

11. Landscape and visual amenity

11.1 Existing environment and background

This chapter draws on information from Appendix J (Landscape character and visual impact assessment).

11.1.1 Overview

The area’s landscape and streetscape are a composition of the area’s history. Chapter 7 (Aboriginal heritage) describes the landscape of the wider area pre-European arrival as tidally influenced flats associated with Cockle Bay and Blackwattle Bay, and freshwater swamp associated with Blackwattle Creek. Chapter 8 (Non-Aboriginal heritage) describes the changes in land use over the past 115 years that saw construction of the original Station followed by its subsequent development and expansion to support Sydney’s trams, followed by the suburban rail, and more recently the light rail and metro. This gives rise to the area’s primary character and functional use as a transport interchange and the grandeur of the streetscape and patterns that help frame the main Sydney Terminal Building and give its dominant setting and prominence in the landscape.

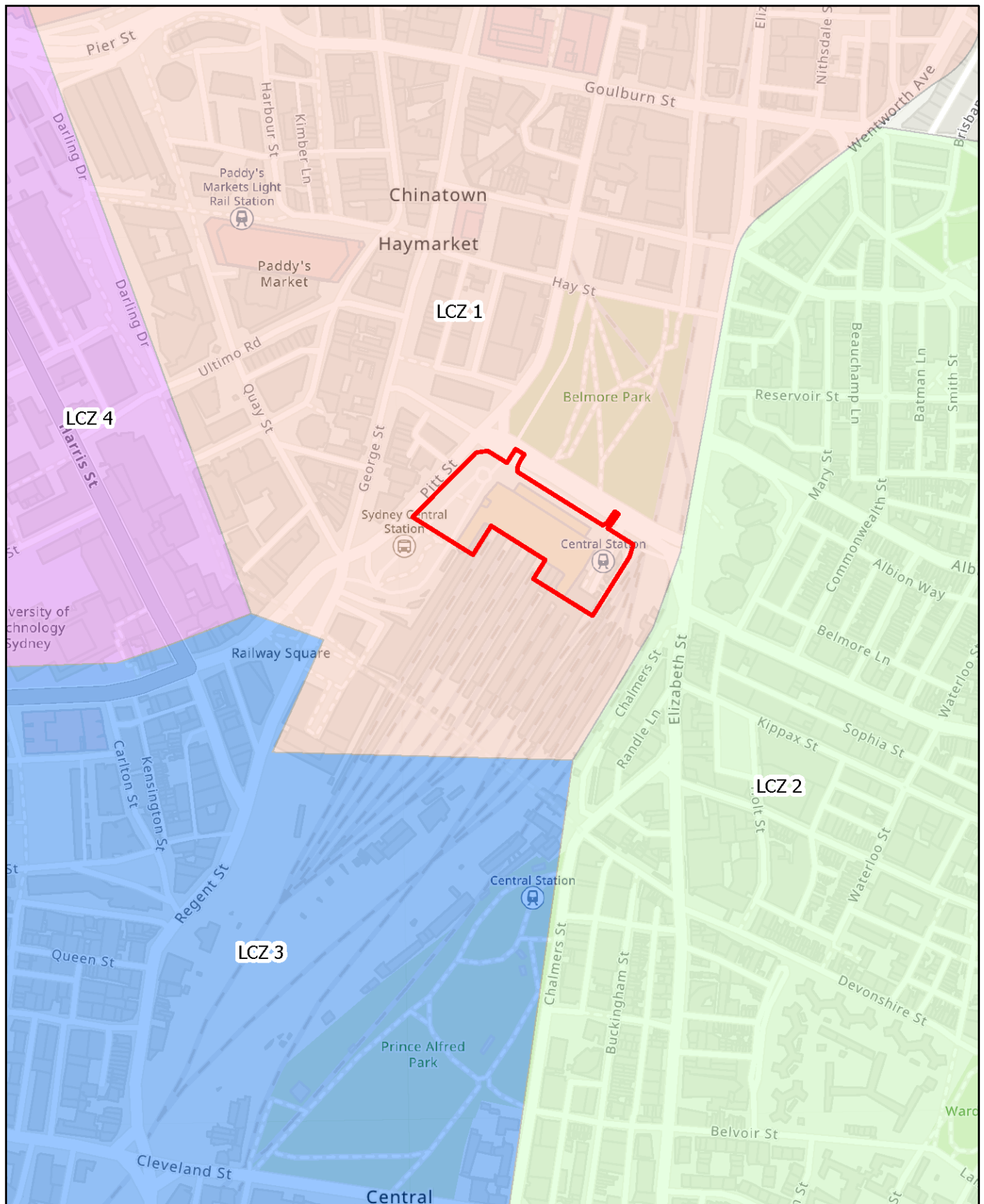
The area is also characteristic of its mix of retained important open spaces, chief of which are Belmore Park framing the station to the north, and Prince Alfred Park framing the station to the (south) east. Both contrast with the mixed-use high-density character of the commercial buildings that front, frame, and contain the main streets. This provides a sense of enclosure and partial division in the landscape. The street frontages contain the landscape and reduce any distant views. The exception is moving southwards outside of the project area, where the increased topography, and the low profile of the main station platforms and canopies offer an open distant panoramic view northward to the heart of the Sydney Central Business District (CBD), which is punctuated by key buildings such as Sydney Tower Eye.

Landscape character

The landscape in and around the station can be grouped into four distinct zones that represent distinct areas of similar characteristics. They are:

- Landscape character zone (LCZ) 1 | Chinatown and CBD South Village
- LCZ2 | Crown Street and Baptist Street Village
- LCZ3 | Redfern Street Village
- LCZ4 | Harris Street Village.

Figure 11-1 below shows the extent of each zone. Table 11-1 summarises each zone describing its sensitivity to potential change.



Coordinate System: GDA2020 MGA Zone 66



0 75 150
Metres
Scale at A4
1:6,000

Data Source: Esri Community Maps Contributors, Geoscape, Esri, HERE, Garmin, Foursquare, METI/NASA, USGS

Prepared by: MD
Checked by: CS
Approved by: CS

Legend

 Project area

Landscape character zones

LCZ1 - Chinatown and CBD South

LCZ2 - Crown and Baptist Streets Village

LCZ3 - Redfern Street Village

LCZ4 - Harris Street Village

Sydney Terminal Building Revitalisation Project

Figure 11-1: Landscape character zones

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Table 11-1: Landscape character zones

Zone	Picture	Summary and sensitivity
LCZ1		<p>Defined by its mix of high-rise commercial, residential, and retail uses, interspersed with heritage buildings and open spaces. There are no major conservation areas in the zone. Key landmarks are Belmore Park and the Capitol Theatre.</p> <p>Sensitivity high</p> <p><i>Reason</i> an area of historic value, being a tourist destination, and the presence of heritage buildings.</p>
LCZ2		<p>Defined by its historic terrace and cottage typologies near Elizabeth Street and Foveaux Street. There is a strong streetscape character and plant, supported by a diversity of public open spaces and established street trees. Key features are the public spaces, heritage buildings and public amenities.</p> <p>Sensitivity moderate</p> <p><i>Reason</i> a residential area and known for recreation, entertainment and dining, and the presence of heritage buildings dispersed throughout.</p>
LCZ3		<p>Defined by a mix of historic low-rise terraces and smaller apartment buildings alongside high-rise newer developments. Key is the education, creativity, and innovation zone associated with the Camperdown-Ultimo area. There are many urban conservation zones alongside heritage buildings, small to medium sized open spaces and mature street trees. Key landmarks are Prince Alfred Park, Sydney University, Mortuary Station Building, Chippendale Garden and Victoria Park.</p> <p>Sensitivity moderate</p> <p><i>Reason</i> a residential and commercial area and educational precinct, and the presence of heritage buildings dispersed throughout.</p>
LCZ4		<p>Defined by its role within the regional economy through media, technologies, publishing, and broadcasting industries. Its unique location on the harbour foreshore has been enhanced through the implementation of foreshore walks and parks. The zone comprises high-density residential and commercial spaces with few public open spaces. Small urban conservation zones and heritage buildings are scattered across the site along with mature street trees. Key landmarks are Ultimo TAFE, University of Technology Sydney, Powerhouse Museum, and the Goods Line.</p> <p>Sensitivity moderate</p> <p><i>Reason</i> a residential and commercial area and educational precinct, and the presence of heritage buildings dispersed throughout.</p>

Visual receivers and viewpoints

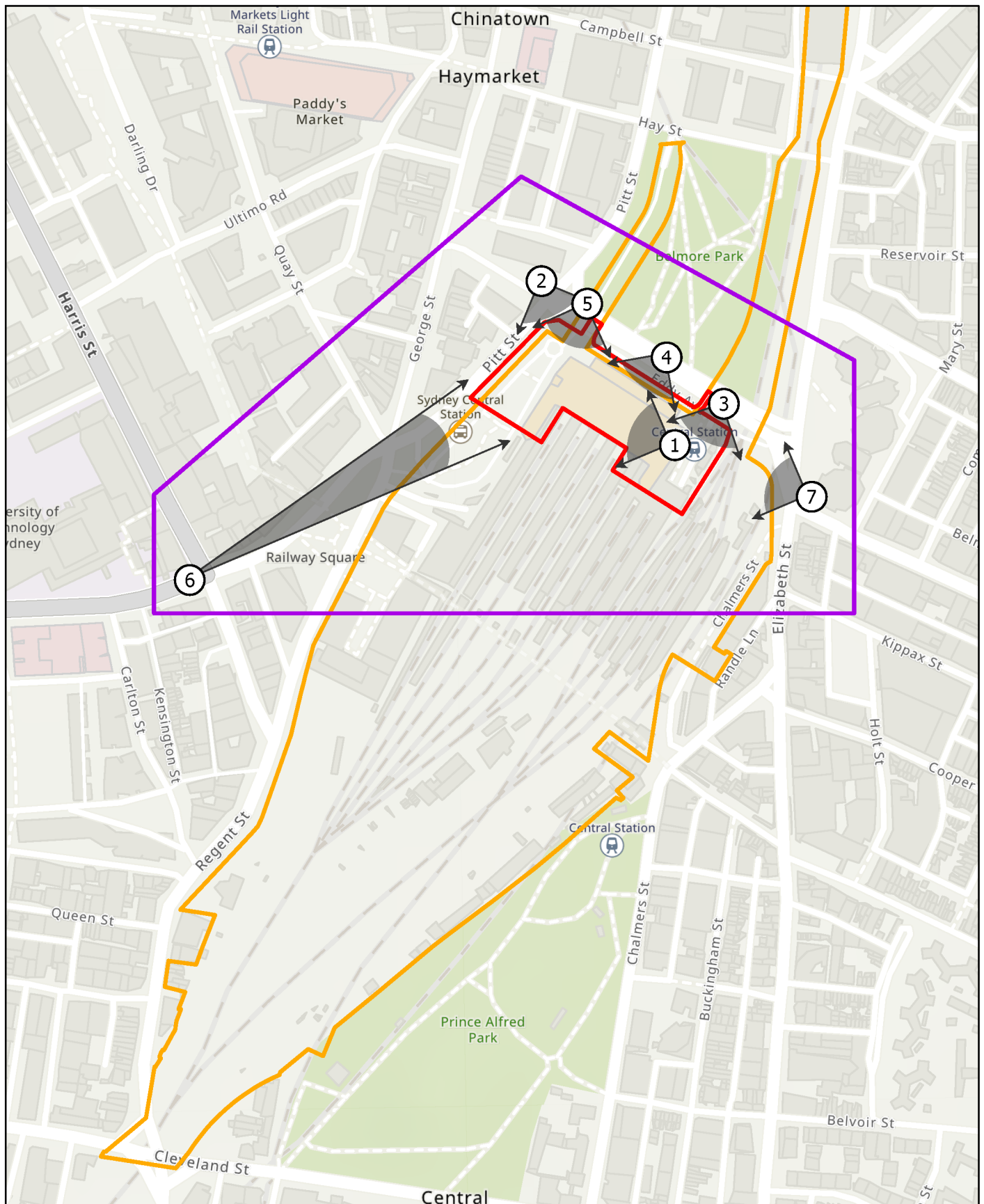
There are three distinct groups of people who would be impacted by the project:

- People who work at Central Station or surrounds, or live in the local area, who will be able to see the project for a prolonged period when in the office or at home
- Commuters (including station customers, pedestrians, cyclists, public transport users, and motorists) who transit through or interchange at Central Station, who will pass through the area potentially twice a day during the week
- Visitors and tourists, who will only occasionally visit Central Station and area, who will have a memory of the station prior to construction, or at a point during construction.

To understand how each group would be impacted, seven viewpoints were identified around the area that represent key locations where these receiver groups have views of Central Station. In some instances, the viewpoint represents more than one receiver group, in which case the rating reflects the most sensitive receiver. The seven viewpoints are:

- VP1 | Central Station concourse looking north-west
- VP2 | Rawson Place and Pitt Street, Haymarket looking south-east
- VP3 | Eddy Avenue Plaza looking south-west
- VP4 | Eddy Avenue Colonnade looking south-west
- VP5 | Upper-level forecourt, north-east corner looking south-west
- VP6 | Central Station Clock Tower view protection plane looking north-east
- VP7 | Foveaux Street intersection looking west.

Figure 11-2 below shows the location and direction of each viewpoint. Table 11-2 summarises each viewpoint describing its sensitivity to potential change.



Coordinate System: GDA2020 MGA Zone 56



0 60 120
Metres
Scale at A4
1:5,100

Data Source: Esri Community Maps Contributors, Geoscape, Esri, HERE, Garmin, Foursquare, METI/NASA, USGS, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Prepared by: MD
Checked by: CS
Approved by: CS

Legend

- ▬ Project area
- ▬ Central Precinct Renewal Program boundary
- ▬ Visual Catchment Boundary
- Viewpoints
- Viewlines

Sydney Terminal Building Revitalisation Project

Figure 11-2: Viewpoint locations and directions

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Table 11-2: Viewpoints

Points	Picture	Representation, views, and sensitivity
VP1		<p><i>Representation</i> commuters transiting through the station's main concourse.</p> <p><i>Views</i></p> <ul style="list-style-type: none"> • General view available to commuters, visitors, and tourists • Key view of the feature space of the station with a unique architectural, historic, and social value • Key view of the uniqueness of the concourse space within the Sydney Terminal Building. <p>Sensitivity high</p>
VP2		<p><i>Representation</i> members of the community, tourists and road users travelling along Pitt Street and Eddy Avenue, patrons and personnel of adjoining businesses, and tourists and visitors residing at nearby hotels and hostels.</p> <p><i>Views</i></p> <ul style="list-style-type: none"> • General view available to members of the community and tourists using the public footpaths. <p>Sensitivity high</p>
VP3		<p><i>Representation</i> commuters transiting through the station at one of the station's key entrances.</p> <p><i>Views</i></p> <ul style="list-style-type: none"> • General view available to commuters, visitors, and tourists • Key view of the public open space within the station building complex serving as frontage to adjoining food and beverages businesses. <p>Sensitivity high</p>
VP4		<p><i>Representation</i> commuters, road users and members of the public travelling along Eddy Avenue and traversing through Belmore Park.</p> <p><i>Views</i></p> <ul style="list-style-type: none"> • General view available to pedestrians, road users, and public transport users on the light rail line and bus routes along Eddy Avenue • General view available to visitors and events attendees to Belmore Park. <p>Sensitivity high</p>

Points	Picture	Representation, views, and sensitivity
VP5		<p><i>Representation</i> commuters, road users and members of the public travelling along Railway Colonnade Drive.</p> <p><i>Views</i></p> <ul style="list-style-type: none"> General view available to pedestrians, road users, and public transport users on the light rail line along Railway Colonnade Drive. <p>Sensitivity high</p>
VP6		<p><i>Representation</i> historically important view of the Sydney Terminus clock tower against the silhouette of the eastern sky when seen from the intersection of Broadway, George Street, Harris Street and Regent Street.</p> <p><i>Views</i></p> <ul style="list-style-type: none"> Key heritage view looking towards the clock tower General view available to commuters, visitors and tourists as road users, and public transport users. <p>Sensitivity high</p>
VP7		<p><i>Representation</i> commuters, road users, and members of the public travelling along Foveaux and Elizabeth Streets.</p> <p><i>Views</i></p> <ul style="list-style-type: none"> General view available to pedestrians travelling along Foveaux and Elizabeth Streets, and staff from adjoining businesses. <p>Sensitivity moderate</p>

Night-time

All the roads around Central Station are lit. There is also external lighting around and within the Sydney Terminal Building, which is not switched off or dimmed at night.

The age, condition, and design of street and internal lighting varies; however, it means there is a high level of ambient external light at night. While the specific light (lux) levels were not measured it is likely that there are locations where the obtrusive light levels set under AS 4282–1997 Control of the Obtrusive Effects of Outdoor Lighting (Standards Australia, 1997) are exceeded.

There are locations around the area which are unlit. This includes parts of Central Station and Belmore Park, which tend to be favoured by rough sleepers.

11.1.2 Policy and planning setting

The assessment considered the following relevant policies and guidelines:

- AS 4282–1997 Control of the Obtrusive Effects of Outdoor Lighting (Standards Australia, 1997)
- Guidelines for Landscape and Visual Impact Assessment, Third Edition (UK IEMA, 2013)
- Better Placed – Aligning Movement and Place – Outline for understanding places in relation to movement infrastructure (Government Architect of NSW, 2019)
- Guideline for Landscape Character and Visual Impact Assessment Environmental Impact Assessment Practice Note EIA–N04 (Transport for NSW, 2020c)
- Central Precinct Strategic Framework (Transport for NSW, 2021b)

- [Visual Impact Assessment Central Precinct State Significant Precinct](#) (Transport for NSW, 2022x).

A key aspect of the Guideline for Landscape Character and Visual Impact Assessment (Transport for NSW, 2020c) is that impacts are rated on a five-point scale from **negligible** to **high**. The ratings are based on combining the scale (magnitude) of the change introduced by the project and people’s sensitivity to this change, or the landscape’s ability (sensitivity) to cope with change, as defined above in Section 11.1.1. Section 2.2 in Appendix J (Landscape character and visual impact assessment) provides the detail.

11.2 Assessment of potential impacts

11.2.1 Construction

Landscape character

Construction would last for around three years, in which time various construction activities would take place (refer to Chapter 5 (Project description)). As construction would be largely confined to the Sydney Terminal Building and Eddy Avenue Plaza it means the works would have no material or direct impact on the features or characteristics of the surrounding zone (LCZ1). The only exception would be the indirect impact to this zone where the visible presence of equipment, hoardings, and cranes may temporarily detract from its historic and heritage value. While elements of construction works and equipment may be visible from within the remaining zones, the separation and scale mean they would have no influence on the characteristics of these zones. The construction works would therefore have a negligible impact on the landscape character. Table 11-3 below summarises the construction impact on landscape character.

Table 11-3: Construction impacts on landscape character

Zone	Sensitivity	Magnitude	Rating
LCZ1	High	Moderate	High-moderate
LCZ2	Moderate	Low	Moderate-low
LCZ3	Moderate	Low	Moderate-low
LCZ4	Moderate	Negligible	Negligible

Visual amenity

A common theme from all viewpoints would be a noticeable increase in activity around the area when the works are being carried out for the proposed three-year construction period. For the most part, the works would be carried out behind screened areas and hoardings, which is common practice in the CBD. This would help maintain the area’s amenity for residents, commuters, and visitors. However, there would still be a visual impact from the larger equipment and machinery that is needed to build elements of the project, such as cranes and loaders. Overall, any visual impacts would be temporary, lasting for the duration of the activity or for the construction period. The visual impact would be greatest inside the Sydney Terminal Building where most work is taking place (VP1) followed by surrounding viewpoints (VP2, VP3, VP4 and VP5).

Night-time

Security, site, and equipment lighting would be used on site in the evening and at night. However, given that most of the work would be carried out behind hoardings or inside the building, the potential to cause light spill or glare would be limited. For those times when work would take place outside at night (see Chapter 5 (Project description)) it would be confined to Eddy Avenue, Eddy Avenue Plaza where the street lighting contributes to ambient light levels and the Sydney Trains Yard due to its use as a construction compound. Overall, while the additional lighting along Eddy Avenue and Eddy Avenue Plaza is unlikely to add to the overall ambient levels across the wider area, it may result in light spill into Belmore Park from equipment, headlights, or security lighting (for example, directional lighting). Given the Sydney Trains Yard’s recessed location within the rail corridor and both vegetation and physical screening along the edges of the rail corridor, light spill from this location would be minor.

11.2.2 Operation

Landscape character

As noted in Chapter 10 (Place, design and movement), the project’s urban design has been developed to respond to design standards set by the Government Architect, the overall aim of which is to create development that is user-friendly, enjoyable, and aesthetically pleasing. Most of the project’s urban design features focus on the internal spaces within the Sydney Terminal Building to improve its amenity (see Chapter 10 (Place, design and movement)). This means any external changes would be limited in their scale and nature, in part to conserve the aspects of the Sydney Terminal Building that contribute to its heritage listing (see Chapter 8 (Non-Aboriginal heritage)). The small and subtle scale and nature of the external changes and the distance to all zones, except LCZ1, means the project would not materially impact on the historical, educational, open-space, and heritage and conservation characteristics that define these zones.

In the case of LCZ1, there would be slight improvement of character by the removal of uncharacteristic features in Eddy Avenue Plaza and revitalisation of the Sydney Terminal Building providing enhanced activation within the LCZ through extra retail and commercial outlets and pedestrian connections. There would be some changes to the Sydney Terminal Building that would be more noticeable, such as the eastern awning and service components to the roof. This would result in an incremental modification and expansion of the Sydney Terminal Building. Equally, key elements of the project, such as the façade treatments, have been designed to be consistent with the character of the zone. Nonetheless, there would be a change in the Sydney Terminal Building's character and given that Central Station dominates and notably contributes to the zone's character there would be a moderate beneficial impact. Table 11-4 below summarises the operational impact on landscape character.

Table 11-4: Operational impacts on landscape character

Zone	Sensitivity	Magnitude	Rating
LCZ1	High	Low	Moderate beneficial
LCZ2	Moderate	Negligible	Negligible
LCZ3	Moderate	Negligible	Negligible
LCZ4	Moderate	Negligible	Negligible

Visual amenity

For the most part the external appearance of the Sydney Terminal Building would not be impacted. In some locations the façade would be changed, however the materials and design would be consistent with the existing building to conserve its heritage values (see Chapter 10 (Place, design and movement)). The exceptions are the locations where the mechanical equipment would be installed on the roof, and the addition of the eastern awning. Most of these changes would not be noticeable from several of the viewpoints due to their distance from the project, which means the changes do not occupy the view.

The exception is VP1 where the proposed internal changes would serve to improve the internal visual amenity of the Sydney Terminal Building. Specifically, amenity (and visual impact) would improve because there would be:

- A reduction in visual clutter, particularly at street level
- Increased transparency and views through the concourse at street level by creating new sightlines
- An increased connection with nature (a term called biophilia) from the introduction of trees and other largescale planting inside the Sydney Terminal Building
- More natural light coming into the Grand Concourse from increasing the size and transparency of the skylight.

Table 11-5 below summarises the operational visual impacts. Figure 11-3 to Figure 11-5 show the changes (photomontages) in those locations where the impact is rated higher than moderate. The full set of comparative photomontages are in Section 5 of Appendix J (Landscape character and visual impact assessment).

Table 11-5: Operational visual impacts

Zone	Sensitivity	Magnitude	Rating
VP1	High	Low	Moderate beneficial
VP2	High	Low	Moderate
VP3	High	Low	Moderate beneficial
VP4	High	Low	Moderate
VP5	High	Moderate	High-moderate
VP6	High	Negligible	Negligible
VP7	Moderate	Low	Moderate-low



Figure 11-3: Photomontage representative of VP1



Figure 11-4: Photomontage representative of VP3



Figure 11-5: Photomontage representative of VP5

Night-time

The internal and external lighting would be developed as part of the detailed design. It would be designed in accordance with Australian Standards to ensure it would provide sufficient coverage to be consistent with the requirements of Crime Prevention Through Environmental Design (CPTED), while preventing light spill and glare. This may involve using filters, directional lighting, and backplates to focus the light. This means the project can be designed to avoid any additional contribution to ambient light in the area. Modern lighting designs means that it should be possible to reduce the light glare and scatter in the area, which may be a benefit.

11.3 Environmental management measures

Landscape and visual impacts will be addressed in the form of management measures. Measures to minimise impacts relating to place and urban design, biodiversity and heritage are addressed other impact chapters and have not been included here. Table 11-6 lists the measures to manage landscape and visual impacts specifically.

Table 11-6: Environmental management measures – landscape and visual amenity

Ref	Impact / Uncertainty	Environmental management measure	Timing
LCV01	Impact Sightlines within the Grand Concourse	To improve sightlines within the Grand Concourse, the following measures will be investigated during detailed design: <ul style="list-style-type: none"> Selection of colour and materials to allow the project to better blend with the heritage elements of the Sydney Terminal Building Removal of existing visual clutter on the Grand Concourse Break up the size of large and bulky elements into smaller units to be less visually obstructive. 	Detailed design
LCV02	Uncertainty Lighting	Lighting will be designed in accordance with AS/NZS 1158:2005 Lighting for Roads and Public Spaces (Australian and New Zealand Standard, 2005), and AS/NZS 4282:2019 Control of Obtrusive Effects of Outdoor Lighting (Australian and New Zealand Standard, 2019).	Detailed design
LCV03	Impact Urban design	An Urban Design and Landscape Plan (UDLP) (or equivalent) for the project will be prepared. The plan will:	Detailed design/ pre-construction

Ref	Impact / Uncertainty	Environmental management measure	Timing
		<ul style="list-style-type: none"> Outline the process to ensure place design principles implemented and aligned with <u>Better Placed</u> (NSW Government Architect, 2017) and City of Sydney Council design codes and technical specifications Outline consultation with relevant stakeholders including Traditional Custodians, City of Sydney Council, vulnerable and special interest groups, the community and affected businesses to inform the detailed design and construction Include an analysis of the built, heritage, natural and community context and values, and articulate the urban design objectives, principles, and standards for the project Include information on the form, materials, and detail, with a focus on high quality concourse and station entrance design that integrates with the existing context and the safe functioning of the public areas Document the design development and review process, including opportunities explored for increasing the transparency of the concourse and reducing its bulk and scale Define the design of all public areas with consideration of relevant City of Sydney Council design guidelines and standards Include the location of existing heritage items and measures for ensuring appropriate separation between heritage fabric and new elements Identify opportunities for heritage interpretation during design and construction, consistent with the <u>Heritage Interpretation Strategy</u> (Transport for NSW, 2022q) Define the visual screening elements to provide visual separation and privacy for tenants and workers Demonstrate integration of CPTED principles into the detailed design process Confirm the design and landscaping elements to demonstrate that the visual outcomes of the streetscapes are in keeping with character and amenity of the area and the wider precinct, and respect the visual, heritage and Aboriginal cultural identity (Connecting with Country) as developed by the Traditional Custodians Develop and deliver public artwork opportunities using local artists Develop final visuals, cross-sections, elevations, and plans showing the proposed design Detail the proposed vegetation planting on demonstrating the contribution of landscaping to habitat and biodiversity enhancements Include any requirements contained within the <u>Central State Significant Precinct study</u> and supporting technical documents where applicable. <p>The UDLP will:</p> <ul style="list-style-type: none"> Address and meet the reasonable requirements of the project stakeholders Be reviewed by State Design Review Panel and respond to the outcomes of the review Be submitted to the Planning Secretary for approval no later than one month before construction. 	

Ref	Impact / Uncertainty	Environmental management measure	Timing
LCV04	Impact Construction elements	Construction hoardings and acoustic fencing will be discrete, congruous with the building’s materials (potentially including artwork), and setback from the front face of the colonnade to be less visually obstructive. They will be maintained throughout and removed after construction.	Pre-construction/ Construction
LCV05	Impact Construction amenity	All areas and activities in the construction footprint will be managed to ensure the appropriate storage of equipment, parking, stockpile screening and arrangements for the storage and removal of waste and materials.	Construction