

5. Project description

5.1 Project overview

The project comprises the revitalisation of the Sydney Terminal Building and its public domain interfaces, Eddy Avenue Colonnade, Eddy Avenue Plaza and the Western Forecourt at Central Station (the project). The project would provide:

- Improved pedestrian connections and integration with the adjacent public domain areas
- Improved lighting, wayfinding, safety and accessibility
- Improved customer amenity, public art and interpretation
- Improved activation of spaces, including high quality retail and community uses that are complementary to the function of the transport interchange
- Heritage conservation and enhancement.

The project is located on Gadigal Country of the Eora Nation, in Haymarket, in the City of Sydney local government area (LGA).

The project represents a key initial stage of the overarching Central Precinct Renewal Program (CPRP), being an urban renewal and city shaping project relating to the broader 24-hectare area of NSW government-owned land at the southern edge of central Sydney, subject of the nominated Central State Significant Precinct.

The detailed project description in this chapter is based on the project's concept design and has been developed with consideration of:

- Findings from design, heritage and Aboriginal engagement activities detailed in Chapter 6 (Stakeholder and community engagement)
- Place making and urban design principles and objectives detailed in Chapter 10 (Place, design and movement)
- Stakeholder and community feedback as detailed in Chapter 6 (Stakeholder and community engagement) and Appendix D (Stakeholder and community engagement table)
- Avoiding and minimising environmental, heritage and social impacts.

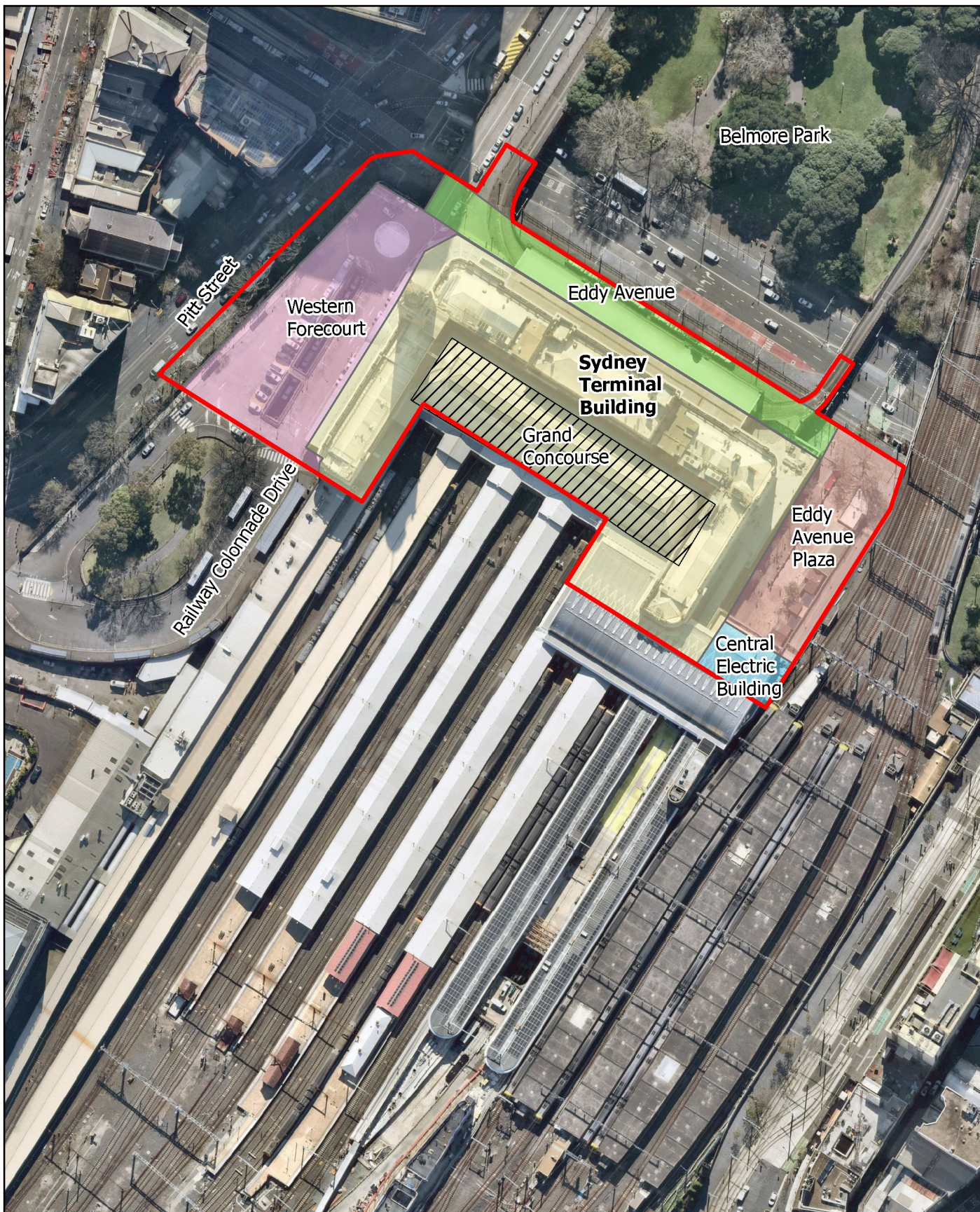
A summary of the key features of the project is provided in Table 5-1. Further design and construction methodology descriptions are provided in Sections 5.2 and 5.3.

Table 5-1: Project summary table

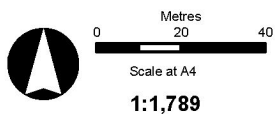
Project element	Summary	Figure reference
Operations		
Description	The project comprises the revitalisation of the Sydney Terminal Building and its public domain interfaces, Eddy Avenue Colonnade, Eddy Avenue Plaza and Western Forecourt at Central Station.	Figure 5-1
Project area	About two hectares	Figure 5-1
Sydney Terminal Building	<ul style="list-style-type: none"> • New access and egress points, including escalators and lifts between the Grand Concourse and street level at Eddy Avenue and Eddy Avenue Plaza • New lifts and stairs between the Grand Concourse and upper levels of the Sydney Terminal Building • Adaptive re-use, additions and alterations of retail space at the Grand Concourse and street level of the Sydney Terminal Building • New amenities and relocation of existing amenities at the Grand Concourse and street level of the Sydney Terminal Building • Reinstatement of the original Booking Hall's double height ceiling space • New multipurpose space on the street level of the Sydney Terminal Building • New finishes to the Grand Concourse roof and flooring • Improved roofing for natural lighting and provision of solar panels above the Porte Cochere over the existing light rail stop • New awning over the eastern balcony of the Sydney Terminal Building, adjacent to Eddy Avenue Plaza • Widening of Eddy Avenue footpath between Pitt Street and Eddy Avenue Plaza • Market-style retail activation within the western loading dock (located at street level underneath the Western Forecourt) • Reconfiguration of the northwest corner of the Sydney Terminal Building and colonnade adjacent to Pitt Street, including creation of a new public access to the western loading dock from Pitt Street and Eddy Avenue • Relocation of the gate line in the Grand Concourse • Public domain improvements. 	Figure 5-3
Eddy Avenue Plaza	<ul style="list-style-type: none"> • Additional retail spaces within Eddy Avenue Plaza including a new two storey retail building • New lifts and escalators to provide access to the Central Electric Building and the Grand Concourse from Eddy Avenue Plaza • New landscaping and paving reflecting a Connecting with Country approach • New bicycle parking to accommodate a minimum of 50 bicycles • Public seating in Eddy Avenue Plaza. 	Figure 5-5
Central Electric Building	<ul style="list-style-type: none"> • New retail space on Level 1 and activation of the rooftop of the Central Electric Building 	

Project element	Summary	Figure reference
Operational ancillary facilities and infrastructure	<ul style="list-style-type: none"> • New wayfinding and signage • Upgrading of lighting, closed-circuit television (CCTV) and passenger information systems • Coolers, chillers and other mechanical plant to be installed on the roof of the Sydney Terminal Building. 	
Utilities	<ul style="list-style-type: none"> • Adjustment, protection and upgrade of existing utilities within the Sydney Terminal Building • Relocation of transformer rooms within the Sydney Terminal Building • Relocation of fire hydrant boosters. 	
Operation of the project	<p>Operation of the project would not result in any change of the primary use of the station as a transport interchange. Any operational changes that arise from the project are expected to be beneficial changes related to accessibility, wayfinding and safety.</p> <p>The project also aims to address current Sydney Light Rail operations at the Central Station light rail platform where a 2-stage drop-off and pick-up arrangement exists. By widening the platform to alleviate congestion issues, it is intended to simplify operations to a single drop-off and pick-up arrangement.</p>	
Construction		
Construction footprint	About three hectares.	Figure 5-9
Timeframe	Construction for the project is expected to commence in Quarter 3 (Q3) of 2023 and take about three years to complete. This is subject to planning approval, funding availability, weather conditions and any unforeseen events.	
Workforce	The construction workforce is expected to be an average of 100 per day over a three-year period with an estimated peak of 200 being anticipated.	
Construction ancillary facilities	<p>Construction worker parking, site compounds and materials would be located within the western loading dock and Western Forecourt, with access from Pitt Street.</p> <p>Additional site staff facilities and storage areas would be provided from the existing facilities in the Sydney Trains Yard.</p>	Figure 5-10
Sydney Terminal Building	<ul style="list-style-type: none"> • Demolition of awning and escalators on the eastern side of the Sydney Terminal Building • Removal of all redundant and ageing services, non-loadbearing walls, fit-outs, mezzanine floors and associated support structures within the back of house area of the Sydney Terminal Building • Removal of concrete floor and associated services to restore the Booking Hall to its original double height space • Western loading dock modification and strip-out works • Replacement of roof sheeting to the Grand Concourse and Porte Cochere • Realignment of the light rail track under the Porte Cochere of the Sydney Terminal Building to enable platform widening and water proofing corrective works. 	
Eddy Avenue Plaza	<ul style="list-style-type: none"> • Regrade Eddy Avenue Plaza to remove level difference and provide improved pedestrian access 	

Project element	Summary	Figure reference
	<ul style="list-style-type: none"> Demolition of the brick retaining wall in the centre of Eddy Avenue Plaza Demolition of service ramp between rail line and existing retail shops. 	
Western Forecourt	<ul style="list-style-type: none"> Strengthening works to support the Western Forecourt. 	
Central Electric Building	<ul style="list-style-type: none"> Removal of mezzanine within the Central Electric Building. 	
Tree removal	Trees requiring removal include six London Plane Trees and two Tuckeroo trees in Eddy Avenue Plaza. The large London Plane tree on the Eddy Avenue footpath at the entrance to Eddy Avenue Plaza is to be retained.	
Property	The project is located on land owned by the NSW Government or City of Sydney Council. No property acquisition would be required as part of the project.	
Capital investment	\$350 million	



Coordinate System: GDA2020 MGA Zone 56



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Prepared by: GL
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Legend

- Project area
- Sydney Terminal Building
- Central Electric Building
- Eddy Avenue
- Eddy Avenue Plaza
- Grand Concourse
- Western Forecourt

Sydney Terminal Building Revitalisation Project

Figure 5-1: Project area

Project Number: 287415

Drawings / Design Prepared By

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Transport for NSW

5.2 The proposed project

The project is split across many different levels of the Sydney Terminal Building and its public domain interfaces, Eddy Avenue Colonnade, Eddy Avenue Plaza and the Western Forecourt. Figure 5-2 shows the key features of the project as split across these various levels.

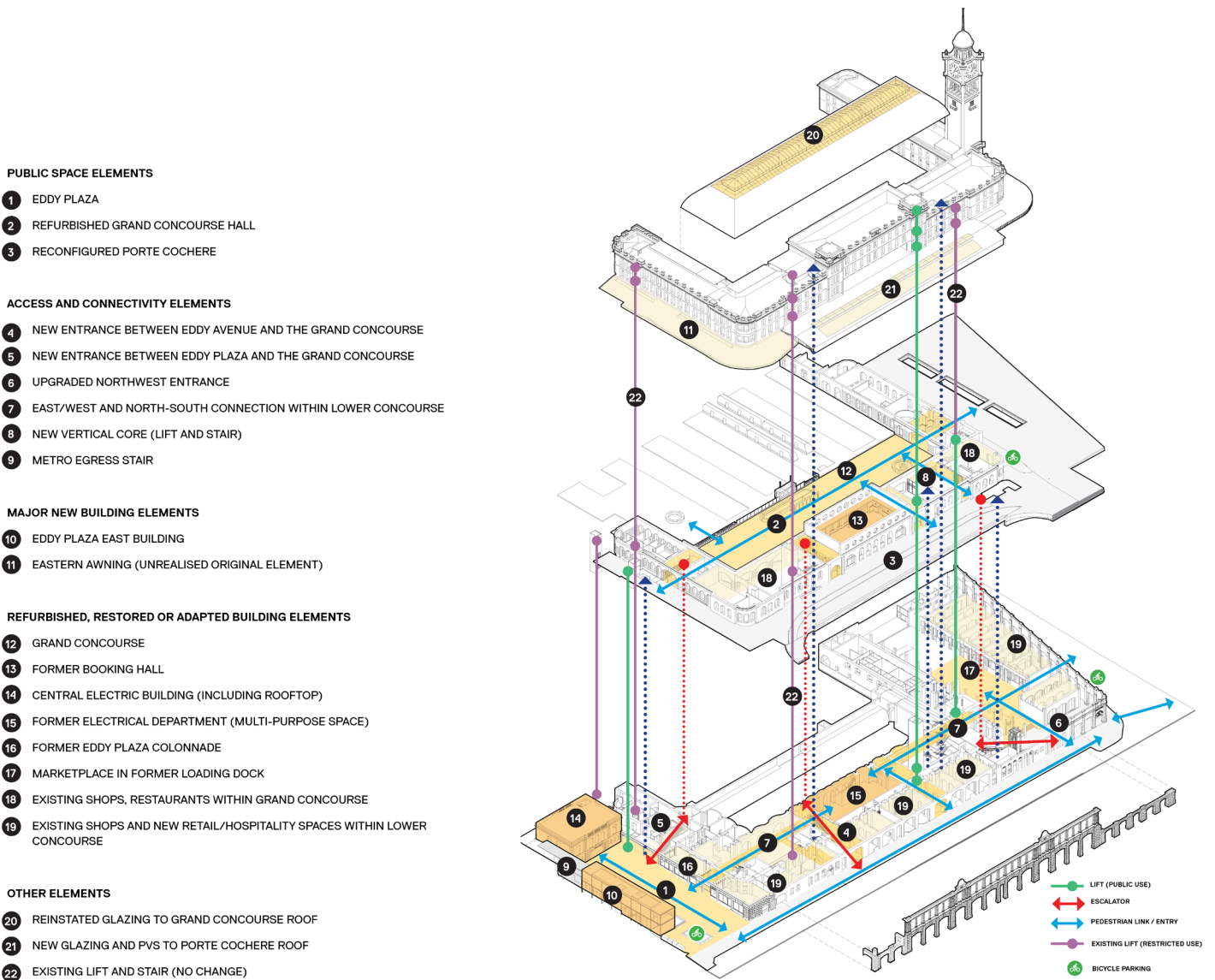


Figure 5-2: Key features of the project

5.2.1 Sydney Terminal Building

Street level

The following key features of the project would improve access, connectivity, activation and amenity of the street level of the Sydney Terminal Building, while celebrating its heritage character and significance. The key features are shown in Figure 5-3.

- Improving pedestrian circulation through and around the Sydney Terminal Building via new entrances, exits and lifts and escalators, supporting key strategic planning objectives. This includes new entry points at:
 - Eddy Avenue to connect the street level to the Grand Concourse as well as a new access at the north-western corner to provide access to the western loading dock
 - Eddy Avenue Plaza to provide access to the Sydney Terminal Building
 - Pitt Street to provide access to the Sydney Terminal Building and western loading dock
- Activation of the street level, including adaptive reuse of the back of house areas of the Sydney Terminal Building including a market style activation within the western loading dock to create a vibrant new publicly accessible space. This space would optimise the heritage character of the building to create a unique customer experience through a network of lanes and retail offerings at the street level
- Provision of new toilets near the new entry points to the Sydney Terminal Building from Pitt Street and Eddy Avenue on the Grand Concourse level and next to the Eddy Avenue Plaza entrance on the street level
- Creation of a new multi-purpose space on the street level of the Sydney Terminal Building. The new multi-purpose space would be able to support a range of commercial uses and events such as art exhibitions, cultural experiences, concerts and other events
- Widening of Eddy Avenue footpath between Pitt Street and Eddy Avenue Plaza
- Public domain improvements along Pitt Street and Eddy Avenue Plaza.

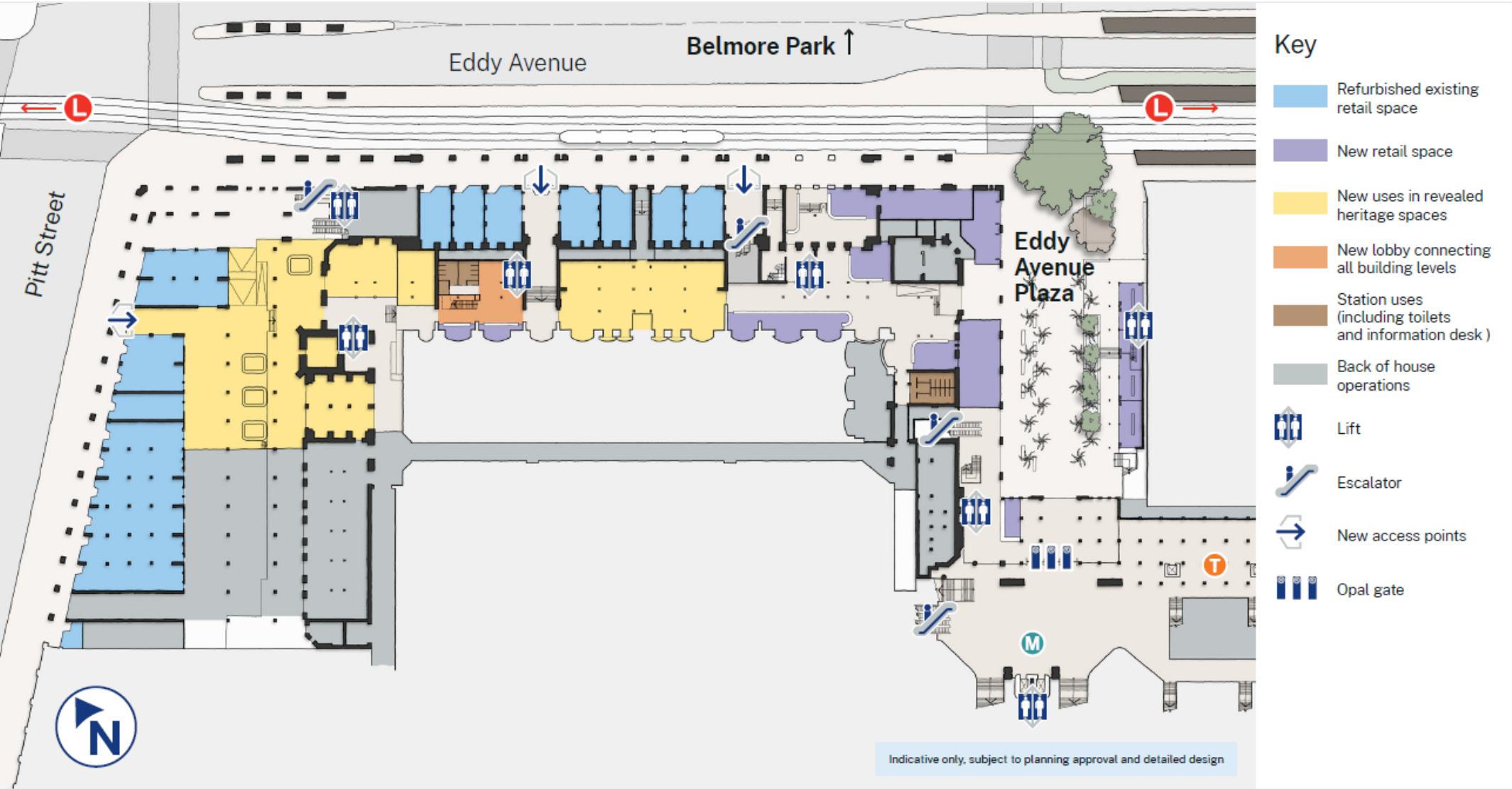


Figure 5-3: Proposed uses within the Sydney Terminal Building – Street level

Grand Concourse level

The following key features of the project would improve access, connectivity, activation and amenity of the Grand Concourse level of the Sydney Terminal Building, while celebrating its heritage character and significance. The key features are shown in Figure 5-4 and Figure 5-5.

- Improvements to pedestrian flow including new escalators, stairs and elevators to support direct connection between Eddy Avenue and Eddy Avenue Plaza to the Grand Concourse
- Consolidation of the gate line to align with the Grand Concourse roof and structure
- New and enhanced retail uses that service customers and create a vibrant and exciting destination which offers a diverse range of food and beverage options and cultural, events and entertainment spaces
- Station administration functions would be accommodated in the east wing and adjacent to Platform 1 with regional services relocated adjacent to the Western Forecourt
- Relocation of toilets at the Grand Concourse of the Sydney Terminal Building
- The original volume of the Booking Hall would be reinstated by removing the concrete floor inserted in 1937 to reinstate the original double height space. This space would be a publicly accessible space which may be used in a variety of ways, such as for food and beverage offerings, retail, cultural and community uses
- New finishes to the Grand Concourse roof to restore it to its original 1906 design, for improved light and aesthetic restoration, including additional structural support for safety
- New floor finishes throughout the Grand Concourse, respective of its heritage significance
- New awning over the eastern balcony of the Sydney Terminal Building, adjacent to Eddy Avenue Plaza to reflect the original design and existing awning at the north-western corner to create building symmetry
- Realignment of the light rail track under the Porte Cochere of the Sydney Terminal Building to enable platform widening to improve safety and improve passenger flow and movement
- Improved roofing for natural lighting and provision of solar panels above the Porte Cochere over the existing light rail stop.



Figure 5-4: Grand Concourse with proposed additions

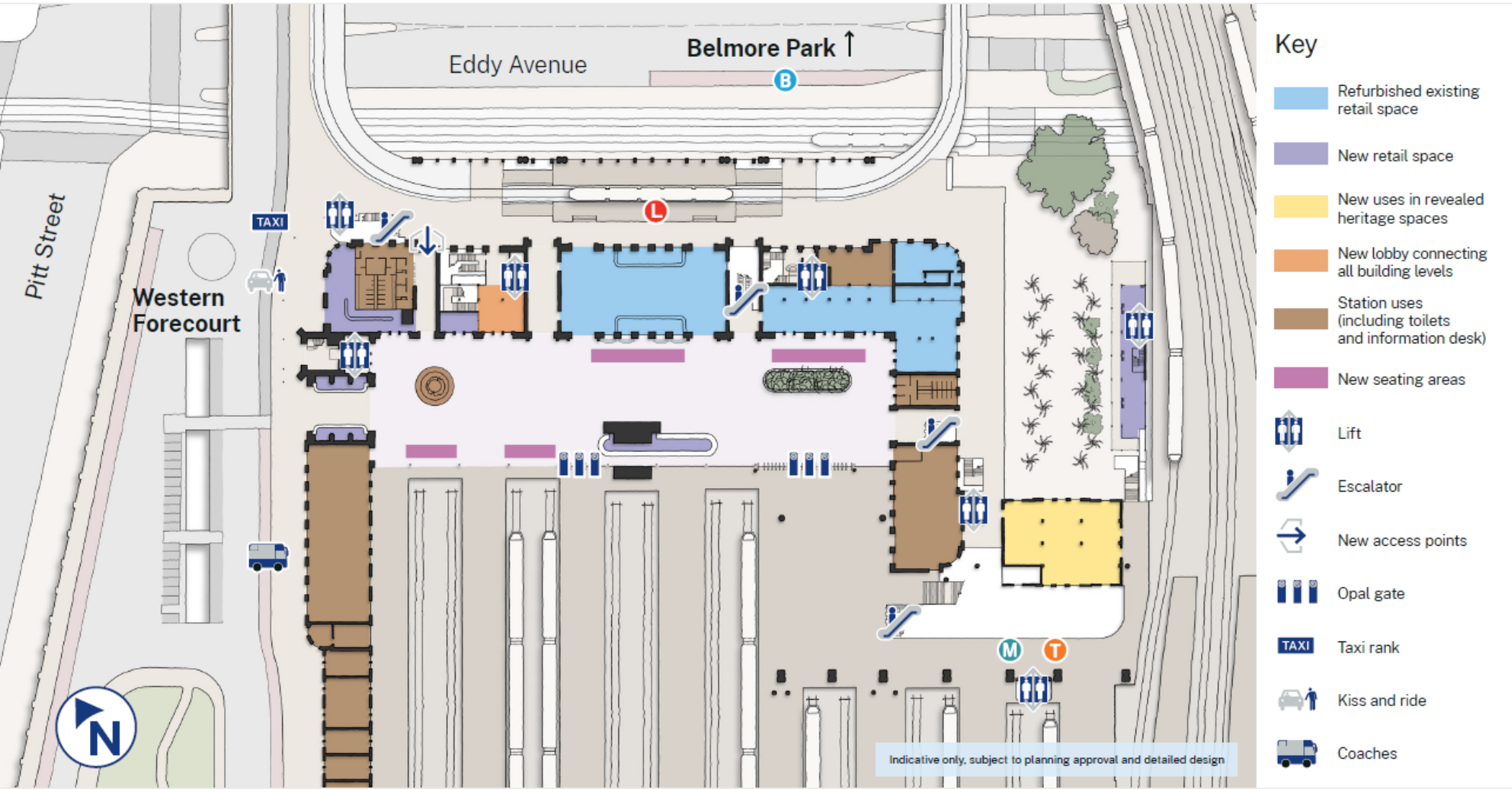


Figure 5-5: Proposed uses within the Sydney Terminal Building – Grand Concourse level

5.2.2 Eddy Avenue Plaza

The following key features of the project would improve access, connectivity, activation and quality of Eddy Avenue Plaza. The key features are shown in Figure 5-6 and Figure 5-7.

- Adaptive reuse, additions and alterations of retail space within Eddy Avenue Plaza including a new two storey retail building adjacent to the rail line. Eddy Avenue Plaza would also be levelled providing better access and pedestrian flow through the plaza and to the Sydney Terminal Building
- New lifts and stairs to provide access to the Central Electric Building and Grand Concourse
- New landscaping and paving reflecting a Connecting with Country approach
- New bicycle parking would be provided within Eddy Avenue Plaza to accommodate a minimum of 50 bicycles, subject to detailed design. Additional bicycle parking areas would be provided in the broader precinct as part of the CPRP
- Public seating in Eddy Avenue Plaza.



Figure 5-6: Artist's impression of Eddy Avenue Plaza looking south from Eddy Avenue



Figure 5-7: Artist's impressions within Eddy Avenue Plaza

5.2.3 Central Electric Building

The Central Electric Building would be repurposed to allow for new retail space on Level 1 and on the rooftop. New access points to the Central Electric Building would be created between the new two storey retail space in Eddy Avenue Plaza and the Grand Concourse level of the Sydney Terminal Building.

5.2.4 Operational ancillary facilities and infrastructure

Operational ancillary facilities and infrastructure that would support the operation of the project include:

- Wayfinding and signage throughout the Sydney Terminal Building, Eddy Avenue Plaza and Central Electric Building
- Lighting and CCTV
- Upgrades to the passenger information systems (for example, passenger information displays, public address and hearing loops)
- Emergency equipment (for fire and life safety)
- Coolers, chillers and other mechanical plant to be installed on the roof of the Sydney Terminal Building.

5.2.5 Green infrastructure

Green infrastructure involves the inclusion of natural elements such as vegetation and trees into design features (for example, green roofs, living walls, open spaces, canopy cover, and urban forests). The design for this project includes green infrastructure through the implementation of 214 metres squared of understory planting (ground level vegetation such as shrubs), 110 metres squared of which would be a green roof atop of the new two-storey building in Eddy Avenue Plaza. This planting would also help to reduce the urban heat island effect, an effect where the built environment causes the surrounding ground level temperature to be warmer than it naturally would be, by reducing the number of sealed surfaces within the project area. Planting is also included within the Grand Concourse itself which is a form of biophilic design and is a type of green infrastructure.

The understory planting in Eddy Avenue Plaza also aims to improve the microclimate. This would create comfortable spaces for people to remain outdoors all year round, and it would help create green spaces.

The project would require the removal of the six London Plane trees and two Tuckeroo trees in Eddy Avenue Plaza. However, the project would increase the overall tree canopy cover by 55.5 metres squared with a total of 696.5 metres squared of canopy coverage, all of which would be mature trees. The proposed landscaping in Eddy Avenue Plaza and Grand Concourse all contribute to the tree canopy cover provided as part of the project.

The plant species proposed for Eddy Avenue Plaza would be selected from the remnant native ecologies of the Dry Sclerophyll Forest: Coastal Dune Dry Sclerophyll Forests and Sydney Coastal Sandstone Foreshores Forest to reflect the natural environment of the area.

5.2.6 Connecting with Country

Consultation has been carried out, and would continue to be carried out, with the local Aboriginal community (see Chapter 6 (Stakeholder and community engagement)). This has included input into the design process. The Connecting with Country Framework developed for the wider CPRP (Balarinji & Transport for NSW, 2022) was developed through engagement with the local Aboriginal community and includes 13 themes that are being integrated in various ways and forms across the precinct (see Figure 5-8).



Figure 5-8: Connection to Country themes

Seven of these themes were deemed as the most relevant for integration with the project (marked with an asterisk above). The remaining themes that were not selected were considered more relevant for future stages of the CPRP.

The project responds to the themes in the following ways and has identified specific areas for further investigation, consultation and the commissioning of artworks and interpretative elements as the design develops:

- **A connection to Sky Country and cosmology** through the design of the Grand Concourse roof to allow for a direct view of the sky during the day and evening
- **A meeting place** provided thorough the development of multi-purpose spaces within the Grand Concourse area to provide areas for people to connect in both the former Booking Hall and on the street level within the previous Electrical Department in the back of house area of the Sydney Terminal Building
- **Connecting with Country through layers of sandstone** through the design of Eddy Avenue Plaza and entries within Eddy Avenue Colonnade
- **The legacy of Sydney Trains** through an interpretative element within the Interstate Booking Office which responds to the existing terrazzo floor with a map of Australia
- **Six seasons planting** through the selection of indigenous planting within Eddy Avenue Plaza and the Grand Concourse that has been identified within the [Connecting with Country Framework](#)
- **Welcome to Country** integration with entrances to the Sydney Terminal Building and within the Grand Concourse floor (major artwork commission)
- **Acknowledging and healing** will be addressed through ongoing consultation and working groups established by Transport to address the association of Platform 1 and Central Station with the Stolen Generations (see Chapter 7 (Aboriginal Heritage)). This project does not propose or assume what the outcome of this process will be but has taken particular care to not impact Platform 1 or to assume what form the response will take. How this project will respond to this process is a sensitive and ongoing discussion. Indicative locations within this project could include Platform 1, the Grand Concourse, and the Interstate Booking Office. Balarinji have presented the [Connecting with Country Framework](#) to the State Design Review Panel with representatives from the Government Architect NSW to inform them of this ongoing process.

5.2.7 Place making

One of the primary drivers for the project is to re-establish Central Station as a place and destination within Sydney that can attract visitors beyond its existing transport functions. This would be achieved in a number of ways including the restoration and rejuvenation of the Grand Concourse including the former Booking Hall, the reconfiguration and upgrade of Eddy Avenue Plaza, and the re-activation and expansion of retail, hospitality and cultural spaces within the Sydney Terminal Building.

Most importantly, the project has been designed to be sympathetic to the existing place and to restore and enhance its existing and historic character. For example, the mezzanine floor within the former Booking Hall, which is currently blocking the ornate ceiling and plasterwork from view, would be removed to better showcase and celebrate the historical architecture. The reinstatement of the glazing on the Grand Concourse roof would also help to better reflect

the original design and amenity of the Sydney Terminal Building and would restore views of the clocktower from within the Grand Concourse. The sensitive adaptive re-use of the lower levels and the former Electrical Department as a multi-purpose space would reveal areas to the public that have not been accessible previously.

The Better Placed principles (Government Architect NSW, 2017) for design have been adopted as objectives within the design. The way in which the design has been developed to address these objectives is summarised in Table 10-2 in Chapter 10 (Place, design and movement). For more detail, refer to Section 8 of Appendix I (Place and urban design assessment).

5.2.8 Accessibility

The project would improve accessibility of Central Station in line with the requirements of the National Construction Code and the Disability Standards for Accessible Public Transport 2002. Key improvements to accessibility include:

- Additional lifts and escalators
- Regrading of Eddy Avenue Plaza to provide an accessible entrance to the Sydney Terminal Building
- New compliant toilets within the Sydney Terminal Building at street level and Grand Concourse level.

5.2.9 Property requirements and adjustments

The project would be located on land owned by the NSW Government or City of Sydney Council. No property acquisition would be required as part of the project.

5.2.10 Utilities

The project would require adjustments and relocation of existing services such as electrical and power supply infrastructure, stormwater services and drainage, this includes:

- Adjustment, protection and upgrade of existing utilities within the Sydney Terminal Building, Eddy Avenue Plaza and Central Electric Building
- Relocation of transformer rooms
- No public utility adjustments would be required. Further investigation of the extent of utility adjustments and relocations would be carried out during detailed design.

5.2.11 Project operation

Operation of the project would maintain the primary use of the Sydney Terminal Building as a transport interchange, while facilitating additional ancillary uses that complement its primary function. Any operational changes that arise from the project are expected to be beneficial changes related to retail activation, accessibility, wayfinding, safety, amenity and activation.

The project aims to address current Sydney Light Rail operations in the Porte Cochere light rail platform where a two-stage drop-off and pick-up arrangement exists. By widening the platform to alleviate congestion issues, it is intended to simplify operations to a single drop-off and pick-up arrangement.

Ongoing maintenance would be required for key operational components. This would be carried out by Transport in line with standard maintenance policies. Periodic maintenance including inspections and repairs would take place inside and outside the Sydney Terminal Building to ensure continuous operation of the Sydney Terminal Building as a transport interchange.

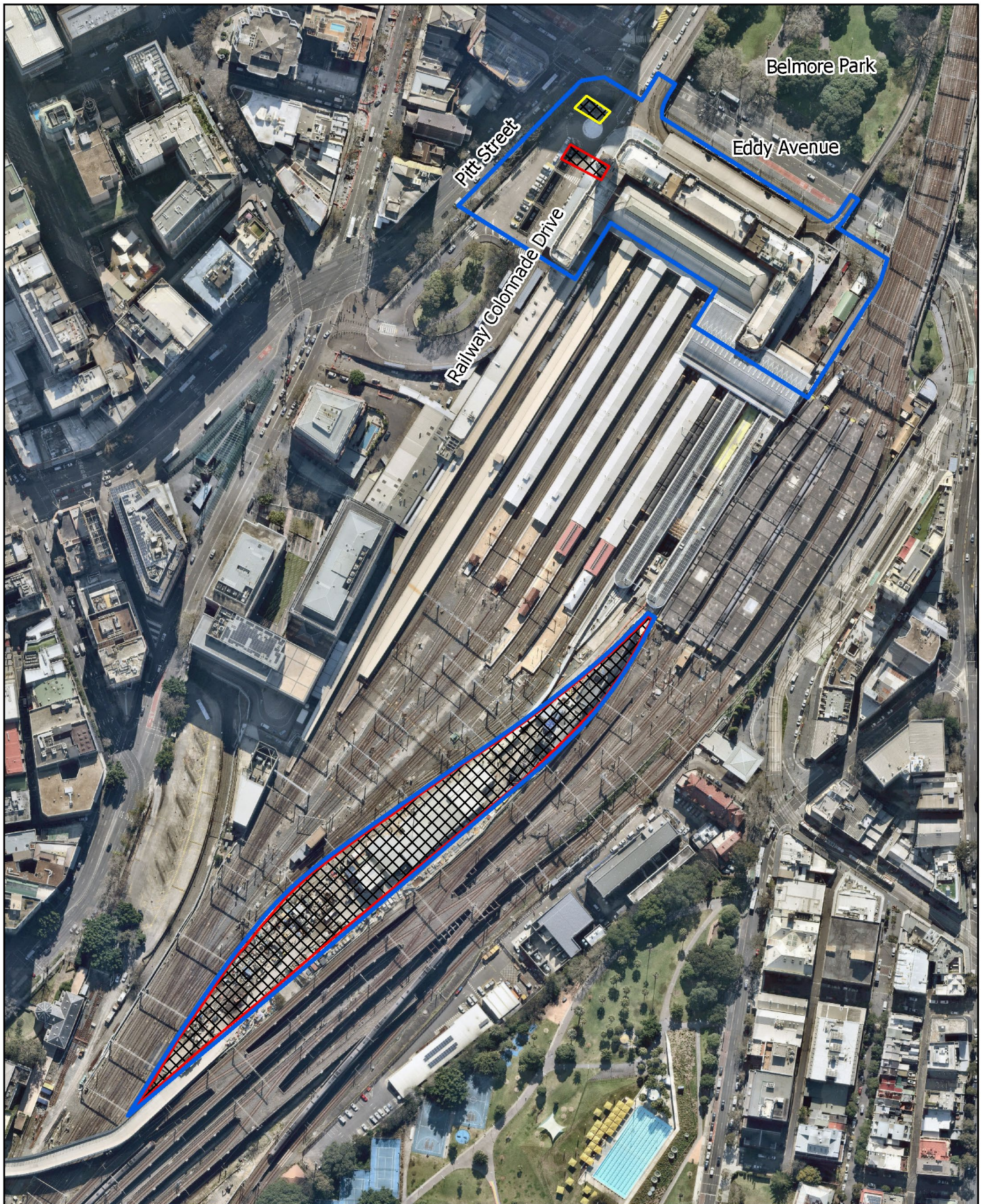
5.3 Construction

All construction works would be carried out within the construction footprint, as depicted in Figure 5-9, and bounded by the following:

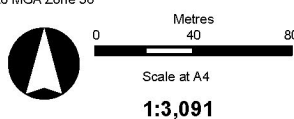
- North – Sydney Terminal Building colonnade along Eddy Avenue
- South – End of Intercity train lines
- East – Sydney Trains suburban line viaduct and rail lines
- West – Sydney Terminal Building colonnade along Pitt Street. This incorporates the western loading dock and Western Forecourt.

The temporary construction works would also incorporate the existing construction facilities located in the Sydney Trains Yard. These facilities would be used for construction staff amenities or equipment and plant storage. Construction ancillary facilities and laydown areas would also be included in the western loading dock and Western Forecourt.

Vegetation removal would be limited to existing trees within Eddy Avenue Plaza, however the large London Plane tree at the entrance to Eddy Avenue Plaza would be retained.



Coordinate System: GDA2020 MGA Zone 56



Data Source: © Nearmap 2022

Prepared by: GL
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Approved by: CS

Legend

- Construction footprint
- Indicative construction compound**
- XX Grand Concourse level
- XX Ground level

Sydney Terminal Building Revitalisation Project

Figure 5-9: Construction footprint

Project Number: 287415

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5.3.1 Construction overview and program

Construction for the project is expected to commence in Q3 2023 and would take about three years, subject to planning approval, funding availability, weather conditions. The indicative program and staging is provided in Table 5-2. The key construction items associated with the program are as follows:

- Site establishment. This would involve establishing construction site facilities in the western loading dock as well as additional laydown areas on the Western Forecourt. This stage would also include removal of plant and equipment from the Sydney Terminal Building which are no longer in operation. Additional site staff facilities and storage areas may be provided from the existing facilities in the Sydney Trains Yard.
- Eddy Avenue Plaza staged works starting with the removal of the existing buildings on the eastern side. Replacement buildings would be completed along with service relocations and upgrades within Eddy Avenue Plaza prior to regrading and surfacing.
- Following the construction of the new substation, the existing substations would be decommissioned and removed, and services relocated.
- The Central Electric Building refurbishment would be carried out in parallel with the works in Eddy Avenue Plaza to minimise disruption.
- The revitalisation of the Grand Concourse, including restoration of the roof structure.
- The Sydney Terminal Building works would commence with the removal of redundant services and building fabric followed by a staged fit out.
- The Western Forecourt strengthening, and western loading dock works would be the final activity carried out prior to this area being used as a construction zone for the duration of the project.
- Realignment of the light rail track under the Porte Cochere of the Sydney Terminal Building.

Table 5-2: Indicative program and staging

Construction stage	2023		2024				2025				2026	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Site establishment and low impact work												
Eddy Avenue Plaza												
Substation relocations												
Central Electric Building												
Grand Concourse												
Sydney Terminal Building												
Western Forecourt and loading dock												
Light rail track slew ¹												

1. This item of works is reliant on Sydney Light Rail schedule of possessions or shutdowns.

5.3.2 Site establishment and low impact work

Site establishment and low impact work that would be carried out prior to the main works includes:

- Site surveys including geotechnical, hydrological and contamination
- Façade cleaning, painting and other durability and general maintenance repairs
- Removal of redundant services/equipment in back of house areas
- Dilapidation surveys identifying and recording the condition and location of buildings, structures and services
- Removal of redundant services and temporary relocation of services
- Establishment of site compounds (for example, erect fencing and plant/material storage areas)
- Removal of a number of trees in Eddy Avenue Plaza
- Establishment of temporary construction facilities as required.

5.3.3 Sydney Terminal Building

Proposed construction activities within the Sydney Terminal Building include:

- Removal of all redundant services, non-loadbearing walls, mezzanine floors and associated support structures within the back of house area of the Sydney Terminal Building
- Replacement of flooring in Grand Concourse
- Replacement of Grand Concourse roofing
- Replacement of Porte Cochere roofing
- Removal of void infill and associated services to restore the Booking Hall to its original double height space
- Demolition of existing awning and escalators on the eastern side of the Sydney Terminal Building
- Western loading dock modification and removal of redundant services/equipment
- Realignment of the light rail track under the Porte Cochere of the Sydney Terminal Building to enable platform widening and water proofing corrective works.

5.3.4 Eddy Avenue Plaza

Proposed construction activities within Eddy Avenue Plaza include:

- Regrade Eddy Avenue Plaza to remove level difference
- Demolition of wall in the centre of Eddy Avenue Plaza
- Demolition of service ramp between rail line and existing retail shops
- Relocation of fire control room & pump room to north-eastern corner of Eddy Avenue Plaza
- Rebuild of the support colonnade to the eastern terrace of the Sydney Terminal Building.

5.3.5 Western Forecourt

Proposed construction activities within the Western Forecourt include:

- Strengthening works to upgrade the load capacity of the Western Forecourt to support emergency vehicles and coach/bus loading
- Construction parking and material storage.

5.3.6 Central Electric Building

Proposed construction activities within the Central Electric Building include:

- Removal of mezzanine within the Central Electric Building.

5.3.7 Testing, commissioning, and finishing work

Upon completion of construction, the following testing, commissioning and finishing works would be carried out:

- Dismantling site compounds and hoarding
- Installation of seating along Eddy Avenue and Pitt Street
- Installation of lighting, wayfinding and signage
- Landscaping and tree replanting within Eddy Avenue Plaza
- Fit out of retail and station facilities
- Testing electrical, communications and signalling components.

5.3.8 Construction ancillary facilities

Construction ancillary facilities such as site compounds for plant, equipment and material storage would be located within the western loading dock, Western Forecourt and/or utilise existing back of house areas of the Sydney Terminal Building. Construction staff amenities and equipment and plant storage would also be provided in the Sydney Trains Yard (see Figure 5-9).

5.3.9 Construction transport management and access

Construction access would be via Pitt Street to the Western Forecourt and western loading dock at scheduled times to suit loading dock operations. Railway Colonnade Drive would also be used to access the Grand Concourse. Possessions of Eddy Avenue Plaza would also be required to facilitate deliveries of materials, equipment, plant and machinery to the eastern side of the Sydney Terminal Building (see Figure 5-10).

Workers would be encouraged to travel to the site utilising public transport. If this is not possible, workers would be required to park in pre-defined areas (for example, the Western Forecourt).

No public or residential parking would be impacted by construction works. There are some areas of the western loading dock and Porte Cochere where Sydney Trains staff and emergency vehicle parking that may be impacted. The Sydney Trains and emergency vehicle parking would be relocated from the western loading dock and Porte Cochere to an alternative location to avoid operational or servicing impacts or effects on other road users. The final locations would be agreed in consultation with Sydney Trains, and the emergency services.

The daily heavy vehicle numbers are expected to be between 20 and 30 trucks per day. During the demolition these would be spread across the day with typically fewer movement during the network peak. For the construction component the majority of these movements would occur after hours to minimise impacts to the operation of Central Station and enable movement of material through public spaces.

For light vehicles there are expected to be around 50 vehicles per day. These would vary across the day with the bulk being delivery or inspection vehicles rather than for construction workers. It is noted that most of the light vehicle generation would be during fit out and not coincide with the peak heavy vehicle periods.

5.3.10 Workforce and construction work hours

The construction workforce would average 100 workers per day over the three-year construction period with an estimated peak of 200 being anticipated.

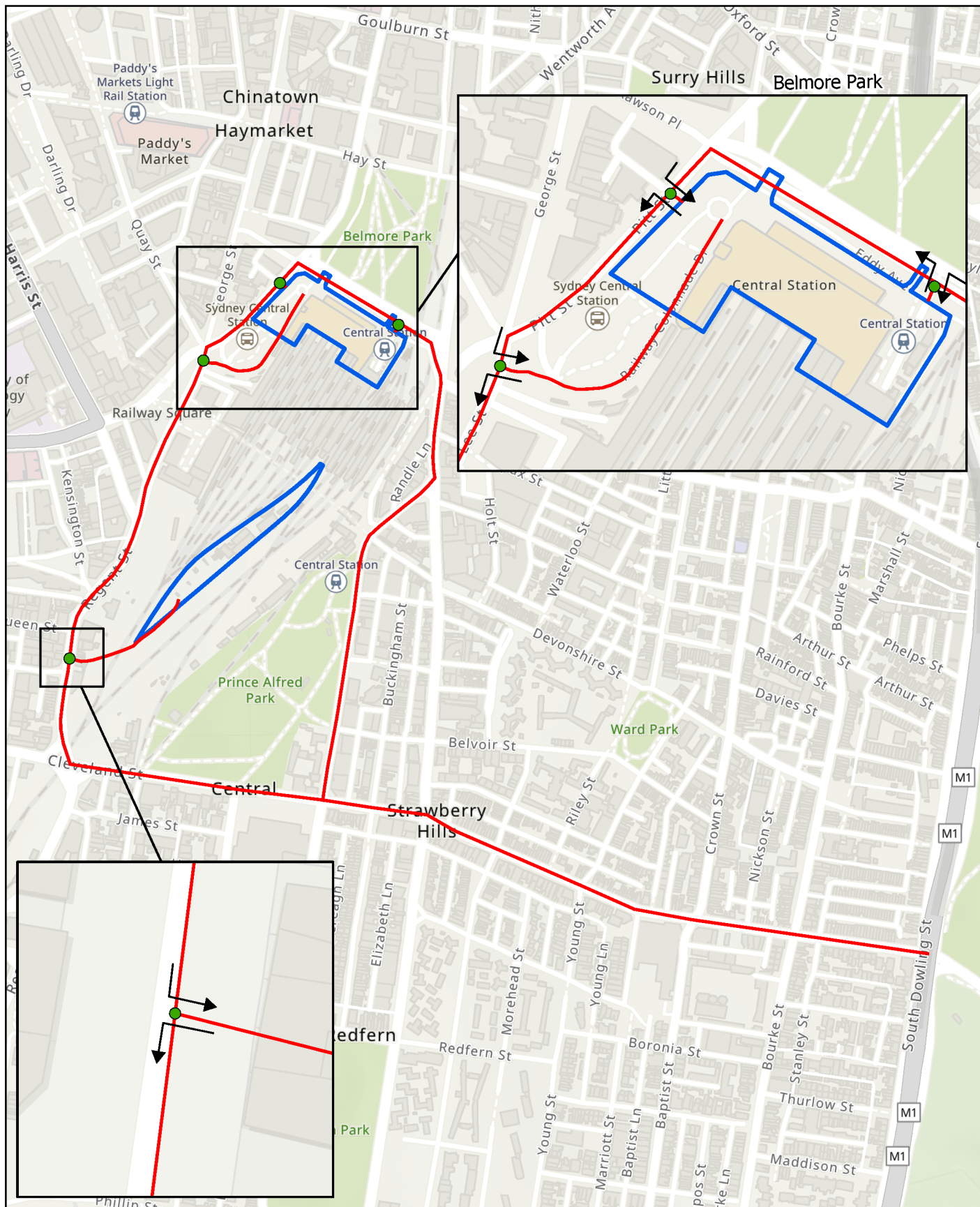
The majority of work required for the project would be carried out during standard NSW Environment Protection Authority construction hours, which are as follows:

- 7am to 6pm Monday to Friday
- 8am to 1pm Saturdays
- no work on Sundays or public holidays.

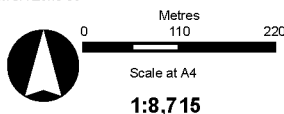
Certain work may need to occur outside standard hours (see Table 5-3). Out of hours work may be required in some cases to minimise disruptions to customers, pedestrians, motorists and nearby sensitive receivers; and to ensure the safety of railway workers and operational assets.

Realignment of the light rail track would be carried out in conjunction with planned Sydney Light Rail possessions or extended Sydney Light Rail shutdowns.

Customers would be notified of any planned rail possession works to allow customers to plan their journey well ahead of time. Announcements would be made by station staff and appropriate signage would be provided to inform customers of any changes to rail services. Rail replacement services would be provided during rail possessions. This is similar to the current practices at Central Station. Rail possessions would be scheduled to avoid or minimise impacts on special events.



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Prepared by: GL
Checked by: CS
Approved by: CS

Legend

- ▮ Construction footprint
- Access points
- Access routes
- ➔ Incoming/outgoing construction vehicle movements

Sydney Terminal Building Revitalisation Project

Figure 5-10: Construction access routes

Project Number: 287415

Drawings / Design Prepared By

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Transport for NSW

Table 5-3: Construction work hours

Construction activities	Estimated duration ¹	Hours of work			
		Standard daytime	Day OOH ²	Evening	Night-time
All locations					
Deliveries and load out	Project duration	✓	✓	✓	✓
Sydney Terminal Building					
Demolition and hazmat removal	18 months	✓	-		
Excavation	10 months	✓			
Concrete work	18 months	✓	✓	✓	✓
Installation of services	19 months	✓	✓	✓	✓
Roof construction – Grand Concourse	17 months	✓	✓	✓	✓
Grand Concourse work	17 months	✓	✓	✓	✓
Roof construction – light rail	5 months	✓	✓	✓	✓
Façade refurbishment	20 months	✓	✓	✓	✓
Eddy Avenue Plaza and Central Electric Building					
Demolition	2 months	✓	✓	✓	✓
Concrete work	5 months	✓	-		
Installation of services	3 months	✓			
Paving and landscaping	3 months	✓			
Western loading dock					
Demolition and hazmat removal	3 weeks	✓	-		
Excavation	1 week	✓			
Concrete work	6 weeks	✓			
Western Forecourt					
Western Forecourt strengthening	6 months	✓	✓	✓	✓

Note 1: Durations are indicative and would be confirmed by the construction contractor.

Note 2: OOH = out-of-hours. Daytime out-of-hours is Saturday between 7am to 8am and 1pm to 6pm, and on Sunday and public holidays between 8am to 6pm.

5.3.11 Construction plant and equipment

An indicative list of plant and equipment that would be required to construct the project is provided in Table 5-4. Additional equipment that may be required would be identified during detailed design by the construction contractor.

Table 5-4: Construction plant and equipment

Activity	Plant and equipment
Early works	Elevated work platforms, mobile crane, hand tools, jackhammer, concrete saw, trucks, light construction vehicles, power tools, generator, chainsaw, chipper/mulcher
Main works (Sydney Terminal Building, Eddy Avenue Plaza, Western Forecourt, Central Electric Building)	Elevated work platforms, tower crane, mobile cranes, excavators, compactors, hand tools, jackhammer, concrete saw, excavator, air compressor, trucks, light construction vehicles, concrete mixer, concrete pumps, compactor, power tools, grinder, generator, mobile construction lighting

Activity	Plant and equipment
Finishing works	Elevated work platforms, mobile cranes, hand tools, trucks, light construction vehicles

5.3.12 Construction resources and waste management

Various components of construction works would generate spoil and waste. The project would require the excavation of about 2,000 meters cubed of material.

The surplus excavated materials are expected to be recyclable and non-recyclable general solid waste or virgin excavated natural material. Surplus excavated materials would be beneficially reused or recycled as a priority, with any remainder disposed at a licensed facility.

The source and quantity of materials would be determined during the detailed design of the project and would consider the requirements of the Green Building Council of Australia Green Star Buildings. Materials would be sourced from local suppliers where practicable. Reuse of existing and recycled materials would be carried out where practicable. Circular economy principles would inform the design and construction. These aspects are to be further detailed in the technical reports.