



Transport
for NSW

AECOM

Wynyard Station Upgrade

Review of Environmental Factors – Submissions Report

March 2015



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Abbreviations and Glossary

Abbreviation	Definition
CBD	Central Business District
CEMP	Construction Environmental Management Plan
CTPMP	Construction Traffic and Pedestrian Management Plan
EP&A Act	<i>Environmental Protection and Assessment Act 1979</i>
Feasible and reasonable	Feasible relates to the engineering considerations and what is practical to build. Reasonableness relates to the application of judgement in arriving at a decision taking into account to the nature of extent of mitigation benefit, the cost of mitigation and community views.
HCEMP	Heritage Construction Environmental Management Plan
Infrastructure SEPP	<i>State Environmental Planning Policy (Infrastructure) 2007</i>
LEP	Local Environment Plan
LoS	Level of Service
NWRL	North West Rail Link
REF	Review of Environmental Factors

Executive summary

Background

Transport for NSW is proposing to upgrade Wynyard Station to transform the station into a new gateway for Sydney's financial district and western Central Business District (CBD). A review of environmental factors (REF) for the station upgrade was commissioned and put on public display in December 2014 as a key step in the planning, design and proposal approval process.

In summary, the proposal involves:

- Refurbishment of the concourse level.
- Reconfiguration of the unpaid concourse area, including widening the northern concourse area and inclusion of the southern unpaid concourse area within the expanded paid concourse.
- Expansion of the paid concourse area and reconfiguration of the gateline to respond to pedestrian movements, including the provision of new ticket gates.
- Refurbishment and de-cluttering of Platforms 3 and 4 and provision of a new staircase between the platforms and the paid concourse area.
- Refurbishment and de-cluttering of Platforms 5 and 6, including demolition of the former escalator enclosures and re-orientation of one staircase between the platforms and the paid concourse area.
- Reconfiguration of the station facilities, including relocation of the Station Manager's Office and new or refurbished amenities (such as public and staff toilets).
- Fit out of Transport House basement levels for station facilities, including the reconstruction of stairs to the concourse.
- Other works relating to the provision of services to support the station upgrade, within roof and wall cavities throughout the station and within adjoining properties.
- Temporary works and support services associated with construction activities throughout the station and within the basement levels of Transport House.
- Refurbishment of the York Street foyer.

Purpose of this report

This Submissions Report outlines and provides responses to submissions received by Transport for NSW in response to the REF.

As part of the exhibition of the REF, Transport for NSW undertook consultation with the community and stakeholders. This included a staffed public display office throughout the duration of the exhibition period. Meetings were also held with key stakeholders, including businesses, on request. Chapter 2 provides detail of the consultation undertaken.

Overview of submissions

A total of 30 submissions were received during the period of public display. These included:

- 23 submissions from individual community members.
- Six submissions from organisations (Coles, Memocorp Australia Pty Ltd, NSW Commuter Council, Action for Public Transport, the Planning Institute of Australia, and the NRMA).
- One submission from local government (City of Sydney Council).

All written feedback received during the public display period along with contact details was recorded in the proposal consultation database.

Each submission received was assigned a unique submission number and was categorised according to the key issues raised. A letter of response will be sent to each party who made a submission to inform them of their individual submission number and where their issue has been addressed in the Submissions Report. Individual submissions have been categorised and grouped with others relating to the issues identified.

Modifications to the proposal

Transport for NSW has made modifications to the proposal including the retention of the Concourse Bar and Café and minor changes to the retention of heritage features within the basement levels of Transport House. An alternative construction methodology has also been identified which would involve the establishment of three pedestrian circulation corridors to segregate customers from the work areas in the station, along with temporary relocation of gatelines.

An assessment of additional environmental impacts resulting from these modifications has been conducted. This concluded that there would be no significant impacts from the proposed modifications.

A number of additional management measures are proposed to mitigate the likely impacts from the proposed modifications. These are outlined in Chapter 5 of this Submissions Report.

Conclusion and next steps

This Submissions Report documents the consideration of the submissions received and outlines Transport for NSW's response to them.

Transport for NSW will now review the REF and this Submissions Report and determine whether the requirements for assessment under Part 5 of *the Environmental Planning and Assessment Act 1979* (EP&A Act) have been met. It will then make a determination as to whether or not to proceed with the Wynyard Station Upgrade proposal.

Should the Wynyard Station Upgrade proposal be approved, Transport for NSW would continue to consult with community members, government agencies and other stakeholders to manage impacts during construction and operation.

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1 Introduction

1.1 Background

Wynyard Station currently provides an essential link between the T1 North Shore, Northern and Western Line, T2 Airport, Inner West and South Line, and T3 Bankstown Line and the City Circle. The station is one of the busiest on Sydney's rail network and is the gateway to Sydney's financial district and Central Business District (CBD). The station is currently congested during peak periods and receives approximately 39,000 movements over the three and a half hour morning peak period. Passenger numbers are expected to increase with the opening of the first development at Barangaroo (scheduled for 2015).

The station has undergone several alterations since it opened in 1932, but has not had significant improvements since the addition of platform lifts in 1999. Given the age of the station and the continually growing demand for rail travel to and from the CBD, there is a need to reconfigure the station to improve circulation in order to meet current and future capacity requirements and to improve safety and comfort for customers and staff (the proposal).

The key objectives of the proposal are to:

- Improve the customer experience at Wynyard Station by relieving congestion at ticket gatelines and stairs and enhancing the amenity of the station and visual connection throughout the station.
- Improve passenger flow and wayfinding throughout the station to accommodate increased patronage associated with the new Barangaroo development which would connect to the station via the Wynyard Walk project and rail network growth, by removing station enclosures and increasing paid concourse width.
- Provide improved station facilities and amenities for customers and station staff, including public and staff toilets, Station Manager's Office and other station facilities.
- Provide a safer and more secure environment for customers and station staff.
- Improve the station's compliance with Statutory Codes and Regulations (such as the Building Code of Australia, Disability Discrimination Act and Work Health and Safety).

1.2 Overview of the Wynyard Station Upgrade

The key features of the proposal include:

- Refurbishment of the concourse level.
- Reconfiguration of the unpaid concourse area, including widening the northern concourse area and inclusion of the southern unpaid concourse area within the expanded paid concourse.
- Expansion of the paid concourse area and reconfiguration of the gatelines to respond to pedestrian movements, including the provision of new ticket gates.
- Refurbishment and de-cluttering of Platforms 3 and 4 and provision of a new staircase between the platforms and the paid concourse area.
- Refurbishment and de-cluttering of Platforms 5 and 6, including demolition of the former escalator enclosures and re-orientation of one staircase between the platforms and the paid concourse area.
- Reconfiguration of the station facilities, including relocation of the Station Manager's Office and new or refurbished amenities (such as public and staff toilets).
- Fit out of Transport House basement levels for station facilities, including the reconstruction of stairs to the concourse.
- Other works relating to the provision of services to support the station upgrade, within roof and wall cavities throughout the station and within adjoining properties.
- Refurbishment of the York Street foyer.

Figure 1 provides an overview of the key features of the proposal. During detailed design, the configuration of the gateline would continue to undergo refinement to ensure it maximises customer experience, meets operational requirements and delivers a high standard of architectural design. As discussed later in this report, some design changes have been identified and assessed in Chapter 4, which would change the proposed concourse design. This revised indicative layout is reflected in Figure 1. It is noted that fit out of retail spaces would not form part of this proposal.

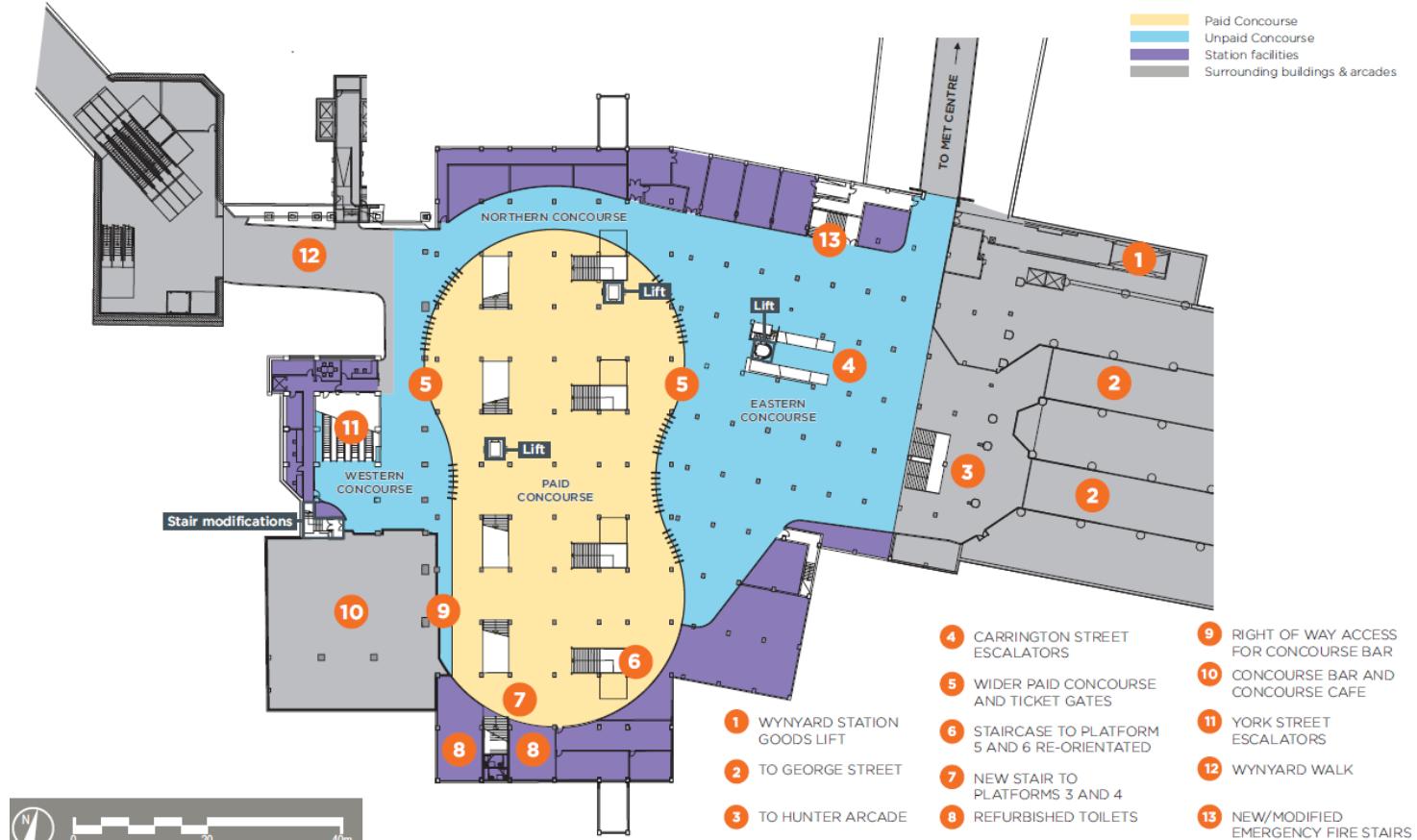


Figure 1 - Proposed Wynyard Station - revised concourse layout (indicative)

Figure 1 Proposed Wynyard Station – concourse layout

1.3 Review of environmental factors

1.3.1 Need for the proposal

Wynyard Station experiences congestion during morning and evening peak periods. Sydney's population and economy is forecast to continue growing and measures are required to reduce congestion and boost capacity across the busiest transport corridors. Passenger numbers at Wynyard Station, in particular, would be influenced by an overall increase in jobs and passenger numbers in the CBD as well as the construction of a number of nearby private developments and transport infrastructure projects. The Wynyard Walk project (which is currently under construction) would facilitate access for a large proportion of users of the Barangaroo site directly to Wynyard Station.

As a result of the expected increase in movements to and from Barangaroo, congestion at Wynyard Station would increase. Retaining the current station layout would likely lead to further queuing, delays on platform stairs, and crowding and congestion within the concourse and platforms.

While additional services are being added to the network, such as the North West Rail Link (NWRL) and a second harbour crossing and new CBD rail line are proposed to ease congestion and existing capacity constraints, an upgrade to the Wynyard Station is required to address congestion now and into the future.

1.3.2 Likely impacts of the proposal

Environmental investigations were undertaken during the preparation of the REF to assess the potential environmental impacts. Significant environmental impacts are unlikely to arise as a result of the proposal. The main potential impacts that would require further consideration during detailed design, construction and operation are summarised below.

Noise and vibration

Construction noise and vibration has the potential to impact nearby sensitive receivers, such as pedestrians and commercial receivers. Exceedance of noise management levels at external receivers are predicted during the commissioning of operational systems, such as testing of alarms and sirens, which already occurs occasionally and for a short duration. There are likely to be some noise impacts to receivers within the station public domain, mezzanine level and commercial receivers above or adjacent to the station, including structure-borne noise impacts. Appropriate mitigation measures would be considered during detailed design to reduce impacts of construction noise and vibration.

As the proposal area currently houses a railway station, the proposal would not permanently change the land use or character of the area or the receiving noise environment. As such, no significant impacts are anticipated during operation of the proposal.

Pedestrian access

Pedestrian access and wayfinding would be temporarily disrupted due to the installation of hoardings and the temporary closure of areas within the public domain. The primary impact would occur with the closure of the southern unpaid concourse. Closure would occur prior to the expansion of the northern unpaid concourse and as a result has the potential to increase pedestrian congestion in that area. The construction activities within the public domain would be staged to maintain adequate and safe movement of customers and would be undertaken in accordance with a Construction Traffic and Pedestrian Management Plan (CTPMP).

Pedestrian access and wayfinding is anticipated to improve during the operation of the proposal with improvements to pedestrian flow. This includes the provision of an additional staircase to Platforms 3 and 4, the re-orientation of the staircase to Platforms 5 and 6 and an increased number of ticket gates.

Traffic and access

Potential traffic impacts include temporary occupation of road space by heavy vehicles when loading/unloading, restricted access to the Wynyard Lane Car Park and good lifts for deliveries, and conflicts with other service vehicles, public transport and private vehicles using the surrounding roads and laneways while deliveries are in progress.

Construction works would be undertaken in accordance with a CTPMP, which would be integrated within the broader construction staging strategy to minimise disruption to traffic and transport services. Mitigation measures in the CTPMP would include scheduling movements of construction heavy vehicles outside peak periods; implementing traffic control measures during loading/unloading activities; and provision of signage to notify motorists and pedestrians of changes.

Wynyard Station would remain operational during the upgrade and passenger services would be maintained throughout construction of the proposal.

Heritage

The proposal would impact on four heritage-listed items: Transport House (a State heritage item), Wynyard Station, the Former Wynyard Tram Tunnels and Wynyard Park.

The proposal would result in the permanent loss of some original fabric of the station, and the reconfiguration of the station would alter the original layout in some locations, in addition to impacts to Transport House. Temporary impacts to Wynyard Park may occur should it be required for construction access. Archival recording of the original fabric would be undertaken where permanent heritage impacts are likely. Measures would also be implemented to avoid or minimise impacts on remaining fabric and these would be described within a Heritage Construction Environmental Management Plan.

1.3.3 Statutory compliance

Chapter 4 of the REF outlines the statutory planning and approvals process for the proposal. Having regard to the provisions of *State Environmental Planning Policy (Infrastructure) 2007* (the Infrastructure SEPP), the proposal is permissible without development consent and is assessable under Part 5 of the EP&A Act.

An approval under Section 60 of the *Heritage Act 1977* was granted by the Heritage Council on 2 February 2015 for works within Transport House between the York Street foyer level and the concourse level (Basement Level 4).

As the proposal is not expected to have a significant impact on matters of national environmental significance or Commonwealth land, a referral to the Commonwealth Department of Environment under the *Environment Protection and Biodiversity Conservation Act 1999* would not be required.

The construction and operation of the proposal would comply with all relevant legislative requirements identified in Chapter 4 of the REF.

1.3.4 Conclusions of the REF

The proposal is needed to improve customer experience, passenger flow and wayfinding throughout Wynyard Station. The upgrade would also provide improved amenities and facilities creating a safer environment for customers and station staff.

The main construction impacts associated with the upgrade are temporary and would be managed in accordance with the mitigation measures outlined in the REF.

It is considered that the Wynyard Station Upgrade proposal is unlikely to significantly affect the environment. Accordingly, an Environmental Impact Statement under Part 5.1 of the EP&A Act is not required.

In addition, approval under the *Environment Protection and Biodiversity Conservation Act 1999* is not required.

1.4 Purpose and structure of this report

This Submissions Report has been prepared to:

- Summarise and respond to issues raised in submissions.
- Identify any changes to the proposal and the potential impact of those changes.
- Summarise the mitigation measures for the proposal.

The Submissions Report has a number of key sections. These include:

- Description of community and stakeholder consultation activities undertaken during the REF preparation and public display period (Chapter 2).
- Responses to issues raised in submissions by the community and stakeholder agencies (Chapter 3).
- Details of design changes and modifications to the proposal (Chapter 4).
- Updated mitigation and management measures (Chapter 5).

Conclusions to the report are provided in Chapter 6.

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2 Consultation

2.1 Consultation prior to REF preparation

Prior to the preparation of REF for the Wynyard Station Upgrade, consultation was undertaken with surrounding businesses and organisations, City of Sydney Council, government agencies and other stakeholders.

2.2 Stakeholder engagement plan

A Stakeholder Engagement Plan consistent with Transport for NSW's *Community Engagement Policy* was prepared for the proposal. The plan:

- Provides background information about the proposal.
- Identifies the community and key stakeholders with the potential to be affected by the proposal.
- Identifies the potential nature and extent of stakeholder issues/concerns and relevant strategies to manage these proactively.
- Defines key messages, and identifies the communication tools and techniques to disseminate information and provide opportunities for feedback.
- Documents the policies and procedures implemented to record and respond to enquiries, complaints, and issues.
- Identifies and allocates roles and responsibilities.
- Provides an overview of how the effectiveness of the strategy will be evaluated.

The consultation strategy provides for consultation to be undertaken in two stages:

- During REF preparation.
- During the public display of the REF.

An overview of the activities proposed for each stage of consultation is provided in the following sections.

2.3 Consultation during REF preparation

2.3.1 Consultation activities

Table 1 lists the key engagement activities and tools, outlines their purpose, and describes how each tool/activity has been used to engage with the community and stakeholders.

Table 1 **Consultation during REF preparation**

Activity	Purpose and detail
Business and community contact and feedback mechanisms	<p>Project related information was provided to a number of stakeholders including surrounding businesses, property owners and organisations and face-to-face meetings held when requested. This includes Memocorp Australia Pty Ltd, MetCentre, Brookfield Office Properties, educational establishments, accommodation providers, and body-corporate entities of buildings near Wynyard Station.</p> <p>A letter was sent in July 2014 to inform all RailCorp's retail tenants at Wynyard Station about the proposal.</p>
Meetings with City of Sydney	<p>Meetings were held with Council representatives to discuss the key issues and the potential impacts associated with the proposal.</p> <p>The Project Director presented a project update to City of Sydney Council on 20 October 2013.</p>
Meeting with transport agencies	<p>Meetings were held with transport agencies, including Roads and Maritime Services, the Traffic Management Centre, CBD Taskforce and Sydney Buses, to discuss the potential impacts of the proposal and potential cumulative impacts on the road network, pedestrian network, current and future bus infrastructure in the vicinity of the proposal.</p>
Meetings with Sydney Trains (Heritage)	<p>Meetings were held with Sydney Trains (Heritage) to discuss the proposed plans and potential impacts on Wynyard Station and Transport House.</p>
Meeting with the Office of Environment and Heritage (Heritage Division)	<p>Meetings with the Office of Environment and Heritage (Heritage Division) to discuss the proposed plans and potential impacts on heritage, specifically, Transport House.</p>

2.3.2 Infrastructure SEPP consultation

Clauses 13 to 17 of the Infrastructure SEPP require consultation with the City of Sydney Council (Council) for development that impacts on:

- Council infrastructure or services.
- Local heritage.
- Flood liable land.

Prior to public display, correspondence was sent to Council providing information on the proposal and requesting the identification of any issues or concerns. The Infrastructure SEPP specifies that any response received within 21 days must be taken into consideration by Transport for NSW prior to determining to proceed with the proposal.

A submission from the City of Sydney was received on 24 December 2014, which raised concerns relating heritage impacts, Wynyard Park, impacts to pedestrians and road traffic. These issues are discussed further in Chapter 3 of this report.

2.4 Public display of the REF

2.4.1 Public display

The REF was publically displayed from 4 December to 19 December 2014 at the following locations:

- Transport Projects Division head office: Level 5, Tower A, Zenith Centre, 821 Pacific Highway, Chatswood.
- Transport for NSW Community Information Centre, Retail 5, 388 George Street, Sydney located on the corner of King and George Streets.
- City of Sydney: Town Hall House, 456 Kent Street, Sydney.
- City of Sydney Customs House Library: 31 Alfred Street, Circular Quay.

Members of the community were also able to visit the Community Information Centre during standard business hours throughout the display period and ask questions about the proposal and provide feedback.

The REF was placed on the Transport for NSW website and made available for download. The proposal Infoline and email address were available to the public during the display period for further details.

2.4.2 Consultation activities

Table 2 lists the key engagement activities and tools used during the public display, outlines their purpose, and describes how each tool/activity has been used to engage with the community and stakeholders.

Table 2 Consultation during public display

Activity	Purpose and detail
Stakeholder contact	The community contact and feedback mechanisms listed in Table 1 operated through the display period. All details of community members and stakeholders who contacted the proposal team, issues raised, and responses provided were recorded in the consultation database.
Community newsletter	The community newsletter included information on the status of the proposal and details of the public display locations. The community newsletter was distributed to properties and businesses near Wynyard Station (approximately 500 metres), and was also handed out to customers during the morning and afternoon peak periods at Wynyard Station on 8 December 2014.
Website	Information about the public display of the REF was posted on the Transport for NSW, Have Your Say and the Wynyard Station Upgrade proposal websites.
Letters to government agencies	A letter was distributed to key agencies to provide them with information on the public display of the REF and to invite submissions.
Advertisement	Advertisements were placed in local newspapers to provide information about the public display locations, including Central Sydney, The Daily Telegraph, mX, and The Sydney Morning Herald.

2.5 Future consultation

Should Transport for NSW determine to proceed with the proposal, then Transport for NSW would continue to engage and consult with the community and key stakeholders during construction regarding potential impacts and opportunities to provide further feedback. The consultation activities would ensure that:

- The community and stakeholders have a high level of awareness of the key processes and activities associated with the proposal.
- Accurate and accessible information is made available.
- Timely responses are given to issues and concerns raised by the community.
- Feedback from the community is encouraged.
- Opportunities for input are provided.

The proposal Infoline (1800 684 490), 24-hour Construction Response Line (1800 775 465) and project email address (projects@transport.nsw.gov.au) would be available during construction. Targeted consultation and communication such as meetings, briefings, letters, notifications, advertisements and signage would continue to occur. The website would also include regular updates on the progress of the proposal.

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3 Consideration of REF submissions

3.1 Overview

All written feedback received during the public display period was recorded on the consultation database. Submissions have been numbered, contact details recorded, and key issues identified in each submission added to the database. A letter of acknowledgement will be sent to individuals, organisations and City of Sydney Council who made submissions to inform them of their unique submission number to assist them in finding the response to issues raised in the Submissions Report. The letter will not contain individual responses to submissions raised.

A total of 30 submissions were received during the period of public display. These included:

- 23 submissions from individual community members.
- Six submissions from organisations (Memocorp Australia Pty Ltd, Coles, NSW Commuter Council, Action for Public Transport, the Planning Institute of Australia, and the NRMA).
- One submission from local government (City of Sydney Council).

Of the 30 submissions, nine submissions stated their general support for the proposal and one objected to the proposal. The remainder did not state whether they supported or objected to the proposal, although raised concerns with aspects of the proposal.

Issues raised in each submission have been categorised according to the key issues raised. A summary of the issues identified by category is provided in Section 3.2 of this report. Transport for NSW responses to the issues raised are provided in Section 3.3 and Section 3.4. Appendix A provides a summary of all the responses, which relate to each submission.

3.2 Summary of issues raised

A breakdown of the key issues raised in submissions is provided in Table 3, which are not listed in order of importance. Since most submissions raised more than one issue, the number of issues identified is greater than the total number of submissions received. Section 3.3 provides more detailed responses to frequently raised matters in submissions.

Table 3 Overview of key issues raised in submissions

Key issue category	Number of times raised within the submissions
Proposal description and scope	32
Proposal need and justification	1
Alternative and options	2
Strategic planning	6
Planning and statutory requirements	1
Noise and vibration (construction)	9
Pedestrian access (construction)	3
Pedestrian access (operation)	17
Traffic and transport (construction)	9
Heritage	24
Urban design and visual (operation)	3
Business impacts	3
Property and land use	7
Air quality (construction)	1
Other	8

3.3 Detailed responses to frequently raised matters

3.3.1 Pedestrian access (operation)

Submissions expressed concern that congestion issues would not be addressed through the proposed scheme. In particular, submissions identified the following issues:

- Additional space was not being provided on station platforms.
- Escalators should replace staircases between the station platforms and concourse to improve pedestrian flows.
- Lifts between platforms are provided, or the existing lifts are upgraded.

Improvements to congestion

As discussed in Section 1.3.1, the proposal is needed to address both existing and predicted passenger numbers at Wynyard Station. The station currently experiences congestion during the morning and evening peak periods, and does result in customers queuing on the stairs, which can increase the dwell times of trains at the station.

A Demand Data Report for Wynyard Station undertaken by Arup (2011) determined that Wynyard Station is currently at or nearing capacity. This report states that Platform 6 would fail to meet customer service expectations in 2015 and Platform 3 in 2018 given the time it would take for a platform to clear after a train arrival. The broader station area is expected to become constrained between 2020 and 2025, with the ongoing development of Barangaroo. As a result, there is a need to upgrade the station to address current and future operational requirements at Wynyard Station.

The proposed design would improve the layout of Wynyard Station public domain (both concourse and platforms) by removing pedestrian pinch points and improving sightlines, wayfinding and pedestrian flow. The key layout improvements would include:

- An increase in the concourse area, primarily through the removal of retail and commercial space in the eastern unpaid concourse area.
- Widening of the western unpaid concourse at the approach to the Wynyard Walk tunnel and connection to the completed Wynyard Walk.
- An increased number of ticket gates and widened paid concourse.
- An additional staircase connecting the paid concourse to Platforms 3 and 4.
- Re-orientation of the southern-most staircase to Platforms 5 and 6.
- Removal of the unused escalator enclosures to improve the use of space on Platforms 5 and 6.

As detailed in Section 7.2.3 of the REF, pedestrian modelling of the station with the proposed design demonstrated that there would be general improvement in pedestrian flows when compared to a ‘do nothing’ scenario (refer to Table 4). In particular, there would be a substantial reduction in the time spent under Level of Service (LoS) D conditions in the paid concourse. Improved pedestrian flows within the paid concourse would be the result of the widening of the paid concourse area as well as an increased number of ticket gates. These improvements would address the current concerns associated with customers queuing along stairs and platforms.

Table 4 Existing and modelled pedestrian movements at Wynyard Station during AM 20 min peak average

Concourse	Level of Service	No upgrade (2021 – existing with Wynyard Walk)	With upgrade (2021 - modelled)
Paid	C	19%	24%
	D or worse	54%	27%
Unpaid	C	26%	26%
	D or worse	10%	10%

Source: Review of Environmental Factors – Wynyard Station Upgrade (AECOM, 2014)

However, even with the pedestrian flow improvements in the paid concourse and despite the proposed de-cluttering of the station platforms, the LoS on all platforms would still be expected to deteriorate by 2021 given the strong growth in rail demand expected over this period. This would be a direct result of passenger demand increasing by over 70 per cent on Platforms 5 and 6 and 40 per cent on Platforms 3 and 4. As discussed in Chapter 2 of the REF, these are whole of network capacity issues that are not able to be addressed through improvements to the existing Wynyard Station alone. There are longer term strategies to increase capacity and relieve congestion on the rail network in the Sydney CBD, including the completion of a new tunnel under the Harbour and a new Sydney CBD rail line (Transport for NSW, 2012a).

Escalators and lift access to/from platforms

To improve pedestrian flow during peak periods, the proposal includes the construction of a new staircase to Platforms 3 and 4 and the re-orientation of an existing staircase to Platforms 5 and 6. These works are proposed to provide a more even distribution of pedestrians accessing/departing the platforms, to reduce congestion on station platforms and within the paid concourse, and to more effectively use the available space for platform storage (in the case of Platforms 5 and 6). It is not proposed to include escalators to station platforms or to upgrade platform lifts.

While escalators would improve the general accessibility to station platforms, particularly for customers with reduced mobility, there are a number of factors that would reduce the benefits of providing escalators. Specifically, escalators are not considered necessary for the following reasons:

- Alternative access to/from station platforms for less mobile customers is provided by the existing platform lifts. These lifts would remain as part of the proposal.

- The provision of escalators would require the replacement of an existing (or proposed) staircase(s), or would require a reduction in platform area to accommodate the additional access points. Neither is supported, in particular, the reduction in the available area on station platforms for customers.
- Stairs allow for a natural split between travel directions during peak periods, whereas an escalator bank would require a permanent split for access up or down from the concourse. Stairs also reduce the risk of overcrowding on platforms.
- During the peak hours, especially during the evening peak, most of the platform areas are occupied by customers waiting to board the trains and there would be insufficient run-off space to pull customers safely away. If escalators are provided, this would create a situation that would ‘force’ customers to arrive at the platform level and would subsequently further deteriorate the level of service at the platforms.
- The provision of escalators would likely increase the flow rate of pedestrians moving to/from the station platforms given the reduced width of an escalator versus the existing staircases. This could also promote queuing of customers waiting to gain access to the escalator(s).

Lifts are currently provided between the paid concourse and platforms, and between the Carrington Street entrance and the eastern unpaid concourse. These lifts were installed in 1996 and 1999 to AS-1735 (Australian Standard - lift and escalator standard). Additional lifts to the concourse level are also proposed through the following projects:

- Wynyard Walk would provide lift access to the station concourse level and the future Clarence Street entrance.
- The One Carrington development is proposing lift access between the station concourse level, George Street and the Hunter Arcade.

As such, the provision for additional lift access to the concourse level is not considered necessary.

Further provision of a lift between York Street foyer and the western unpaid concourse would require structural changes to Transport House, a State heritage item and is not part of the proposed scope.

3.3.2 Project description and scope

Safety doors on platforms

Platform screens are not part of the scope of the proposal. Platform screens are typically provided for automated rolling stock (trains) to enable train doors to align with safety doors. A variety of rolling stock (trains) are used at Wynyard Station which have different door locations and sizes, and the station platforms are curved. For this reason it is not feasible to design platform screens which would be compatible with all trains using Wynyard Station.

Air conditioning

Transport for NSW acknowledges that customers currently experience elevated temperatures on the station platforms. The source of the elevated temperatures is largely attributed to the tunnel system of the City Circle and would require a broader network response which is beyond the scope of this proposal.

Ventilation and air conditioning of the platform spaces is a complex issue due to the nature of the station environment. As Wynyard Station is underground in a heavily built up area within a complex of existing structures, installing mechanical ventilation has been considered not feasible from a capital and recurrent cost perspective. Further, the “piston effect” caused by moving trains would inhibit the effectiveness of any air conditioning system installed, as warm air is pushed into the platform space from the adjacent tunnels and cooled air is pushed out.

3.3.3 Heritage

Submissions from individuals, organisations and the City of Sydney Council made comment on the proposed design and the potential impacts on heritage values of Wynyard Station, Transport House and Wynyard Park. In particular, comment was made on the interpretation of heritage within the design, impacts to remaining heritage values within these spaces, the nature of the proposed finishes and mitigation measures.

Concerns relating to Wynyard Park impacts are discussed separately in Section 3.3.4.

Wynyard Station

As described in Section 7.4 of the REF, Wynyard Station has undergone modifications since its original construction in the 1930’s but retains some original fabric. There is also the potential for original fabric to be hidden behind more modern fabric or in concealed areas.

As a result of the proposal, there would be a permanent loss of some original fabric, and the reconfiguration of the station would alter the original layout of Wynyard Station. However, given the changes that have occurred as a result of previous upgrades in the 1970s and 1990s (which saw a substantial reconfiguration of the space and the loss of most of the original fabric) and the extent of impacts associated with this proposal, the impacts to the heritage values of the item are not considered to be significant.

The proposed design represents an aesthetic improvement to the station precinct, modernising and de-cluttering the paid and unpaid concourses and platform areas to increase customer amenity. Several of the proposed works are also necessary for operational performance requirements and safety reasons. The design provides for a modern interpretation of the heritage item, and incorporates features such as exposure of the paid and unpaid ceiling of the station, use of lighting design and the use of colour hues that reflects, but is not intended to mimic, the original design of the station areas.

These features are considered to provide a positive heritage impact, and the removal of unnecessary or intrusive fabric would have a positive impact from a heritage perspective, representing a partial return to the original streamlined and functional aesthetic qualities of the site. Other remaining heritage features, including areas on station platforms and the platform staircases would be retained in situ. This includes balustrades and exposed steel girders. These features are considered to be of greater historic significance than other areas of the station, given the extent of changes to the station over time.

The anticipated loss in heritage values is considered to be acceptable given the benefits to pedestrian flows, customer safety and comfort, and to the general aesthetic context of the station. As some original fabric would be impacted, such as the ceiling treatments within the Grill Room of the former Railway Refreshment Rooms, mitigation measures and heritage archival recordings requirements have been recommended (refer to Chapter 5).

There would be the further refinement of proposed design, finishes and colours during detailed design. This includes opportunities to expose the original ceiling of the unpaid concourse, the lighting strategy for the unpaid concourse, and the consideration of platform signage that reflects the original signage of the station. These would be undertaken in consultation with Sydney Trains (Heritage), and the Office of Environment and Heritage (Heritage Division) (where relevant to Transport House).

Based on recent experience at other station upgrades, there remains the potential for unexpected finds during construction activity, which may reveal original fabric behind more recent finishes. Should any original fabric be found, stop work procedures would be implemented and in consultation with a suitably experienced heritage practitioner, the following options would be explored (in order):

- If original finishes are discovered, the finishes are to be recorded and sampled in accordance with relevant Office of Environment and Heritage (OEH - Heritage Division) guidelines.
- In-situ retention of the features and incorporation into the proposal design, where feasible and reasonable, would be investigated.
- If in-situ retention is feasible, methods to remove modern finishes that minimise potential damage to the original fabric would be implemented.

Mitigation and conservation measures would be detailed in a Heritage Construction Environmental Management Plan (HCEMP), which would be prepared by a suitably qualified heritage specialist (who is approved by the OEH (Heritage Division) and in consultation with Sydney Trains (Heritage) and City of Sydney prior to the commencement of construction.

Transport House

The basement levels of Transport House and the York Street foyer have been heavily modified by previous works and contain late 20th century finishes in generally poor condition. Further changes have resulted due to the construction of Wynyard Walk, which have been approved under Section 60 of the *Heritage Act 1977*.

The proposed works within Transport House would largely affect modified areas and finishes, and utilitarian spaces and, as such, would have minimal heritage impact. As the works would involve impacts to the basement levels of Transport House, an item of State Heritage significance, and York Street foyer (on the ground level of Transport House) an approval under section 60 of the *Heritage Act 1977* has been sought and granted.

As with Wynyard Station, the works represent an aesthetic improvement to the spaces, modernising and de-cluttering the western unpaid concourse within Transport House. The removal of unnecessary or intrusive fabric has a positive impact from a heritage perspective, representing a partial return to the original streamlined and functional aesthetic qualities of the site. Revealing of the original fabric of the ceilings of the York Street foyer and a transition zone between the western unpaid concourse and the paid concourse would have a positive heritage impact, as would reinstatement of the original lighting detail in the York Street foyer.

It has been suggested within submissions that the York Street foyer should be based on the historic documentary evidence, a heritage conservation management plan and the principles of the Burra Charter. Further, any early Art Deco features found under modern finishes should be retained in-situ and incorporated into the design.

The York Street foyer has already undergone modification by previous upgrades and does not reflect the overall art deco design of Transport House. The design objectives for the foyer is to re-instate (if any fabric remains) or to incorporate design features that better reflect the original period of the building. This includes the exposure of the ceiling beams, new box lights and use of certain materials and finishes. This would have a positive impact on Transport House. Coordination would be required with Wynyard Walk to effectively integrate the spaces. The finalisation of design would occur in consultation with the City of Sydney Council and Sydney Trains (Heritage), and in accordance with the approval requirements of the Office of Environment and Heritage (Heritage Division) under section 60 of the *Heritage Act 1977*. The HCEMP would detail the methodologies and conservation works associated with the remaining items of heritage within Transport House. The preparation of the heritage conservation management plan is considered to be a matter for the property owner(s).

3.3.4 Wynyard Park

Submissions raised concerns that the use of Wynyard Park as a construction works zone would not be appropriate given its location, as well as heritage and social value. City of Sydney Council objected to the use of the park, and requested that Transport for NSW should only proceed with the option if all other primary and secondary access options have been exhausted.

Wynyard Park is considered to be of historic, cultural and aesthetic significance, and a listed local heritage item under the *Sydney Local Environment Plan 2012* (LEP). It is also heavily used by the community as a recreational space and for pedestrian through-movements. Bus services also circle Wynyard Park.

Construction access to the station is significantly limited, given the station does not have any direct access from the surrounding road network. Surrounding construction projects may also change the available access points over time.

For this reason, Transport for NSW has identified a number of primary and secondary access points during the construction of the project. The primary access points (being Margaret Street, George Street and Wynyard Lane), would be used regularly, and the secondary access points (such as York Lane, York Street and Carrington Street) would be used less frequently on an occasional ‘as needs’ basis. Due to size and time constraints and competing road traffic and pedestrian requirements, options for providing secondary access are limited. Secondary access points would not meet the requirements of construction in the absence of the nominated primary access points.

Wynyard Lane would be the primary access point most heavily used by the proposal. Workers would use the Wynyard Lane goods lift and a temporary construction hoist constructed within Wynyard Lane Car Park to access the station concourse below. Access would default to Cumberland Street (the current exit to Wynyard Lane Car Park) if access to Wynyard Lane is lost due to the construction of the One Carrington development.

Margaret Street and George Street would be a primary access point for lengthy or large equipment and materials, and would only be accessible at night. Access to George Street would be further reduced with the commencement of the main construction works for the CBD and South East Light Rail project (CSELR).

Should the primary access points no longer be available or become insufficient for construction requirements, only then would the proposed Wynyard Park compound be used as an access point. The compound would require a temporary construction hoist to be installed within the curtilage of Wynyard Park and the former Tram Tunnels. Following completion of these works, the areas would be re-instated.

Transport for NSW acknowledges that there are potential impacts associated with the use of this compound requiring a targeted response, as detailed in Chapter 5 of this report. This would include:

- The area impacted by the Wynyard Park compound (if required) would be minimised as much as possible, and would be reinstated to its original condition as soon as practicable once the compound is no longer required for construction (refer to mitigation measure V8).
- City of Sydney Council would be consulted concerning the treatment of the compound hoardings and re-instatement works. This could include opportunities for the treatment of hoardings to provide for the heritage interpretation of the park (refer to amended mitigation measure V2).
- Urban design features would be investigated to minimise impacts associated with the temporary loss of public space and a reduction of visual amenity (refer to mitigation measure V7).
- Limits would be placed on the hours of delivery to the compound to minimise bus and pedestrian conflicts (8pm to 10pm, Sunday to Thursday), and traffic control measures would be used during delivery periods (refer to Chapter 5 of the REF, and mitigation measure T1).
- Required changes to bus infrastructure around Wynyard Park resulting from the establishment of the Wynyard Park compound would be coordinated with Sydney Buses, any other relevant bus operators and the Traffic Management Centre (refer to mitigation measure T4).
- A wayfinding strategy would be implemented to inform pedestrians of altered arrangements. This strategy would consider surrounding construction sites/activities and transport projects, including the bus access infrastructure modifications and 333 George Street redevelopment impacts on Regimental Square (refer to mitigation measure P3).
- Temporary changes to bus infrastructure, as a result of this proposal, would also be communicated to bus commuters using methods such as signage, website updates, transport applications and real time text/SMS updates. The required communication protocols and methods would also be detailed within the CTPMP (refer to mitigation measure P6, T1 and T4).
- Contingency measures, which would be detailed in the CTPMP, which would be implemented to manage construction site access in the event that an emergency requires bus services to replace train services at Wynyard Station (refer to mitigation measure T1).
- Measures would be implemented to protect or minimise impacts to the health of nearby trees within Wynyard Park (refer to mitigation measure V10 and V11).
- Archival recording would be undertaken of the Wynyard Park heritage item, limited to the areas potentially impacted by the compound, prior to the commencement of construction of the compound (if required) (refer to amended mitigation measure H26).

- A landscape management plan for Wynyard Park, for areas potentially impacted by the compound, would be prepared in consultation with City of Sydney Council prior to the establishment of the compound (if required) (refer to proposed additional mitigation measure V10).

An internal approval would be required within Transport for NSW before Transport for NSW would proceed with obtaining landowners consent and agreement with City of Sydney Council (as the manager of the park) for use of this space. This is to ensure that all alternative options have been explored.

3.4 Responses to submissions

Table 5 Response to submissions

Proposal description and scope

Item	Issue	Summary of issue	Stakeholder number	Response
PD1	Air conditioning	<i>Provision of air conditioning or fans on the station platforms.</i>	1, 4, 11, 12, 27, 16	<p>Transport for NSW acknowledges that customers currently experience elevated temperatures on the station platforms. The source of the elevated temperatures is largely attributed to the tunnel system of the City Circle network and would require a broader network response which is beyond the scope of this proposal. The “piston effect” caused by moving trains would inhibit the effectiveness of any air conditioning system installed, as warm air is pushed into the platform space from the adjacent tunnels and cooled air is pushed out.</p> <p>As the proposal involves refurbishment and improvements to capacity within Wynyard Station, network improvements are not within the scope for this proposal.</p> <p>Further, it is noted that air conditioning of the platform spaces is a complex issue due to the nature of the station environment. As Wynyard Station is underground in a heavily built up area within a complex of existing structures, installing air conditioning and associated mechanical</p>

Item	Issue	Summary of issue	Stakeholder Response number
			<p>ventilation has been considered not feasible.</p> <p>The installation of fans on platforms to improve customer comfort has been raised in submissions for further consideration by the project working group. This suggestion will be considered during ongoing design development in terms of feasibility, cost and benefit.</p>
PD2	<i>Construction staging and duration</i>	Queries when construction would commence, and if the station would remain operational during construction.	<p>Wynyard Station would remain operational throughout the duration of construction, except during scheduled rail possessions when the station would be closed. Construction is expected to commence in the first quarter of 2015, with commencement dates and staging to be confirmed during detailed design.</p> <p>Construction activity at the station is expected to create some inconvenience to customers.</p> <p>The commencement of construction would be communicated to stakeholders via community updates, as well as communicated to station customers, and surrounding businesses and stakeholders through targeted consultation mechanisms.</p>
PD3	<i>Construction staging and duration</i>	Construction staging and key dates.	<p>8</p> <p>An indicative construction staging program for key activities is provided in Section 5.5.3 of the REF. The final staging and works associated with each stage would be determined by the contractor during detailed design</p>

Item	Issue	Summary of issue	Stakeholder number	Response
				and construction planning.
PD4	<i>Construction staging and duration</i>	Supports the immediate commencement and swift completion of the proposal to accommodate the Barangaroo development.	27	A key objective of the proposal is to accommodate future demands in pedestrian access to and from Barangaroo via Wynyard Walk.
PD5	<i>Construction staging and duration</i>	Recommends the consideration of program and mitigation allowances should the development take longer than anticipated in regard to construction access and pedestrian needs.	29	<p>It is recognised that there is the potential for disruption to the road and pedestrian network as a result of the cumulative impacts of the proposal and other developments that are expected to be under construction at the same time. These issues are considered in Section 7.11 of the REF.</p> <p>Transport for NSW considers that a coordinated approach is required to address these impacts, which would involve participation from Transport for NSW, Brookfield, 333 George Street, construction contractors, Sydney Buses, Roads and Maritime Services and City of Sydney. It is expected that effectiveness and appropriateness of mitigation measures would be reviewed when required through this engagement.</p> <p>Forums, such as a CBD Transport Taskforce, would also be used where necessary to facilitate coordinated approaches to pedestrian and traffic impact mitigation.</p>

Item	Issue	Summary of issue	Stakeholder number	Response
PD6	<i>Construction staging and duration</i>	Concern that the current construction staging approach would impact on the concourse entry to Transport House as part of the Wynyard Walk project, and create a 'bottle neck'.	30	<p>As indicated in the REF, relevant Wynyard Station Upgrade works would be coordinated with Wynyard Walk works where necessary. The staging program as presented in the REF is indicative only and would be confirmed during detailed design.</p> <p>A pedestrian flow analysis would also be completed prior to the commencement of construction based on the final staging strategy. This would assist in identifying minimum width passageways within the public domain based on peak and off-peak commuter movements and to confirm that adequate flows can occur.</p> <p>The final construction staging would be managed in consultation with stakeholders (including Memocorp Australia Pty Ltd).</p>
PD7	<i>Construction staging and duration</i>	Concern with the potential delays to the reactivation of the Transport House ground floor lobby with the entrance to the York Street foyer due to the program of Wynyard Walk and the proposal	30	<p>The closure of the auto door between the York Street foyer and Transport House foyer was carried out by Memocorp Australia Pty Ltd and relates to the Wynyard Walk project.</p> <p>Construction works in the York Street foyer as part of the proposal may require closure of the temporary auto door. Construction staging would be managed in consultation with stakeholders (including Memocorp Australia Pty Ltd).</p>

Item	Issue	Summary of issue	Stakeholder number	Response
PD8	<i>Platform seating</i>	Queries if additional seating would be provided on station platforms.	1, 22, 25	Seating would be provided on station platforms. The specific number and location of platform seating would be determined in detailed design. The design principles would be applied when considering seating design to improve customer experience.
PD9	<i>Platform seating</i>	Requests seating on platforms that are not distanced from the platform lifts to accommodate less mobile customers.	25	Noted. The location of platform seating would be determined in detailed design and would consider accessibility and availability of space to accommodate seating without generating congestion on platforms during peak periods.
PD10	<i>Safety doors on platforms</i>	Suggests that safety doors are provided on station platforms to improve the safety for customers during periods of congestion.	4, 7, 9, 14, 19, 20.	<p>Platform screens are not part of the scope of the proposal. Platform screens are typically provided for automated rolling stock (trains) to enable train doors to align with safety doors. A variety of rolling stock (trains) are used at Wynyard Station which have different door locations and sizes, and the station platforms are curved. For this reason it is not feasible to design platform screens which would be compatible with all trains using Wynyard Station.</p> <p>Further, the removal of redundant features and de-cluttering of station platforms would maximise the available space for customers on the platforms (particularly Platform 5 and 6).</p>

Item	Issue	Summary of issue	Stakeholder Response number
PD11	<i>Amenities</i>	Queries if amenities would be provided at the station as part of the proposal.	22 The proposal would include new or refurbished amenities for station customers, including public toilets within the paid concourse. Temporary amenities (toilets) would be provided during construction.
PD12	<i>Construction access</i>	Recommends that alternate access points that are already being used by Transport for NSW/Sydney Trains for other developments are also used to provide construction access for this proposal.	29 Transport for NSW would actively seek to jointly use common access points if construction scheduling is not unreasonably constrained, can be negotiated and would not pose a safety or security risk. Joint access with Wynyard Walk at York Lane is unlikely to be feasible due to the competing construction activities and staging of Wynyard Walk. Transport for NSW would continue to review the available access points that could be utilised on an as needs basis and would continue to liaise with affected and surrounding stakeholders to ensure construction access does not have an unacceptable impact.
PD13	<i>Construction access</i>	Use of Wynyard Park for a construction compound is not supported given its high use by the community, nearby students and its use for marshalling purposes for surrounding buildings. If it is to proceed, the	29, 30 Multiple access points would be used during the construction of the proposal. It is anticipated that primary access points, being Margaret Street, George Streets and Wynyard Lane, would be used until access can no longer be guaranteed due to surrounding construction projects. Secondary access points would be used less frequently for occasional deliveries and are unlikely to meet the requirements of construction in the absence of the proposed primarily access points due to size or time

Item	Issue	Summary of issue	Stakeholder Response number
		<p>use of the park should only be used once all primary and secondary access options have been exhausted.</p>	<p>restrictions.</p> <p>The partial use of Wynyard Park as a construction compound would only occur if all alternative primary access points are no longer available or become insufficient for construction purposes.</p> <p>Transport for NSW acknowledges the high usage of the park by the community including students and the tenants of the surrounding buildings. The compound area shown in the REF reflects the expected space required in order to facilitate access while minimising the impacts to park users. Transport for NSW would continue to review the area needed for the compound to minimise the extent of land required as much as practicable. The hours of delivery have also been restricted to minimise disruption to bus services that circle the park and pedestrian movements in this busy area of the CBD.</p> <p>Mitigation measures to minimise impacts on pedestrian access, heritage, traffic and the public domain in the event that Wynyard Park is used as a compound have been outlined in the REF. This includes consultation with City of Sydney Council concerning the treatment of the compound hoardings and re-instatement works.</p> <p>Transport for NSW would also consult with neighbouring buildings that may use Wynyard Park for a marshalling area prior to the establishment</p>

Item	Issue	Summary of issue	Stakeholder Response number
		of the compound to determine if alternative arrangements would be required.	The decision to proceed with the Wynyard Park compound and to seek the relevant approvals would be subject to the approval of Transport for NSW (TPD Principal Manager Environmental Management). This is to ensure that all feasible and reasonable alternatives to Wynyard Park compound have been explored.
PD14	<i>Safety in design</i>	Queries how pedestrian/customer safety has been addressed in the proposal design in terms of the design of access ways, access to security and general platform design.	As part of this approvals process, Transport for NSW would consult with the City of Sydney and Transport agencies/divisions during detailed design planning for the compound, to confirm the required land requirements and mitigation measures to minimise disruption to all users of this space and impacts to the park.

Item	Issue	Summary of issue	Stakeholder Response number
			Upgrades to pedestrian arcades to/from George Street and Hunter Street do not form part of this proposal, and would be reconstructed as part of the One Carrington development.
PD15	<i>Concourse design</i>	<p>Concerns with the 'bottleneck' in the paid and unpaid concourse design within the vicinity of Wynyard Walk, the northern Wynyard Walk wall design and the proximity of the works to building corporate signage and others aspects that would impact on the provision of a concourse entry to Transport House as part of the Wynyard Walk project</p>	<p>30</p> <p>The main objective of the proposal is to improve pedestrian flows throughout the station concourse areas and to improve the customer experience of Wynyard Station. Aspects of the design, such as additional ticket gates and the widening of the western and northern unpaid concourse, all address the expected pedestrian volumes using Wynyard Walk.</p> <p>Pedestrian modelling of the concept design options identified in the REF indicated there would be no "bottleneck" effect. The Traffic, Transport and Pedestrian technical report, provided as Appendix D of the REF, presents the results of pedestrian modelling of the proposed design, including the unpaid concourse design.</p> <p>The station design is subject to detailed design and would undergo further refinement. This would be supported by further pedestrian modelling.</p> <p>Matters relating to works that form part of Wynyard Walk project (the northern wall and signage) are not a matter for this assessment.</p>

Item	Issue	Summary of issue	Stakeholder number	Response
PD16	<i>Fire infrastructure</i>	There are inconsistencies with plans approved for Wynyard Walk and plans presented in the Statement of Heritage Impact for the proposal concerning fire rating walls and doors within Basement Level 1 of Transport House.	30	The areas specified within the submission are not located within the areas impacted by the proposal, as shown on Figure 65 of the Statement of Heritage Impact (SOHI) for the Wynyard Station Upgrade (FuturePast Consulting Pty Ltd, 2014)
PD17	<i>York Street foyer</i>	Concerns with the design of the York Street foyer, especially the northern wall design which is to be handed over to Memocorp Australia Pty Ltd. Transport for NSW is required to consult with Memocorp Australia Pty Ltd concerning the design of York Street foyer.	30	A concept design for the York Street foyer has been presented in the REF, and is subject to detailed design and the requirements of the approval granted under Section 60 of the Heritage Act 1977. Any works that impact the northern wall of the Transport House lobby would be discussed directly with Memocorp Australia Pty Ltd during detailed design. The northern wall handover issue is outside of the scope of this environmental assessment and is subject to commercial negotiations between Transport for NSW and Memocorp Australia Pty Ltd as part of the Wynyard Walk project.
PD18	<i>Retail</i>	Objects to the extent of retail	30	The fit out of retail spaces does not form part of the proposal and would

Item	Issue	Summary of issue	Stakeholder Response number
		<p>proposed under the proposed design.</p>	<p>be subject to separate approval under Part 4 of the EP&A Act.</p> <p>Areas nominated as ‘station facilities’, as shown on Figure 1, would not be solely used for potential retail. These areas would also be used for station back-of-house uses, such as storage areas, Station Manager’s Office, toilets and change rooms, services and plant rooms, general office space and meeting rooms.</p> <p>The final partitioning and fit out of the station facilities would be subject to detailed design and future commercial negotiations. The division of space between back-of-house, office and storage, services and utilities, and retail would be determined based on station operational, access and safety requirements.</p> <p>The use and final fit out of future retail or commercial spaces would be subject to separate assessment, however the proposal includes servicing of these spaces to support their future use.</p>
PD19	<i>Construction laydown and storage</i>	<p>Objects to the use of the laydown areas within Transport House basement levels for the proposal due to fire risk and O&HS.</p>	<p>30</p> <p>All work in Transport House (including use of Transport House basement levels for construction storage) is being assessed by a Crown Certifier and Fire and Life Safety Engineer. Construction risks would be managed through this process.</p>

Proposal need and justification

Item	Issue	Summary of issue	Stakeholder number	Response
J1	<i>Improved capacity</i>	Supports the improvements to station capacity ahead of the increased demand in order to help public transport usage, and the associated benefits to the economy and the environment.	27	Noted.

Alternatives and options

Item	Issue	Summary of issue	Stakeholder number	Response
A1	<i>Platform/concourse design</i>	Suggests that the station platform design considers a solution that separates customers entering and exiting trains to minimise opposing flows.	15, 22	The suggested design solution would require a major redevelopment of the station and cannot be accommodated in the current configuration of Wynyard Station. This is beyond the scope of this proposal, which seeks to upgrade and refresh the existing station without major structural works.

Strategic planning

Item	Issue	Summary of issue	Stakeholder number	Response
S1	<i>North West Rail Link</i>	Suggests that Transport for NSW should investigate how the North West Rail Link would integrate with the station.	17, 18	<p>The NSW Long Term Transport Master Plan identifies a future second harbour crossing and new CBD rail line from the North West Rail Link (NWRL) to ease congestion and existing capacity constraints. However immediate measures including the upgrade to the Wynyard Station are required in the interim.</p> <p>NWRL services would run from Rouse Hill to Chatswood and therefore would not physically integrate with the station. Instead, the proposed Sydney Rapid Transit project would extend the NWRL, and would include a second harbour crossing and additional CBD train stations.</p>
S2	<i>Preservation of transit corridors</i>	Recommends the preservation of an alignment that connects the southern end of former tram tunnels (Platforms 1 and 2) to the proposed light rail tracks in George Street via Wynyard Street and Regimental Square. Concerns with the lack of commitment to the retention or protection of the former tram	17, 18	<p>The former tram tunnels are presently used for a commercial car park, and the proposal does not include any proposals to alter this use.</p> <p>The NSW Long Term Transport Master Plan, Sydney City Centre Access Strategy (the Access Strategy) (Transport for NSW, 2013) and Sydney's Rail Future – Modernising Sydney's Trains (Transport for NSW, 2012b) detail the NSW Government's strategy for enhancing public transport services to and within the CBD. This does not include any use of the former tram tunnels.</p>

Item	Issue	Summary of issue	Stakeholder number	Response
		tunnels to enable the possible reuse for transit purposes.		
S3	<i>Preservation of transit corridors</i>	The former unused tram tunnels are a waste of space.	22	The former tram tunnels are currently used as a commercial car park and a change in use of the tunnels do not form part of this proposal.
S4	<i>Additional platforms</i>	Suggests that the former tram tunnels are reinstated for use for the second harbour crossing, and two additional platforms are used for a new line to the Rocks and Barangaroo.	21	<p>Noted.</p> <p>The NSW Long Term Transport Master Plan, Sydney City Centre Access Strategy (the Access Strategy) (Transport for NSW, 2013) and Sydney's Rail Future – Modernising Sydney's Trains (Transport for NSW, 2012b) detail the NSW Government's strategy for enhancing public transport services to and within the CBD. This does not include any use of the former tram tunnels.</p> <p>Three new underground stations are currently envisioned as part of the Sydney Rapid Transit project, which is currently under design development. These stations would be offset from existing stations providing relief to Wynyard and Town Hall Stations.</p>

Planning and statutory requirements

Item	Issue	Summary of issue	Stakeholder number	Response
PS1	<i>Planning and statutory requirements</i>	Objects to the proposed changes within the basement levels of Transport House. Suggests this is a “change of use” and would require an approval from City of Sydney Council under Part 4 of the EP&A Act. Full details of the fit out should be supplied to Council as part of this approval.	30	Clause 79(1) of the State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) stipulates that development for the purpose of railway or rail infrastructure facilities may be carried out by or on behalf of a public authority without consent on any land. The proposal falls within the definition of rail infrastructure facilities, which includes railway stations, station platforms, areas in a station complex that commuters use to get access to the platforms, public amenities for commuters and railway workers’ facilities. As such the proposal is permissible without consent and does not require consent under Part 4 of the EP&A Act from City of Sydney Council.

Noise and vibration (construction)

Item	Issue	Summary of issue	Stakeholder number	Response
NV1	<i>Construction hours</i>	Noisy or high vibration works should only be allowed daily from 1am to 7am in the early morning hours due to the impacts to	30	Where feasible and reasonable, noise or vibration intensive activities would be undertaken during the night time period to minimise impacts on tenants located within 11 – 31 York Street.

Item	Issue	Summary of issue	Stakeholder Response number
		tenants within 11 – 31 York Street.	
NV2	<i>Construction noise</i>	Disagrees that there would not be any predicted exceedances at Level 2 of Transport House, and objects to exceedances of up to 11dB due to regenerated noise.	30 The vibration assessment was undertaken using vibration source data which was measured on site, proven empirical calculation methods and conservative assumptions. The assessment was completed in accordance with relevant guidelines. Where feasible and reasonable, noise or vibration intensive activities would be undertaken during the night time period to minimise impacts on tenants located within 11 – 31 York Street. Consultation would be undertaken with tenants to avoid examination periods and the like.
NV3	<i>Construction noise</i>	Concerns with the impact to educational uses within 11 – 31 York Street, and impacts during examination periods. For examination periods, respite periods were agreed for the Wynyard Walk project.	30 Where feasible and reasonable, noise or vibration intensive activities would be undertaken during night time periods to minimise impacts on tenants located within 11 – 31 York Street. Consultation between Transport for NSW and the affected parties would be undertaken to inform reasonable construction time periods and respite periods

Item	Issue	Summary of issue	Stakeholder number	Response
NV4	<i>Construction noise</i>	Concerns with impacts to the ground floor tenant (Wynyard Service Centre), which operates 7am to 7pm Monday to Friday, and 9am to 3pm Saturday, with shoulder periods.	30	Where feasible and reasonable, noise or vibration intensive activities would be undertaken during the night time period to minimise impacts on tenants located within Wynyard Service Centre. Consultation between the proponent and the affected parties would be undertaken to inform reasonable construction time periods and respite periods.
NV5	<i>Construction noise</i>	Concerns with impacts to the ground floor lobby of Transport House, the Wynyard Service Centre, and education establishments on Level 1 and above due to construction activities in the York Street foyer, such as the removal of the existing wall and floor tiling.	30	<p>The refurbishment of the York Street foyer includes re-tiling and painting of the ceiling, walls and flooring and installation of new building services, lighting and signage. Works to the York Street escalators are limited to sanding and varnishing to refresh timber panels. No existing common walls would be removed as part of the proposal.</p> <p>The re-tiling activities would give rise to regenerated noise levels of up to 70 dB(A), an exceedance of 25 dB(A) on the York Street level. Regenerated noise levels would be up to 64 dB(A) and 59 dB(A) on levels 1 and 2 respectively. Other works would give rise to much lower regenerated noise levels. Human comfort and structural damage criteria would be complied with at all times during these works.</p> <p>Consultation between Transport for NSW and the affected parties would be undertaken to inform reasonable construction time periods and respite</p>

Item	Issue	Summary of issue	Stakeholder number	Response
NV6	<i>Construction noise</i>	Objects to the loading area outside the building and use of crane.	30	<p>periods.</p> <p>The proposed construction vehicle loading zone, proposed as part of the Wynyard Park compound (should it proceed) is located along York Street opposite Transport House. This loading zone would be subject to a works zone permit from City of Sydney Council, and subject to consultation with Sydney Buses to minimise disruption to bus services.</p> <p>The loading zone would only be used between 8 pm and 10 pm Sunday to Thursday.</p> <p>A crane is not proposed to be used. A construction hoist, located within the compound, would be used during standard construction hours and out of hours to move materials stockpiled within the compound to the car park below. Hoarding would be erected along the compound to mitigate the potential impacts of this hoist.</p>
NV7	<i>Construction noise and vibration management</i>	Transport for NSW is required to complete proper consultation with all key stakeholders including Memocorp Australia Pty Ltd and prepare detailed Construction Noise and Vibration assessments	30	<p>A construction noise and vibration report has been prepared based on potential construction scenarios, which are considered to represent worst case scenarios for typical work activities for the proposal.</p> <p>Once the final staging strategy and construction methodologies have been finalised, Transport for NSW will complete a Construction Noise and Vibration Management Plan. This would include work practices to be</p>

Item	Issue	Summary of issue	Stakeholder Response number
		<p>and management plans, including monitoring regimes for input prior to approval.</p>	<p>applied to minimise noise and vibration and monitoring procedures (refer to Chapter 5).</p> <p>As outlined in Section 7.1.3 of the REF, additional consultation would be undertaken with receivers that would exceed construction noise management levels. This would include:</p> <ul style="list-style-type: none"> • Programmed times and locations of construction work. • The hours of the proposed works. • Construction noise and vibration impact predictions. • Information on construction noise and vibration mitigation measures being implemented on site. <p>The highest consideration for consultation would be given to receivers that are predicted to be the most affected as a result of the works.</p>
NV8	<i>Construction vibration</i>	<p>Wynyard Walk currently imposes a maximum 3Hz control on vibration frequencies. The proposed 10Hz identified in Table 14 of the REF is unacceptable due to impacts on class rooms</p>	<p>30</p> <p>Table 14 of the REF summarises the structural damage criteria in accordance with DIN 4150. The vibration and regenerated noise criteria appropriate to classroom and exam activities are provided in tables 15 and 16 of the REF. These are in accordance with the NSW EPA's guidelines. In addition it is noted identical vibration criteria were applied to the Wynyard Walk project.</p>

Item	Issue	Summary of issue	Stakeholder Response number	
		that require hearing and impacts during exams.		
NV9	<i>Sensitive noise receivers</i>	Concern with the impact on a childcare centre in the vicinity of the proposal.	30	There are a number of childcare centres located in the vicinity of the proposal. The closest child care centre is located on Margaret Street. The Interim Construction Noise Guideline (DECC, 2009) does not have a specific noise management level for this land use. As such, the criteria for schools has been applied (being an internal noise level of 45dB(A)) and the noise management level for active recreation areas (being an external noise of 65db(A)) has been applied to outdoor play areas. External noise levels at this receiver are expected to be between 40 dB(A) to 45 dB(A) under the majority of the assessed scenarios. External noise levels would be the greatest during excavation activities at Wynyard Park to accommodate the construction hoist. Under this scenario, external noise levels would increase to around 50 to 55db(A). On this basis, it is expected that internal noise levels would comply with the internal noise level noise management level and the external noise management level within the external play area.
NV10	<i>Sensitive noise receivers</i>	Concern with the impact on a childcare centre in the vicinity of	30	There are a number of childcare centres located in the vicinity of the proposal. The closest child care centre is located on Margaret Street. The Interim Construction Noise Guideline (DECC, 2009) does not have a

Item	Issue	Summary of issue	Stakeholder Response number
		the proposal.	<p>specific noise management level for this land use. As such, the criteria for schools has been applied (being an internal noise level of 45dB(A)) and the noise management level for active recreation areas (being an external noise of 65db(A)) has been applied to outdoor play areas. External noise levels at this receiver are expected to be between 40 dB(A) to 45 dB(A) under the majority of the assessed scenarios. External noise levels would be the greatest during excavation activities at Wynyard Park to accommodate the construction hoist. Under this scenario, external noise levels would increase to around 50 to 55db(A). On this basis, it is expected that internal noise levels would comply with the internal noise level noise management level and the external noise management level within the external play area.</p>

Pedestrian access (construction)

Item	Issue	Summary of issue	Stakeholder Response number
PAC1	<i>Construction access conflicts</i>	Concerns with the disruption to pedestrians on Carrington Street due to deliveries.	29 Only occasional access to the concourse would be provided using the passenger lift and escalators within the Wynyard Park dome via Carrington Street. The material would be transported from Carrington

Item	Issue	Summary of issue	Stakeholder Response number
		Street to the lift using forklifts, skates or trolleys.	<p>The scheduling of construction activities for the proposal has been considered to minimise disruption to the surrounding road and pedestrian network, in particular, the Wynyard bus interchange on York and Carrington Streets.</p>
PAC2	<i>Cumulative impacts</i>	<p>Concerns that the changes to bus infrastructure and access to Barangaroo would result in changes to current pedestrian flows, which may be impacted by the proposal due to construction</p> <p>29</p>	<p>It is acknowledged that some pedestrians that use the station for through-movements may alter current routes to avoid construction activity at Wynyard Station. The alternative construction methodology discussed in Section 4.2.2 of this report, involving pedestrian circulation corridors would restrict general public through-movements in the station during the period in which it is implemented, unless they have an Opal Card/paper</p>

Item	Issue	Summary of issue	Stakeholder Response number	
		access.	<p>ticket. The corridor access is via the temporarily relocated gatelines. This is discussed further in Chapter 4 of this report.</p> <p>The proposal has been staged to coincide with milestones of surrounding developments, such as Wynyard Walk and Barangaroo. Ongoing consultation would be undertaken with transport agencies, City of Sydney Council and developers to coordinate mitigation responses to impacts on pedestrian movements as a result of the concurrent construction activity in the area. These would be regularly reviewed and additional mitigation strategies developed if necessary.</p> <p>A CTPMP would be implemented to manage any conflicts between traffic and pedestrian movements. Cumulative impacts on pedestrian movements from other surrounding projects would be appropriately coordinated and managed. This would include wayfinding strategies, coordination at direct construction interfaces and coordination with Sydney Buses in light of the anticipated changes to bus scheduling within the CBD.</p>	
PAC3	<i>Cumulative impacts</i>	Recommends consideration be given to pedestrian movements in	29	Transport for NSW acknowledges the construction of the proposal would result in temporary disruptions to pedestrian access to various areas

Item	Issue	Summary of issue	Stakeholder Response number
		<p>the area and alternative pedestrian routes be considered while multiple projects are under construction, including Regimental Square, noting that closing parts of Margaret and George Streets may limit alternative routes for pedestrians.</p>	<p>within the station.</p> <p>The staging of construction activities within the public domain is critical in terms of maintaining adequate and safe movement of customers. Accordingly, construction staging has been scheduled such that the works that would have the greatest impact on public areas would be undertaken outside peak periods. This would be documented within a detailed construction staging strategy and a CTPMP that would be prepared during detailed design. Mitigation measures would be informed by pedestrian modelling of the station, which would be based on the final staging strategy.</p> <p>An alternative construction methodology has been developed that involves establishing three pedestrian circulation corridors to segregate customers from the work areas in the station, along with temporary relocation of gatelines. These corridors would distribute the public between the platform stairs and access/egress points. This alternative methodology would improve pedestrian movements within the station area.</p> <p>Transport for NSW has committed to a coordinated and consultative approach to managing cumulative impacts on the surface road network.</p>

Pedestrian access (operation)

Item	Issue	Summary of issue	Stakeholder number	Response
PA1	<i>Escalators to unpaid concourse</i>	Queries if escalators would be provided to access the Hunter Arcade.	1	The staircase to the Hunter Arcade does not form part of this proposal (refer to Figure 1). The Hunter Arcade is to be redeveloped as part of the One Carrington development. Presently, the major project application for this development proposes a set of escalators to connect the arcade to the eastern unpaid concourse (JBA Urban Planning Consultants, 2014).
PA2	<i>Escalators to unpaid concourse</i>	Recommends that the two sets of escalators from the eastern unpaid concourse to Carrington Street are replaced with one set of escalators to reduce the time taken to travel to/from the station to Carrington Street.	6	<p>The proposal does not include provisions to develop a single escalator to provide direct access from the station to Carrington Street. The lift which provides alternate access from the concourse level to Carrington Street level would not be impacted by the proposal.</p> <p>The two escalators between George Street and Carrington Street currently provide access to the mezzanine level where Coles supermarket and the Wynyard Lane car park entrance are located. Access to these areas could not be maintained under a single escalator arrangement.</p>

Item	Issue	Summary of issue	Stakeholder number	Response
PA3	<i>Platform capacity</i>	Concerned that the proposal does not provide additional space at the station platforms and does not address the key capacity issues at the station. In particular, there is concern that the design does not address areas that are currently unsafe to pedestrians when platforms are congested.	2	<p>It is a key objective of the proposal to improve the customer experience at Wynyard Station by relieving congestion and improving pedestrian flows throughout the station, including platforms.</p> <p>At station platforms, works would be undertaken to de-clutter station platforms by removing redundant services or relocating services, to maximise the space available on platforms. The new staircase to Platforms 3 and 4 and the re-orientation of the staircase on Platform 5 and 6, along with the station concourse expansion and reconfiguration, are all aimed to remove current and predicted points of congestion.</p> <p>Improvements to wayfinding and sightlines would also contribute to improving pedestrian flows within the station domain.</p> <p>Pedestrian modelling of the proposed station upgrade shows a general improvement in pedestrian flows in 2021 when comparing the proposal with the current station design. This includes a significant reduction in the time spent in a Level of Service (LoS) D. However, as discussed in Section 7.2.3 of the REF, Transport for NSW acknowledges that the LoS on all platforms would still be expected to deteriorate by 2021 given the strong growth in rail demand expected over this period. This growth is a whole of network capacity issue that cannot be addressed through improvements to the existing Wynyard Station. Longer-term strategies are in place to increase capacity and relieve congestion on the rail network in the Sydney CBD. This includes the Sydney Rapid Transit and a second harbour crossing.</p>

Item	Issue	Summary of issue	Stakeholder number	Response
PA4	<i>Escalators to platforms</i>	Suggestion that the existing stairs between platforms and concourse are replaced with escalators to improve pedestrian flows.	3, 21	A response to this issue has been provided in Section 3.3.1.
PA5	<i>Need for additional ticket gates</i>	Recommends that Transport for NSW maximises the number of ticket gates to improve pedestrian flows between the paid and unpaid concourse, acknowledging that the preliminary design suggests an increase in the number of gates.	3	The number of ticket gates would be increased as a result of this proposal. The design is at concept level and is subject to detailed design to ensure an outcome that balances operational and customer needs with the constraints of the existing structure.
PA6	<i>Platform access</i>	Supports the new staircase to Platforms 3 and 4, and the reorientation of the staircase to Platforms 5 and 6.	17, 18	Noted.
PA7	<i>Station access</i>	Concern that the proposal does not include station access from the south (Erskine and Clarence	17, 18	The Wynyard Walk project, which is currently under construction, would include a new western entrance to Wynyard Station from Clarence Street. Underground, Wynyard Station does not extend to Erskine Street.

Item	Issue	Summary of issue	Stakeholder Response number	
		Streets).	Provision of an additional tunnel, if feasible, would likely be a significant cost due to the required amount of construction activity and property acquisition. The current surface pedestrian network is considered sufficient to cater for station customer catchments located between Wynyard Station and Town Hall.	
PA8	<i>Wayfinding</i>	<p>Requests that clear and appropriate directional signage around the station is provided to cater for both train users and people using the station for through-movements.</p> <p>Recommends that the proposal includes improved station entrance and exit signage.</p>	17, 18, 26	The proposal would improve the layout of the public domain (both concourse and platforms) by removing pedestrian pinch points and improving sightlines, wayfinding, pedestrian flow and the general LoS. Wayfinding and signage would be designed to be consistent with the Transport for NSW Wayfinding Program, which is being progressively rolled out across the Transport network.
PA9	<i>Station design</i>	The proposal does not solve congestion on the concourse, and the design should reflect the grid pattern.	21	<p>It is a key objective of the proposal to improve the customer experience at Wynyard Station by relieving congestion and improving pedestrian flows throughout the station, including the paid and unpaid concourse.</p> <p>Pedestrian modelling of the proposed station upgrade shows a general improvement in pedestrian flows in 2021 when comparing the proposal</p>

Item	Issue	Summary of issue	Stakeholder Response number	
			<p>with the current station design. This includes a significant reduction in the time spent in a LoS D with the paid concourse. However, as discussed in Section 7.2.3 of the REF, Transport for NSW acknowledges that the LoS on platforms would still be expected to deteriorate by 2021 given the strong growth in rail demand expected over this period. The LoS for the unpaid concourse would remain similar to the current LoS. This growth is a whole of network capacity issue that cannot be addressed through improvements to the existing Wynyard Station. Longer-term strategies are in place to increase capacity and relieve congestion on the rail network in the Sydney CBD. This includes the Sydney Rapid Transit and a second harbour crossing.</p> <p>The paid concourse configuration is not confined to the structural grid. Design refinements are being considered to maximise customer convenience and the operational efficiency of the station. The design is at concept level and is subject to detailed design to ensure an outcome that balances operational and customer needs with the constraints of the existing structure.</p>	
PA10	<i>Station design</i>	The brochure did not provide adequate information on how operational pedestrian flows	2	Improvements to pedestrian movements within the station domain are discussed in Section 3.3.1.

Item	Issue	Summary of issue	Stakeholder Response number
		around the station would be addressed.	
PA11	<i>Lifts</i>	<p>Concerned that the proposal does not include facilities to assist people with limited mobility or people with prams accessing the station, and suggests the inclusion of a single lift running from platforms 3 and 4 to platforms 5 and 6.</p> <p>Recommends that larger lifts to the platforms are provided.</p>	<p>26</p> <p>Lift access is provided to all platforms at the station from the concourse. These lifts were installed in 1999 to Australian Standard 1735 which covers lifts and escalators. The lifts are compliant with relevant statutory codes and regulations and an upgrade to these lifts is not in the scope of the proposal.</p> <p>Platforms 3 and 4 are offset in a westerly direction from Platforms 5 and 6. Therefore direct lift access from platform to platform is physically constrained due to the positioning of the platform tunnels relative to one another (refer to Figure 8 of the REF).</p>
PA12	<i>Lifts</i>	<p>Concerned that the proposal design does not consider the accessibility needs of an ageing population, prams and travellers, and recommends the inclusion of additional lifts to access the platforms and to York Street</p>	<p>28</p> <p>The proposal would improve the station's compliance with statutory codes and regulations (such as the Building Code of Australia, Disability Discrimination Act and Work Health and Safety). The proposal also generally aligns with the objectives of the Transport Access Program.</p> <p>Lifts are currently provided between the paid concourse and platforms, and between the Carrington Street entrance and the eastern unpaid concourse. Once completed, Wynyard Walk would also provide lift access</p>

Item	Issue	Summary of issue	Stakeholder Response number
		oyer.	<p>to the station concourse level and the Clarence Street portal. The One Carrington development is also proposing lift access between the station concourse level, George Street and the Hunter Arcade. As such, the provision for additional lift access to the concourse level is not considered necessary. Further provision of a lift between York Street foyer and the western unpaid concourse would require structural changes to Transport House, a State heritage item.</p>

Traffic and transport (construction)

Item	Issue	Summary of issue	Stakeholder Response number
TTC1	<i>Construction access</i>	Concerns with access to the Wynyard Lane goods lift and supermarket delivery trucks being blocked when Wynyard Lane is being used for the proposal. The supermarket is required to comply with delivery curfews and is a critical issue for the business.	<p>8</p> <p>Transport for NSW acknowledges that Wynyard Lane is currently used by Coles supermarket for delivery access and is subject to company delivery curfews.</p> <p>A CTPMP would be developed in consultation with Coles supermarket for construction access points that conflict with the supermarket operations including Wynyard Lane.</p>

Item	Issue	Summary of issue	Stakeholder number	Response
TTC2	<i>Construction access</i>	Concerns with the disruption to public transport on Carrington Street due to deliveries, and the competing use of Wynyard Lane with adjacent developments.	29	<p>Only occasional access to the concourse would be provided using the passenger lift and escalators within the Wynyard Park dome via Carrington Street. The material would be transported from Carrington Street to the lift using forklifts, skates or trolleys.</p> <p>The scheduling of construction activities for the proposal been designed to minimise disruption to the surrounding road and pedestrian network, in particular, the Wynyard bus interchange on York and Carrington Streets.</p> <p>Road space that would be temporarily occupied by heavy vehicles loading/unloading and/or temporary bus infrastructure changes in the vicinity of Wynyard Park would be coordinated with Sydney Buses.</p> <p>Deliveries of plant/equipment and materials to the site would be undertaken outside the peak traffic periods of 7am to 9am and 4pm and 6:30pm, Monday to Friday where feasible, to minimise potential disruption to the local traffic network and bus services in the vicinity of the works.</p> <p>Access during lunchtime (12pm to 2pm) on weekdays would also be avoided where feasible and reasonable.</p> <p>It is acknowledged that the 333 George Street development and the One Carrington development relies on the use of Wynyard Lane, which also</p>

Item	Issue	Summary of issue	Stakeholder Response number
			<p>provides rear lane access for other buildings along George and Carrington Streets. As discussed in Section 7.3 of the REF, there would be the need to coordinate with these developers and other businesses (such as Coles supermarket) to minimise disruption to these competing uses. This would include the limitation of delivery times by the construction contractor. Use of Wynyard Lane would also be subject to any conditions of a works zone permit from the City of Sydney Council. However, the use of Wynyard Lane is critical to supporting construction activity at the station and avoiding impacts on other access points which are more heavily constrained by general traffic, buses and pedestrians.</p>
TTC3	<i>Construction access</i>	Recommends that Transport for NSW investigates rail as a mode for the delivery of construction materials.	<p>Transport for NSW has assessed the viability of using hi-rail as a mode of construction material delivery and has outlined the mode as a potential secondary access point.</p> <p>Hi-rail access to Platforms 5 and 6 would be provided via hi-rail on-ramps west of Circular Quay Station. For Platforms 3 and 4, hi-rail access points south of North Sydney Station and north of Central Station would be used. Material would then be transported by rail using on-track plant such as a lifter and trailers to bring in materials. This option would only be accessible when trains are not running, for example, during weekend possessions. This would be subject to rail availability and coordinated in</p>

Item	Issue	Summary of issue	Stakeholder Response number	
			consultation with Sydney Trains. As such, it cannot be relied upon to provide primary access to the construction site.	
TTC4	<i>Construction access</i>	Objects to the use of York Lane. States that Wynyard Walk and 33 York Street construction activities have had an impact on the southern fire stairs and routes to Wynyard Park as an evacuation point and impacts on the ability to maintain security to the building. Questions air quality control within the building due to vehicle fumes.	<p>York Lane is a public lane and is identified as a secondary access point for Wynyard Station Upgrade. The use of York Lane would be subject to standard approval processes from City of Sydney Council, such as construction work zone applications, and the accessibility of the western fire stairs from the upper and lower levels of Transport House would be considered in this process.</p> <p>The use of York Lane and security of access to Transport House would be considered in partnership with the Wynyard Walk project, and would be subject to appropriate work method statements.</p> <p>Minor air quality impacts may result from the use of delivery vehicles, however this can be adequately managed in the Construction Environmental Management Plan (CEMP) using safeguards. These include maintaining all plant and equipment in good working order in accordance with manufacturer's specifications, and commitments to switching off all plant and equipment when not in use.</p>	
TTC5	<i>Construction access</i>	Objects to the use of York Street loading bay in front of Transport	30	Transport for NSW proposes to use this public loading bay during construction as a secondary access point for occasional deliveries. This

Item	Issue	Summary of issue	Stakeholder Response number	
		House due to the impact on the building tenants.	loading bay is proposed to be removed as part of the Sydney City Centre Bus Infrastructure modifications and would be used until it is removed.	
TTC6	<i>Cumulative impacts</i>	<p>Concern with the potential cumulative impacts to the surrounding road network and pedestrian safety as a result of the proposal, CSELR, 333 George Street, Barangaroo and One Carrington.</p> <p>In particular, there is concern that this congestion would impede access to the property (which includes businesses and a hotel car park), which is accessed via Margaret Street.</p>	<p>28</p> <p>Transport for NSW accepts that there would be cumulative impacts as a result of the five surrounding developments being undertaken in conjunction with the proposal. However, the volume of traffic generated by the proposal, in comparison to other developments, is minor.</p> <p>As part of proposal staging and ongoing coordination with the surrounding developments, Roads and Maritime Services, other transport agencies and City of Sydney would be required to minimise any disruption and the potential for cumulative impacts on pedestrians and vehicular traffic. In addition, an alternative construction methodology has been developed that involves establishing three pedestrian circulation corridors to segregate customers from the work areas in the station, along with temporary relocation of gatelines. These are proposed to be established to distribute the public between the platform stairs and access/egress points. This alternative methodology would improve pedestrian movements and safety within the station area. This is discussed further in Chapter 4 of this Submissions Report.</p>	
TTC7	<i>Network limitations</i>	Recommends that Margaret	28	The widening of the pedestrian footpath along Margaret Street was

Item	Issue	Summary of issue	Stakeholder Response number
TTC8	<i>Traffic management</i>	<p>Street is widened to provide an additional traffic lane once Wynyard Walk is open. The widened footpath and narrowed traffic lanes along Margaret Street between York and Clarence Streets has created accessibility issues for vehicles entering and exiting car parks on the northern side of Margaret Street. Lanes are also too narrow to safely fit two adjacent buses or heavy vehicles, and creates difficulty for heavy vehicles turning right from York Street.</p> <p>Additional pressure will be placed on this road once George Street is closed and Hunter Street will become a two way road.</p>	<p>undertaken as a separate project to the Wynyard Station Upgrade proposal. This was undertaken to create a safer and wider access for pedestrians and to accommodate pedestrians that had been displaced by the closure of the former Kent Street tunnel as part of Wynyard Walk.</p> <p>The future management of that footpath is outside of the scope of this proposal.</p>
		Recommends the management	28
			Mitigation and management measures to minimise the disruption to the

Item	Issue	Summary of issue	Stakeholder Response number
		<p>of traffic signals surrounding the development during construction, particularly to assist in reducing bus congestion and pedestrian congestion at the intersection of Margaret Street and York Street.</p>	<p>road network would be detailed in a CTPMP. This plan would be prepared in consultation with Roads and Maritime Services, Sydney Buses and City of Sydney Council.</p> <p>Consultation with transport agencies, developers and City of Sydney Council would also be undertaken on a regular basis to provide a coordinated approach to cumulative impacts that may occur. Change to traffic signalling is a matter for the Traffic Management Centre, and potential impacts to the broader road network as a consequence would need to be considered.</p>
TTC9	<i>Impact assessment</i>	<p>Transport for NSW needs to conduct a detailed traffic impact assessment in consultation with Memocorp Australia Pty Ltd.</p>	<p>30</p> <p>A traffic, transport and pedestrian technical assessment has been completed as part of the REF. As detailed in this assessment, the proposal is not expected to have a significant impact due to the low volumes of traffic generated during construction relative to existing volumes of traffic on the surrounding network.</p> <p>However, it is acknowledged that there is the potential for cumulative impacts due to other surrounding developments. Transport for NSW would liaise with these contractors and relevant transport agencies during the preparation of a CTPMP.</p> <p>As part of this, Transport for NSW would consult with surrounding</p>

Item	Issue	Summary of issue	Stakeholder Response number	
				property owners in the immediate vicinity of the proposal. This includes Memocorp Australia Pty Ltd.

Heritage

Item	Issue	Summary of issue	Stakeholder Response number	
H1	<i>Station platform design</i>	Concern regarding enclosure of the historic girders on Platforms 3 and 4, and suggestion that these are retained in the design.	10	The proposal would not involve the enclosure of the original steel girders on Platforms 3 and 4. The girders would be left exposed and painted.
H2	<i>Incorporation of heritage</i>	Support for the proposed interpretation of heritage, but requests some interpretation of heritage value of the un-used escalator caverns between platforms 5 and 6 and platforms 1 and 2.	17, 18	<p>Key objectives of the proposal include de-cluttering of Platforms 5 and 6 to improve congestion. This would involve the demolition of the former escalator enclosures to create additional space for an increase in pedestrian volumes and to improve wayfinding.</p> <p>As stated in the SOHI, the unused enclosures for escalators, which were never installed, would represent a loss of original fabric. However, the loss was considered to be minor and acceptable given the practical and safety benefits that would result through its removal.</p>

Item	Issue	Summary of issue	Stakeholder number	Response
				The enclosure would be photographically recorded prior to demolition. Further mitigation is not considered necessary.
H3	<i>Finishes</i>	Supports the upgrade, but recommends that the treatment of the station includes the retiling of the walls and columns to reflect the original design to preserve heritage values.	24, 29	The proposal would involve the replacement of the current floor, wall and column tiling. As the current tiling within areas that are publically accessible is not original, this work would involve the removal of non-significant functional fabric and replacement with modern and appropriate finishes. On the platforms, the proposed new tiles would result in a cleaner, more modern aesthetic for the platforms, improving visual amenity for customers. The tactile and safe area indicators would be retained or replaced as necessary. The final design of the column finishes and the tiling of the platform floor would be determined during detailed design and in consultation with Sydney Trains (Heritage). Colour cues, reflective of the heritage blue colour of Wynyard Station, would feature within the paid concourse area.
H4	<i>Finishes</i>	Recommends the consideration of exposed building services to reinstate heritage profiles and to expose historic materials.	29	The proposed design of the paid concourse includes the exposure of the original ceiling. The exposure of the original ceiling within the unpaid concourse would be considered during detailed design.
H5	<i>Finishes</i>	The proposed design, including	29	The proposal includes design features that provide a modern

Item	Issue	Summary of issue	Stakeholder Response number
		<p>finishes, should reflect the original character of the station and Transport House to allow interpretation through design, and recommends that the opportunities for heritage interpretation in the design of new fit out finishes are explored, as opposed to the replica of original finishes.</p>	<p>interpretation of the station and Transport House. This includes the exposure of the ceiling, colour cues within tile finishes, and lighting design. It is not currently proposed to replicate original finishes.</p> <p>The final design of the concourse and finishes used in the upgrade would be confirmed during detailed design and in consultation with Sydney Trains (Heritage). It would also need to meet any requirements of the Section 60 approval from the OEH (Heritage Division) relevant to Transport House.</p>
H6	<i>General</i>	<p>Recommends that a heritage conservation management plan be prepared for Wynyard Station to guide the works to the station.</p>	<p>29</p> <p>The preparation of a conservation management plan is a matter for the property owner (Sydney Trains). During detailed design, consultation would continue with Sydney Trains (Heritage) concerning the design and finishes.</p>
H7	<i>General</i>	<p>An interpretation plan for the proposal should be developed in consultation with City of Sydney Council.</p>	<p>29</p> <p>Design features have been proposed to provide a modern interpretation of the station heritage. This includes exposed ceilings in parts of the concourse, and lighting design. The final treatment of the station and York Street foyer would be subject to detailed design. Transport for NSW would continue to consult with Sydney Trains (Heritage) and City of Sydney concerning the final design outcomes, and where relevant, in</p>

Item	Issue	Summary of issue	Stakeholder Response number
		<p>accordance with the approval granted under Section 60 of the Heritage Act 1977. Methods for interpretation, beyond design, would be considered during construction and/or operation.</p> <p>As detailed in the REF, Wynyard Station has undergone modifications since its original construction in the 1930's and retains some original fabric. There is also the potential for original fabric to be hidden behind more modern fabric or in concealed areas. Remaining fabric would be retained in the design (for instance, staircase balustrades), or would be subject to archival recordings if it would be directly impacted by the proposal.</p> <p>In the event that original fabric is discovered in Wynyard Station or Transport House, it is also noted that the following steps and considerations would be undertaken in consultation with a suitably experienced heritage practitioner as part of the stop work procedures:</p> <p>If original finishes are discovered, the finishes are to be recorded and sampled in accordance with relevant OEH (Heritage Division) guidelines.</p> <p>In-situ retention of the features and incorporation into the proposal design, where feasible and reasonable, would be investigated.</p>	

Item	Issue	Summary of issue	Stakeholder Response number
			If in-situ retention is feasible, methods to remove modern finishes that minimise potential damage to the original fabric would be implemented.
H8	<i>General</i>	<p>Transport for NSW should undertake heritage archival records for all heritage related impacts.</p> <p>Recommends that a photographic archival recording of the affected areas both prior to and during works be submitted to the City of Sydney Council for archiving.</p>	<p>29, 30</p> <p>The proposal includes the provision for archival recordings from Transport House and Wynyard Station to be undertaken prior to removal works. This would include photographs and annotated plans indicating the existing alignments and layouts for future reference. A paint test analysis would also be undertaken where feasible as part of this pre-works recording exercise.</p> <p>Wherever possible, archival recordings and paint test analyses would be undertaken before any demolition of fabric, insertion of new elements, and application of new surface finishes.</p>
H9	<i>General</i>	Recommends that a detailed schedule of conservation works and methodologies is prepared during detailed design.	29 Noted. This would be detailed within the HCEMP for the proposal.
H10	<i>General</i>	The heritage conservation management plan for Transport House should be updated, and works in this building to be	29, 30 The preparation of a heritage conservation management plan is a matter for the property owner(s). During detailed design, consultation would continue with the OEH (Heritage Division) and Sydney Trains (Heritage)

Item	Issue	Summary of issue	Stakeholder number	Response
		<p>consistent with the plan, which should be endorsed by City of Sydney Council and NSW Heritage Council.</p> <p>Transport for NSW should have a proper conservation management plan.</p>		<p>concerning the design and finishes within Transport House.</p> <p>It is also noted that a HCEMP would be prepared in consultation with Sydney Trains (Heritage) and City of Sydney prior to the commencement of construction. The HCEMP would be prepared by a suitably qualified heritage specialist who is approved by the OEH (Heritage Division).</p> <p>The HCEMP would include identification of heritage items, and known heritage fabric, description of work practices (generic and specific) to be applied to avoid and minimise impacts to heritage fabric, stop work procedures that would be implemented should original fabric or unexpected historical archaeological relics be discovered during construction, and procedures to monitor works in sensitive areas, including reporting and notification of accidental damage to heritage fabric.</p>
H11	<i>Paid concourse design</i>	<p>Concern that the artist's impressions of the paid concourse lacks detail of historic features of the original paid concourse, including coffered ceilings between structural beams with box lighting and</p>	29	<p>The artist's impression for the proposal is only indicative and subject to detailed design.</p> <p>The proposal involves the following works to the paid concourse which are subject to detailed design:</p> <ul style="list-style-type: none"> • The use of lighting, finishes and ceiling treatments to accentuate the transition between the two distinct precincts.

Item	Issue	Summary of issue	Stakeholder number	Response
		contrasting colours, which would enhance the character of the space.		<ul style="list-style-type: none"> Removal of the suspended ceiling and re-routing of services to expose the original ceiling structure with reinstatement of recessed lantern lights similar to the original lighting design. <p>The final finishes used in the proposal would be selected during detailed design. This would include a blue colour reflective of the original colour design for Wynyard Station.</p>
H12	<i>Station platform design</i>	Recommends the use of exposed riveted steel beams and riveted girder columns, rather than flush ceilings, to retrieve the original design features of the station platforms.	29	The riveted steel girders, which are only present on Platforms 3 and 4, would be left exposed and would be painted. There are no intentions to enclose the ceiling on Platforms 3 and 4.
H13	<i>The former Grill Room ceiling</i>	Recommends that heritage archival recordings be completed to mitigate the heritage impact resulting from the proposed removal of the remnant ceilings within the former Grill Room.	29	<p>The extent of disturbance to the decorative profiles of original art deco ceiling treatments associated with the Railway Refreshment Rooms (including the former Grill Room) would be minimised. Remaining portions of the ceiling are to be retained and protected within modern ceiling finishes.</p> <p>Further, prior to the commencement of construction, the ceiling would be subject to archival recording. This would include the preparation of a</p>

Item	Issue	Summary of issue	Stakeholder number	Response
				Reflected Ceiling Plan which would record the remaining features of the ceiling prior to demolition.
H14	<i>Unexpected finds</i>	In the event that undiscovered early features are found, it is recommended that the features are retained in situ, incorporated into the design and exposed to view. If removed or covered, this impact should be mitigated by archival recording and heritage interpretation.	29	<p>The HCEMP for the proposal would include provisions such as stop work procedures that would be implemented in the event that original fabric or unexpected historical archaeological relics are discovered during construction. The OEH (Heritage Division) would be notified and further assessment, documentation or approval may be required before site works could recommence in the affected area(s). Options to retain the original fabric in situ or for the fabric to be incorporated into the design would also be considered at this time.</p> <p>Records of any original finishes exposed during works would be lodged with Transport for NSW. This should include photos, location plans and samples of finishes, as appropriate.</p>
H15	<i>Unpaid eastern concourse design</i>	Recommends the exposure of the original ceiling within the eastern unpaid concourse instead of providing flush ceiling linings to retrieve heritage value.	29	<p>The final ceiling treatment would be subject to detailed design, and opportunities to expose the original ceiling within the eastern unpaid concourse would be explored.</p>

Item	Issue	Summary of issue	Stakeholder Response number	
H16	<i>Western unpaid concourse design</i>	<p>Supports the design of the western unpaid concourse, but recommends a comprehensive interpretive reinstatement for the unpaid western concourse (basement levels 3 and 4) design to retrieve original finishes and profiles. This includes column profiles, exposed structures and finishes based on historic photographs.</p>	29	<p>The western unpaid concourse is intended to provide a transition zone following entry from York Street foyer to the more modern design of the unpaid concourse to provide a suitable expression of the historic character of the station.</p> <p>The western unpaid concourse (Basement Level 4 of Transport House) and Basement Level 3 of Transport House is subject to detailed design and the relevant conditions of approval granted under section 60 of the Heritage Act 1977.</p> <p>Opportunities to expose the columns, as shown in historic photographs would be limited given the need to meet fire safety requirements, as this area serves as an egress from the concourse to street level in the event of an emergency.</p>
H17	<i>Wynyard Park</i>	<p>Wynyard Park is considered not to be an appropriate work zone location given its heritage value. However, if the use is approved, mitigation measures to preserve heritage value should be implemented, including photographic recording of the</p>	29	<p>The potential impacts on the heritage values of Wynyard Park have been assessed in Section 7.4 of the REF. The potential impacts on the heritage item, if the Wynyard Park compound is required, were assessed in the SOHI as minor and temporary.</p> <p>Mitigation measures recommended within the REF, include the photographic recording of the excavation area. The mitigation measure has been modified to include a photographic recording of the affected</p>

Item	Issue	Summary of issue	Stakeholder Response number
		affected areas, and the preparation of plans in consultation with City of Sydney including a landscape conservation plan and heritage interpretation plan.	area and the preparation of a landscape conservation plan. The REF also included the commitment to consult with City of Sydney Council concerning the treatment of the compound hoardings. Opportunities to allow for heritage interpretation in hoarding treatments would be considered as part of this consultation.
H18	<i>York Street foyer design</i>	<p>Supports the exposure of the original cross beam ceiling and the proposed interpretation of the early character. However, it is recommended that the design be based on historic documentary evidence, the heritage conservation management plan and the principles of the Burra Charter.</p> <p>Any early Art Deco features found under modern finishes should be retained in-situ and incorporated</p>	<p>29, 30</p> <p>The detailed design of the York Street foyer would investigate opportunities for salvage of any original fabric and/or heritage interpretation associated with Transport House, as well as the integration with Wynyard Walk.</p> <p>The final treatment of areas within Transport House is subject to detailed design. The conditions of approval issued by the OEH (Heritage Division) under section 60 of the Heritage Act 1977 require that a nominated heritage consultant provides advice on the detailed design.</p> <p>Mitigation measures have been detailed in the REF concerning the procedures for unexpected finds and for archival recording.</p>

Item	Issue	Summary of issue	Stakeholder Response number	
		<p>into the design. The removal or covering of finishes should be mitigated through archival recording and interpretation of the finishes.</p> <p>No heritage interpretation strategy has been supplied, including how it relates to the Wynyard Walk strategy.</p>		
H19	<i>Wynyard Walk</i>	<p>Concern that Wynyard Walk works do not adequately protect original features within the western corridor of York Street foyer.</p>	30	<p>This is not a matter for this assessment and is related to the Wynyard Walk project.</p>

Urban design and visual (operation)

Item	Issue	Summary of issue	Stakeholder number	Response
U1	<i>Colour scheme</i>	Concerns with the aesthetics of the station with respect to the proposed colour palette.	5	<p>Transport for NSW would consult with Sydney Trains (Heritage) during the development of detailed finishes, including the opportunity to incorporate colour cues (such as the heritage blue) into the design.</p> <p>The proposed materials and colour scheme have been selected for durability and to provide a modern aesthetic and the blue colour is reflective of the original colour design for Wynyard. This colouring is indicative only and would be confirmed in detailed design.</p>
U2	<i>Visual</i>	Supports the urban design of the new station.	13	Noted.
U3	<i>Signage</i>	No building signage is to be allowed in front of Transport House	30	Transport for NSW is not proposing to erect any external permanent signage as part of this proposal.

Business impacts

Item	Issue	Summary of issue	Stakeholder number	Response
B1	<i>Disruption to retail businesses</i>	Query concerning how construction would impact on the operation of the supermarket and how access would be provided and services maintained during construction. It is requested that there is ongoing consultation during construction to provide forewarning of impacts to services and access that could disrupt the business.	8	<p>Transport for NSW would ensure ongoing consultation with all stakeholders that have the potential to be directly or indirectly impacted by construction activity, including Coles supermarket. Transport for NSW and the construction contractor would regularly liaise with the Coles supermarket to coordinate activities that may disrupt services or access for deliveries. This would include the management of deliveries at Wynyard Lane.</p> <p>Direct impacts on the supermarket may include waterproofing activities on the mezzanine level of the station if undertaken. Transport for NSW and the construction contractor would liaise with Coles supermarket to schedule these works in a manner that minimise disruption to the business. Changes to the fire stair, identified in the REF, would be limited to the concourse level and are no longer proposed at the mezzanine level.</p>
B2	<i>Loss of retail</i>	The lack of allocated retail space under the proposed design would decrease ongoing maintenance and upgrade budgets for	21	Although Transport for NSW has not specifically allocated space for retail use, retail allocation provisions have not been precluded. The proposal would provide the opportunity for new retail uses in station facilities not required for back-of-house uses. Fit out of retail space is not part of the proposal, although services would be provided to all station facilities

Item	Issue	Summary of issue	Stakeholder Response number
		Wynyard Station.	<p>spaces, refer Figure 1.</p> <p>The final configuration of these spaces would be determined during detailed design and a retail strategy is being prepared by Transport for NSW. Any future proposed retail uses would be subject to a separate approval under Part 4 of the Environmental Planning and Assessment Act 1979.</p>

Property and land use

Item	Issue	Summary of issue	Stakeholder Response number	
PL1	<i>Asset protection</i>	Security bonds would be required to cover the potential for damage to City of Sydney Council assets due to construction access requirements.	29	Noted. Transport for NSW would continue to liaise with City of Sydney regarding the proposed works, and has amended mitigation measure L3 to include an initial survey of Council's assets to provide a baseline assessment upon which any potential damage could be assessed.
PL2	<i>Impacts to property</i>	Queries on the impacts to the Transport House goods lift as a result of the replacement of the	30	It is understood that two goods lifts operate within Transport House, within the same elevator shaft. Transport for NSW proposes to replace the goods lift 'car' that services the ground floor to the lower basement floors,

Item	Issue	Summary of issue	Stakeholder number	Response
		goods lift within Transport House.		<p>and to reinstate a pre-existing entrance from York Street which had been enclosed during previous works within Transport House. It is noted that the roller door for this entrance remains.</p> <p>The goods lift referred to in the submission services the upper floors of Transport House. The replacement of the elevator car and the reinstatement of the entrance from York Lane is not expected to have structural impacts on the elevator shaft.</p>
PL3	<i>Other</i>	Detailed designs of the York Street foyer and the basement levels of Transport House should be supplied to Memocorp Australia Pty Ltd prior to approval as it would have an impact on Memocorp Australia Pty Ltd.	30	Transport for NSW would consult with Memocorp Australia Pty Ltd, as a landowner, for any works that directly impact the property during detailed design.
PL4	<i>Other</i>	Legacy issues concerning utilities located within areas of Transport House owned by Memocorp Australia Pty Ltd need to be resolved.	30	Separation of services within Transport House is not part of the scope of Wynyard Station Upgrade. This is not a matter for this proposal but for direct negotiations between Transport for NSW and/or Sydney Trains, and Memocorp Australia Pty Ltd.

Item	Issue	Summary of issue	Stakeholder number	Response
PL5	Other	Access to Memocorp Australia Pty Ltd is to be subject to the requirements of the landowner.	30	Noted. If access is required to areas owned by Memocorp Australia Pty Ltd, this would be subject to commercial negotiations with Transport for NSW.
PL6	Other	Arrangements would be sought to indemnify Memocorp Australia Pty Ltd for any damage to property as a result of construction activity in the basement levels and York Street foyer. This will include property condition reports and monitoring. Requests façade protection to be extended to cover for the full façade length until completion of the proposal.	30	This is a matter for commercial discussions during detailed design. No works are proposed that would impact the façade. However, it is noted that Transport for NSW has committed to completing property condition reports where private property may be impacted by construction activity prior to the commencement of construction.
PL7	Other	Impacts on building settlement as a result of demolition activities in the basement levels of Transport House have not been provided. A settlement assessment report is	30	Demolition activities within Transport House basement levels are not significant, and are not anticipated to result in building settlement. Nonetheless, Transport for NSW has committed to completing property condition reports where private property may be impacted by construction

Item	Issue	Summary of issue	Stakeholder Response number
		to be provided to Memocorp Australia Pty Ltd.	activity.

Air quality (construction)

Item	Issue	Summary of issue	Stakeholder Response number
AQ1	Dust	Queries how dust would be managed during construction.	8 The generation of dust during construction would be managed in accordance with mitigation and management measures outlined in the REF and as detailed in a Construction Environmental Management Plan (CEMP). This would include the provision of hoardings or containment to minimise the spread of dust, wetting down surfaces during demolition and concrete cutting works, and provision of appropriate air extraction and ventilation during demolition and construction works in underground areas.

Other

Item	Issue	Summary of issue	Stakeholder number	Response
O1	<i>Pest Control</i>	Concern regarding the control of rodents during construction.	8	It is acknowledged that pests, including rodents, are an inherent issue for the CBD. While the proposal would not be of a similar scale to Wynyard Walk, there remains the risk for rodents to be disturbed. Transport for NSW would continue to consult with business owners during construction activities, and may consider implementing a pest control program if required.
O2	<i>Pest Control</i>	Recommend re-surfacing the tracks to reduce rodent populations.	13	Transport for NSW acknowledges that pests, including rodents, are an inherent issue for the CBD. The re-surfacing of tracks would not resolve pest control within the station. Transport for NSW would continue to consult with business owners during construction activities, and may consider implementing a pest control program if required.
O3	<i>Alternative transport modes</i>	States that heavy rail services are appropriate for long distance travel and best meets commuter requirements.	22	Noted. The proposal involves the refurbishment and improvement of Wynyard Station, which currently services the Sydney suburban rail network.
O4	<i>Rolling Stock</i>	Recommends the introduction of double storey trains, and	22	Wynyard Station would continue to service the suburban rail network, which consists of double-deck trains.

Item	Issue	Summary of issue	Stakeholder number	Response
		improvements to network signals to increase the capacity of the network.		Improvements to the broader signalling network are outside the scope of the proposal.
O5	<i>Rolling Stock</i>	Recommends that trains are upgraded to improve/provide air conditioning.	23	Improvements or changes to the rolling stock (trains) do not form part of the proposal.
O6	<i>Landowners consent (Wynyard Park)</i>	Use of Wynyard Park for a construction compound will require landowners consent from the Crown and City of Sydney.	29	<p>Landowners consent for the temporary use of land at Wynyard Park for a construction compound, should it be required, would need to be obtained from the landowners of the park. The landowners include the Crown for the majority of the above ground works and for the southern portion of the site below ground. The remaining portions of land that would be occupied by the Wynyard Park compound are owned by RailCorp, including the below ground portions of the shaft.</p> <p>The management of the park has also been vested to City of Sydney under the Crown Lands Act 1989. Transport for NSW acknowledges that agreement from City of Sydney, along with landowners consent, would be required prior to the establishment of the compound.</p> <p>An internal approval within Transport for NSW (TPD Principal Manager Environmental Management) would also be required to ensure that all</p>

Item	Issue	Summary of issue	Stakeholder Response number
			alternative access arrangements have been explored prior to proceeding with the Wynyard Park compound option.
O7	<i>Cumulative impacts (unspecified)</i>	Cumulative impacts are currently occurring as a result of construction for Wynyard Walk, and construction at 33 York Street and 333 George Street. Further impacts will occur as a result of this proposal, CSLER, the bus modifications and other projects.	30 It is acknowledged that the proposal is one of many projects that are expected to be occurring concurrently within the CBD. Section 7.11 of the REF identifies and considers potential interactions that could occur as a result of concurrent construction activity. This considered 333 George Street, Wynyard Walk and CSLER. Construction activities associated with the refurbishment of 33 York Street could further contribute to cumulative impacts on the road network and pedestrian network, and would also potentially generate noise and vibration impacts. The potential for cumulative impacts would be dependent on the staging of that project. A reference to this project has been incorporated into the relevant conditions to ensure that the contractor associated with 33 York Street is involved in coordinating responses to cumulative impacts.
O8	<i>Wynyard Walk</i>	Concern with aspects of Wynyard Walk that are to be delivered to Memocorp Australia Pty Ltd.	30 This is not the subject of this environmental assessment and is a matter for direct negotiations between Transport for NSW and Memocorp Australia Pty Ltd.

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4 Additional investigations and modifications to the proposal

4.1 Overview

Transport for NSW has identified modifications to the proposal that improve its constructability and operation. Section 4.2 outlines these modifications and the potential environmental impacts. Any new mitigation measures developed since the preparation of the REF, or in response to the proposed modifications, are identified in Chapter 5.

4.2 Modifications to the proposal

4.2.1 Concourse design

Since the exhibition of the REF, Transport for NSW has confirmed that:

- The Station Manager's Office would be located on the concourse level with direct access to the eastern unpaid concourse and paid concourse within areas designated for station facilities (refer to Figure 1). The basement levels of Transport House would continue to be developed for back of house uses.
- The Concourse Bar and Café would no longer be acquired and would be incorporated into the final concourse design. This would require adjustments to the western unpaid concourse and western ticket gateline.

As described in Chapter 5 of the REF, the concourse design would be subject to refinement to ensure the final design maximises the customer experience, meets operational requirements, and delivers a high standard of architectural design. The changes to the location of the Station Manager's Office would not alter the assessment as presented in the REF, given it would be contained within the original footprint identified for station facilities. Changes resulting from the retention of the Concourse Bar and Café would require some redesign of the paid and unpaid concourse area. Given the predominant flow within the western unpaid concourse would be towards Wynyard Walk, the inclusion of the Concourse Bar and Café is unlikely to result in significant changes to the LoS. However, required changes to the concourse design to incorporate the retained businesses would be approached on the basis that the predicted LoS, as detailed in the REF, would be maintained.

4.2.2 Construction staging and methodology

As described in Chapter 5 of the REF, construction activity would be staged to ensure that the station can remain operational while works are underway. As part of this, it was envisioned that the majority of works would be completed during night time periods. However, it was noted that the staging program would be subject to further review and would be supported by a pedestrian flow analysis to be completed prior to the commencement of construction based on the final

staging strategy. The REF identified that the flow analysis would assist in identifying minimum width passageways within the public domain based on peak and off-peak commuter movements and to confirm that adequate flows can occur. The proposed staging program would be subject to pedestrian flow as well as fire and life safety assessments, to ensure compliance and customer experience is maintained.

Since the exhibition of the REF, opportunities to isolate larger areas of the station have been explored to enable construction activities to occur during and outside standard construction hours. These opportunities have been explored through the co-ordination of the Wynyard Precinct Forum which includes representatives of the Traffic Management Centre (TMC) together with Sydney Light Rail, Wynyard Walk and Wynyard Station Upgrade projects. A key objective was to minimise the cumulative impact of these projects through a reduction in the overall construction timeframes associated with the Wynyard Station Upgrade project. This would minimise overlapping periods of construction between these transport projects, and would also reduce the extent of overlap with the adjacent One Carrington development.

The option currently under consideration involves establishing three pedestrian circulation corridors to segregate customers from the work areas in the station, along with temporary relocation of gatelines. These are proposed to be established to distribute the public between the platform stairs and access/egress points.

The pedestrian circulation corridors would comprise of walls, which are fully serviced with CCTV, lighting, communications and fire systems. Temporary wayfinding would also be installed.

This option is being considered to allow work to be undertaken overhead and elsewhere during the day without impact to customers, and is anticipated to be in place between approximately June 2015 to April 2016. This alternative approach to isolate construction areas from operational station areas is expected to reduce the duration of construction of the project by up to six months when compared with the hoarding option outlined in the REF which also relied on a high proportion of night time work. There would also be cost savings due to improved access, less complex staging and a single commissioning of new operational systems. Finalisation of this option would be subject to further pedestrian modelling and an analysis of the impact on pedestrian movements within this precinct.

Changes in impacts associated with this alternative construction methodology are outlined below.

Changes to customer environment

The alternative construction methodology would provide a clean, light and safe environment for station users offering a more comfortable experience when transiting through the station. It is anticipated that construction related noise and dust impacts are likely to be reduced from levels identified in the REF, given the segregation from customers. The reduction in stages and

changes in hoarding scenarios, when considered together with proposed wayfinding signage, is also expected to reduce confusion for commuters through the construction period.

The alternative construction methodology involving pedestrian circulation corridors would however restrict general public through-movements in the station during the period in which it is implemented, unless they have an Opal Card/paper ticket. Access to the pedestrian circulation corridor would be provided via temporary ticket gates. These impacts are further discussed under pedestrian impacts and business impacts below.

Station operations

The proposal provides an improved outcome for station operations, as station staff would become familiar with one “hoarding” configuration which would enable routine tasks such as customer services, security checks and cleaning to become well established.

Pedestrian impacts

Any approach to isolate larger areas of the station would require designated pedestrian access ways to/from the surrounding pedestrian arcades, lifts and escalators. Preliminary pedestrian modelling undertaken as part of the development of the alternative construction methodology concluded that the temporary station design would operate to a satisfactory LoS for both the AM and PM peaks.

Detailed pedestrian flow analysis both within the station and the surrounding precinct would continue as the scheme is refined during the detailed design to support the final staging program and construction methodology

The alternative construction methodology together with the proposed wayfinding signage would reduce commuter confusion during the construction period. However, the pedestrian circulation corridors would restrict general public through-movements in the station, unless they have an Opal Card/paper ticket, as access to the corridors would be via ticket gates. That is, pedestrians that only seek to pass through the station would be allowed to do so by tapping on and off at the entry and exit ticket gates at no charge. Alternative measures to manage these impacts would continue to be explored during detailed design in conjunction with Sydney Trains.

As noted in Chapter 7.2 of the REF, through-movements within the public domain are most prevalent during the lunch time period, as it is likely that the station is used to access surrounding retail businesses.

A Pedestrian Analysis Report prepared by AECOM in July 2014 collected statistics on pedestrian movements through the lunchtime (1 hour) peak period, including a count of pedestrian movements and analysis of the path of travel. There were 2,750 pedestrian through-movements east-west in Wynyard Station through the lunchtime peak 1 hour period. This is the approximate number of pedestrian trips affected by the alternative construction methodology and staging. These people would be required to take an alternative route for their journey.

Some of these people would be able to undertake movements through the station using Opal Cards to pass through both proposed ticket gatelanes.

It is noted that a comparison of results from a 2008 and 2014 survey indicated that the number of pedestrians that use Wynyard Station for through-movements reduced by 50 percent during the lunch time peak with the closure of the former Kent Street tunnel (AECOM 2014). People adapted their behaviour in this instance and used an alternative route. It is acknowledged that restriction of through-movements in the station could have the potential to increase congestion along pedestrian surface networks.

In this regard, as part of the pedestrian flow analysis, Transport for NSW would also review the proportion of pedestrians that may shift from the station to surface roads to determine if any additional mitigation measures are required. Appropriate signage and wayfinding material would be installed throughout the station and at street level (if required) for the duration of the construction period to ensure the public are aware of the changed pedestrian flows and conditions. Any such measures would be detailed in the CTPMP, together with contingency measures to be implemented if required.

Visual impact

The alternative construction methodology would provide a clean, light and safe environment for station users. The pedestrian circulation corridors would comprise of walls, which are fully serviced with CCTV, lighting, communications and fire systems. Temporary wayfinding would also be installed. The pedestrian circulation corridors would provide a safe environment for pedestrians which would visually separate them from the proposed construction activities. Hoarding treatment would also add visual interest and aid wayfinding. In addition, the consistency of the pedestrian circulation corridors throughout the construction period, as opposed to mobile hoarding structures, would provide a familiar visual environment for pedestrians.

Safety in design

The alternative construction methodology would improve the safety and comfort of customers and staff. The pedestrian circulation corridors would provide a clear, light path for station users that are fully serviced with CCTV.

Due to the proximity of the western York Street escalators to the respective street level and concourse fare gates, operational controls would be required to manage customer safety. The positioning of the temporary gatelanes would be determined with consideration to customer safety and maintaining appropriate levels of pedestrian flow during detailed design. Any required mitigation measures would be detailed in the CTPMP.

Noise and vibration

The ability to isolate larger areas of the unpaid concourse would enable the construction contractor to more effectively carry out works out-of-hours and would enable construction activities to occur more regularly during standard construction hours.

Customers would remain exposed to elevated noise levels, depending on the location of construction activity. However, this impact would be temporary given the transitory use of these spaces.

The potential impacts to surrounding retail, business or educational receivers located adjacent or above the station are not anticipated to increase as a result of this alternative construction methodology, as the impact assessment has considered a number of worst case scenarios for both works during standard construction hours and activities outside standard construction hours. However, as acknowledged in Section 7.1 of the REF and as discussed further in Chapter 3 of this report, there remains the potential for exceedances at certain receivers in the immediate vicinity of the proposal. As such, as the alternative construction methodology could enable works to occur for prolonged periods across a 24 hour period, there is potential for works to give rise to construction fatigue. Equally, the alternative construction methodology would have benefits to the construction program and could result in shorter construction periods (and therefore shorter duration of impact to nearby receivers). To manage these potential issues, Transport for NSW and its contractor would implement the mitigation measures in Chapter 5, which include:

- Schedule particularly noisy activities for times when they would have the least impact where feasible and reasonable (refer to mitigation measure NV4).
- Consult with the affected receivers to determine approaches to manage these potential impacts. This can include respite periods (refer to mitigation measures NV2 and NV4).
- Implement a Construction Noise and Vibration Management Plan (CNVMP), which would detail feasible and reasonable noise mitigation measures and work practices to minimise noise and vibration (refer to mitigation measure NV1).
- Consider and implement a noise monitoring program to assist in confirming and controlling the site specific potential for disturbance at particularly sensitive receivers, at the commencement of activities identified as having the potential to result in exceedances and periodically during the construction program as the works progress. Measurements would also be undertaken in response to complaints (refer to mitigation measure NV13).

Business impacts

Congestion and reduced pedestrian flows could also discourage the use of the Wynyard Station public domain for through-movements between York and Carrington streets and the MetCentre, George Street and the Hunter Arcade. The option currently being investigated would not isolate access to the Carrington Street escalators, the MetCentre, George Street or the Hunter Arcade.

However, it would discourage pedestrians using Wynyard Station to complete east-west connections underground. This could impact visitation to surrounding businesses, such as those located within the MetCentre. Maintaining adequate key pedestrian routes, the de-cluttering of the eastern concourse early in the construction program and a construction wayfinding strategy would assist in minimising impacts or changes to pedestrian flows (and therefore businesses).

Feasible and reasonable measures to minimise the disruption to surrounding businesses and educational establishments due to elevated noise levels and/or due to construction fatigue, would be explored during detailed design and implemented. This could include respite periods.

Heritage

Temporary ticket gatelines would be installed within the unpaid concourse. One possible location for a temporary gateline is within Basement Level 4 of Transport House, a State heritage item. The other gatelines would be located within Wynyard Station, which is listed on the Section 170 heritage register.

The temporary gatelines are within areas that are to be impacted as part of the refurbishment works (such as the removal of tiles). As such, the temporary structures would be akin to the impacts as assessed within the REF. The final configuration of the pedestrian circulation corridors, and the final location of temporary ticket gatelines would be determined during detailed design. At that point in time, Transport for NSW would determine if an exemption or modification to the Section 60 application would be required.

Mitigation and management measures

The proposed mitigation measures have been amended to reflect these considerations, should this approach be taken. These are detailed in Chapter 5 of this Submissions Report.

5 Summary of mitigation measures

Environmental management for the proposal would be carried out as detailed in the REF. A CEMP would be prepared to include all specific environmental mitigation measures that have been identified in the REF and in this Submissions Report.

Additional environmental management and mitigation measures for the proposal having regard to submissions received and the investigations and modifications outlined in Section 4.2 and 4.3 of this report are included in Table 6.

The list includes any changes to mitigation measures that are now proposed in response to submissions received during the public display period or due to additional investigations undertaken since the completion of the display. New mitigation measures have been underlined. Removal of mitigation measures (or text removed from measures) has been shown with a strikethrough.

The mitigation measures numbers have been adjusted to account for the inclusion or removal of particular mitigation measures.

Table 6 outlines the revised set of mitigation measures for the proposal.

Table 6 Mitigation and management measures

General

ID number	Mitigation measure
G1	The construction of Wynyard Station Upgrade would be undertaken in accordance with the Transport for NSW Environmental Management System (EMS) and the contractor's EMS.
G2	A CEMP would be prepared prior to the commencement of construction.
G3	Methods for the management of impacts would be incorporated into site inductions, training and commencement briefings. .
G4	A Community Liaison Management Plan would be prepared and implemented to manage consultation during construction. This would detail procedures for the seeking and receiving feedback from the community and businesses, and for procedures to respond to any enquiries or complaints
G5	Contact details for a 24-hour Construction Response Line, project Infoline and email address would be provided for ongoing stakeholder contact throughout the construction stage. Complaints during construction would be managed in accordance with Transport for NSW's Community Engagement Policy.

Noise and vibration

ID number	Mitigation measure
NV1	<p>A Construction Noise and Vibration Management Plan (CNVMP) would be prepared and implemented in accordance with the requirements of the Transport for NSW Construction Noise Strategy and the Interim Construction Noise Guideline. The CNVMP would include all reasonable and feasible mitigation options to manage the noise emissions from the site and also any complaints which may occur due to the construction activity noise. The CNVMP would include the following:</p> <ul style="list-style-type: none"> • Identification of nearby residences, other sensitive land uses (e.g places of worship) and businesses (e.g retailers). • Description of approved hours of work. • Description and identification of all construction activities, including work areas, equipment and duration. • Description of work practices (generic and specific) to be applied to minimise noise and vibration. This could include scheduling of noisy or vibration intensive works outside standard retail hours and periods of respite. • Details of any necessary out-of-hours work required would form part of the CNVMP. • A complaints handling process. • Noise and vibration monitoring procedures.
NV2	<p>All receivers impacted by noise from the proposed works which are expected to exceed the construction NMLs would be consulted about the project prior to the commencement of the particular activity, with the highest consideration given to those that are predicted to be most affected as a result of the works.</p> <p>The information provided to the receivers would include:</p> <ul style="list-style-type: none"> • Programmed times and locations of construction work. • The hours of proposed works. • Construction noise and vibration impact predictions. • Construction noise and vibration mitigation measures being implemented on site. <p>Consultation would be consistent with the requirements of Transport for NSW Construction Noise Strategy and the Community Liaison Plan (refer to mitigation measure G4). The highest consideration would be given to receivers that are predicted to be most affected as a result of the works.</p>
NV3	<p>Induction and training would be provided to relevant staff and sub-contractors outlining their responsibilities with regard to noise. Construction workers would be briefed in order to create an awareness of the locality, the location of sensitive receivers and noise mitigation measures.</p>
NV4	<p>Particularly noisy activities should be scheduled for times when they would have the least impact where feasible and reasonable</p> <p>Where there is potential for continued elevated noise levels (including structure-borne noise), consultation with affected businesses (including retailers), <u>affected educational establishments</u> and Sydney Trains personnel would be undertaken to complete noise or vibration intensive activities outside retail business hours, during periods of low retail activities and low passenger numbers, where reasonable and feasible.</p>

	<p>This would result in additional works being undertaken outside standard construction hours. Undertaking works outside of standard working hours is advantageous as it reduces the impact on retail premises and Sydney Trains personnel and customers.</p>
	<p>Negotiations should be undertaken with affected businesses and educational establishments within and around the station to determine if periods of respite are appropriate.</p>
NV5	<p>Activities that may need to be conducted outside of standard construction hours, and have not been assessed in this report, would be subject to out-of-hours approval as identified in the Transport for NSW <i>Construction Noise Strategy</i>.</p>
NV6	<p>The selection of plant and equipment can have a significant impact on construction noise (including structure-borne levels). Appropriate plant would be selected for each task to minimise the noise contributions.</p>
NV7	<p>Alternative works methods would be considered and implemented where feasible and reasonable (e.g. saw cutting instead of impact hammering would reduce structure-borne noise). The use of alternative machines that perform the same function (e.g. electric/hydraulic in place of diesel; rubber wheeled in place of steel tracked plant) would be considered.</p>
NV8	<p>Equipment would be regularly inspected and maintained to ensure it is in good working order.</p>
NV9	<p>At Wynyard Park compound, noisy equipment would be orientated away from residential and hotel receivers and/or shielded behind structures where feasible and reasonable.</p>
NV10	<p>Where possible, noisy construction works should be conducted behind hoardings subject to the final construction staging strategy. The hoardings should be full height and be constructed from ≥10 mm plywood or similar.</p>
NV11	<p>Truck drivers would be advised of designated vehicle routes, parking locations, acceptable delivery hours or other relevant practices (i.e. minimising the use of engine brakes, and no extended periods of engine idling).</p>
NV12	<p>Construction sites would be arranged to limit the need for reversing associated with regular/repeatable movements (e.g. trucks transporting spoil) to minimise the use of reversing alarms. Where feasible and reasonable, non-tonal reversing alarms would be used (particularly for vehicles reversing down York Lane), taking into account the requirements of the WHS legislation.</p>
NV13	<p>A noise monitoring program would be considered and implemented to assist in confirming and controlling the site specific potential for disturbance at particularly sensitive receivers, at the commencement of activities identified as having the potential to result in exceedances and periodically during the construction program as the works progress. Measurements would also be undertaken in response to complaints. The results would be reviewed to determine if additional mitigation measures are required. All measurements would be undertaken in accordance with Australian Standard 1055.1-1997 – Acoustics – Description and measurement of environmental noise, Part 1: General procedures.</p> <p>A noise monitoring program would be presented in the CNVMP.</p>
NV14	<p><u>During construction, affected educational institutions would be consulted and reasonable steps taken to ensure that noise generating construction works in the vicinity of affected buildings are not timetabled during examination periods where practicable, unless other reasonable arrangements satisfactory to the affected institutions are made, at no cost to the affected institution.</u></p>

Pedestrian management

ID number	Mitigation measure
P1	<p>Pedestrian access would be maintained to Wynyard Station at all times when the station is open.</p> <p>Adjustments to regular pedestrian routes to and within the Station (e.g. movement of hoardings) would occur outside commuter peak periods.</p>
P2	<p>A pedestrian flow analysis would be completed prior to the commencement of construction based on the final staging strategy. This would assist in identifying minimum width passageways within the public domain based on peak and off-peak commuter movements and to confirm that adequate flows can occur for movements within the station domain. <u>The pedestrian flow analysis would also consider movements in the immediate vicinity of the station along the surface road network, to determine if any mitigation strategies are required. following the closure of the southern concourse, prior to the widening of the northern concourse.</u></p>
P3	<p>A Construction Traffic and Pedestrian Management Plan (CTPMP) would be prepared and would be developed in consultation with the Roads and Maritime Services and City of Sydney prior to the commencement of construction. This would be supported by a pedestrian flow analysis and construction wayfinding strategy for the final staging strategy for the proposal. The CTPMP would include:</p> <ul style="list-style-type: none"> • The establishment and implementation of minimum width walkways within the public domain based on peak and off-peak commuter movements to enable safe passage of pedestrians, guided by the pedestrian flow analysis. <u>This includes pedestrian circulation corridors within the station domain with good sightlines.</u> • <u>The design of pedestrian circulation corridors with consideration to pedestrian amenity and safety, and any mitigation measures required during peak periods to maintain safe flows between the paid and unpaid concourse areas.</u> • <u>Contingency measures to be implemented (if required) to address through-movements in the station.</u> • Early removal of redundant structures within the station to minimise unnecessary obstructions to pedestrian flows. • Installation of appropriate signage to support wayfinding and allow public awareness of changed pedestrian flows and conditions. • Managing staging of works to accommodate high-demand special events (e.g. Vivid, New Year's Eve) during which public transport is provided in addition to timetabled services and for extended hours. • Monitoring procedures to assess the effectiveness of management measures, and the implementation of corrective action(s) if required.
P4	<p>Where possible, construction work within the public domain would be undertaken outside of peak commuter periods to minimise congestion and maintain pedestrian safety.</p> <p>Adjustments to regular pedestrian routes to and within the Station (e.g. movement of hoardings)</p>

ID number	Mitigation measure
	would occur outside commuter peak periods.
P5	As part of the Community Liaison Management Plan (refer to mitigation measure G4), procedures would be implemented to provide advance notice of upcoming works that would restrict or disrupt pedestrian movements, and these would be clearly signposted ahead of the construction activity.
P6	Temporary changes to bus infrastructure, as a result of this proposal, would also be communicated to bus commuters using methods such as signage, website updates, transport applications and real time text/SMS updates. The required communication protocols and methods would also be detailed within the CTPMP.

Traffic and access

ID number	Mitigation measure
T1	<p>A Construction <u>Traffic</u> and Pedestrian Management Plan (CTPMP), as identified in mitigation measure P3, would be also include mitigation and management measures to manage potential traffic and transport impacts. The CTPMP measures, specific to traffic and access impacts, would include:</p> <ul style="list-style-type: none"> • Signage (for example, deploying temporary speed restrictions, changes to the road environment, traffic management controls). • Traffic control plans for access points and Wynyard Park compound, if used. • Scheduling heavy vehicle movements outside the morning and evening peak periods, where feasible and reasonable. • Temporary bus infrastructure changes in the vicinity of Wynyard Park to accommodate access to the construction compound. Any such changes would be coordinated with Sydney Buses, and would account for rail possessions. • Driver protocols and communication methods to avoid queuing of heavy vehicles on the road network. • Contingency measures that would be implemented to manage construction site access in the event that an emergency requires bus services to replace train services at Wynyard Station.
T2	Where feasible, construction vehicle movements would be scheduled outside the weekday peak (7am to 9am, 4pm to 6pm) to minimise disruption to the surrounding road network.
T3	Necessary approvals to temporarily occupy Wynyard Lane, York Street, Margaret Street, York Street, York Lane and Cumberland Street (such as Road Occupancy Licences) would be obtained from the relevant authority (City of Sydney and Sydney Harbour Foreshore Authority) prior to works that would require the possession of a road. These would be supported by traffic control plans.
T4	Transport for NSW and the contractor would coordinate with Sydney Buses, any other relevant bus operators and the Traffic Management Centre on required changes to bus infrastructure

ID number	Mitigation measure
	around Wynyard Park resulting from the Sydney City Centre Bus Infrastructure modifications proposal and Access Strategy. If the establishment of the Wynyard Park compound is required, the same parties would be consulted. This would be considered within the CTPMP.
T5	Consultation with key authorities, including Roads and Maritime Services and City of Sydney, in addition to contractors responsible for the delivery of the CSELR, <u>333 George Street, 33 York Street</u> and the proposed One Carrington Street development, would be undertaken to manage potential cumulative traffic and transport impacts in the vicinity of Wynyard Station. If necessary, forums, such as a CBD Transport Taskforce, would also be utilised.
T6	The traffic management plan will be developed in consultation with Brookfield and Coles supermarket for the use of Wynyard Lane Car Park, Wynyard Lane goods lift and Cumberland Street.
T7	Opportunities to enable deliveries to occur via the George Street ramps would be explored with the CSELR contractor.
T8	As part of the Community Liaison Plan (refer to mitigation measure G4), procedures would be implemented to provide advance notice of upcoming works that would restrict or disrupt the road network, and these would be clearly signposted ahead of the construction activity.

Heritage

ID number	Mitigation measure
H1	<p>A Heritage Construction Environmental Management Plan (HCEMP) would be prepared and would be developed in consultation with Sydney Trains (Heritage), the Office of Environment and Heritage (Heritage Division) and City of Sydney prior to the commencement of construction. The HCEMP would be prepared by a suitably qualified heritage specialist.</p> <p>The HCEMP would include (but is not limited to):</p> <ul style="list-style-type: none"> • Identification of heritage items, and known heritage fabric. • Description of work practices (generic and specific) to be applied to avoid and minimise impacts to heritage fabric. • Stop work procedures that would be implemented should original fabric or unexpected historical archaeological relics are discovered during construction. Procedures to monitor works in sensitive areas, including reporting and notification of accidental damage to heritage fabric. • <u>Interpretative approaches during construction, such as use of hoardings for interpretative displays.</u>
H2	Prior to the commencement of any demolition works (including reconfiguration of spaces), refurbishment works (including painting) and/or re-purposing of spaces within Wynyard Station and Transport House, annotated plans and a photographic recording would be undertaken of all areas to be modified by the proposal. This includes:

ID number	Mitigation measure
	<ul style="list-style-type: none"> • Plans and photographs illustrating the current layout and uses. • Plans and photographs of the original art deco ceiling treatment within the former Railway Refreshment Rooms and the preparation of a Reflected Ceiling Plan which would record the remaining features of the ceiling prior to demolition. • A historic paint test analysis of heritage fabric that would be impacted by the proposal.
H3	Prior to works commencing, contractors shall be briefed as to the sensitive nature of the site and any recommended mitigation measures or controls required.
H4	<p>In the event that any unexpected historical archaeological relics or original fabric is discovered during construction at the site (including Wynyard Park), works in the affected area(s) would cease and the Office of Environment and Heritage (Heritage division) would be notified. Further assessment, documentation or approval may be required before site works could recommence in the affected area(s).</p> <p>Records of any original finishes exposed during works should be lodged with Transport for NSW. This should include photos, location plans and samples of finishes, as appropriate.</p>
H5	<p>In the event that original fabric is discovered in Wynyard Station or Transport House, the following steps and considerations would be undertaken in consultation with a suitably experienced heritage practitioner as part of the stop work procedures:</p> <ul style="list-style-type: none"> • If original finishes are discovered, the finishes are to be recorded and sampled in accordance with relevant OEH (Heritage Division) guidelines. <u>This is to include photographic archival recordings.</u> • In-situ retention of the features and incorporation into the proposal design, where feasible and reasonable, would be investigated. • If in-situ retention is feasible, methods to remove modern finishes that minimise potential damage to the original fabric would be implemented.
H6	A lighting design for the unpaid concourse would be developed during detailed design in consultation with a suitably experienced heritage practitioner and in consultation with Sydney Trains. The lighting design would include a sympathetic response and transition between the western unpaid concourse (within Transport House) and other areas of the station.

Transport House

ID number	Mitigation measure
H7	An approval under Section 60 of the <i>Heritage Act 1977</i> would be obtained prior to any works associated with the proposal commencing within Transport House.
H8	No structural modifications to the façade of Transport House (along its York Street and York Lane façade) are permitted as part of this proposal.
H9	During detailed design, the refurbishment of the York Street foyer, reconstruction of the western

ID number	Mitigation measure
	fire staircase and fit out of the basement levels of Transport House (including the western unpaid concourse) would be finalised in consultation with a suitably experienced heritage practitioner and Sydney Trains (Heritage). The design of York Street foyer would investigate opportunities for salvage of any original fabric and/or heritage interpretation associated with Transport House, as well as the integration with Wynyard Walk.
H10	Original tiles and flooring within the western corridor of the York Street foyer are to be conserved and retained in-situ, and protected during construction to prevent damage.
H11	An experienced heritage practitioner would supervise the removal of modern fittings within Transport House, including the York Street foyer.
H12	The position of service utilities (such as power and air conditioning) within the basement levels of Transport House would use existing openings within ceilings/walls where feasible. The location of final openings would be determined in consultation with an experienced heritage practitioner.
H13	Two timber doors located within basement Level 1 of Transport House, which would be removed (after necessary archival recordings have been completed) to accommodate toilet amenities, would be re-used within basement Level 1. All other timber doors found in basement levels of Transport House impacted by the proposal would be retained in situ during the works. Where there is a requirement to remove them, the doors are to be packed and stored to prevent damage to the doors. The door frames and architraves are to be temporarily protected with a localised timber hoarding/casing.
H14	During detailed design, consideration would be given to the feasibility of incorporating design features that meet BCA requirements and reflect the original design of the western fire staircase, including the art deco tiling, stair design and re-use of the original balustrade.
H15	Structural changes below stairs and escalators within Transport House are to be subject to a structural assessment prior to any demolition or modification work being undertaken to prevent damage to remaining heritage fabric.

Wynyard Station

ID number	Mitigation measure
H16	The extent of disturbance to the decorative profiles of original art deco ceiling treatments associated with the Railway Refreshment Rooms (including the former Grill Room) would be minimised. Remaining portions of the ceiling are to be retained and protected within modern ceiling finishes.
H17	Original balustrades would be retained and protected in situ, or retained and re-used within the station design where direct impacts are anticipated. Original remnant timber handrails, that have not been previously painted, are to be kept as exposed timber.

ID number	Mitigation measure
	Additional treatments to original balustrades that are required to comply with the Building Code of Australia would not significantly obstruct views of the railings.
H18	<p>Original tiles that would be impacted would be recorded and salvaged for re-use elsewhere within the station domain.</p> <p>Where original tiles would require removal, methods to remove the original tiles in a manner that avoids or minimises the potential for damage to the tiles would be implemented.</p>
H19	Where repainting works would involve the stripping of painted original metal elements within the station, testing would be undertaken to ensure no original finishes remain. If original finishes are uncovered, the unexpected finds procedure would apply.
H20	Where original timber doors on station platforms are to be removed and replaced with modern fire safety compliant doors, an example of the original doors is to be retained either in storage on site, or relocated to the Transport Heritage NSW movable heritage collection
H21	Where feasible, new doors for back-of-house areas on station platforms would be designed to include a heritage styled sheeting to replicate the appearance of the original panelled doors.
H22	Removal or reduction of the rooms below the staircases on the station platforms is to be subject to a structural assessment prior to any demolition or modification work being undertaken to prevent damage to remaining heritage fabric.
H23	The incorporation of station platform signage that reflects the original signage of Wynyard Station would be considered as part of the wayfinding design on Platforms 3 and 4, and Platforms 5 and 6.
<u>H24</u>	<u>The colour palette of the station design would be determined during detailed design and in consultation with Sydney Trains (Heritage).</u>

Wynyard Park and the former Wynyard Tram Tunnels

ID number	Mitigation measure
<u>H25 H24</u>	All remnant sandstone and landscape elements within Wynyard Park in proximity to the compound and access route are to be protected during construction works within the curtilage of Wynyard Park (if the compound is required)
<u>H26 H25</u>	<p>The area excavated for the temporary construction hoist at Wynyard Park is to be photographically recorded prior to the demolition of the car park surface, and following the establishment of the cross section which provides depths and stratigraphy, to inform the future management of the area.</p> <p><u>An archival recording of the area impacted by, and in the vicinity of Wynyard Park compound, would be completed prior to the commencement of construction associated with the compound.</u></p>

Urban design and visual

ID number	Mitigation measure
V1	Construction site hoarding would be regularly maintained, including the prompt removal of graffiti.
V2	Quality finishes and design features would be incorporated into hoardings at appropriate prominent locations within the station public domain and Wynyard Park. This may include project information or relevant historic information about the station and/or Wynyard Park.
V3	Work spaces within the public domain within the station would be regularly maintained, and where possible, the consolidation of materials and equipment storage behind hoarding.
V4	Lighting levels within public domain areas within the station would be considered to ensure pedestrian amenity and safety is maintained.
V5	Temporary structures and compounds would be removed as soon as practicable. The reinstatement works for Wynyard Park would be determined in consultation with City of Sydney.
V6	Should the tree on Margaret Street be removed for the purposes of a works zone for the proposal, the tree would be replaced following the completion of construction or at a time to be agreed by City of Sydney. The replacement tree would consist of locally endemic native species (unless otherwise agreed by the Principal Manager Environmental Management) and following consultation with City of Sydney (as landowner).
V7	Should construction access be required through Wynyard Park, urban design features would be investigated to minimise impacts associated with the temporary loss of public space and a reduction of visual amenity. These would include: <ul style="list-style-type: none"> • Provision of public seating around the hoardings. • Treatment of hoardings to minimise the intrusion into the visual environment and to minimise graffiti risk.
V8	The area impacted by the Wynyard Park compound (if required) would be minimised as much as possible, and would be reinstated to its original condition as soon as practicable once the compound is no longer required for construction. City of Sydney would be consulted concerning the treatment of the compound hoardings and reinstatement works.
V9	The use of artificial lighting would be minimised wherever possible at Wynyard Park, with all lighting designed and installed in accordance with the requirements of <i>Australian Standard AS4282 Control of the Obstructive Effects of Outdoor Lighting</i> . Lighting would be directed to ensure glare and light spill is minimised beyond the compound footprint
V10	<u>A landscape management plan for Wynyard Park, for areas potentially impacted by the compound, would be prepared in consultation with City of Sydney Council prior to the establishment of the compound.</u> To manage potential impacts on trees close to the excavation of the temporary construction hoist

ID number

in Wynyard Park, the following mitigation measures would be implemented:

- Prior to the excavation of the concrete ceiling of the underlying car park, soil would be carefully removed to expose the underlying root system. A qualified arborist would be present on site during the soil excavation, and would determine the appropriate method to manage roots within the excavation area to minimise impacts to tree health.
- Should roots above 50 mm diameter be discovered within the excavation area, opportunities to adjust the location of the excavation area would be considered, where feasible and reasonable, to avoid the tree roots. Adjustments would need to consider the underlying car park and other nearby trees.

V11	Tree protection measures would be considered for other at-surface activities associated with the Wynyard Park compound during detailed planning and implemented with reference to <i>Australian Standard AS 4970 – Protection of Trees on Development Sites</i>
V12	Spaces with direct interfaces with the public domain that are not used for back-of-house activities would be subject to the conditions of a retail strategy currently being prepared by Transport for NSW.
V13	Following the completion of construction, spaces that are not used for back-of-house purposes would be managed until a permanent use has been established, including the prompt removal of graffiti.

Land use and business impacts

ID number	Mitigation measure
L1	As part of the Community Liaison Plan (refer to mitigation measure G4), surrounding businesses would be consulted to provide details regarding construction activities, scheduling and timing of works including timing of noise or traffic intensive activities
L2	Appropriate signage would be installed to support wayfinding and maintain public awareness of businesses which remain operational during construction
L3	Building condition <u>and City of Sydney council asset condition</u> surveys would be completed both before and after the works at potentially affected properties <u>and council assets</u> , to identify existing damage and any project related damage
L4	The termination and/or vacation of remaining leases on the concourse is to be staged so that areas are made available to the proposal only as they are needed
L5	A 'dial before you dig' search would be completed for the excavation area associated with the Wynyard Park compound (if required). If necessary the excavation area would be adjusted, if required, to avoid utilities and with consideration to the underlying car park and tree roots.
L6	Property acquisition (where required), including compulsory acquisition, would be undertaken in accordance with <i>Land Acquisition (Just Terms Compensation) Act 1991</i> .

Hazards and Risk

ID number	Mitigation measure
R1	The storage, handling and use of hazardous materials would be undertaken in accordance with the <i>Work Health and Safety Act 2011</i> , the <i>Work Health and Safety Regulation 2011</i> and the <i>Storage and Handling of Dangerous Goods – Code of Practice</i> (WorkCover, 2005).
R2	<p>The Construction Environmental Management Plan would include measures to ensure the appropriate control and management of hazardous materials:</p> <ul style="list-style-type: none"> • Cease work immediately in affected areas should suspected asbestos or other hazardous materials be encountered. • Prepare site specific work health and safety plans and safe work method statements. • Provide training for all construction personnel, including safe management of hazardous materials and location and use of spill management equipment where required. • Provide secure, bunded areas for the storage of fuels, oils, paints and other hazardous materials. • Locate construction worksites behind hoardings where practicable. Where possible, works required within areas accessed by the general public would be undertaken outside of peak periods. The work area would be made safe for public access immediately following the work. • Ensure worksites are kept clean and tidy at all times.
R3	<p>All construction works which are near or around utilities would be carried out in accordance with the following, but not limited to:</p> <ul style="list-style-type: none"> • Work Health and Safety Act 2011. • Work near Underground Assets Guide (WorkCover, 2007). • Dial before You Dig Assets Protection Guidelines.
R4	<p>The management of hazardous materials during the operation of the proposal would be consistent with the existing management practices at Wynyard Station and would comply with the <i>Work Health and Safety Act 2011</i> and the <i>Work Health and Safety Regulation 2011</i></p>

Greenhouse gas

ID number	Mitigation measure
G1	<p>Opportunities to minimise the overall greenhouse gas emissions would be investigated during procurement, design and construction stages of the proposal. These would include:</p> <ul style="list-style-type: none"> • Use of construction materials containing recycled content, such as recycled aggregates in bricks, or recycled steel, where reasonable and feasible. • Use of more energy efficient equipment during construction. • Use of electrical energy derived from a renewable source or the purchasing of Green Power, if

available.

- Minimising travel distances for the transportation of materials and waste by using local sources for materials and local disposal areas for waste.
- Minimising the number of movements associated with the transport of materials and/or waste from the site.
- Use of energy efficient electrical operational systems and HVAC systems to maximise energy efficiencies during the operational stage of the proposal (for example, zoned lighting and sensorised heating/cooling).

G2	Project planning would be undertaken to ensure that the vehicle movements and construction activities have been planned efficiently and to minimise double handling of materials and waste, haulage distances and fuel use.
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Sustainability

ID number	Mitigation measure
S1	Risks of future climate change would be considered during detailed design by the construction contractor. Where medium or high risks to proposal infrastructure have been identified, the construction contractor would review existing design policies, specifications or practices to consider the impacts of climate change. This would include the incorporation of energy efficiencies into the design to offset or otherwise reduce the impact of energy losses associated with temperature increases.
S2	Stop work thresholds for construction and operation activities (for example, for extreme heat or storm events) would also be implemented in line with current workplace health and safety practices.
S3	Provide information for workers driving during high rainfall, elevated temperature or extreme weather events which could result in vehicle breakdown. Information should also be provided to customers, particularly in relation to elevated temperature (hot days).

Air Quality

ID number	Mitigation measure
A1	The Construction Environmental Management Plan would include management measures to prevent or control the release of pollutants and minimise air quality impacts during construction. These measures would include: <ul style="list-style-type: none">• Implementation of dust management measures during excavation and earthworks in Wynyard Park. Measures may include wetting down exposed soil and stockpiles, covering exposed stockpiles, stopping work during windy weather and using hoardings to prevent the spread of soil outside of the work area.

- Loading, unloading and operating trucks in a manner that minimises dust impacts to surrounding environment, such as covering loads and utilising skips.
- Implementation of dust management measures during demolition, such as provision of hoardings or containment to minimise the spread of dust, wetting down surfaces during demolition and concrete cutting works.
- Provision of appropriate extraction and ventilation during demolition and construction works in underground areas particularly during dust intensive activities such as concrete cutting and excavation.
- Provision of appropriate extraction, ventilation and personal protective equipment during removal of hazardous materials.
- Sweeping and cleaning of the construction areas as well as the broader station areas to minimise the spread of dust.
- Maintaining all plant and equipment in good working order in accordance with manufacturer's specifications.
- Switching off all plant and equipment when not in use.

Waste Management

ID number	Mitigation measure
W1	<p>Waste materials requiring removal from site would be classified, handled and stored onsite in accordance with <i>Waste Classification Guidelines</i> (DECCW, 2009) and <i>NSW Government Resource Efficiency Policy</i> (OEH, 2014). Waste generated by the proposal would be disposed to a suitably licensed landfill or waste disposal facility</p>
W2	<p>A Waste Management Plan (WMP) would be developed as part of the CEMP in accordance with the WARR Act, the legislation and relevant guidelines. The WMP would include the following management measures for each waste stream:</p> <ul style="list-style-type: none"> • Demolition waste and construction waste: <ul style="list-style-type: none"> ○ Ensure correct quantities are ordered and delivered to the site. ○ Investigate the use of recycled materials, including concrete and other construction materials. ○ Transport concrete and other suitable materials (such as scrap metals and tiles) to designated crushing and recycling plants and concrete and other suitable materials (such as scrap metals and tiles) to designated crushing and recycling plants. • General waste and domestic waste: <ul style="list-style-type: none"> ○ General waste and recycling bins would be provided on site for construction waste and litter and would be regularly collected and disposed of appropriately. • Hazardous waste:

ID number	Mitigation measure
	<ul style="list-style-type: none"> ○ Management of asbestos containing material (ACM) would be undertaken in accordance with: <ul style="list-style-type: none"> ▪ <i>Work Health and Safety Act 2011.</i> ▪ Code of Practice for the Safe Removal of Asbestos 2nd Edition (National Occupational Health and Safety Commission, 2005a). ▪ Code of Practice for the Management and Control of Asbestos in Workplaces (NOHSC, 2005b). ▪ <i>Protection of the Environment Operations (Waste) Regulation 2005 – clause 42 special requirements relating to asbestos waste.</i> ▪ AS2601:2001 Demolition of Structures. ○ Removal of ACM would generally involve the following: <ul style="list-style-type: none"> ▪ Development of a site specific asbestos removal control plan. ▪ Establishing asbestos removal boundaries with appropriate security signage and barriers. ▪ Preparation of the work area. ▪ Use of the wet removal method where feasible and reasonable. ▪ Removal of ACM in sections and placement in suitably labelled and properly sealed asbestos waste containers. ▪ Decontamination of the workplace, tools and personal protective equipment.
W3	Waste management during the operation of the proposal would be consistent with the existing waste management practices at Wynyard Station.

Cumulative Impacts

ID number	Mitigation measure
C1	The Construction and vibration management plans for surrounding developments would be reviewed to understand the timing of noisy construction activities, and considered in preparing the CVMP for the proposal.

ID number	Mitigation measure
C2	<p>Consultation with key authorities, including Roads and Maritime Services, Sydney Buses and City of Sydney, in addition to Brookfield and contractors responsible for the delivery of the CSELR and the proposed One Carrington Street development, to:</p> <ul style="list-style-type: none"> • Manage and coordinate changes to the surface road network in the vicinity of Wynyard Station. • Manage and coordinate changes to pedestrian access to and in the vicinity of Wynyard Station, • Ensure access is maintained at all times and undertake changes to pedestrian access to Wynyard Station outside of commuter peak periods. <p>Outcomes of the consultation would be incorporated into the Construction Environmental Management Plan for the proposal.</p> <p>Forums, such as a CBD Transport Taskforce, would be used where necessary to facilitate coordinated approaches to pedestrian and traffic impact mitigation.</p>
C3	Transport for NSW would continue to consult with Sydney Buses concerning permanent changes to bus routes and scheduling, and potential implications on construction activities associated with the proposal and implement additional measures if necessary
C4	Shared construction traffic access would be negotiated with Brookfield for the use of Wynyard Lane, Wynyard Lane Car Park, Wynyard Lane goods lift and Cumberland Street. If access can be negotiated, a combined Traffic Management Plan would be prepared including engagement with Coles supermarket.
C5	If possible, negotiate a common vehicle loading area on Margaret Street and/or George Street to be used by both the proposal, Brookfield and CSELR, to minimise disruption to construction activities (due to the limited space). Site safety procedures and controls would need to be maintained by both parties.

Other

ID number	Mitigation measure
O1	If Wynyard Park compound is required, an erosion and sediment control plan would be prepared using the principles in the Blue Book – Managing Urban Stormwater Soils and Construction (Landcom, 2004).
O2	<u>If Wynyard Park compound is required, the landowner would be consulted prior to the establishment of the compound.</u>

6 Conclusion

6.1 Conclusion

The Wynyard Station Upgrade REF included a comprehensive assessment of the likely environmental impacts as a result of the proposal. Potential impacts were identified and addressed in the REF and mitigation measures were recommended where appropriate.

The REF was placed on public display from 4 December to 19 December 2014.

A total of 30 submissions were received which included 23 submissions from the community, six submissions from organisations and one submission from a government agency. This Submissions Report has documented and considered the submissions received and outlined Transport for NSW's response.

Since display of the REF, additional investigations have been completed and modifications to the proposal have been identified. This Submissions Report has assessed the findings of the investigations and the potential environmental impacts of the intended modifications.

Some additional management measures have been identified in this report. The management of all other impacts would be consistent with the management and mitigation measures detailed in the REF. All mitigation measures for the proposal are summarised in Table 6.

6.2 Next Steps

Transport for NSW will review the REF and Submissions Report prepared for the proposal and determine whether the requirements for assessment under Part 5 of the EP&A Act have been met. Transport for NSW will also determine whether issues raised by stakeholders and the community have been appropriately addressed and considered in the Submissions Report.

Following this review, Transport for NSW will make a determination as to whether or not to proceed with the proposal, in accordance with the provisions of Part 5 of the EP&A Act.

Should the proposal be approved, Transport for NSW will continue to consult and inform community members, government agencies and other stakeholders during the pre-construction and construction phases. An overview of the consultation activities that will be undertaken by Transport for NSW during the pre-construction and construction phases of the proposal is provided in Section 2.5.

7 References

- AECOM Australia Pty Ltd (2014). Wynyard Station Upgrade – Review of Environmental Factors. Prepared for Transport for NSW.
- ARUP (2011). Wynyard Precinct Master Plan Demand Data Report. Prepared for the Department of Transport.
- DECC 2009, *Interim Construction Noise Guidelines*, DECC.
- FuturePast Consulting Pty Ltd (2014). *Wynyard Station Upgrade – Statement of Heritage Impact*. Prepared for Transport for NSW.
- JBA Urban Planning Pty Ltd (2014). *State Significant Development Environmental Impact Statement – One Carrington Street, Sydney – Transport Interchange, Commercial and Retail Development*. Prepared for Sovereign Wynyard Centre Pty Limited.
- Transport for NSW (2012a). *NSW Long Term Transport Master Plan*. TfNSW, Sydney.
- Transport for NSW (2012b) *Sydney's Rail Future – Modernising Sydney's Trains*. TfNSW, Sydney.
- Transport for NSW (2013). *Sydney City Centre Access Strategy*.

Appendix A – Summary of submissions received

Abbreviations

A – Alternatives and options	PA – Pedestrian access (operation)
AQ – Air quality	PAC – Pedestrian access (construction)
B – Business impacts	PD – Project description and scope
H – Heritage	PL – Property and land use
J – Proposal need and justification	PS – Planning and statutory requirements
NV – Noise and vibration (construction)	S – Strategic planning
O – Other	TTC – Traffic and transport (construction)
PA – Pedestrian access (operation)	U – Urban design and visual (operation)

Stakeholder ID No.	Response number
1	PA1, PD1, PD2, PD8
2	PA3, PA10
3	PA4, PA5
4	PD1,PD10
5	U1
6	PA2
7	PD10
8	AQ1, B1, O1, PD3, TTC1
9	PD10
10	H1
11	PD1
12	PD1
13	O2, U2
14	PD10
15	A1, PD1
16	PD1
17	H2, PA6, PA7, PA8, S1, S2,
18	H2, PA6, PA7, PA8, S1, S2,
19	PD10

Stakeholder ID No.	Response number
20	PD10
21	B2, PA4, PA9, S4
22	A1, O3, O4, PD8, PD11, PD14, S3
23	O5
24	H3
25	PD9, PD8
26	PA8, PA11
27	PD1, PD4, J1
28	PA12, TTC6, TTC7, TTC8
29	H3, H4, H5, H6, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16, H17, H18, O6, PAC1, PAC2, PL1, PD5, PD12, PD13, TTC2, TTC3
30	H7, H8, H11, H19, NV1, NV2, NV3, NV4, NV5, NV6, NV7, NV8, NV9, NV10, O7, O8, PS1, PL2, PL3, PL4, PL5, PL6, PL7, PD6, PD7, PD11, PD15, PD16, PD17, PD18, PD19, TTC4, TTC5, TTC9, U3

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Appendix B – Sensitive noise receiver map

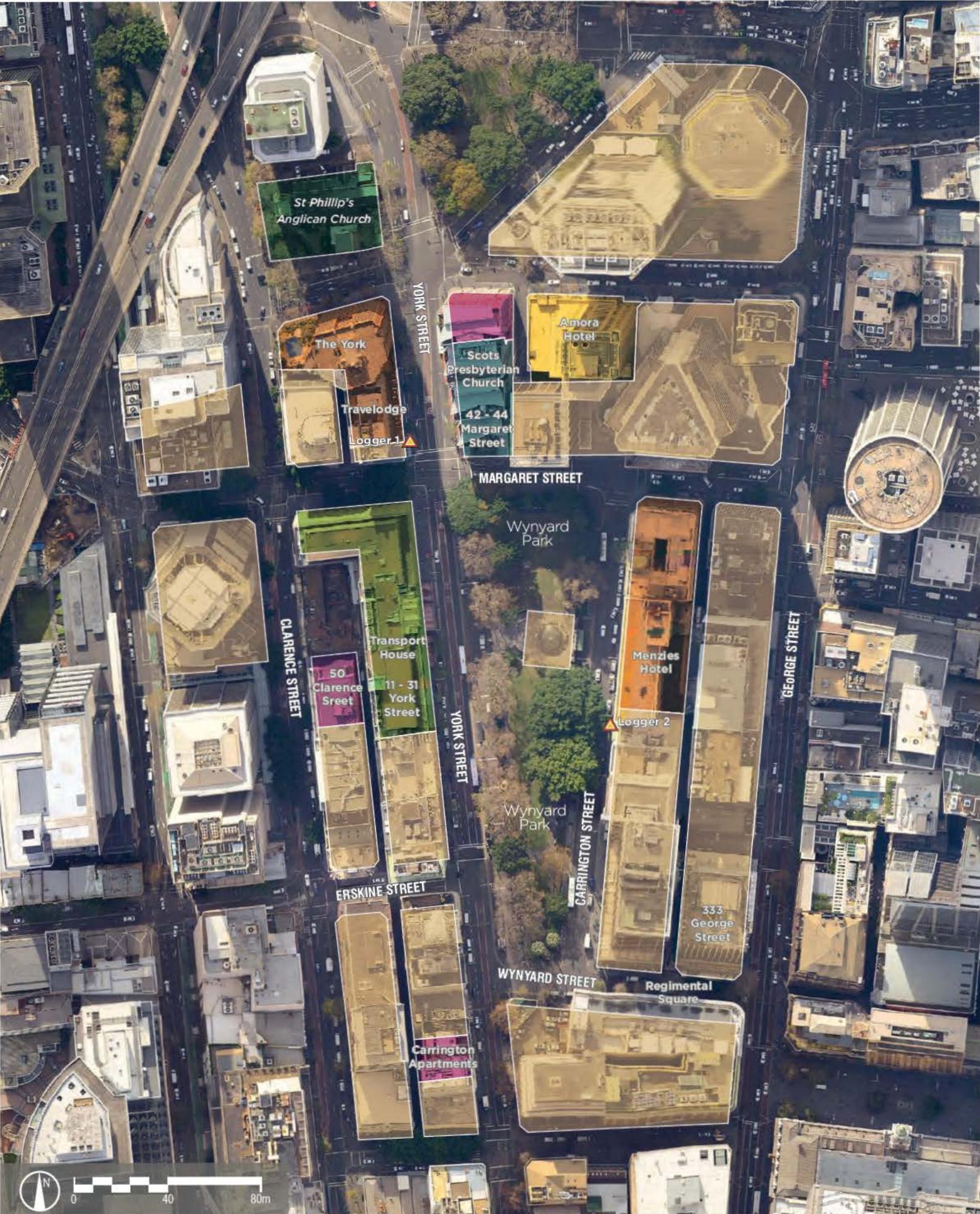


Figure 14 - Sensitive and other noise receivers

Commercial
 Commercial/residential
 Commercial/hotel

Commercial/educational
 Hotel
 Place of worship/residential

▲ Place of worship
▲ Noise monitoring location

