a water detention basin may impact on the current public and	
•	Retain stone cottages where they occur throughout the neighbourhood. Existing stone houses will be maintained, allowing for sensitive development on those sites utilising appropriate materials and styles		private views to King George Park and Iron Cove, and cause a 'hardening' of the existing grassed informal parking area.	
•	Retain and encourage street trees on the wider streets			
•	Conserve the single storey, freestanding cottage form, style and materials characteristic of the neighbourhood			
•	Preserve the consistency of architectural style appropriate to the existing style of each street			
•	Maintain the character of the area by ensuring new development is complementary in terms of its architectural style, built form and materials			
•	Maintain sandstone outcrops and remnant stone wall footings			
•	A maximum building wall height of 3.6 metres applies to the neighbourhood			
•	Changes to the front façades of existing dwellings will be kept to a minimum			
•	New development will maintain the use of hipped or gabled roof forms and designs will be compatible to the existing unadorned built form			
•	Building materials used will be compatible with the existing character of the streetscape,			

Desired future character	Assessment
including rendered and painted surfaces and roof materials such as corrugated iron.	

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Гаble 7-24 LCZ 24 – Callan Park residen	tial precinct lands	scape character asses	ssment
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Sensitivity	Magnitude	Rating
The sensitivity of the Callan Park residential precinct to the project is considered to be High. Notwithstanding that it is not included within a heritage conservation zone, it exhibits obvious qualities associated with the diversity of small, period worker's cottages and recent residential infill, within narrow streets sloping down the hillside. The Culturally important Sydney College of Arts heritage listed sandstone building group, and cultural landscape setting including mature Port Jackson fig trees (<i>Ficus rubiginosa</i>) have a presence as part of the LCZ.	 The magnitude of change arising from the project is considered to be Moderate, due to the following: The project would result in the loss of the existing built form edge along Victoria Road resulting in the increased presence of the arterial road corridor and associated traffic. The project would also include the addition of the structure of the ventilation facility building, located adjacent to existing residential development. 	High– Moderate

LCZ 25 – Sydney College of the Arts precinct

Project effects

The key element of the project that would influence the character of the Sydney College of the Arts precinct would be the ventilation outlet.

Desired future character

Desired future character	Assessment
The LDCP 2013 acknowledges the importance of the interface between the Iron Cove parklands area and the adjacent dwellings and notes that it contributes significantly to the character of these residential streets. It states that the parklands provide important streetscape values to the locality and that the desired future character for the LCZ is that this should be retained.	Adjacent dwellings would not be impacted. Some views to the parklands may be interrupted but it would be at a distance and only impact a small portion of receptors and views.

Landscape character impact assessment

Table 7-25 C7 25 – S	vdnev College of th	he Arts precinct la	indscape character	assessment
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Se	nsitivity	Magnitude		Rating
The sensitivity of this LCZ to the project is considered to be High, due to the following: The magnitude of project is considered the following:		e magnitude of change arising from the oject is considered to be Negligible, due to e following:	Negligible	
•	The inherent landscape value of this LCZ is very high, comprising a State heritage listed sandstone building complex with cultural landscape curtilage (refer to section 5.3.3 : Table 5-21)	•	There would be no physical change or addition of any project elements within this LCZ The effects of the project on this location are likely to be beneficial for this LCZ	
•	The distant location of the LCZ from the project provides a moderate to high capacity to absorb project effects.	•	The project is likely to have a good fit with this LCZ The project would remove all buildings along the southern edge of Victoria Road. However, this would be unlikely to open up significant views from this LCZ.	

LCZ 26 – Darling Street precinct

Project effects

The project effects of the Darling Street precinct would be limited given that the character of this LCZ is so strongly focussed on the Darling Street retail and community uses corridor. The project would be located some 300 metres north-west of this location, itself highly contained within the busy Victoria Road corridor. The key effects of the project on the Darling Street precinct would comprise:

- Local widening of Victoria Road between Springside Street and Byrnes Street
- In addition to the widening of Victoria Road the addition of the ventilation outlet, ventilation building and substation and associated tree planting within the centre median and southern edge of the project.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the LDCP 2013 includes the preservation and improvement of the pedestrian amenity and focus of Darling Street and adjacent streets.	The project would provide substantial streetscape improvements that would improve the amenity of Victoria Road. This in turn would improve the amenity of the view looking northwest from upper level windows and balconies of buildings along the commercial precinct and from the Darling Street intersection with Victoria Road.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-26 LCZ 26 – Darling Street precinct landscape character assessment

Sensitivity	Magnitude	Rating
The sensitivity of this LCZ to the project is considered to be Low, due to the following:	The magnitude of change arising from the project is considered to be Negligible, due to the following:	Negligible
 The landscape value of Darling Street is high, as evidenced by it 	 There would be no physical change or addition of any project elements within this 	

Sensitivity	Magnitude	Rating
being incorporated into The Valley Heritage Conservation Area has and the presence of several separate heritage listed items within the LCZ. Additionally, the LCZ comprises a highly visited area with gathering areas, places of cultural significance, community facilities and commercial enterprises contained within this main street,	 LCZ The LCZ is well removed from the project. 	
 The distant location of the LCZ from the project provides a high capacity to absorb project effects. 		

7.2.4 Southern landscape character zones (St Peters interchange)

A total of seven landscape character zones have been identified for the St Peters interchange. For a description of each landscape character zone within this area, refer to **section 5.3.4**. Refer to **Chapter 5** (Project description) of the EIS and **Appendix L** (Urban Design Report) of the EIS for full description of the works associated with St Peters interchange.

LCZ 27 – Sydney Park precinct

Project effects

The primary effects of the project on Sydney Park precinct would comprise:

• Addition of new elements in the landscape including the new ventilation facility and associated infrastructure (Campbell Road motorway operations complex) located above the M4-M5 Link portals in the north-west corner of the St Peters interchange. The ventilation facility would have a height of around 22 metres above existing ground level.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the SDCP 2012 includes: retention of the panoramic 360 degree views to important local cultural landmarks including the King Street Newtown ridge, the Eveleigh rail yards and further north to the city skyline from Sydney Park high points, and redevelopment of the isolated terraces on Campbell Road to a higher density and form that encourages active frontages overlooking Sydney Park.	The ventilation facility could comprise a new element within the panoramic 360-degree view from the park. The project would not, however, interfere with views to any of the identified cultural landmarks referenced.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-27 LCZ 27 – Sydney Park precinct landscape character assessment

Sensitivity	Magnitude	Rating
The sensitivity of this LCZ to the project	The magnitude of change arising from the	Moderate
is considered to be High, due to the	project is considered to be Low, due to the	

Sensitivity	Magnitude	Rating
following:	following:	
• The inherent landscape value of the Sydney Park precinct is considered to be high within the context of the state heritage listed Former Bedford Brickworks Group located in the north-west corner of the site and the high amenity and well managed condition of the precinct.	 There would be no physical change or addition of any project elements within this LCZ The wide Campbell Road boulevard provides considerable separation between the park and project elements The project would cause a change comparable in scale to other nearby built form elements such as the Former Bedford Brickworks Group close to the existing New M5 St Peters Interchange. 	

LCZ 28 – Sydney Park residential precinct

Project effects

The key effects of the project on Sydney Park residential precinct would comprise:

• Addition of a ventilation facility located above the portals in the north-west corner of the St Peters interchange. The ventilation facility would sit around 22 metres above existing ground level.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the SDCP 2012 includes retention of the panoramic 360 degree views to important local cultural landmarks including the King Street Newtown ridge, the Eveleigh rail yards and further north to the city skyline from Sydney Park high points and redevelopment of the isolated terraces on Campbell Road to a higher density and form that encourages active frontages overlooking Sydney Park.	The ventilation facility could comprise a new element within the panoramic 360-degree view from the park. The project would not, however, interfere with views to any of the identified cultural landmarks referenced.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-28 LCZ 28 – Sydney Park residential precinct landscape character assessment

Sensitivity	Magnitude	Rating	
The sensitivity of the Sydney Park residential precinct to the project is considered to be Moderate, due to the	The magnitude of change arising from the project is considered to be Moderate, due to the following:	Moderate	
 The inherent landscape value of the Sydney Park residential precinct is 	 There would be no physical change or addition of any project elements within this LCZ 		
considered to be high within the context of its cultural importance, as evidenced by the heritage listing of the dwellings	• The project would comprise a moderate scale addition to the backdrop of the LCZ, with the ventilation outlet located about 250 metres west of the precinct. The scale,		
Se	nsitivity	Magnitude	Rating
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•	The likely congruency with the project is considered to be moderate within the context of the precinct being set within the existing extensive Campbell Road boulevard planting	bulk and form of the project would comprise contrasting elements within proximity of the precinct, notwithstanding the well-considered architectural and urban design inputs to the building group.	
•	Within the large scale, formal setting context of the St Peters interchange, the project has the potential for a moderate level of 'fit' with regard to form, scale and mass.		

LCZ 29 – Alexandra Canal industrial precinct

Project effects

The key project effects of the Alexandra Canal industrial precinct would be:

- Addition of a ventilation facility and associated infrastructure located above the M4-M5 Link portals in the north-west corner of the St Peters interchange. The ventilation facility would sit around 22 metres above ground level
- Any impact would be very limited due to the separation distance between the LCZ and the ventilation facility.

Desired future character

Desired future character	Assessment
There is no detail relating to desired future character for this LCZ in the SDCP 2013 that is specifically relevant to both a) landscape and visual impact and b) the project.	N/A

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-29 LCZ 29 – Alexandra Canal industrial precinct landscape character assessment

Sensitivity	Magnitude	Rating
The sensitivity of this LCZ to the project is considered to be Low, due to the following:	The magnitude of change arising from the project is considered to be Negligible, due to the following:	Negligible
• The inherent landscape value of the Alexandra Canal industrial precinct relates to the context of its cultural importance, as evidenced by its state heritage listing	 There would be no physical change or addition of any project elements within this LCZ The distance of the project from this LCZ and extensive Campbell Road boulevard 	
• The LCZ has a utilitarian character due to the nature of the land use. It is characterised by large, utilitarian industrial buildings and signage and heavy vehicle movement on the roads	planting limits the presence of the project to and from within the LCZ.	
• The LCZ is industrial in character		

Sensitivity	Magnitude	Rating
which would have a moderate to high capacity to absorb project elements.		

LCZ 30 – Barwon Park precinct

Project effects

The key effects of the project on Barwon Park precinct would comprise:

• Addition of a ventilation facility and associated infrastructure located above the M4-M5 Link portals in the north-west corner of the St Peters interchange. The ventilation facility would sit around 22 metres above ground level.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the MDCP 2011 includes supporting pedestrian and cyclist access, activity and amenity including maintaining and enhancing the public domain quality. It also includes encouraging a greater scale of development fronting Princes Highway and at the northern end of Barwon Park Road, whilst ensuring new development is sympathetic to the low scale character of Crown Street.	The project site does not currently provide high quality amenity however upon completion of the New M5 works amenity will be improved. The proposed design of project elements such as the ventilation facility and soft landscape works would provide an improved public domain outcome. This in turn would provide improved amenity for cyclists. The project would not impede a greater scale of development fronting Princes Highway and at the northern end of Barwon Park Road. While the height of the ventilation facility may not be sympathetic to the low scale character of Crown Street, it would be separated by the width of the widened Campbell Road.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-30 LCZ 30 – Barwon Park precinct landscape character assessment

Sei	nsitivity	Ма	gnitude	Rating
The pre be	e sensitivity of the Barwon Park cinct to the project is considered to High, due to the following:	The pro the	e magnitude of change arising from the oject is considered to be moderate, due to e following:	High– Moderate
•	The inherent landscape value of the Barwon Park precinct is considered to be moderate within the context of	•	There would be no physical change or addition of any project elements within this LCZ	
	and particularly the generally well conserved small housing, narrow streetscape character of Crown Street	•	The likely congruency of the project with the precinct is considered to be moderate notwithstanding the scale, bulk and form of the ventilation facility	
•	The precinct includes a mix of period housing, medium rise residential infill development, and light industrial development.	•	The ventilation facility is some 70 metres to the south of the precinct, separated by a major new arterial road with extensive boulevard planting	
		•	The scale of the St Peters interchange	

Sensitivity	Magnitude	Rating
	located immediately to the south of the ventilation facility	
	• The ventilation facility would be subject to a well-considered architectural and urban design process in accordance with the project UDLP. Further the precinct is opposite the large scaled St Peters interchange.	

LCZ 31 – Princes Highway precinct

Project effects

The key effects of the project on Princes Highway precinct would comprise:

• Addition of a ventilation facility and associated infrastructure located above the M4-M5 Link portals in the north-west corner of the St Peters interchange. The ventilation facility would sit around 22 metres above existing ground level.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the MDCP 2011 is to protect significant streetscapes and/or public domain elements within the precinct including landscaping, fencing, open space, sandstone kerbing and guttering, views and vistas and prevailing subdivision patterns and to enhance existing streets and encourage pedestrian activity, where appropriate, through improvements to road infrastructure and landscaping.	The ventilation facility could potentially impact on views and vistas from this LCZ, particularly for the upper levels of east facing apartment buildings that front the Princes Highway The New M5 project would provide improved shared pathway along Campbell Road which would connect in to the LCZ.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Sensitivity	Magnitude	Rating
The sensitivity of this LCZ to the project is considered to be Low, due to the following:	The magnitude of change arising from the project is considered to be Low, due to the following:	Low
 The inherent landscape value of the Princes Highway precinct is generally considered to be low, notwithstanding that it contains two heritage items, including St Peters Anglican Church, due to its predominantly low amenity environment The LCZ is considered to have a high capacity to absorb the project, which would be set within the well landscaped St Peters interchange. 	 There would be no physical change or addition of any project elements within this LCZ The heritage listed St Peters Anglican Church is set upon a local high point within the precinct located about 500 metres from the ventilation outlet. However, the church grounds are well landscaped, creating a substantially enclosed setting which limits the presence of the ventilation outlet. 	

LCZ 32 – St Peters triangle precinct

Project effects

The key project effects of the St Peters triangle precinct would be:

• Addition of a ventilation facility and associated infrastructure located above the M4-M5 Link portals in the north-west corner of the St Peters interchange. The ventilation facility would sit around 22 metres above existing ground level.

Desired future character

Desired future character	Assessment
The desired future character for this LCZ as detailed in the MDCP 2011 includes improving pedestrian amenity, to identify signature development opportunities along Princes Highway (at the Campbell Street and King Street intersections), to help define the precinct along this major road and to ensure that higher density development demonstrates good urban design and provides suitable amenity for occupants of those developments.	The ventilation facility could potentially be visible within distant views from the multi-storey developments within this LCZ, particularly from upper floors. This would be seen within the context of the landscaping associated with the upgraded Campbell Road and the St Peters interchange.

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-32 LCZ 32 – St Peters triangle precinct lar	ndscape character assessment
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Sensitivity	Magnitude	Rating
The sensitivity of this LCZ to the project is considered to be Moderate, due to the following:	The magnitude of change arising from the project is considered to be Negligible, due to the following:	Negligible
• The inherent landscape value of the St Peters triangle precinct is considered to be moderate within the context of: one edge of the precinct falling within a heritage conservation area, but much of the remaining area comprising pockets of residential development, within an otherwise extensive, low amenity factory environment.	 There would be no physical change or addition of any project elements within this LCZ The likely congruency of the project with this precinct is considered to be high within the context of the precinct's predominantly low amenity factory environment, and the heritage conservation area being located on the edge furthest away from the project. The ventilation facility would be subject to a well-considered architectural and urban design process, and be set within an existing substantial, well vegetated landscape. 	

LCZ 33 – St Peters interchange precinct

Project effects

The key project effects of the St Peters interchange precinct would be:

 Addition of a ventilation facility and associated infrastructure located above the M4-M5 Link portals in the north-west corner of the St Peters interchange. The ventilation facility would sit around 22 metres above existing ground level. Desired future character

Desired future character	Assessment
There is no detail relating to desired future character for this LCZ in the SDCP 2013 that is specifically relevant to both a) landscape and visual impact and b) the project.	N/A

Landscape character impact assessment

The sensitivity and magnitude of the landscape to change is considered in the following table.

Table 7-33 LCZ 33 – St Peters	interchange precinct	landscape character a	assessment

Sei	nsitivity	Ма	gnitude	Rating
The is c foll	e sensitivity of this LCZ to the project considered to be Negligible, due to the pwing:	The pro foll	e magnitude of change arising from the ject is considered to be Low, due to the owing:	Negligible
•	The inherent landscape value of the St Peters interchange is considered to be moderate, within the context of the extensive landscape works, and application of well-considered architectural and urban design processes for both the road infrastructure and elevated buildings delivered by the New M5 project and UDLP	•	The project would comprise the addition an architecturally well-considered composition of portals and ventilation facility within the context of and as a continuation of the broader St Peters interchange landscape.	
•	The likely congruency of the project with this precinct would be high given the ventilation facility has been located in the vicinity of the portals.			

7.2.5 Summary of landscape character zone assessments

A summary of the landscape character assessments for the relevant LCZs impacted by the project during operation is provided below in **Table 7-34**.

Landscape character zone	Sensitivity to change	Magnitude of change	Overall rating		
Central west landscape character zones	(Darley Road M	OC)			
LCZ 1 – Darley Road residential precinct	Low	Low	Low		
LCZ 2 – Darley Road commercial precinct	Moderate	Moderate	Moderate		
LCZ 3 – Leichhardt light rail precinct	Low	Low	Low		
Central east landscape character zones (Central east landscape character zones (Rozelle interchange)				
LCZ 4 – Glebe Foreshore Parklands precinct	Moderate	Moderate	Moderate		
LCZ 5 – Johnston Street precinct	High	Negligible	Negligible		

Table 7-34 Summary of LCZ assessments

Landscape character zone	Sensitivity to change	Magnitude of change	Overall rating
LCZ 6 – Annandale Street and Young Street precinct	Moderate	Low	Moderate-Low
LCZ 7 – Whites Creek Valley precinct	High	Low	Moderate
LCZ 8 – Catherine Street precinct	Moderate	Negligible	Negligible
LCZ 9 – Catherine Street neighbourhood centre precinct	Low	Low	Low
LCZ 10 – Balmain Road precinct	Low	Negligible	Negligible
LCZ 11 – Nanny Goat Hill residential precinct	Low	Low	Low
LCZ 12 – Halloran Street commercial precinct	Low	Negligible	Negligible
LCZ 13 – Easton Park residential precinct	High	Moderate	High-Moderate
LCZ 14 – Victoria Road south precinct	Low	Moderate	Moderate-Low
LCZ 15 – White Bay Power Station precinct	High	Moderate	High–Moderate
LCZ 16 – Rozelle Bay wharves precinct	Low	Moderate	Moderate-Low
LCZ 17 – City West Link precinct	Low	Moderate	Moderate-Low
LCZ 18 – Rozelle light rail corridor and Whites Creek canal precinct	Moderate	Moderate	Moderate
LCZ 19 – Rozelle Rail Yards precinct	Low	Moderate	Moderate-Low
Northern landscape character zones (Iron	n Cove Link)		
LCZ 20 – Victoria Road north precinct	Low	Moderate	Moderate-Low
LCZ 21 – Victoria Road light industrial precinct	Moderate	Negligible	Negligible
LCZ 22 – Iron Cove residential precinct	Low	Moderate	Moderate-Low
LCZ 23 – King George Park precinct	Moderate	Moderate	Moderate
LCZ 24 – Callan Park residential precinct	High	Moderate	High-Moderate
LCZ 25 – Sydney College of the Arts precinct	High	Negligible	Negligible
LCZ 26 – Darling Street precinct	Low	Negligible	Negligible
Southern landscape character zones (St	Peters intercha	nge)	
LCZ 27 – Sydney Park precinct	High	Low	Moderate
LCZ 28 – Sydney Park residential precinct	Moderate	Moderate	Moderate
LCZ 29 – Alexandra Canal industrial precinct	Low	Negligible	Negligible
LCZ 30 – Barwon Park precinct	High	Moderate	High-Moderate
LCZ 31 – Princes Highway precinct	Low	Low	Low
LCZ 32 – St Peters triangle precinct	Moderate	Negligible	Negligible
LCZ 33 – St Peters interchange precinct	Negligible	Low	Negligible

Mitigation measures have been recommended in **Chapter 9** to minimise landscape character impacts, particularly where impacts are predicted to be high.

7.3 Visual impact assessment

7.3.1 Visual envelope mapping

The visibility of the project is illustrated in visual envelope mapping (VEM) and outlined in this section. The VEM primarily considers existing landform as described previously in **section 3.2**. The VEM may not capture all viewing points, but provides a basis to inform the key viewing points of the project.

Central west (Darley Road motorway operations complex)

Figure 7-1 illustrates the potential visibility of the project from the surrounding area. As can be seen from the VEM, key views of the project are from homes and the roadway along Darley Road, from the light rail stop platform, entry stairs and parts of the light rail corridor, from part of the road way along Hubert Street, from part of the laneway to the west of Hubert Street and from a small number of homes on the western side of Charles Street near Darley Road. The VEM shows that there is limited visibility of the site from the north.



Light rail stop
 Image: Ancillary facility

Central east (Rozelle interchange)

Figure 7-2 illustrates the potential visibility of the project from the surrounding area. The height of the ventilation facility would make the project visible above surrounding residential and commercial properties and potentially also above some tree lines of Easton Park.

As can be seen from the VEM, key views of the project are from the roadways and residences in areas adjacent to the project at the Rozelle interchange, Glebe Foreshore Parklands, Rozelle Bay and associated wharves, Pyrmont Bridge, the light rail stops at Lilyfield and Rozelle Bay, the City West Link and Easton Park.

The height of the ventilation facility would make the project visible from a number of upper levels of multi storey residences located primarily adjacent to the project boundary, but also some high rise apartments located east of Anzac Bridge, towards the Balmain ridgeline, north of White Bay, and the Vance apartments at Harold Park which would comprise distant views.

In the short term (before replacement planting becomes well established), the loss of the landscape screening edge east of the White Bay Power Station would be likely to open up some views to the project (ie approaches to Anzac Bridge) from low -rise medium density residential development within the vicinity of Reynolds Avenue and Hyam Street, Balmain at a viewing distance of between 400 and 700 metres, and some elevated locations west of Victoria Road at a viewing distance of about 300 metres.



Northern (Iron Cove Link)

Figure 7-3 illustrates the potential visibility of the project from the surrounding area. The height of the ventilation facility would make the project visible above surrounding residential and commercial properties and potentially also above some tree lines towards Callan Park.

As can be seen from the VEM, views to the project would primarily be from residences adjacent to the project, along some adjoining residential streets, the length of Victoria Road to the ridgeline near Darling Street, and from Iron Cove Bridge.

Residences along Manning Street (to Callan Street), users of King George Park would have views to the bioretention facility. The multi storey apartments located in proximity of the project along Victoria Road, Terry Street and Nagurra Place would have views to the project from upper levels. Users of King George Park and the grounds of the Sydney College of the Arts would have views to the ventilation outlet and the ventilation outlet building from some areas, seen from a moderate distance, above residential properties and at street intersections. Some upper levels of buildings at the Sydney College of the Arts would also have views to the ventilation facilities.



Southern (St Peters interchange)

Figure 7-4 illustrates the potential visibility of the project from the surrounding area. As can be seen from the VEM, views to the project would be from residences and commercial properties adjacent to the project boundary, along some adjoining residential streets, across the St Peters interchange site, and for recreational users of Sydney Park. The height of the ventilation facility would also make the project visible above surrounding residential and commercial properties and potentially also above some tree lines within Sydney Park.



7.3.2 Key viewpoints

The following section provides an assessment of key viewpoints surrounding the operational footprint of the project. To assess the concept design for the project in the context of these viewpoints, a series of visual impact assessment assumptions were adopted and are presented at **Annexure B**.

Wattle Street interchange

The operational landscape design approach at the Wattle Street interchange has been developed and assessed as part of the M4 East project. The approach is detailed in the Draft M4 East Urban Design and Landscape Plan (Hassell, 2016).

Impacts associated with the construction and operation of new motorway infrastructure (including the ventilation facility itself) at Haberfield have already been assessed in the WestConnex M4 East Urban Design, Landscape Character and Visual Impact Assessment (AECOM, 2015) for the M4 East project. No further visual impact assessment has been undertaken for Haberfield as no additional operational infrastructure is proposed as part of the M4-M5 Link project. Potential cumulative impacts however are considered in further detail in **section 8.1**.

Darley Road

Proposed operational infrastructure and the operational landscape design approach at the Darley Road motorway operations complex (MOC1) is described in **Chapter 5** (Project description) of the EIS and **Appendix L** (Urban Design Report) of the EIS. **Figure 7-5** shows the operational layout of the site and the representative visual receptor locations assessed.



Existing features M4-M5 Link tunnels M4-M5 Link surface works --- Light rail

Ancillary facility

Mainline tunnel Operational facilities

Remaining project land
Receiver locations

Land subject to UDLP Motorway operations complex O Water treatment facility

Light rail stop

Receptor location D1 – View looking east from Darley Road near corner of Charles Street

Existing situation

This receptor location is situated on Darley Road near the near the corner of Charles Street looking east, see **Figure 7-6**. The view comprises from left to right of frame:

- Existing light rail corridor with substantial tree cover
- Charles Street Underbridge, a rail bridge over Charles Street which is a RailCorp S170 heritage item
- Outdoor car parking abutting the light rail corridor, with brick retaining wall and steep batter densely vegetated with tree and groundcover species
- Retail 'warehouse' outlet with large trees behind
- Darley Road with overhead powerlines and street lighting to both sides of the road
- Free standing residential development to the southern side of the road. These houses do not front Darley Road but may have partial views to the road from side windows. However, a number of low street trees and foliage planted outside these side windows may preclude some views to the street.

Project effects

The change in view from this receptor location is shown in **Figure 7-6** and **Figure 7-8**. The key project effects that would be visible from this receptor location are:

- A low scale water treatment plant consisting of a grouping of architecturally well-considered buildings and set behind a security fence and gates
- A substation located at the western end of the site
- Retention of existing tree and ground layer vegetation to the light rail batter
- Low perimeter landscape works and street tree planting at the Darley Road frontage to the project.

The balance of the land in the eastern part of the site (remaining project land) would be grassed until its future development is determined by the Residual Land Management Plan.

Lighting

Minimal additional light would be introduced to project area during operation, with facility lighting limited to that necessary to meet security, and when required on site, worker safety requirements.



Figure 7-6 Existing view looking east along Darley Road near the corner of Charles Street



Figure 7-7 Artist's impression at 12–18 months of operation from near corner of Darley Road and Charles Street looking east to the project



Figure 7-8 Artist's impression at 10 years of operation from near corner of Darley Road and Charles Street looking east to the project

Table 7-35 Receptor location D1 visual impact assessment

Receptor	Sensitivity	Magnitude Magnitude of change: Moderate	Rating Moderate
Residents	The Darley Road facility adjoins an infrastructure corridor located opposite free-standing residential development. Many of the residences adjoining Darley Road have measures in place to screen views to the road including building alterations to limit views; strategic planting of low street trees, large privacy/sun protection blinds, and tall hedges in front yards. The view to Darley Road from nearby residences is of poor to moderate quality within the context of the refurbished retail warehouse outlet.	The project would comprise a low scale, architecturally well- considered development to a portion of the Darley Road civil and tunnel site. The extent of visibility of the project from these residences is generally considered to be Low within the context of the observed measures put in place by residents to minimise views to Darley Road. Three dwellings would have direct views to the project. The design quality, including scale, size and character of the project would be expected to comprise an appropriate level of visual 'fit' with the street, including provision of street tree planting to the Darley Road frontage of the project.	Low
Pedestrians	Sensitivity to change: Low It is likely there would be a moderate amount of pedestrian traffic passing the project from local streets and along Darley Road due to the location of the light rail stop. However, as most of the pedestrian traffic is likely to be related to weekly commuting to and from work, the sensitivity of these receptors is considered likely to be relatively low, particularly given the frequent exposure to the view.	Magnitude of change: Low The scale, size and character of the project would be expected to comprise an appropriate level of visual 'fit' with the street, within the context of its infrastructure purpose, including provision of street tree planting to the Darley Road frontage of the project. The project would be visually compatible with the adjoining light rail corridor and Charles Street Underbridge.	Low

Table 7-36 Receptor location D1 lighting impact assessment

Receptor	Sensitivity	Magnitude	Rating
Residents	The sensitivity of residents to the low lighting levels likely to be required for the site is considered to be Low.	The magnitude of change in lighting is considered to be Low within the context of the existing street lighting present to both sides of the street.	Low
Pedestrians	The sensitivity of pedestrians to additional lighting is considered to be Low.	The magnitude of change for pedestrians passing the site at night is considered to be Low.	Low

Receptor location D2 – View looking west from Darley Road at entry to lane between James Street and Francis Street

Existing situation

This receptor location is situated on Darley Road at the entry to the lane between James Street and Francis Street looking west (see **Figure 7-9**). The view comprises from left to right of frame:

- Free standing residential development to the southern side of the road
- Darley Road with overhead powerlines and street lighting to both sides of the road
- Existing light rail corridor with substantial tree cover in the foreground
- Retail 'warehouse' outlet with large trees to right of frame.



Figure 7-9 Existing view looking east along Darley Road near corner of Charles Street

Project effects

The view from this location would comprise a grassed area of remaining project land. The perimeter brick retaining wall, Leichhardt North light rail stop and City West Link noise walls would be visible to the rear of the site, given the removal of large trees in the foreground.

A security fence would demark the boundary of the Darley Road motorway operations complex. The project would comprise low scale, architecturally well-considered buildings with the water treatment plant the primary visible building from this receptor. The Darley Road frontage to the project would be subject to low perimeter landscape works and street tree planting. Existing overhead power and street lighting to both sides of the street would be retained intact.

Lighting

Minimal additional light would be introduced to project area during operation, with facility lighting limited to that necessary to meet security, and when required on site, worker safety requirements.

Table 7-37 Receptor location D2 visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
Residents	Sensitivity to change: Low	Magnitude of change: Low	Low
	Refer to Table 7-35 .	The extent of visibility of the project from these residences is generally considered to be low within the context of the observed measures put in place by residents to minimise views to Darley Road. The scale, size and character of the project would be expected to comprise an appropriate level of visual 'fit' within the context of its infrastructure purpose, including provision of street tree planting to the Darley Road frontage of the project.	
Pedestrians	Sensitivity to change: Low	Magnitude of change: Low	Low
	It is likely there would be a moderate amount of pedestrian traffic passing the project from local streets and along Darley Road due to the location of the light rail stop. However, as most of the pedestrian traffic is likely to be related to weekly commuting to and from work, the sensitivity of these receptors is considered likely to be relatively low, particularly given the frequent exposure to the view.	The scale, size and character of the project would be expected to comprise an appropriate level of visual 'fit' with the street, within the context of its infrastructure purpose, including provision of street tree planting to the Darley Road frontage of the project. The project would comprise a small part of the overall view.	

Table 7-38 Receptor location D2 lighting impact assessment

Receptor	Sensitivity	Magnitude	Rating
Residents	The sensitivity of residents to the low lighting levels likely to be required for the site is considered to be Low.	The magnitude of change in lighting is considered to be Negligible within the context of the existing intervening street lighting present to both sides of the street.	Negligible
Pedestrians	The sensitivity of pedestrians to additional lighting from this location is considered to be Negligible.	The magnitude of change for pedestrians viewing the site at night from this location is considered to be Low.	Negligible

Rozelle interchange

Proposed operational infrastructure and the operational landscape design approach at the Rozelle interchange is described in **Chapter 5** (Project description) of the EIS and the **Appendix L** (Urban Design Report) of the EIS. **Figure 7-10** shows the operational layout of the site and the representative visual receptor locations assessed.

General arrangement/landscape setting

The open space landscape would be in the order of one-kilometre long and varies between 100 and 200 metres wide. The landform would be subject to two major changes in level running east to west with primary elevated landforms augmented by:

- Gently to moderately sloping rise and fall along the northern edge of the open space where it transitions to the adjoining Lilyfield Road street frontage
- Changes in level associated with the ventilation facility
- Constructed wetland
- Naturalised drainage channels taking stormwater from: the west, the north and the east and discharging this to Rozelle Bay
- Major infrastructure buildings would be limited to two locations, comprising the:
 - Rozelle West motorway operations complex (MOC2) located at the western end of the open space, with a tightly consolidated building group of air intake building (up to 12 metres high), substation (about 10 metres high) and fire suppression pump station (about 10 metres high) with water tanks
 - Rozelle East motorway operations complex (MOC3) located at the centre of the open space, with ventilation facility and outlets (about 35 metres high), and water treatment facility (about 10 metres high).

Surface landscape treatments would broadly comprise:

- Open space within the Rozelle Rail Yards
- Tree planting and landscaping surrounding permanent operational infrastructure including new portal structures
- Street tree planting along the northern edge of City West Link (most tree cover on the southern edge of this road, and west of The Crescent would be retained); the White Bay Power Station corner of Victoria Road, and the southern edge of the approaches to Anzac Bridge
- Wetland plantings to the naturalised drainage channels and the constructed wetland
- Heritage interpretation where possible.

The open space area would provide two elevated crossing points for pedestrians and cyclists between Rozelle and Annandale/Lilyfield comprising:

- A crossing of City West Link, connecting Lilyfield Road in Rozelle and Brenan Street in Lilyfield
- A crossing of City West Link, connecting Lilyfield Road near Easton Park in Rozelle and The Crescent in Annandale.

The existing views towards the city skyline in the vicinity of the Rozelle interchange include a number of existing structures that feature prominently. The relative scale of these prominent features has been considered as part of the visual impact assessment for Rozelle and is shown on **Figure 7-11**.



M4-M5 Link Ventilation Facility



White Bay Power Station











Receptor location R1 – View looking east from Catherine Street entry to Lilyfield Light Rail Stop

Existing situation

This receptor location is situated on Catherine Street between the entry steps and lift access to the Lilyfield light rail stop, looking east across the project site with the Rozelle maintenance depot in the foreground. This location is representative for light rail commuters, and residents within a nearby five storey mixed use development on the corner of Catherine Street and City West Link, with views oriented across the project site to the city.

The view from this receptor location is shown on **Figure 7-12**. The view comprises:

- Existing Rozelle Rail Yards with a moderate level of existing tree cover along the Lilyfield Road and vegetation along City West Link
- Distant city skyline including buildings within Barangaroo and the CBD, and the Sydney Harbour Bridge. Other elements include Anzac Bridge and the Glebe Island grain silos, all of which are seen against the skyline
- Residential development to the north of the Rozelle Rail Yards.

Views from single and double storey residences in proximity to this location are currently limited by dense built form and street/residential garden tree cover. It is noted that the construction of the Rozelle maintenance depot will result in a change in the addition of a new built form element to the foreground of the view.

Project effects

The change in view from this receptor location is shown in **Figure 7-13** and **Figure 7-14**. The key project effects that would be visible from this receptor location are:

- Part of the air intake, substation and pump house buildings, visible behind the Rozelle maintenance depot
- Ventilation outlets seen in the distance against the skyline
- The new Rozelle open space area and associated landscape plantings.

Beyond this, detail of the project site is predominantly screened by intervening tree cover. The ventilation outlets are seen at an oblique angle such that they visually read as a single mass, not dissimilar to the Glebe Island grain silos also seen in this view.

Lighting

Additional light would be introduced to this area during operation, commensurate with safety and security requirements. The lighting would not be expected to be visually prominent from this location due to the necessary light levels for the Lilyfield light rail stop and adjoining the Rozelle maintenance depot.



Figure 7-12 Existing view from Catherine Street at the entry to Lilyfield light rail stop



Figure 7-13 Artist's impression at 12–18 months of operation from Catherine Street at the entry to Lilyfield light rail stop



Figure 7-14 Artist's impression at 10 years of operation from Catherine Street at the entry to Lilyfield light rail stop

Table 7-39 Receptor location R1 visual impact assessment

Receptor Light rail	Sensitivity Sensitivity to change: Moderate	Magnitude Magnitude of change: Low	Rating Moderate-
users	Workers travelling to and from their place of work are generally considered to have low levels of sensitivity to changes in their travel route environment and the limited duration of the view. However, in this case light rail commuters looking out to the project are considered to be moderately sensitive receptors given the frequency with which commuters use this stop and the context of the view of the city skyline.	The view of the project from this location predominantly comprises a broad open space setting with low levels of topographic relief, characterised by a large open grassed area with a naturalised waterway, and substantial tree cover beyond that. The ventilation outlets are visually prominent, contrasting elements in terms of bulk, scale and form. However, the bulk and scale of these features are softened due to the distance from the receptor location, and the outlets comprise a contained grouping of elements from this location that take up a small proportion of the overall valley floor view. Further, given that the finishing/cladding materials and colour of the outlets have not yet been considered, the visual prominence of these elements would be able to be reduced over that shown within Figure 7-13 and Figure 7-14 . The elevation of this receptor location within the landscape relative to the outlets reduces the extent of the structures that would be seen against the skyline, ie rather than being viewed from the lower ground level within the skyline.	Low
Residents	Sensitivity to change: Low The apartments are located in an elevated position, and orientated towards a panoramic view across the project site to the city and are assumed to have a high number of overall occupants. These sensitive receptors have balconies facing east-north-east and could be expected to spend time observing this view, which would be considered of high importance. Given the increased elevation of these receptors over those at the Lilyfield light rail stop, the ventilation outlets would be unlikely to be seen against the skyline, providing opportunity to have these elements subject to some level of visual absorption against the backdrop of the ground plane.	Magnitude of change: Moderate The project would be highly visible from this location. The view would be in moderate contrast to the existing view, comprising an ordered, and aesthetically pleasing passive, open space in lieu of the previously derelict rail yards. However, this component of the view needs to be considered in conjunction with the proposed increased width of City West Link, and the provision of the Rozelle interchange and associated portals. The elevated angle of viewing would tend to shorten the height of the ventilation outlets, which would in most cases be seen against the backdrop of the ground plane rather than the skyline, potentially reducing their visual prominence.	Moderate– Low

Table 7-40 Receptor location R1 lighting impact assessment

Receptor	Sensitivity	Magnitude	Rating
Light rail users	Sensitivity to change: Low	Magnitude of change: Low	Low
	The sensitivity of light rail users to project lighting is considered to be Low given most commuters would be expected to use the light rail during daylight hours, other than when coming home after dark when they would subject to the relatively bright lighting of City West Link in this location, and some of whom would have brief views into the open space from Catherine Street. However, this view would be seen across the Rozelle maintenance depot which may be subject to relatively high lighting levels for security.	The magnitude of change is considered to be Low within the context of existing relatively high lighting levels associated with City West Link, and the relatively limited amount of lighting anticipated to be present within the open space and subject to light spill cut-off measures and screening some screening from trees, and likely to be limited to path systems and recreation nodal points.	
Residents	Sensitivity to change: Low	Magnitude of change: Low	Low
	The sensitivity of residents to project lighting is considered to be Low within the context of the intervening busy and well illuminated City West Link and associated M4 East interchange, and Catherine Street intersection. In addition to the Rozelle maintenance depot which may be subject to relatively high lighting levels for security.	The magnitude of change is considered to be Moderate within the context of increased illumination levels associated with City West Link and associated M4 East interchange. The majority of the lighting within the open space would generally be expected to be relatively low level when viewed from this receptor location, subject to light spill cut-off measures and screening from landscape planting.	

Receptor location R2 - View looking west along City West Link to M5 Link portal

Existing situation

This receptor location is located on City West Link about 300 metres west of the intersection with The Crescent. The view is shown on **Figure 7-15** and comprises the existing City West Link, a four lane road closely bounded to the south by a noise wall and tree planting, and bounded to the north by narrow tree planting and a 1.8 metre chain wire fence. Filtered views are available through the northern edge planting to the Rozelle Rail Yards.

Project effects

The change in view from this receptor location is shown in **Figure 7-16** and **Figure 7-17**. The key project effects that would be visible from this receptor location are:

- The M5 portal, with an open passive space with planting of native trees and grass which drapes over the portal structure
- A pedestrian share pathway bridge that spans over City West Link to Lilyfield
- New open space to the north of City West Link.

All existing vegetation on the southern side of City West Link would be retained other than for select removal of trees where the pedestrian bridge lands next to Brenan Street in Lilyfield. Motorists on City West Link would have substantial views into the new open space area.

Lighting

Additional light including traffic lights would be introduced to this area during operation, commensurate with safety and security requirements.



Figure 7-15 Existing view looking west along City West Link



Figure 7-16 Artist's impression at 12–18 months of operation from City West Link to the M5 portal



Figure 7-17 Artist's impression at 10 years of operation from City West Link to the M5 portal

Table 7-41 Receptor location R2 visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
Motorists	Sensitivity to change: Low	Magnitude of change: Moderate	Moderate-
	The road would be subject to a very high number of users on a daily basis, with views to the landscape elements fluctuating between views for moving traffic to consider when vehicles were stopped at traffic lights. These transient receptors would have existing views for a relatively short duration.	The project would be highly visible from this location and would be in contrast with the narrow and highly enclosed nature of the existing view. The project would open views at this location, including views of new open space, as well as hard landscape elements of the M5 portal and the pedestrian bridge, which would comprise architecturally well-considered design elements. Within this context the quality of this view is considered to be a significant improvement over the existing view. The carriageway would increase in width in this location, however, the sense of openness and visual connectivity with the adjoining open space is considered to potentially mitigate this impact.	Low

Table 7-42 Receptor location R2 lighting impact assessment

Receptor	Sensitivity	Magnitude	Rating
Motorists	Sensitivity to change: Low	Magnitude of change: Moderate	Moderate-
	The sensitivity of motorists to project lighting is considered to be low given the provided lighting conditions would be typical for a motorway interchange of this type.	The magnitude of change is considered likely to be moderate within the context of existing City West Link lighting levels in this location.	Low

Receptor location R3 – View looking west along City West Link to The Crescent

Existing situation

This receptor location is situated on the southern footpath of City West Link about 100 metres east of the existing intersection with The Crescent. The view is shown on **Figure 7-18** and comprises the existing City West Link which has a wide carriageway in this location, bounded to the south by a row of trees and the Rozelle Bay working port edge, and bounded to the north by the Rozelle Rail Yards and a row of trees within the road verge. The view is dominated by the extensive carriageway and a clutter of signage, lighting and powerlines.

Project effects

The change in view from this receptor location is shown in **Figure 7-19** and **Figure 7-20**. The key project effects that would be visible from this receptor location are:

- The upgraded City West Link with large motorway scale elements comprising a pedestrian-bridge spanning City West Link
- The Western Harbour Tunnel portal, with an open woodland planting of native trees and grass which drapes over the portal structure
- The ventilation facility and three ventilation outlets
- A water treatment plant east of the ventilation facility.

Most of the vegetation on the southern side of City West Link would be retained, with the northern edge of road subject to a new planted edge. It is recommended existing overhead power lines be relocated underground, reducing skyline clutter.

Lighting

Additional lighting would be provided to this area commensurate with the upgraded road conditions including to the Western Harbour Tunnel Link interchange.



Figure 7-18 Existing view looking west along City West Link to The Crescent



Figure 7-19 Artist's impression at 12–18 months of operation from City West Link looking west to The Crescent



Figure 7-20 Artist's impression at 10 years of operation from City West Link looking west to The Crescent

Table 7-43 Receptor location R3 visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
Pedestrians/	Sensitivity to change: Low	Magnitude of change: Moderate	Moderate-
cyclists	This receptor location adjoins the upgraded City West Link about 100 metres east of the new intersection with The Crescent. The share pathway along the southern edge of City West Link has relatively low pedestrian activity due to the poor amenity afforded by its marginal separation from the busy road and narrow planting of low ground layer species. A greater number of cyclists would be expected to use this route, particularly those travelling to/from Anzac Bridge. Due to the transient nature of the receptor and the low quality of the existing view, the sensitivity of these receptors to the project is considered to be low.	The project would be highly visible from this location given the new elements introduced into the landscape. The motorway scale elements would be in contrast with the existing Rozelle Rail Yards landscape, and would be seen across the busy City West Link. At a viewing distance of about 100 metres, the taller elements of the land bridge and ventilation facility would be prominent features in this view. However, the project would have a highly functional and ordered landscape character, comprising architecturally well-considered design elements which would be readily appreciable by this receptor group, with low to moderate viewing duration.	Low
Motorists	Sensitivity to change: Low	Magnitude of change: Moderate	Moderate-
	Motorists travelling along this major arterial link would be on route as part of a longer journey, with the attention of drivers on the road rather than the surrounding environment. The road would be subject to a very high number of motorists on a daily basis, with view to the landscape elements fluctuating between fleeting in moving traffic, to brief views when stopped at traffic lights.	The magnitude of change would be similar to that described above for pedestrians/cyclists. The quality of this view would be likely to comprise a significant improvement over the existing view.	Low

Table 7-44 Receptor location R3 lighting impact assessment

Receptor	Sensitivity	Magnitude	Rating
Pedestrians/	Sensitivity to change: Low	Magnitude of change: Moderate	Moderate-
cyclists	The sensitivity of pedestrians and cyclists to project lighting is considered to be low given the provided lighting conditions would be typical for a major arterial road setting of this type.	The magnitude of change is considered likely to be Moderate when compared to existing lighting levels experienced by these receptors.	Low
Motorists	Sensitivity to change: Low	Magnitude of change: Moderate	Moderate-
	The sensitivity of motorists to project lighting is considered to be low given the provided lighting conditions would be typical for a major arterial road setting of this type.	The magnitude of change is considered likely to be Moderate when compared with the existing City West Link lighting levels in this location.	Low

Receptor location R4 – View looking east along Lilyfield Road at corner of Foucart Street

Existing situation

This receptor location is situated on the corner of Foucart Street and Lilyfield Road looking east across the project site towards the city skyline. The existing view is shown on **Figure 7-21**. The view comprises:

- Lilyfield Road, which runs along the toe of the Rozelle valley side which is subject to dense, generally free-standing residential development
- Existing Rozelle Rail Yards and street trees along the southern side of Lilyfield Road in the foreground, which partially obscures and periodically removes views across the valley floor to the city skyline in the background
- Intermittent planting of small street trees along the northern edge of Lilyfield Road.

Due to the north-south orientation of the streets which run up the hill from Lilyfield Road, most dwellings would look out either onto these residential streets, or towards the back yards of adjoining housing. However, a substantial number of these dwellings have upper floors, from which views to the city skyline may be available, including to the White Bay Power Station. The view may also in some cases incorporate partial views of the Rozelle Rail Yards.

Project effects

The change in view from this receptor location is shown in **Figure 7-22** and **Figure 7-23**. The key project effects that would be visible from this receptor location are:

- The landscape of the new open space with share pathways, tree planting, and a reinstated rail gantry as part of heritage interpretation
- The three ventilation outlets, seen through a new street tree planting along the southern edge of Lilyfield Road.

Lighting

Additional lighting seen from this location would comprise share pathway lighting and potentially nodal lighting within the park and in the vicinity of the ventilation facility.



Figure 7-21 Existing view looking east along Lilyfield Road at corner of Foucart Street


Figure 7-22 Artist's impression at 12–18 months of operation from Foucart Street looking east along Lilyfield Road at corner of Foucart Street



Figure 7-23 Artist's impression at 10 years of operation from Foucart Street looking east along Lilyfield Road at corner of Foucart Street

Table 7-45 Receptor location R4 visual impact assessment

Receptor Residents	Sensitivity Sensitivity to change: Moderate	Magnitude Magnitude of change: Moderate	Rating Moderate
	This receptor location is located within less than 20 metres from the project. A small to possibly moderate number of residents within Foucart Street would be expected to have views from their dwellings, including from balconies, front porches, and possibly also from the back of some residences. Residents walking from the top of the hill south along their street would obtain substantial vistas along the street to the existing Rozelle Rail Yards and beyond to the city skyline. However, this is not considered to be an important or quality view in the context of the existing character of the rail yards and existing streetscape of Lilyfield Road. The duration of the view could be expected to be from a few minutes while strolling down the hill, to substantial periods of time, eg as residents sit on their balconies.	When looking south along Foucart Street, and where views are available to the project from residences, some elements of the project would be highly visible. The visible elements in the view include the ventilation outlets which are prominent given the young age of the soft landscape treatments. The view would be in contrast to the existing view of the Rozelle Rail Yards landscape, notwithstanding the substantial amount of vegetative cover to both settings. The project would by contrast provide a well-considered and visually inviting landscape. Once the soft landscape treatments have grown in height, the ventilation outlets would no longer be visible and the open space setting would dominant the view. This would provide an overall improvement in the quality of the view. However, given the highly oblique angle of the view to the ventilation facility relative to the alignment of Foucart Street, the number of residents that would have substantial views of it is considered likely to be Moderate.	
Motorists	Sensitivity to change: Negligible	Magnitude of change: Low	Negligible
	Motorists travelling along Lilyfield Road have limited and periodic views across the Rozelle Rail Yards. Travel and views along this local road would be part of a longer journey, with the attention of drivers primarily on the road rather than the surrounding environment. The road is subject to periodically high numbers of motorists on a daily basis. The existing view would be considered likely to comprise one of low quality. Within this context, the sensitivity of motorists to the proposed change is considered to be Negligible.	The project would be highly visible from this location given the 12–18 months maturity of the soft landscape treatments, including the street trees along the southern edge of Lilyfield Road. Given the scale of the project, much of this high quality landscape would be broadly appreciable by motorists when driving, notwithstanding the generally brief duration of these views. Within this context, the magnitude of change is considered to be Low.	

Table 7-46 Receptor location R4 lighting impact assessment

Receptor	Sensitivity	Magnitude	Rating
Residents	Sensitivity to change: Negligible	Magnitude of change: Low	Negligible
	The sensitivity of residents to project lighting is considered to be Negligible given that lighting within the project open space would be relatively limited, eg share pathway lighting and potentially nodal lighting at some activity locations. Lighting levels along Lilyfield Road would not be expected to significantly increase over those currently in place.	The magnitude of change is considered likely to be Low within the context of existing lighting levels in this location, ie there would be more lighting visible given the existing Rozelle Rail Yards landscape, but also taking account of the likely low number of residents that would have views of the open space from their residences.	
Motorists	Sensitivity to change: Low	Magnitude of change: Low	Low
	The sensitivity of motorists to project lighting is considered to be low given their need to concentrate on the road, and the relatively minor amount of lighting visible within the highly undulating project landscape.	The magnitude of change is considered likely to be Low within the relatively limited areas of lighting visible from Lilyfield Road which would be predominantly set at a similar level to the road.	

Receptor location R5 – View looking south from Easton Park to the project

Existing situation

This receptor location is situated about midway along the northern boundary within the heritage listed Easton Park, looking south to the project. Easton Park is surrounded to the west, north and east by a number of 1800s period homes, interspersed with contemporary dwellings. The park also includes a substantial playground to the east, and a community building and Sydney Water S170 heritage listed sewage pumping station set alongside Lilyfield Road. All of this area falls within the Easton Park Heritage Conservation Area. The park is bordered along its western and northern boundaries by mature fig trees.

The existing view is shown on **Figure 7-24**. The view comprises Easton Park and Lilyfield Road, adjoined by a light industrial area which comprises most of the backdrop to the park from this location. There are distant views toward Annandale and the vegetated Whites Creek corridor.

Project effects

The change in view from this receptor location is shown in **Figure 7-25** and **Figure 7-26**. The key project effects that would be visible from this receptor location are:

- The removal of industrial buildings and vegetation within and adjacent to the Rozelle Rail Yards
- The new ventilation facility and outlets, which will present a visually prominent feature in the view.

The ventilation facility would comprise a visually prominent feature of high bulk, scale and contrasting form within the landscape when seen from this central location within Easton Park, particularly given the limited height of intervening tree planting, as shown at 12–18 months into operation³ (see **Figure 7-25**).

The facility can usefully be looked at in two parts, ie the long, horizontal north facing walls of the ventilation building, and the squat, vertical ventilation outlet elements. The walls sit below the skyline, and are seen against the well vegetated backdrop of Glebe. The ventilation outlets being of greater height, extend into the skyline. Future architectural detailing of the ventilation facility in conjunction with the tree planting in the foreground within the park, would potentially result in a moderate reduction in the visual prominence of these elements.

Once the horizontal elements of the building have visually receded, or over time been substantially screened by intervening tree cover, the vertical ventilation outlet elements would reduce in contrast with the landscape (see **Figure 7-26**). While still large structures, these elements are more readily able to be visually accommodated at this distance, given they take up a lesser proportion of the overall view.

Residents

Residents would be expected to have varying degrees of visibility of the project, with the following locations considered:

- Double storey dwellings on Lilyfield Road just prior to the corner of Denison Street. These dwellings are situated on elevated land and orientated towards the ventilation facility
- Residences along Denison Street, where many of those houses closest to the project would have highly oblique views towards the ventilation facility. This view would be increasingly obscured by a substantial stand of moderately tall spreading trees at the Denison Street corner of Easton Park. Views further north on Denison Street are generally confined to the immediate street frontage

³ This view is taken from about midway along the northern boundary of Easton Park to provide a representative view towards the project. This has resulted in the western ventilation outlet being screened from view by the large spreading trees in the foreground.

- Residences on the northern side of Burt Street which, although screened by tree canopies, would have partial to full views of the ventilation facility. It is anticipated residences on the southern side of Burt Street are unlikely to have significant views to the ventilation facility due to the intervening park playground and a stand of tall trees along Lilyfield Road, with the exception of three to four residences which could potentially have views from their rear windows and back gardens
- Three dwellings facing onto Lilyfield Road near the corner of Burt Street would also be likely to have prominent views of the ventilation facility.

Park users

Users of Easton Park would primarily be considered likely to comprise:

- Active recreation pursuits such as school children and teachers at weekday sporting activities, and parents and children at weekend sporting activities
- Passive recreation activities such as walking the dog, walking through the park as part of a longer walk, and quiet contemplation.

Lighting

Additional lighting seen from this location would comprise share pathway lighting and potentially nodal lighting within the park and in the vicinity of the ventilation facility.



Figure 7-24 Existing view looking south from Easton Park to the project



Figure 7-25 Artist's impression at 12–18 months of operation looking south from Easton Park to the project



Figure 7-26 Artist's impression at 10 years of operation looking south from Easton Park to the project

Table 7-47 Receptor location R5 visual impact assessment

Receptor Residents	Sensitivity Sensitivity to change: High	Magnitude Magnitude of change: High	Rating High
	Residential receptors would likely have prominent views to the ventilation facility from living spaces. Existing views to Easton Park, which is a heritage listed item, would be expected to be highly valued by many of these residents, with substantial viewing durations likely from living areas including front verandahs/porches.	Views to the ventilation facility would range from unimpeded for a low to moderate number of residents, to partially obscured for a further moderate number of residents. The view of the ventilation facility would be in high to moderate level of contrast with that of the existing view, notwithstanding that much of this view would comprise new open space. The quality of the design outcome is expected to be High. The exception to this may be the ventilation facility, which although subject to well-considered architectural and urban design, may nonetheless be perceived by some residents as to have a contrasting bulk and scale, and subsequent visual prominence4. Most views from residential receptors would be from a similar level to that of the facility. The primary exception to this would be those few dwellings on Lilyfield Road west of Denison Street, which would potentially have an elevated view across the new open space and ventilation facility. All of these residents would be located within between 150 and 350 metres of the ventilation facility.	
Active	Sensitivity to change: Low	Magnitude of change: Moderate	Moderate-
recreational users	Active recreational users would generally be expected to be primarily focused on their competitive activity and team mates rather than their broader surroundings. Receptor numbers would be anticipated to be high, and undertaken over a period of one to three hours. Within this context, the sensitivity of these active recreational receptors to the proposed change in the view is anticipated to be Low.	The magnitude of change would be Moderate within the context of the removal of the adjacent industrial development, and its replacement with a high quality open space and the bulk and scale of the ventilation facility seen in the view.	Low

⁴ It is noted that these issues would be expected to have been substantially resolved once the instated tree planting had developed.

Receptor	Sensitivity	Magnitude	Rating
Passive recreational users	Sensitivity to change: Moderate Passive recreational users would be considered likely to take an interest in their surroundings and the quality of these. The number of receptors would be considered likely to be moderate, with the duration of viewing likely to be in the order of say 15 minutes up to an hour or two. Within this context, the sensitivity of these passive recreational receptors to the proposed change is considered to be Moderate.	Magnitude of change: High The magnitude of change would be High within the context of the removal of the adjacent industrial development, and its replacement with a visually prominent feature of bulk, scale and contrasting form located within the new open space.	High– Moderate

Table 7-48 Receptor location R5 lighting impact assessment

Receptor Residents	Sensitivity Sensitivity to change: Negligible	Magnitude Magnitude of change: Low	Rating Negligible
	The sensitivity of residents to project lighting is considered to be Negligible given that lighting within the project open space would be relatively limited, eg shared pathway lighting and potentially nodal lighting at some activity locations. Lighting levels within Easton Park and along Lilyfield Road would not be expected to significantly increase over those currently in place.	The magnitude of change is considered likely to be Low within the context of existing lighting levels in this location, ie there would be more lighting visible given the existing Rozelle Rail Yards landscape, but also taking account of the likely low number of residents that would have views of the open space from their residences.	
Active	Sensitivity to change: Negligible	Magnitude of change: Low	Negligible
recreational users	There would be a low number of receptors using the park at night. Within this context, the sensitivity of these active recreational receptors to the proposed change in the view is anticipated to be Negligible.	The magnitude of change is considered likely to be Low given lighting would be designed to fit within the landscaping of the open space and would be a low contrast with the existing view.	
Passive	Sensitivity to change: Negligible	Magnitude of change: Low	Negligible
recreational users	There would be a low number of receptors using the park at night. Within this context, the sensitivity of these passive recreational receptors to the proposed change in the view is anticipated to be Negligible.	The magnitude of change is considered likely to be Low given lighting would be designed to fit within the landscaping of the open space and would be a low contrast with the existing view.	

Receptor location R6 - View looking north from Glebe Foreshore Parklands to the project

Existing situation

This receptor location is situated at a formal lookout point on the foreshore of Bicentennial Park, which provides a representative view for recreational users of the Glebe Foreshore Parklands. This receptor location provides a sweeping panorama across Rozelle Bay from Annandale in the west, across the Rozelle valley side and Balmain to the north, through to Pyrmont Point in the east. The existing view is shown on **Figure 7-27**.



Figure 7-27 Existing view (panorama) looking north from Glebe Foreshore Parklands to the project

The existing view comprises:

- An extensive water element extending from the foreground in Rozelle Bay to the middle ground of the view in Johnsons Bay
- A working port edge along the north and west sides of Rozelle Bay, behind which the vegetated cover of the Rozelle Rail Yards is seen in conjunction with tree cover within the Whites Creek corridor and alongside City West Link
- A diverse range of features are seen in the background including the state heritage listed White Bay Power Station, the Glebe Island grain silos, Anzac Bridge, the historic Glebe Island Bridge, and Sydney Harbour Bridge (partial view)
- The Rozelle valley side and western end of the Balmain peninsula provides a modulated backdrop to this view, comprising substantial vegetation with an interspersed, variable cover of generally small housing and commercial elements.

Project effects

Most of the infrastructure elements of the project which are not screened by intervening working port edge facilities along the northern edge of Rozelle Bay would be visible from this location. This is due to the project being assessed at 12–18 months into operation, when landscape planting works are at an early stage of growth and provide limited screening capability. The key project effects that would be visible from this receptor location are:

- Land bridge crossing of City West Link, including connected pedestrian bridge crossing to the western side of The Crescent
- Ventilation facility and outlets
- Water treatment plant
- Shared pathway that runs across the western corner of Rozelle Bay
- New Victoria Road bridge crossing and associated intersection with City West Link in the vicinity of White Bay Power Station and approaches to Anzac Bridge.

The ventilation outlets in particular would be visually prominent from this location, particularly given the limited height of intervening tree planting. These elements would protrude into the skyline and comprise visually contrasting elements within the immediate vicinity of the project. However, within the larger setting as viewed from this receptor location, these new elements would be broadly congruent with other proximate, large infrastructure elements in the skyline, such as the White Bay Power Station chimney stacks, the Glebe Island grain silos, and the Anzac Bridge. The relative scales of these elements have previously been shown in **Figure 7-11**. The project would, however, seek to integrate the potentially visually prominent elements together with the improved setting afforded by the new open space.

Lighting

Additional lighting seen from this location would comprise: street lighting to City West Link, including the intersection with The Crescent and the intersection with Victoria Road, and to the Anzac Bridge approaches; the land bridge/pedestrian bridge and associated ramps and steps; the share pathway at the western corner of Rozelle Bay and potentially nodal lighting at activity locations within the park.

Table 7-49 Receptor location R6 visual impact assessment

Receptor	Sensitivity	Magnitude	Rating
Passive	Sensitivity to change: High	Magnitude of change: Moderate	High–
recreational users	Passive recreational users of the open space are likely to be there for prolonged periods of time, and in high numbers, particularly on weekends. They can be expected to take a high level of interest in their surrounds, including the extensive view from the bayside edge of the open spaces. This is considered to be an important view within the context of the surrounding receptor catchment of densely populated suburbs, with views often enclosed, and dominated by narrow, busy streets. Additionally, the view is considered to be one of high quality within the context of the large, open and well maintained open space environment where it occurs, the extensive harbour element of the view, and the visually interesting combination other infrastructure and landscape elements (including port infrastructure, vegetated suburbs, White Bay Power Station, and Anzac Bridge). Visual receptors can be expected to be sensitive to the introduction of additional large, and visually prominent elements into the view.	The project would be visually prominent due to introduction of motorway infrastructure including the ventilation facility, land bridge and associated pedestrian bridge, and to a lesser extent the elevated carriageway of City West Link and the Victoria Road bridge. The visual prominence is in part due to limited screen planting along the southern edge of this part of the project. The ventilation outlets would comprise contrasting elements within the immediate context of the Rozelle Rail Yards. However, within the overall extent of this view, and due to the distance of the receptor from the project (in the order of 500 metres), it is considered that the landscape has the capacity to visually accommodate these elements particularly in the context of proximate elements such as the White Bay Power Station, Glebe Island grain silos and Anzac Bridge. In addition, these elements would be viewed within the context of an extensive open space setting, including the well vegetated backdrop of the Rozelle valley side, with the ventilation outlets seen as an integral component of the larger open space composition.	Moderate
Active recreational users	Sensitivity to change: Low Active recreational receptors are considered less likely to pay attention to their surrounding environment when compared to passive recreations users, given their primary focus would be on their active pursuit, eg cricket, football and running.	Magnitude of change: Moderate The magnitude of change is considered to be the same as for passive recreational users.	Moderate– Low

Table 7-50 Receptor location R6 lighting impact assessment

Receptor	Sensitivity	Magnitude	Rating
Passive recreational users	Sensitivity to change: Low The number of recreational receptors using the parkland at night is considered likely to be low. Within the context of the viewing distance, the breadth of the view, and illuminated elements within it including Anzac Bridge, and the nature of views across the harbour at night with reflections on the water, these receptors would be considered likely to have a relatively low level of sensitivity to the proposed level of increased lighting.	Magnitude of change: Moderate The magnitude of change is considered likely to be moderate given that City West Link and the approaches to Anzac Bridge already constitute major arterial roads with associated lighting levels. The extent and nature of lighting within the project open space is considered likely to be moderate to low with its focus on pedestrian and cyclists, notwithstanding the previously 'dark' setting of the derelict rail yards.	Moderate– Low
Active recreational users	Sensitivity to change: Negligible The number of recreational receptors using the parklands at night is considered likely to be low, with these receptors focussed on their active pursuit, eg running.	Magnitude of change: Moderate The magnitude of change is considered to be the same as for passive recreational users.	Low

Receptor location R7 – View looking north from Rozelle Bay Light Rail Stop to the project

Existing situation

This receptor location is situated on the west travelling platform close to the entry from Bayview Crescent. The existing view is shown on **Figure 7-28**. The view looks into the canopy of trees within Buruwan Park, which is set some six metres below the station. There is no view available through the canopy looking from this location. Buruwan Park is situated between City West Link, The Crescent, and the light rail corridor.

Project effects

The change in view from this receptor location is shown in **Figure 7-29** and **Figure 7-30**. The key project effect that would be visible from this receptor location is the upgrading of the intersection of The Crescent and City West Link. This upgrade would require the removal of Buruwan Park, and all of the adjacent vegetation between Whites Creek and City West Link. This would have the effect of removing the existing screening between the station and the project, opening up views to City West Link, the land bridge crossing of City West Link, pedestrian bridge crossing of The Crescent and the ventilation outlets. However, it would also open up views to Rozelle hillside, Balmain industrial area and the White Bay Power Station, and the city skyline, which were not previously available.

A key element of this change in view is that the extent of the project would make it highly unlikely that tree cover could be reinstated to this area, and consequently, this temporal duration of this change would be long-term.

Light rail patrons

Light rail patrons would have partial views of the project and panoramic views across the broader landscape.

Residents

Some residents upslope of the light rail stop in Bayview Crescent would be likely to have partial views of the project. The extent of views to visible elements would be highly variable, ranging from glimpse/filtered views through the substantial tree cover present across much of the residential hillside, to substantial views, albeit obtuse views to the ventilation facility from elevated locations looking over intervening development.

Pedestrians

There is potential for views of the project from residential streets including Bayview Crescent, Annandale Street, Breillat Street, and Pritchard Lane. These streets have the potential to provide substantial framed views of the project, and the ventilation facility and outlets in particular, as a result of the loss of the trees adjoining the light rail stop.

Lighting

Additional lighting seen from this location would be high, primarily comprising road lighting from the Iron Cove Link interchange, and intersection of The Crescent and City West Link, including light from vehicle headlights travelling east on City West Link. Other likely additional nearby lighting sources would include that to both the land bridge crossing of City West Link, and pedestrian bridge crossing of The Crescent. The lighting poles to the adjoining motorway would be assumed to be in the order of 10–12 metres high, with the luminaires therefore sitting about four to six metres above the light rail stop platform level.



Figure 7-28 Existing view looking north from Rozelle Bay light rail stop to the project



Figure 7-29 Artist's impression at 12–18 months of operation looking north from Rozelle Bay light rail stop to the project



Figure 7-30 Artist's impression at 10 years of operation looking north from Rozelle Bay light rail stop to the project

Table 7-51 Receptor location R7 visual impact assessment

Receptor Light rail patrons	Sensitivity Sensitivity to change: Moderate The Rozelle Bay light rail stop would be used by local Lilyfield and Annandale residents, primarily for commuting to and from work, although a significant number of people would also use it on weekends. The importance of the existing view is low. The quality of the existing view is considered to be Moderate, within the context of what is a quiet, well vegetated, visually enclosed setting.	Magnitude Magnitude of change: High The project would open up views to new infrastructure elements introduced by the project such as the ventilation outlets and land bridge. Visibility would be high due to the elevated location. The quality of the design outcome however would be expected to be significant and could reduce the degree of contrast with the existing view. Relatively extended wait times on the station platforms would provide substantial time for this receptor group to appreciate an extensive view of the project, which would be seen from a close range with the land bridge at a distance of about 60 metres. Views would be opened to the city skyline at a distance of about three kilometres, and include other features in between.	Rating High– Moderate
Residents	Sensitivity to change: High Some residents upslope of the Rozelle Bay light rail stop would have variable views to the project, ranging from glimpse/filtered views through the extensive tree cover present across much of the residential hillside, to substantial, albeit obtuse views to the ventilation facility from elevated locations looking over intervening development, as described above. The number of residential receptors with some level of view to the project is considered likely to be moderate to high. However, the number of residents likely to have substantial views of the project from living areas within their residences is considered likely to be moderate to low. The quality of the existing view would vary from: low, eg looking into a close, relatively dense canopy of vegetation; through to high, eg a view looking east from Bayview Crescent across Rozelle Bay to Anzac Bridge and the city skyline beyond. This is considered to be a view of High importance, particularly to those residents adjoining it.	 Magnitude of change: Moderate The extent of visibility of the project would be highly variable and can be grouped as follows: High visibility of the project from a few locations along Johnston Street and Bayview Crescent which may view a coverage of the project infrastructure elements, noting that this view would be seen at an oblique angle. These locations have a moderate degree of contrast due to other infrastructure elements in the field of view, moderate to high duration of viewing, and would be in the order of 200 to 300 metres from the project Moderate to low visibility of the project from locations along Buruwan Lane, Kentville Avenue and Weynton Street that may have a partial view of the project, most often incorporating the ventilation facility. These locations have a moderate degree of contrast due to other infrastructure elements in the field of view, low duration of viewing, and would be in the order of 200 to 400 metres from the project (up to 700 metres from the open space extent)	High– Moderate

Receptor	Sensitivity	Magnitude	Rating
		Street and Breillat Street that would potentially be subject to glimpse/partial views, or views filtered by vegetation of the ventilation facility. These locations have a high degree of contrast due to (in most cases) no significant visual reference to major infrastructure other than the project, low duration of viewing and would be in the order of 200 metres to the project.	
		Within the context of the above, the magnitude of change arising from the project for residents upslope of the Rozelle Bay light rail stop is considered to be Moderate, drawing particularly on the moderate to low number of residences with 'high visibility', and associated degree of contrast, duration of viewing and distance to the view.	
Pedestrians	Sensitivity to change: High	Magnitude of change: High	High
	There is potential for views to project infrastructure from: Bayview Crescent; Annandale Street, Breillat Street; and Pritchard Lane. These receptors would in many cases be walking along these streets either on their way to the light rail stop for work or other destination. Where the purpose of the walk is work/destination focused, the sensitivity of the receptor would be considered moderate within the context of the attractive environment. Where the purpose is for recreation, the sensitivity of the receptor to changes in the view would be considered to be high, with the number of receptors being moderate to potentially high. The quality of the existing streetscape view is High, as is the importance of these views, given that all of these streets are	The extent of visibility of the project would in most cases be likely to be limited to the ventilation facility and outlets. The distance to the views would be in the order of 150 to 450 metres, meaning the ventilation outlets would be seen in a considerable level of detail. The duration of the view could be extended: given the lengths of those parts of the streets from which the view was available; and the speed at which the receptor was walking, or potentially ambling. The temporal duration of the change in view would potentially be long-term.	

Table 7-52 Receptor location R7 lighting impact assessment

Receptor	Sensitivity	Magnitude	Rating
Light rail	Sensitivity to change: Low	Magnitude of change: High	Moderate
patrons	The light rail stop is currently a relatively low light setting at night, generally well screened from Bayview Crescent (local road), and City West Link and The Crescent. The assumed extent and intensity of additional lighting would be considered likely to be high. The type and number of receptors is as described in Table 7-51 . The sensitivity workers returning home after dark to the increased lighting levels is considered likely to be Low, given this would be a regular/daily occurrence during the working week, from which sensitivity to increased lighting levels would soon diminish.	The current relatively low light/local light rail stop character would change to one of a primary public transport link with the new open spaces, with assumed high light levels primarily associated with the adjoining motorway infrastructure. However, as with the daytime views of project infrastructure, the pedestrian bridging structures and associated lighting effects would be the subject of well-considered urban design inputs. Moderate areas of the motorway interchange would be screened from view by the parapets to the bridge deck.	
Residents	Sensitivity to change: High	Magnitude of change: High	High
	A moderate and potentially high number of residential receptors would have direct visibility of what would be anticipated to be a significant increase in road lighting levels associated with the project, particularly at the intersection of the Western Harbour Tunnel portals, City West Link, and The Crescent. Additionally, the extent of screening vegetation along the southern edge of City West Link between the intersection with James Craig Road and midway between the Victoria Road intersection and the approaches to Anzac Bridge would be considerably reduced, potentially resulting in increased headlight glare from traffic. These increased levels of lighting would be visible from the living areas of some of the above 'high visibility' dwellings. The quality of the night-time district views from residences (where available) would be considered likely to be moderate to High. Residents within the 'low visibility' areas at the northern end of Bayview Crescent, Pritchard Street, Breillat Street and Railway Parade could be subject to a less direct, but nonetheless pervasive or prominent 'glow' effect through the limited remaining screening vegetation between them	The extent of increased night lighting visible to residential receptors could be High for the above stated reasons, resulting in moderate to high levels of night-time contrast with the existing views. These increased lighting effects would be located within 50–60 metres of many residential receptors along the lower end of Bayview Crescent and much of Railway Parade. The elevated location of many of these residential receptors would cause a relative increase in seen lit areas, ie looking from above, across the road surface in three dimensions, compared for instance with views from Glebe Foreshore Parklands, which would be at or below the level of much of the above described lighting, and therefore see in elevation, ie in two dimensions. The duration of viewing from many of the above described 'low visibility' residences would generally be expected to be low, given that many of them may not have night-time views to the above major intersection from living areas, or where they did these would be inside and therefore generally lit, rather than from an unlit outdoor living area such as a balcony or verandah where a night-time view could be readily appreciated.	

Receptor	Sensitivity	Magnitude	Rating
	and the intersection. In both cases, the temporal duration of any effect would be long-term.		
Pedestrians	Sensitivity to change: Moderate	Magnitude of change: High	High-
	Pedestrians at this receptor location experience low level street lighting, light from the light rail stop and nearby busier	Lighting effects from the project on pedestrians would potentially be most likely to occur when walking at night.	Moderate
	receptors at night time are expected to be low and with limited duration.	The views along Annandale Street, Breillat Street and Pritchard Lane would be aligned with the Rozelle interchange with City West Link and The Crescent, the likely primary focus point for increased light	
	The sensitivity of pedestrians to the introduction of a potentially high or even moderate point source of high light	intensity arising from the project. Depending on the extent of visibility of this area resulting from project related tree loss, the view could	
	from multiple locations. Were this view to be available, it would be in strong contrast to the generally well screened,	including parts of the land bridge and pedestrian bridge, or moderately or highly filtered views through intervening street trees,	
	low light suburban environment of Annandale.	and/or garden trees of the well-lit motorway interchange.	
		The distance to the views would be in the order of 100–400 metres.	
		The magnitude of change in this case would relate to the introduction of a bright point source of light within an intrinsically low light suburban, heritage landscape setting.	

Iron Cove Link

Proposed operational infrastructure and the operational landscape design approach at Iron Cove Link is described in **Chapter 5** (Project description) of the EIS and **Appendix L** (Urban Design Report) of the EIS. **Figure 7-31** shows the operational layout of the site and the representative visual receptor locations assessed.

General arrangement/landscape setting

The project would commence from the eastern approaches to Iron Cove Bridge, widening to contain four Iron Cove Link eastbound and westbound lanes with associated portals and retaining walls, and a further three lanes either side of these comprising through lanes for Victoria Road, the outer lanes of which would be bus lanes. East of Toelle Street, the widened carriageway would gradually realign with the existing Victoria Road alignment at Springside Street.

- Retaining walls located at the southern edge of part of the Victoria Road corridor and adjacent to the Iron Cove Link portals
- Widening of the road carriageway comprising areas of both hard landscape and soft landscape works to centre median areas east of Toelle Street and along the southern side of Victoria Road
- The verge south of Toelle Street would be grade separated from the Victoria Road westbound carriageway
- The pedestrian environment along the northern side of the project would be retained as is, maintaining the existing exposed, low amenity character of this pedestrian edge. Existing vegetation along this edge would also be retained
- The ventilation building would be located on the southern side of Victoria Road, between Springside Street and Callan Street, with the associated substation located on the western corner of Callan Street. The ventilation building would be about 10 metres high, and would incorporate a buffer tree planting between it and adjoining housing. The substation would be about four metres high
- The ventilation outlet would be located east of Terry Street, within a central median area. It would be 20 metres high. An early stage landscape setting including trees (12–18 months into operation) would be in place along the western, southern and northern edges of the ventilation outlet, in addition to an adjacent larger centre median area adjoining the eastern edge of the portals. The long north facing wall of the outlet would be subject to a narrow, low shrub/ground layer planting
- Land along the southern boundary of the project used for an active transport link and landscaping areas subject to UDLP.

There would be localised significant changes in level at the proposed turning head at the end of Clubb Street in the order of three metres, and about a four metre change in level between the Clubb Street and Byrnes Street turning heads. Design issues addressing these changes in level would be addressed in an integrated manner with architects and urban designers in conjunction with determining land uses for remaining project land.

Bioretention facility

A bioretention facility would be located within King George Park at Manning Street in the location of an existing informal car parking area. The bioretention facility would be the subject of an urban design process, integrating the structure within a formalised car parking arrangement that would incorporate landscape planting. The bioretention facility would be of a broadly triangular form, and have relatively low retaining walls. It would normally be dry, only filling with stormwater during rain events. No trees would be removed as part of this work.

Noise walls

Noise walls may be required along/within the vicinity of the southern boundary of the project, ranging between about four metres and five metres high, subject to detailed design. If required, the location of any noise walls would be assessed in a future stage of the project (note: noise walls are not shown on **Figure 7-33** or **Figure 7-34**). Noise walls are one of a number of noise mitigation options being considered including road pavement treatments and architectural treatments of properties. The preferred noise mitigation options would be determined during detailed design.



Receptor location IC1 – View looking east along Victoria Road from near Iron Cove Bridge

Existing situation

This receptor location is situated at the turn point of the Bay Run where it leaves Iron Cove Bridge and loops into King George Park. The existing view is shown on **Figure 7-32**. The view comprises the busy Victoria Road adjoined by dense low rise development along its western end (Balmain Shores), a mix of commercial and institutional development to the eastern part of the road corridor, and freestanding housing fronting the southern edge of Victoria Road.

The view terminates at the ridgeline along Darling Street, and which is seen against the skyline. Tree cover is concentrated in discrete locations along the road corridor, with key locations at: the frontage of the Balmain Shores apartments to left of frame; the south-west corner of Terry Street; and the Chapel Hill Estate and Rozelle Public School at the top of the hill, near the corner of Darling Street.

Project effects

The change in view from this receptor location is shown in **Figure 7-33** and **Figure 7-34**. The key project effects that would be visible from this receptor location are:

- Widening of Victoria Road and new tunnel portals
- The ventilation building and outlet visible beyond the new tunnel portals
- Substation building which may be visible during early stages of the project before screen planting is well established.

Lighting

Additional light would be introduced to this area during operation associated with the increased extent of road infrastructure including dive structures and increased headlight glare from vehicles exiting the Iron Cove Link portal. Project lighting would include cut-off fittings and would be directed to reduce light trespass. The extent of glare emanating from the new lighting towards the Balmain Shores residential development is likely to be moderately reduced by the existing dense planting along the frontage of this development.



Figure 7-32 Existing view from Victoria Road near Iron Cove Bridge looking east



Figure 7-33 Artist's impression at 12–18 months of operation from Victoria Road near Iron Cove Bridge looking east



Figure 7-34 Artist's impression at 10 years of operation from Victoria Road near Iron Cove Bridge looking east

Table 7-53 Receptor location IC1 visual impact assessment

Receptor Residents	Sensitivity Sensitivity to change: Moderate	Magnitude Magnitude of change: Moderate	Rating Moderate
	Residents impacted by the project would primarily be limited to those within Balmain Shores fronting onto the project t given their close proximity and elevated viewing level. These i residents would have filtered views to the project. Most of these apartments are oriented away from Victoria Road to face the water. However, this receptor location is anticipated to have a moderate number of residential receptors facing southward toward the project, but with an existing low quality view. It is expected that the existing view would afford a moderate level of change within the context of the existing busy road.	The project would on average be moderately to highly visible from the Balmain Shores apartments with some views obscured by intervening trees. The project would also be seen from elevated locations, in particular the new tunnel portals, retaining walls, and kerbside bus lanes. However, the scale of the project is broadly consistent with the existing situation, and viewing duration would be expected to be low. The view would comprise a moderate contrast to the existing view, but characterised by well-considered design, and incorporating a much improved streetscape backdrop.	
		The nature of future development of remaining project land to the southern side of the project is not known at this time, and would be determined as part of the UDLP developed in consultation with the local council.	
Pedestrians	Sensitivity to change: Low	Magnitude of change: Moderate	Moderate-
	Pedestrians impacted by the project are likely initially to be relatively low in number given that where alternative routes could be taken, eg to walk to Darling Street using back streets or utilising the Bay Run, it is unlikely pedestrians would choose to walk alongside the project. The exception to this would be people catching buses, predominantly related to work travel.	The project would be broadly contextual with the existing road corridor in terms of scale and character, and visually prominent from this location given the limited tree growth that would have occurred within the 12–18 months old streetscape and centre median plantings, since the opening of the project. The ventilation outlet building and the nearby ventilation outlet would both be seen projecting above the skyline from this location with a viewing	Low

Receptor	Sensitivity	Magnitude	Rating
Recreation	Sensitivity to change: Moderate	Magnitude of change: Moderate	Moderate
	The quality of the existing view of Victoria Road is low. The view of the project would be seen by people actively running/jogging or passively walking or cycling the Bay Run for a moderate period of time when travelling west across Iron Cove Bridge towards the project. Passive users of this facility in particular could be expected to take some interest in this view given: the potentially visually interesting elements of the Iron Cove Link portals when seen from this location; and the ventilation outlet projecting well above much of the surrounding development, all set within the substantial landscape elements of the project. People travelling in the opposite direction from King George Park would come upon the view quite suddenly, and then turn away as they rounded the looping pathway towards Iron Cove Bridge.	The magnitude of change is considered to be Moderate, within the context of the: works being undertaken within an existing busy road corridor; moderate level of contrast with the existing situation, including substantial streetscape and centre median planting outcome; the moderate duration of viewing as recreational users approached the project from the west, and anticipated application of refined architectural, urban design for the project.	
	The sensitivity of the active recreational receptors can be expected to be relatively low given their primary preoccupation on their jogging/running/cycling, but that of passive receptors to be moderate, notwithstanding the context of the project within the longer journey they are taking, and the range of competing available views, eg west along the harbour and towards the Sydney College of Arts site. The number of both active and passive recreational users would be expected to be Moderate to high on weekends.		

Receptor	Sensitivity	Magnitude	Rating
public transport/ cyclists	Motorists travelling east towards the project would predominantly be doing so as part of the weekly commute to or from work, with these receptors focusing on the road, and the view of the project comprising a small part of a longer journey. Passengers in public transport and cars would be expected to have a moderate level of sensitivity to the project given the generally limited opportunity to view anything other than the passing road corridor landscape once they have crossed Iron Cove Bridge. Cyclists would be expected to be travelling towards the project both as part of a weekly commute, and also for recreation on weekends, and would be expected to be focussing on share path foot and cycle traffic.	The magnitude of change is considered to be Moderate, within the context of the works being undertaken within an existing busy road corridor, the relatively brief viewing duration and anticipated refined architectural, urban design of the project.	Low
	The number of these visual receptor types is broadly considered to be high seven days a week. The quality of the existing view to the project from Iron Cove Bridge is low specific to the project area, but moderate to high with the broader context of the views to Iron Cove and Callan Park.		

Table 7-54 Receptor location IC1 lighting impact assessment

Receptor	Sensitivity	Magnitude	Rating
Residents	Sensitivity to change: Moderate	Magnitude of change: Moderate	Moderate
	The sensitivity of residents to lighting for the portals and widened carriageway is considered to be Moderate within the context of the motorway interchange setting, but acknowledging they are already located adjacent to a relatively well-lit, major arterial road.	The magnitude of change is considered to be Moderate with the context of potentially increased lighting levels from traffic and anticipated well directed lighting including light spill cut-off measures.	

Receptor Pedestrians	Sensitivity Sensitivity to change: Low	Magnitude Magnitude of change: Moderate	Rating Moderate-
	The sensitivity of pedestrians to additional lighting is considered to be Low within the context of the motorway interchange setting.	The magnitude of change is considered to be Moderate, given that reductions in glare from lighting on the southern edge of the project would not occur immediately, but would gradually improve as tree and understorey planting matures, filtering light intensity to pedestrian areas. Light intensity on the northern edge of the project would not reduce for pedestrians between Iron Cove Bridge and Terry Street due to no street tree planting being proposed along this edge of the project.	Low
Recreational	Sensitivity to change: Low	Magnitude of change: Moderate	Moderate-
	The sensitivity of recreational Bay Run receptors to additional lighting is considered to be Low within the context of the motorway interchange setting.	The magnitude of change is considered to be Moderate given the motorway interchange can be expected to be noticeably more brightly lit than the existing situation for the reasons discussed above.	Low
Motorists/	Sensitivity to change: Low	Magnitude of change: Moderate	Moderate-
public transport/ cyclists	The sensitivity of motorists/public transport users and cyclists to additional lighting is considered to be Low within the context of the motorway interchange setting.	The magnitude of change is considered to be Moderate given the motorway interchange can be expected to be noticeably more brightly lit than the existing situation for the reasons discussed above.	LOW

Receptor location IC2 – View looking west from Manning Street towards bioretention facility

Existing situation

This receptor location comprises an informal car park setting located adjacent to Manning Street within King George Park. The existing view is shown on **Figure 7-35** and **Figure 7-36**. The view comprises:

- an athletics field in the far left of frame with night lighting set against the well vegetated edge of Callan Park, and seen through a row of mature Tallowwood trees (*Eucalyptus microcorys*)
- an informal car parking area with views of the Bay Run and Iron Cove with a glimpse view of Drummoyne in the background
- double-storey residences overlooking the car parking area and King George Park.

The car park is primarily utilised during weekends and potentially some weekday evenings for local sporting events. It is also potentially used by people driving to use the Bay Run or the nearby bayside playground.

The car park is directly overlooked from three residences opposite on Manning Street, located on the 'no through road' end of the street, which intersects with Byrnes Street. Each of these residences have outdoor living areas that overlook the site. These are likely to be connected with indoor living spaces that share the view.

Project effects

A bioretention facility would be located to the centre of the car park as shown in **Figure 7-37**. Project effects would comprise, subject to detail design:

- A formalised composition of bioretention facility and parking situated within a well-considered landscape setting
- The basin being planted to a generally low cover of native grasses and shrubs
- A potential 'hardening' of the currently grassed setting with additional hardstand, marked parking areas.

The project would be unlikely to be visually prominent from the Bay Run, with users more likely to be interested in closer views to King George Park, Iron Cove or the adjoining children's playground.

Lighting

There would be no additional lighting proposed for this part of the project, subject to detail design.



Figure 7-35 Existing view from near corner of Manning Street and Clubb Street looking west



Figure 7-36 Existing view from near corner of Manning Street and Clubb Street looking west