

Chapter 8

Non-Aboriginal heritage

8 Non-Aboriginal heritage

This chapter provides an assessment of the potential impact on non-Aboriginal heritage items and areas of archaeological potential as a result of this proposal, and identifies mitigation measures to minimise these potential impacts. This chapter draws on information provided in Technical Paper 3 (Non-Aboriginal heritage).

8.1 Overview

Potential non-Aboriginal heritage impacts have been avoided and minimised where possible. For example, station excavation work at the Hunter Street Station (Sydney CBD) construction sites has been designed to retain and protect the Stage listed heritage item Skinners Family Hotel, and avoid direct impacts on the State listed heritage item Tank Stream and Bennelong Stormwater Channel No 29A. Potential impacts to built heritage items would be mitigated through design development and the implementation of mitigation measures, including archival recording and reporting, salvage and adaptive reuse opportunities.

Potential ground-borne vibration impacts to non-Aboriginal heritage items in the vicinity of the Pyrmont Station and Hunter Street Station (Sydney CBD) construction sites have been assessed as being between neutral and moderate. This includes heritage items which are directly above the tunnel alignment.

Built heritage impacts within the Pyrmont Station western construction site would result in negligible direct impacts (with the exception of one unlisted potential heritage item) and moderate indirect impacts to the Pyrmont Heritage Conservation Area.

Within the vicinity of the tunnel alignment and the Pyrmont Station and Hunter Street Station (Sydney CBD) construction sites, potential settlement impacts would be limited, with negligible or slight (minor) settlement impacts anticipated at the majority of heritage items. Further assessment would be undertaken during detailed construction planning and appropriate mitigation measures would be implemented to reduce the potential for settlement impacts.

At the Pyrmont Station construction sites, it is predicted that previous construction activity and basement excavations have removed any buried archaeological resources to varying extents. Proposed construction work at Pyrmont Station construction sites would further impact any remaining archaeological resources, which would be managed in accordance with an Archaeological Research Design.

At Hunter Street Station (Sydney CBD) construction sites, the impact assessment for the proposal has identified the potential for State significant archaeological resources relating to De Mestre's counting house and residence, and locally significant resources related to former road surfaces of the original carriage lane of De Mestre Place, which would be managed in accordance with an Archaeological Research Design.

Where heritage items, including significant archaeology, are impacted by work associated with this proposal, consideration would be given to their inclusion in the Heritage Interpretation Plan for future stages.

8.2 Legislative and policy context

The Secretary's Environmental Assessment Requirements relating to non-Aboriginal heritage, and where these requirements are addressed in this Environmental Impact Statement, are outlined in Appendix A.

8.2.1 World and Commonwealth

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* provides a legislative framework for the protection and management of matters of national environmental significance. This includes heritage places of national and international importance which are protected through their inclusion on the World Heritage List, Commonwealth Heritage List or the National Heritage List.

8.2.2 New South Wales

The *NSW Heritage Act 1977* (Heritage Act) provides protection for items of 'environmental heritage' in NSW. 'Environmental heritage' includes places, buildings, work, relics, movable objects or precincts considered significant based on historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values. Items considered to be significant to the state are listed on the State Heritage Register (SHR).

Although the requirements for permits under the Heritage Act are not required for an approved State significant infrastructure project, the Heritage Act is relevant in that it guides assessment and defines statutory listed items. Relevant regulations are required to be used under the Secretary's Environmental Assessment Requirements and certain sections of the Heritage Act are potentially relevant to the project, such as Section 146 (notification of a relic), and would still be applicable to approved State significant infrastructure projects.

Statutory registers that provide legal protection for heritage items include:

- The State Heritage Register
- Government agency Heritage and Conservation Registers established under Section 170 of the Heritage Act (s170 registers)
- Environmental heritage schedules of local environmental plan (LEP).

8.3 Assessment methodology

The non-Aboriginal heritage assessment comprised:

- Desktop investigation involving the identification of listed and unlisted heritage items
- Site walkovers undertaken on 14 May 2021, including assessments of condition and integrity of known heritage items, identification and assessment of potential heritage items as well as detailed examination of ground levels and the urban landscape
- Preparation of heritage and archaeological impact assessments for all listed and potential heritage items identified within the study areas
- Identification of mitigation measures to minimise impacts to the significance of heritage items and significant non-Aboriginal archaeological resources.

8.3.1 Study areas

Tunnel alignment study area

Listed and potential heritage items located above the proposed tunnel alignment or within the preliminary settlement contours used to identify the likely zone of settlement influence (refer to Chapter 14 (Groundwater and ground movement)) have been assessed for potential settlement impacts. Tunnel sections between stations would generally be too deep to affect heritage items or archaeological deposits and are generally not included in the study area, unless identified as impacted in the noise and vibration assessment – refer to Chapter 7 (Noise and vibration). In those instances, the item has also been included in this heritage assessment.

Given the tunnelling work would be underground, no assessment of potential indirect visual impacts has been carried out.

Construction site study area

The construction site study area for the non-Aboriginal heritage assessment was defined as the four proposed construction sites (two in Pyrmont and two in the Sydney CBD) and an additional 25 metre buffer around each of the construction sites. The construction site includes the physical footprint of each site, any excavation or underground work associated with station construction, such as mined caverns and underground pedestrian connections (adits) as well as ancillary works and any temporary facilities during construction. Non-Aboriginal archaeological resources would only potentially be impacted by direct ground disturbance. The construction site study area is shown in Section 8.8 and Section 8.9.

Potential vibration impacts have been assessed to heritage items within 150 metres of the construction sites (refer to Chapter 7 (Noise and vibration)).

The study area is used to identify heritage items and their potential impacts as a result of the proposal and includes heritage items that may be potentially affected by either direct impacts (such as from construction, excavation or vibration) and indirect impacts (such as items within the visual catchment). Potential heritage impacts caused by settlement and power supply routes have also been included within this assessment. The study area also includes any underground work associated with station construction, such as mined caverns and underground pedestrian connections.

The Bays tunnel launch and support site

The Bays tunnel launch and support site would be located entirely within the construction footprint of The Bays Station construction site approved under the Stage 1 of the planning approval process for Sydney Metro West. As the proposed work and heritage and archaeological impacts for The Bays Station construction site have been previously assessed, no further non-Aboriginal heritage or archaeological assessment of The Bays tunnel launch and support site is required. However, potential vibration and settlement impacts for the proposed tunnelling work at The Bays are included as part of the overall impact assessment for vibration and settlement heritage impacts.

8.3.2 Identification of heritage items

Heritage register searches were carried out in March 2021. Heritage items within both study areas were identified through a search of relevant State and Federal statutory and non-statutory heritage registers, including the World Heritage List, Commonwealth Heritage List, National Heritage List (NHL), the SHR, various s170 registers, the Sydney LEP (SLEP) 2012, the Sydney Regional Environmental Plan (SREP) 2005, the National Trust Register (NTR) and the now-repealed Register of National Estate (RNE).

Items listed on these registers have been previously assessed against the NSW Heritage Office guideline *Assessing Heritage Significance* (NSW Heritage Office, 2001). Statements of heritage significance identified in this chapter are consistent with those included in relevant heritage inventory sheets and are based on the guideline.

Where relevant, Conservation Management Plans and other heritage management documents and guidelines have been used to provide additional information regarding heritage significance.

During the site walkovers carried out in May 2021, additional items of heritage potential were identified. These items were only assessed from the exterior as visible from the public domain. These items were cross-checked against existing registers and were found to be unlisted. Potential heritage items have been considered and assessed in Sections 8.5 to 8.9.

8.3.3 Significance of heritage items

Determining the significance of heritage items or a potential archaeological resource is carried out by using a system of assessment centred on the Australia ICOMOS Burra Charter, 2013 (Burra Charter). The principles of the Burra Charter are relevant to the assessment, conservation and management of sites and relics.

If an item meets one of seven heritage criteria, and retains the integrity of its key attributes, it can be considered to have heritage significance. The significance of an item or potential archaeological site can then be assessed as being of local or State significance depending on its importance in a local or NSW State context.

The seven heritage criteria include:

- Criterion (a): Historical significance
- Criterion (b): Associative significance
- Criterion (c): Aesthetic significance
- Criterion (d): Social significance
- Criterion (e): Research potential
- Criterion (f): Rarity
- Criterion (g): Representativeness.

The assessed heritage significance of all identified relics, items, areas and/or landscapes that are considered to be potentially directly or indirectly impacted by the proposal are identified in Technical Paper 3 (Non-Aboriginal heritage).

8.3.4 Heritage impact assessment

Impacts on heritage items and places are identified as:

- Direct impact, resulting in the demolition or alteration of fabric of heritage significance or significant archaeological resources
- Indirect impact, resulting in changes to the setting or curtilage of heritage items or places, historic streetscapes and landscapes, visual amenity or views
- Potential direct impact, resulting in impacts from vibration, subsidence, architectural noise treatment and demolition of adjoining structures
- Archaeological impact, resulting in impacts to archaeological resources predicted to occur within the study areas.

Once the level of all four types of impacts are assessed, adverse and positive impacts to aspects of significance are balanced to determine an overall level of impact to the heritage significance of the listed item as a result of the proposal. Where major impacts to heritage significance are identified, discussion is provided on whether the item would continue to meet the threshold of significance necessary for heritage listing. The terminology and definitions used to assess the magnitude of direct and indirect heritage impacts are as follows:

- **Major impact** – Actions that would have a long-term and substantial impact on the significance of a heritage item or actions that would remove or impact key historic building elements, key historic landscape features, intangible cultural heritage values, or significant archaeological materials. Major impacts would result in comprehensive and irreversible changes to the setting, landscape, or character of heritage items, thereby resulting in a change of historic character, or altering of a historical resource. These actions cannot be fully mitigated and would result in comprehensive changes to the significance of the item
- **Moderate impact** – Actions involving considerable changes to a heritage item which would impact the items significance, including altering the setting or landscape of a heritage item, partially removing archaeological resources, or the alteration of significant elements of fabric from historic structures. Moderate impacts may involve considerable changes to intangible cultural heritage. The impacts arising from such actions may be able to be partially mitigated
- **Minor impact** – Actions that would result in slight impacts to the significance of a heritage item, through changes to archaeological materials, historic building elements, few changes to key landscape elements that would result in slight changes to the visual setting. The impacts arising from such actions can usually be mitigated
- **Negligible impact** – Actions that would result in minimal changes to the significance of heritage items. These impacts would not usually require mitigation
- **Neutral impact** – Actions that would have no change and therefore no impact to the significance of a heritage item
- **Positive impact** – Actions which improve the condition of fabric or local setting which improves the legibility of the significance of the heritage item.

The proposal would potentially include both permanent and temporary impacts to heritage. Permanent impacts may include the removal of features including structures, whilst temporary impacts may be the installation of acoustic sheds which would eventually be removed. Unless otherwise stated, impacts to heritage are assumed to be permanent.

As described in Chapter 4 (Stakeholder and community engagement), consultation was undertaken with the Sydney Metro Heritage Working Group and the Heritage Council of NSW to discuss the approach to the non-Aboriginal heritage assessment.

Assessment of visual impacts

Heritage items that fall within the study area have been assessed for potential visual impacts. In order to assess visual impact on heritage significance, sightlines from the heritage item to the proposal have been established. Both the views towards the heritage item (whether the proposal would impair views of the item's significant visual characteristics) and views away from the item (whether the proposal would impair views of the heritage-significant surroundings or character of the item) have been assessed.

Assessment of vibration impacts

In locations where heritage items are adjacent to demolition, construction or excavation work, an assessment of potential direct impacts through vibration has been undertaken (refer to Chapter 7 (Noise and vibration)). A conservative vibration damage screening level of 7.5 millimetres per second peak particle velocity has been adopted for heritage items potentially impacted by the proposal. This screening level has been established with reference to the minor cosmetic damage criteria in British Standard BS 7385:2 – 1993. The vibration levels specified in this standard are designed to minimise the risk of threshold or cosmetic surface cracks, and are set well below the levels that have potential to cause damage to the main structure, except where the item is already structurally unsound. Sydney Metro would complete condition surveys of potentially affected buildings and structures near to the tunnel and excavations prior to the commencement of excavation, where appropriate. Where heritage items are found to be structurally unsound, a more conservative cosmetic damage screening level of 2.5 millimetres per second peak particle velocity would be applied.

During main tunnelling work, it is anticipated that ground-borne vibration associated with tunnel boring machine use would be much lower than the 7.5 millimetres per second peak particle velocity screening level. As such, the study area for assessment of potential vibration impacts to heritage items does not extend to areas above the tunnel alignment that are outside the nominated study area for each construction site.

Assessment of power supply routes

Heritage items that may be temporarily impacted by the power supply route work have been identified and potential impacts assessed. Potential preliminary archaeological impacts have also been considered. Heritage and archaeological impacts as a result of the power supply route work are outlined in Section 8.6.

Assessment of settlement impacts

Ground excavation has the potential to cause ground movement caused by the redistribution of the stresses within the ground or groundwater drawdown. A preliminary high-level assessment of potential ground movement associated with the proposal has been carried out as described in Chapter 14 (Groundwater and ground movement). Section 8.5 outlines the risk category for each heritage building and any associated potential heritage impact. For listed heritage infrastructure, the requirement for further assessment is identified as appropriate. It is further noted that some heritage and sensitive structures may require detailed assessment in any case.

Assessment of cumulative impacts

Potential cumulative impacts on non-Aboriginal heritage within the study areas have also been considered and are assessed in Technical Paper 3 (Non-Aboriginal heritage). This cumulative assessment is also summarised in Section 8.10. The assessment of views also takes into consideration the item's heritage curtilage, as further described in Section 3.6 of Technical Paper 3 (Non-Aboriginal heritage).

In order to address cumulative impacts, major infrastructure and commercial developments in the vicinity of the proposal have been examined and the combined impact on the heritage significance of each item from these developments with the proposal impacts have been assessed. The approach taken to the assessment of cumulative impacts throughout this assessment is described in Appendix G (Cumulative impacts assessment methodology).

8.3.5 Assessment of potential archaeological impacts

The assessment of historical archaeological potential relates to the study areas' potential to contain historical archaeological resources. This assessment is based on consideration of historic land use, current ground conditions, analysis of the historical development of the study areas, and considering whether subsequent actions (either natural or human) may have impacted on archaeological evidence for these former land uses. The grading and justification for determining archaeological potential is outlined below:

- **Nil** – No evidence of historical development or use or previous removal of all archaeological potential
- **Low** – Evidence of little or low intensity historical development, or previous substantial disturbance and truncation
- **Moderate** – Evidence of known historical development and some previous impacts, with likelihood of archaeological resource with some localised truncation and disturbance
- **High** – Evidence of multiple phases of historical development and structures with minimal or localised later development impacts, with likelihood of largely intact archaeological resource.

The non-Aboriginal archaeological impact assessment (Chapter 7 of the Technical Paper 3 (Non-Aboriginal Heritage)) provides an overview of predicted archaeological resources and their significance, as well as an assessment of potential impacts that would occur from the project. Archaeological Research Designs and archaeological excavation methodologies would be prepared as described in Section 8.11.

8.4 Avoidance and minimisation of impacts

The design development of this proposal has included a focus on avoiding or minimising impact to a number of environmental considerations including non-Aboriginal heritage. This has been achieved through:

- Selecting construction sites that avoid direct impacts to State and local listed heritage items where possible
- Where a heritage item is within a construction site, direct impacts have been avoided or minimised where possible. Specifically, at the Hunter Street Station (Sydney CBD) western and eastern construction sites, where the listed heritage items Bennelong Stormwater Channel No 29A, the Tank Stream and the Former Skinners Family Hotel would be protected and retained.

8.5 Potential tunnelling impacts

8.5.1 Existing environment

Listed heritage items within the tunnel alignment study area were identified through a search of relevant state and federal statutory and non-statutory heritage registers (refer to Section 8.3.2). A total of 42 listed heritage items were identified within the tunnel alignment study area, including:

- No items listed on the World Heritage List
- No items listed on the Commonwealth Heritage List
- One item listed as being of National Heritage Significance
- 17 items listed as being of State Heritage Significance
- 24 items listed as being of Local Heritage Significance.

One unlisted potential heritage item of local significance is also within the tunnel alignment study area.

Further detail of the heritage listings for these items is presented in Section 8.5.2.

8.5.2 Potential settlement impacts

Potential settlement impacts on heritage buildings would range from negligible to slight (minor). A small number of items listed below require further assessment through design development to determine settlement impacts.

The locations of heritage items within the tunnel alignment study area in the vicinity of The Bays tunnel launch and support site are shown in Figure 8-1. The potential settlement impact and associated potential heritage impact on each of these heritage items are summarised in Table 8-1.



Figure 8-1 Listed heritage items within the tunnel alignment study – The Bays tunnel launch and support site

Table 8-1 Potential tunnelling impacts on heritage items – The Bays tunnel launch and support site

Item	Address	Listing	Significance	Potential settlement impact	Potential heritage impact
Glebe Island Silos	Victoria Road, Glebe Island	Port Authority of NSW s170 4560016 SREP No. 26 – City West Part 3 No. 1	Local	Within the zone of influence, and would be subject to further detailed assessment during design development and construction planning.	Further assessment required
Glebe Island Bridge	Bank Street, Victoria Road, Pyrmont	SHR Item no. 01914 RMS s170 register (no item number retrievable)	State	Outside the zone of influence and unlikely to be impacted.	Neutral

The locations of heritage items within the tunnel alignment study area in the vicinity of the Pyrmont Station construction sites are shown in Figure 8-2. The potential settlement impact and associated potential heritage impact on each of these heritage items are summarised in Table 8-2.

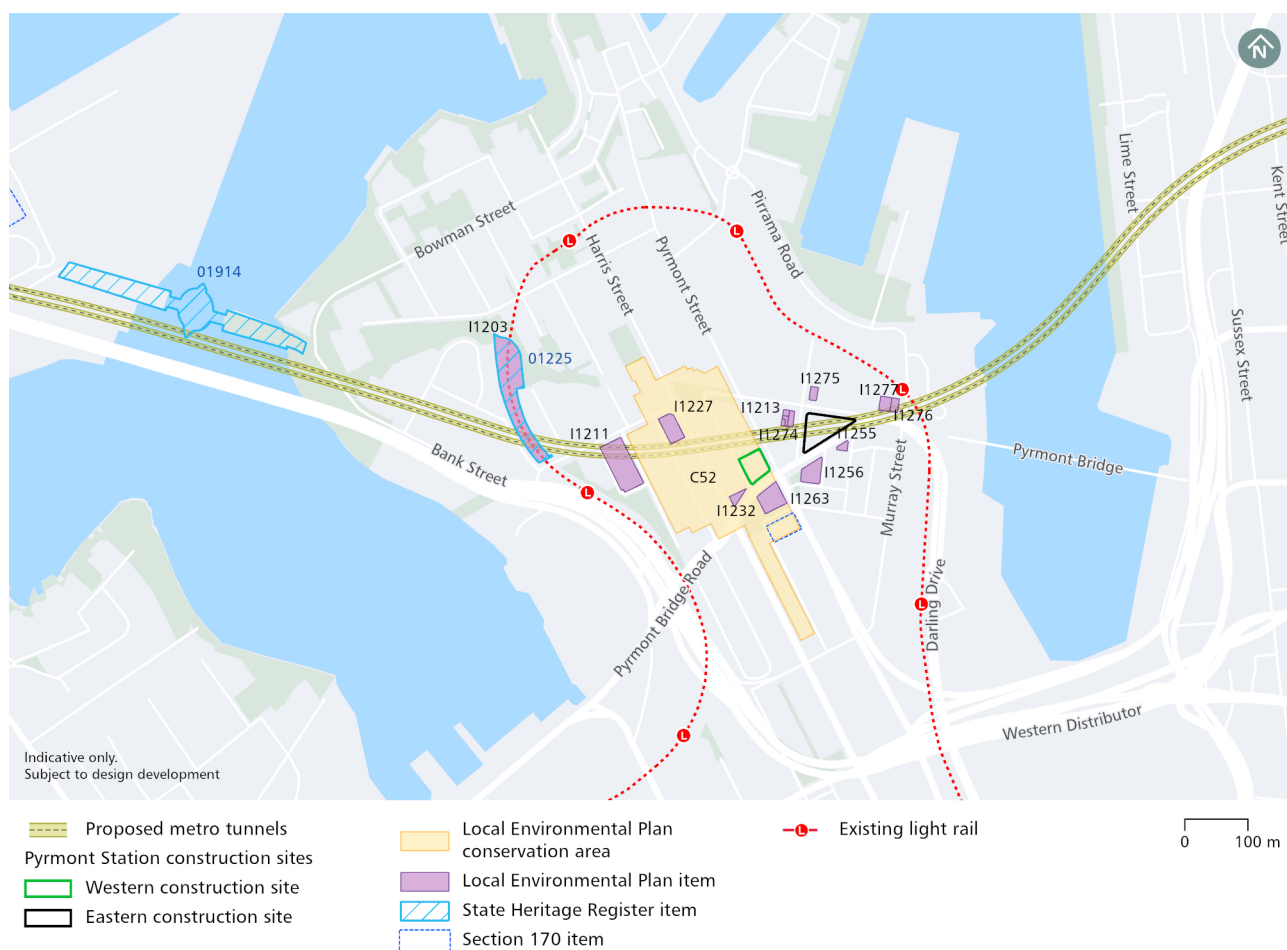


Figure 8-2 Listed heritage items within the tunnel alignment study area - Pymont Station construction sites

Table 8-2 Potential tunnelling impacts on heritage items – Pymont Station construction sites

Item	Address	Listing	Significance
Potential impact: Potential negligible settlement with superficial damage unlikely, resulting in a negligible heritage impact			
Former warehouse 'Festivals Records' including interiors	1-3 Bulwara Road (and 63-79 Millers Street), Pymont	<ul style="list-style-type: none"> SLEP 2012 Item no. I1211 	Local
Terrace group including interiors	135-155 Harris Street, Pymont	<ul style="list-style-type: none"> SLEP 2012 Item no. I1227 	Local
Former New York Hotel	50 Union Street, Pymont	<ul style="list-style-type: none"> SLEP 2012 Item no. I1275 SREP 2005 (City West) Item no. 67 RNE Place ID 100709 	Local
Former Warehouse 'Bank of NSW Stores'	17-21 Pymont Bridge Road	<ul style="list-style-type: none"> SLEP 2012 Item no. I1256 SREP 2005 (City West) Item no. 53 RNE Place ID 100704 	Local
Terrace group including interiors	86-92 Union Street	<ul style="list-style-type: none"> SLEP 2012 Item no. I1276 SREP 2005 (City West) Item no. 123 	Local
Pymont Bridge Hotel	94-96 Union Street, Pymont	<ul style="list-style-type: none"> SLEP 2012 Item no. I1277 SREP 2005 (City West) Item no. 52 RNE Place ID 100703 	Local

Item	Address	Listing	Significance
Potential impact: Potential negligible to slight settlement resulting in possible superficial damage that is unlikely to have structural significance, generating a minor heritage impact			
Pymont Heritage conservation area	Pymont	<ul style="list-style-type: none"> SLEP 2012 Item no. C52 	Local
Potential impact: Potential slight settlement resulting in possible superficial damage which is unlikely to have structural significance, generating a minor potential heritage impact			
Quarryman's Hotel	214–216 Harris Street	<ul style="list-style-type: none"> SLEP 2012 Item no. I1232 SREP 2005 (City West) Item no. 56 RNE Place ID 100706 	Local
Former Industrial Building 'Waite and Bull'	137 Pymont Street, Pymont	<ul style="list-style-type: none"> SLEP 2012 Item no. I1263 SREP 2005 (City West) Item no. 54 RNE Place ID2036 NTR no. 10858 	Local
Corner Shop and Residence 'Charmelu'	63–67 Edward Street, Pymont ('Charmelu' accessed from 35 Union Street)	<ul style="list-style-type: none"> SLEP 2012 Item no. I1213 SREP 2005 (City West) Item no. 68 	Local
Pymont Bridge Road Hotel	11 Pymont Bridge Road, Pymont	<ul style="list-style-type: none"> SLEP 2012 Item no. I1255 SREP 2005 (City West) Item no. 52 RNE Place ID100703 	Local
Terrace group	31–33 Union Street, Pymont	<ul style="list-style-type: none"> SLEP 2012 Item no. I1274 SREP 2005 (City West) Item no. 122 	Local
Potential impact: Within the zone of influence, and would be subject to further detailed assessment during design development and construction planning			
Railway cutting	Pymont	<ul style="list-style-type: none"> SHR item no. 01225 Sydney Trains s170 register (no item number retrievable) SLEP 2012 item no. 1203 RNE Place ID 14311 	State

The locations of heritage items within the tunnel alignment study area in the vicinity of the Hunter Street Station (Sydney CBD) construction sites are shown in Figure 8-3. The potential settlement impact and associated potential heritage impact on each of these heritage items are summarised in Table 8-3.

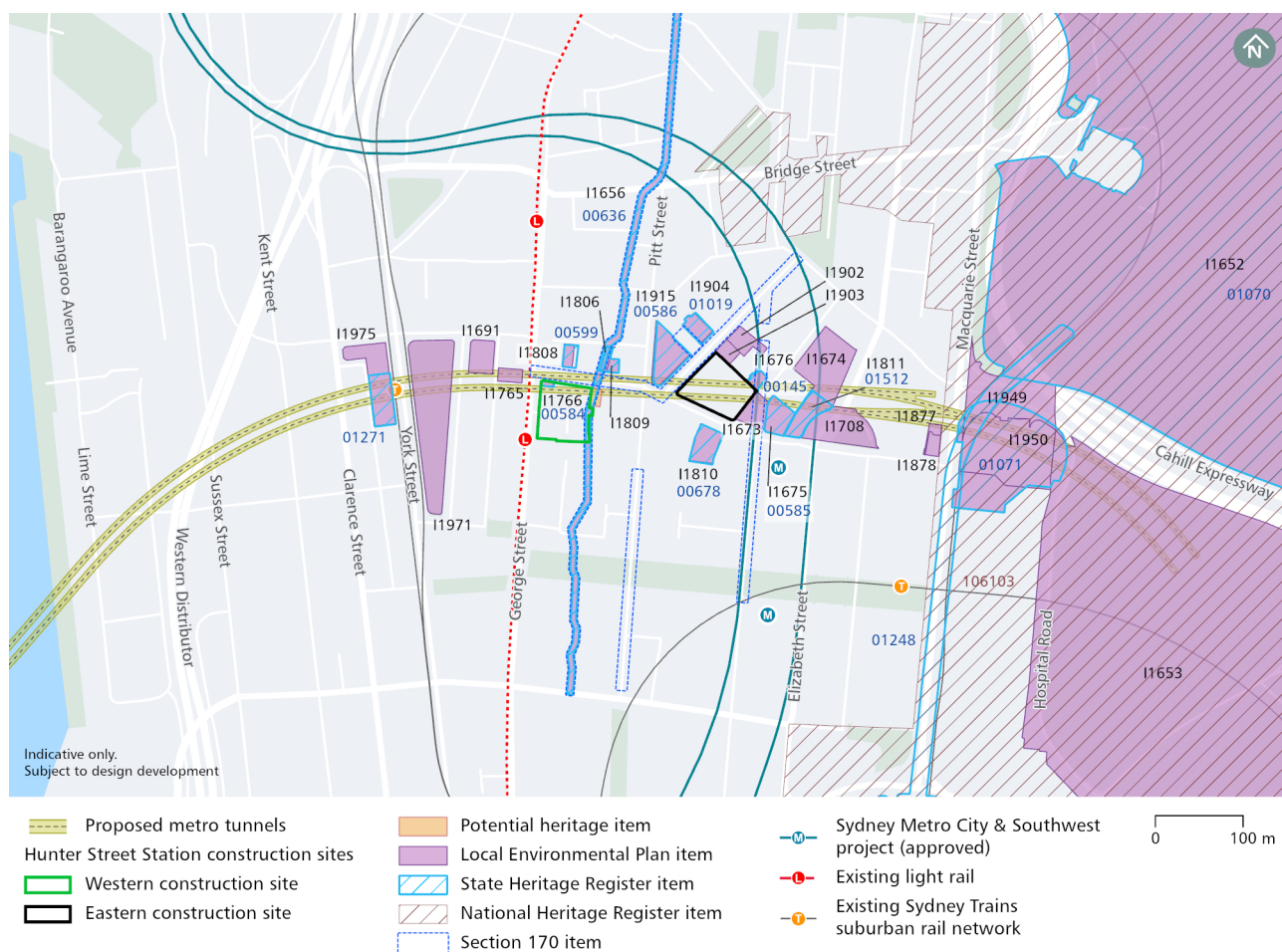


Figure 8-3 Listed heritage items within the tunnel alignment study area – Hunter Street Station construction sites

Table 8-3 Potential tunnelling impacts on heritage items – Hunter Street Station (Sydney CBD) construction sites

Item	Address	Listing	Significance
Potential impact: Outside the zone of influence and unlikely to be impacted, resulting in a neutral potential heritage impact			
Former Railway House (part of Transport House) including interiors	11–31 York Street, Sydney	<ul style="list-style-type: none"> SHR Item no. 01271 Sydney Trains s170 register (no item number retrievable) SLEP 2012 Item no. I1975 RNE Place ID 2351 	State
Wynyard Park including parkland, mature trees, remnant fences, underground conveniences and Lang Statue	York Street, Sydney	<ul style="list-style-type: none"> SLEP 2012 Item no. I1971 	Local
Royal Botanical Gardens and Domain (including Governor's Domain and Civic Precinct)	Sydney	<ul style="list-style-type: none"> NHL Place ID 106103 SHR Item no. 01070 SLEP 2012 Item no. I1653 RNE Place ID 1863 NTR no. 6489 	National

Item	Address	Listing	Significance
Potential impact: Potential negligible settlement with superficial damage unlikely, resulting in a negligible heritage impact			
Former 'Shell House' including interior	2-12 Carrington Street, Sydney	<ul style="list-style-type: none"> SLEP 2012 Item no. I1691 	Local
Former Industrial Building 'Manufacturers Mutual'	12-14 O'Connell Street, Sydney	<ul style="list-style-type: none"> SLEP 2012 item no. I1902 RNE Place ID 19546 NTR no. 6402 	Local
Perpetual Trustee Company	33-39 Hunter Street, Sydney	<ul style="list-style-type: none"> SHR item no. 00678 SLEP 2012 item no. I1810 RNE Place ID 2424 NTR no. 6317 AIA listing no. 4700628 	State
Public Trust Office	33-39 Hunter Street, Sydney	<ul style="list-style-type: none"> SHR item no. 01019 Department of Justice and Attorney General S170 Register (2011) [no item no. provided] SLEP 2012 item no. I1904 	State
Former 'Qantas House'	68-96 Hunter Street, Sydney	<ul style="list-style-type: none"> SHR Item no. 01512 SLEP 2012 Item no. I1811 	State
Wentworth Hotel	2 Bligh Street (and 61-101 Phillip Street), Sydney	<ul style="list-style-type: none"> SLEP 2012 Item no. I1674 	Local
Chifley Square	Chifley Square, Sydney	<ul style="list-style-type: none"> SHR Item no. 01512 SLEP 2012 Item no. I1708 	State
Terrace house 'Horbury House'	171-173 Macquarie Street, Sydney	<ul style="list-style-type: none"> SLEP 2012 Item no. I1877 	Local
Shakespeare Place	Shakespeare Place, Sydney	<ul style="list-style-type: none"> SLEP 2012 Item no. I1949 	Local
Potential impact: Potential slight settlement resulting in possible superficial damage that is unlikely to have structural significance, generating a minor heritage impact			
Former Commercial Building - 'Peapes Menswear'	285-287 George Street, Sydney	<ul style="list-style-type: none"> SLEP 2012 Item no. 1765 RNE Place ID 2376 NTR no. 6217 	Local
Former Skinners Family Hotel	296 George Street, Sydney	<ul style="list-style-type: none"> SHR Item no. 00584 SLEP 2012 Item no. I1766 RNE Place ID 2395 NTR no. 6218 	State
Grand Hotel	30-32 Hunter Street, Sydney	<ul style="list-style-type: none"> SHR Item no. 00599 SLEP 2012 Item no. I1809 NTR no. 6316 	Local (individually) State (as part of Little Hunter and Hamilton Street Precinct)
Pangas House	15-17 Hunter Street, Sydney	<ul style="list-style-type: none"> Unlisted 	Potential local

Item	Address	Listing	Significance
Former Wales House	64–66 Pitt Street, Sydney	<ul style="list-style-type: none"> SHR item no. 00586 SLEP 2012 item no. I1915 RNE Place ID 1841 NTR no. 6543 	State
NSW Club House building	31 Bligh Street, Sydney	<ul style="list-style-type: none"> SHR Item no. 00145 SLEP 2012 Item no. I1676 RNE Place ID 2206 NTR no. 6092 	State
Former Bank Delfin House	16 O'Connell Street, Sydney	<ul style="list-style-type: none"> SLEP 2012 Item no. I1903 RNE Place ID 2206 NTR no. 6403 	Local
City Mutual Life Assurance Building	10 Bligh Street, Sydney	<ul style="list-style-type: none"> SHR item no. 00585 SLEP 2012 item no. I1675 RNE Place ID 1814 NTR no. 6091 AIA listing no. 4700629 	State
NSW Sports Club	10–14 Hunter Street, Sydney	<ul style="list-style-type: none"> SHR item no. 00599 SLEP 2012 item no. I1808 RNE Place ID 2441 	State
State Library of NSW	1 Shakespeare Place, Sydney	<ul style="list-style-type: none"> SHR Item no. 01071 Department of Education s170 register (no item number retrievable) SLEP 2012 Item no. 01071 RNE Place ID 1847 NTR no. 6386 	State
Potential impact: Within the zone of influence for potential settlement impacts, and would be subject to further detailed assessment during design development and construction planning			
Tank Stream	Various locations, Sydney	<ul style="list-style-type: none"> SHR Item no. 00636 SLEP 2012 Item no. I1656 RNE Place ID 14311 	State
Bennelong Stormwater Channel No 29A	Various locations, Sydney	<ul style="list-style-type: none"> Sydney Water s170 Item no. 4570854 	Local
Little Hunter Street Precinct	Hamilton Street, Sydney	<ul style="list-style-type: none"> SHR Item no. 00599 SLEP 2012 Item no. I1806 	State
St James Railway Station	Sydney	<ul style="list-style-type: none"> SHR Item no. 01248 Sydney Trains s170 register (no item number retrievable) SLEP 2012 Item no. I1740 	State
Potential impact: Partially within the zone of influence but no requirement for further assessment during design development and construction planning identified			
Richard Johnson Square	Bligh Street, Sydney	<ul style="list-style-type: none"> SLEP 2012 Item no. I1673 RNE Place ID 2363 NTR no. 6093 (memorial only) 	Local

8.6 Potential power supply route impacts

Existing environment

The Pyrmont power supply route would be located within the locally listed Pyrmont Heritage Conservation Area, Item no. C52 on the Sydney Local Environmental Plan 2012.

Potential impacts

The trenching work would be located within the road corridors of Pyrmont Bridge Road and Harris Street and would involve removing the current asphalt road surface, which would be reinstated following the completion of the conduit installation work. This would not alter the visual character of the area and would not modify any heritage significant fabric or structures which contribute to the significance of this Heritage Conservation Area. The power supply route at Pyrmont would result in neutral indirect heritage impacts to the Heritage Conservation Area.

8.7 The Bays tunnel launch and support site

8.7.1 Existing environment

The historic context of The Bays area is discussed in Section 12.14 of the *Sydney Metro West Environmental Impact Statement – Westmead to The Bays and Sydney CBD* (Sydney Metro, 2020a). On 11 March 2021, the Sydney Metro West Concept and major civil construction work for Sydney Metro West between Westmead and The Bays (Stage 1 of the planning approval process for Sydney Metro West) was approved. This included the use of The Bays Station construction site to:

- Carry out the excavation of The Bays Station
- Launch and support two tunnel boring machines for the drive west to the Sydney Olympic Park metro station construction site.

The potential impacts on non-Aboriginal heritage as a result of The Bays Station construction site is summarised in Section 12.14 *Sydney Metro West Environmental Impact Statement – Westmead to The Bays and Sydney CBD* (Sydney Metro, 2020a). Mitigation measures for non-Aboriginal heritage impacts that apply to The Bays Station construction site were identified in Section 8.1 of the *Sydney Metro West Submissions Report – Westmead to The Bays and Sydney CBD* (Sydney Metro, 2020b). This includes management of archaeological resources during establishment of The Bays Station construction site that will be conducted under the revised Archaeological Research Design and Excavation Methodology as required by Conditions of Approval D25 and D26 for Stage 1 of the planning approval process for Sydney Metro West.

The Bays Station construction site is being established under the Sydney Metro West Concept and Stage 1 planning approval almost two years before the establishment of The Bays tunnel launch and support site within the footprint of The Bays Station construction site. The management of archaeological resources, where required within The Bays Station construction site, would be integrated with the construction work associated with Stage 1 of the planning approval process and conducted in accordance with the revised Archaeological Research Design and Excavation Methodology under the Stage 1 planning approval and may be completed prior to the start of work for this proposal. Therefore there are no listed heritage items included in the construction site study area of The Bays tunnel launch and support site.

8.7.2 Potential impacts

As described in Section 8.3.1 and Section 8.7.1, The Bays tunnel launch and support site would be located within a portion of the construction footprint of the approved The Bays Station construction site. Due to The Bays tunnel launch and support site being away from built heritage and both the management of archaeological resources under the Stage 1 planning approval, as discussed in Section 8.7.1 and the limited surface disturbance of the proposal, it is unlikely the use of The Bays tunnel launch and support site would result in impacts on non-Aboriginal heritage.

8.8 Pyrmont Station construction sites

8.8.1 Existing environment

The first land grants in Pyrmont occurred from 1794. From the 1840s onwards, shipbuilding and quarrying emerged as key industries and Pyrmont village grew, as stone workers cottages were built. The Pyrmont Bridge opened in 1858, allowing industrial workers direct access from the Sydney CBD. In the following decades, the emerging Pyrmont appeared as a mixed-use precinct combining industrial, commercial and residential developments. Pyrmont took on an increasingly residential character following a post-war shift of industry out of the area. The later decades of the twentieth century saw larger scale development including new office buildings, apartment blocks, and the major The Star Sydney casino and entertainment precinct to the east of the proposal.

Listed heritage items within the Pymont Station construction site study area were identified through a search of relevant state and federal statutory and non-statutory heritage registers:

- No heritage items of World, Commonwealth Heritage List, National or State lists
- Eight locally listed heritage items, including a conservation area, listed in the SLEP 2012, the SREP 2005, the NTR and the RNE.

Existing heritage items within the Pyrmont Station construction sites study area are shown in Figure 8-4. Further detail of the heritage listings for these items is presented in Section 8.8.2.

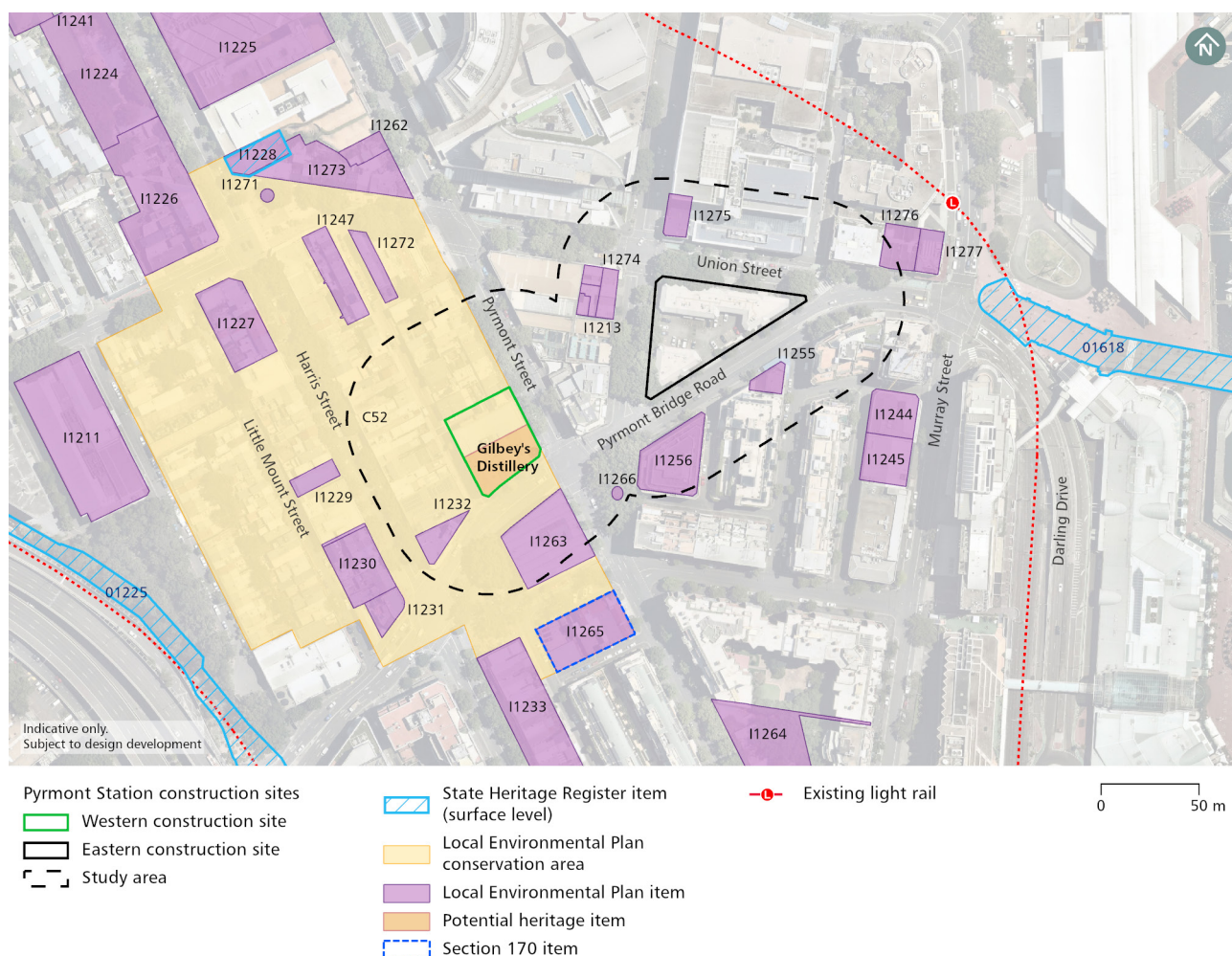


Figure 8-4 Pymont Station construction sites – Listed and potential heritage items and conservation area

8.8.2 Potential impacts

Heritage items and conservation areas

In addition to the potential tunnelling impacts in the vicinity of the Pyrmont Station construction sites described in Section 8.5, the proposal would potentially impact on the listed heritage items and heritage conservation area identified in Table 8-4. Where heritage items are not located within the construction site, there would be no direct impacts to the heritage item.

To minimise vibration impacts on heritage items with a potential vibration impact, further assessment (including a structural assessment) and vibration impact monitoring (if required) would be completed to ensure safe vibration levels for the structure are met.

Table 8-4 Pyrmont Station construction sites study area- Potential impacts on heritage items and conservation areas

Item and listing	Significance	Potential impact	Magnitude
Pyrmont Heritage Conservation Area <ul style="list-style-type: none"> SLEP 2012 Item no. C52 	Local	Direct impact: Demolition of items within conservation area Whilst the proposal includes demolition of buildings within the Heritage Conservation Area, no listed heritage items that are contributory to the significance of the Conservation Area are proposed to be demolished.	Negligible
		Potential direct impact: Vibration There are four items located within the Pyrmont Conservation Area which are located immediately adjacent to the western construction site and have a potential vibration level which could exceed the cosmetic damage screening criteria. Vibration is predicted to have a moderate cumulative impact on the Conservation Area.	Moderate
		Indirect impact: Views and vistas (temporary) The demolition of the existing buildings and construction activities, including the construction of an acoustic shed would result in changes to the surrounding setting and context of the Conservation Area, and impact existing streetscape views and vistas of the significant high density fine grained urban setting of the Conservation Area.	Moderate
Former New York Hotel <ul style="list-style-type: none"> SLEP 2012 Item no. I1275 SREP 2005 (City West) Item no. 67 RNE Place ID 100709 	Local	Potential direct impact: Vibration Vibration to the structure is predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 15 metres north of the eastern construction site. The construction site is within the expanded heritage curtilage of the heritage item. The demolition of existing buildings and construction activities on the eastern construction site would result in changes to the surrounding setting and context of the heritage item, including significant streetscape views from the heritage item. In addition, an acoustic shed would be located directly opposite the heritage item. Main vistas to the building would be maintained along Union Street and Edward Street, retaining this significant setting contribution.	Negligible

Item and listing	Significance	Potential impact	Magnitude
Quarryman's Hotel <ul style="list-style-type: none"> • SLEP 2012 Item no. I1232 • SREP 2005 (City West) Item no. 56 • RNE Place ID 100706 	Local	Potential direct impact: Vibration Vibration is predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 15 metres south-west of the western construction site. The construction site is within the expanded heritage curtilage of the heritage item. The demolition of existing buildings and construction activities, would result in changes to the surrounding setting and context of the heritage item, including views from the heritage item. In addition, an acoustic shed would be located directly opposite the heritage item. Main vistas to the building would be maintained along Pyrmont Bridge Road and Harris Street.	Negligible
Former Warehouse 'Bank of NSW Stores' <ul style="list-style-type: none"> • SLEP 2012 Item no. I1256 • SREP 2005 (City West) Item no. 53 • RNE Place ID 100704 	Local	Potential direct impact: Vibration The vibration is predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 20 metres south of the eastern construction site. The eastern construction site is within the expanded heritage curtilage of the heritage item. An acoustic shed would be located directly opposite the heritage item and impacting the view corridors from the building. In addition, the western construction site would be located 50 metres to the north-west of the heritage item, and visible from the heritage item along Pyrmont Bay Road. Main vistas to the building would be maintained along Pyrmont Bridge Road and Pyrmont Street.	Minor
Corner Shop and Residence 'Charmelu' <ul style="list-style-type: none"> • SLEP 2012 Item no. I1213 • SREP 2005 (City West) Item no. 68 	Local	Potential direct impact: Vibration Vibration is predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 20 metres west of the eastern construction site. The construction site is within the expanded heritage curtilage of the heritage item. An acoustic shed would be located directly opposite the heritage item and impacting the view corridors from the building. Main vistas to the building would be maintained along Union Street and Edward Street.	Negligible
Terrace Group <ul style="list-style-type: none"> • SLEP 2012 Item no. I1274 • SREP 2005 (City West) Item no. 122 	Local	Potential direct impact: Vibration The vibration is predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 20 metres west of the eastern construction site. The construction site is within the expanded heritage curtilage of the heritage item. While the demolition of existing buildings and construction activities would result in changes to the surrounding setting and context of the heritage item, these changes are not within the visual catchment of the heritage item, and therefore will not impact views and vistas to the significant facades nor impact the heritage item's ability to contribute to the streetscape.	Neutral

Item and listing	Significance	Potential impact	Magnitude
Pymont Bridge Road Hotel <ul style="list-style-type: none"> • SLEP 2012 Item no. I1255 • SREP 2005 (City West) Item no. 52 • RNE Place ID100703 	Local	Potential direct impact: Vibration The vibration is predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 20 metres south of the eastern construction site. The construction site would be within the expanded heritage curtilage of the heritage item. An acoustic shed is temporary, and although comparable in scale with the existing site, which comprises two buildings. The construction site and heritage item are separated by a large open area which permits views to and from the heritage item. Main streetscape vistas to the building would be maintained along Pymont Bridge Road and Hardwood Street.	Minor
Former Industrial Building 'Waite and Bull' <ul style="list-style-type: none"> • SLEP 2012 Item no. I1263 • SREP 2005 (City West) Item no. 54 • RNE Place ID2036 • NTR no. 10858 	Local	Potential direct impact: Vibration The vibration is predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The western construction site would be located directly opposite the heritage item. An acoustic shed would be located directly opposite the heritage item on the western construction site and impacting view corridors from the building. The eastern construction site would be located 50 metres to the north-east of the heritage item, and visible from the heritage item. Main vistas to the building would be maintained along Pymont Bridge Road and Pymont Street. Overall, the work is considered to have a minor visual impact, as a result of demolition and alteration of the existing streetscape and context of the heritage item, however considered to be a negligible impact to the significance of the item and its contribution to the streetscape.	Negligible

Unlisted potential heritage items

Unlisted potential heritage items are not listed heritage items but are identified as meeting criteria for heritage significance. There is one unlisted potential heritage item within the Pymont Station construction site study area, the Former Gilbey's Gin Distillery Building. Table 8-5 identifies the significance of this item and potential impacts of the proposal. Section 6.1.3.9 of the Technical Paper 3 (Non-Aboriginal heritage) assesses the heritage significance of the item and the potential impacts.

Table 8-5 Pymont Station construction sites – Impacts on potential heritage item

Potential item	Potential heritage significance	Potential impact	Magnitude
Former Gilbey's Gin Distillery Building	Local	Direct impact: Demolition of potential heritage item The potential heritage item would be demolished as part of this proposal. This would result in the loss of a representative example of an Art Deco warehouse building, and one of few remaining distillery buildings left in NSW.	Major

Archaeological resources

Table 8-6 provides a summary of significant non-Aboriginal archaeological resources that may be present, the potential for those archaeological resources to occur within the study area and their likely heritage significance.

Table 8-6 Summary of significant non-Aboriginal archaeological resources with the Pyrmont Station construction sites

Site	Phase	Predicted archaeological resources	Potential for occurrence	Heritage significance
Pyrmont Station western construction site	Phase 2 (1883 – 1914)	Archaeological resources related to this phase could include brick and stone footings, hearths, domestic or underfloor deposits (discarded ceramic, pins, buttons, glass), cooking and kitchen remains (bone, utensils), yard and workshop surfaces and isolated rubbish deposits.	Moderate	Local
Pyrmont Station eastern construction site	Phase 2 (1878 – 1940)	Archaeological resources related to this phase could include brick and stone footings, hearths, domestic or underfloor deposits (discarded ceramic, pins, buttons, glass), yard and workshop surfaces and isolated rubbish deposits.	Moderate	Local

Mined excavation to significant depth (approximately 20 metres) within the Pyrmont Station construction sites would result in the total removal of all archaeological resources. As all archaeological resources that may be present within both construction sites would be removed, the proposal would result in a major impact to non-Aboriginal archaeological resources of local significance. Archaeological resources would be managed in accordance with an Archaeological Research Design.

8.9 Hunter Street Station (Sydney CBD) construction sites

8.9.1 Existing environment

Following European settlement at Port Jackson, Sydney emerged as the hub of government and administration in the new colony. The freshwater source later known as the Tank Stream played a key role in the selection of the Port Jackson settlement, and as the colony grew, the water source was put under pressure and increasingly polluted as Sydney Town developed around it. The Tank Stream served as a demarcation between the government's administrative centre and the convict settlement. In 1860, the Tank Stream around Hunter and Bridge Streets (to the north of the construction sites) was covered and connected to an open stone drain at Bridge Street.

Currently, the portion of the Tank Stream between Hunter Street in the north and Martin Place in the south consists of an original stone section and early brick oviform section of the sewer on the southern side of Hunter Street with a modern concrete and steel sewer constructed further to the south. The sandstone and brick oviform portion of the drain is located directly outside to the north-east of the Hunter Street Station (Sydney CBD) western construction site. Before entering the construction site, the drain is converted to a section of modern concrete pipes, constructed in 1962, and a shorter section of steel pipes, laid in 1958 and 1978. The two sections are separated by a brick chamber, constructed in 1958 and associated with the construction of the steel pipes. South of the Hunter Street Station (Sydney CBD) western construction site, the pipe reverts to a stone and brick oviform profile.

The study area was quite densely developed and built upon by 1880s, with the Sydney CBD evolving from a manufacturing and warehousing function to increasingly commercial business premises. Post-war booms in population and economic growth contributed to ever-increasing pressure on land within the city, leading to a wave of mass re-development and the erection of many high-rise buildings around the study area from the 1960s onwards. A summary of historic land leases and businesses, as well as further history of the heritage items present within the Hunter Street Station (Sydney CBD) construction sites study areas, is presented in Section 5.4 of Technical Paper 3 (Non-Aboriginal heritage).

The study area is surrounded by a mix of historic buildings dating from the mid-nineteenth century onwards, as well as a variety of twentieth century developments, the majority of which are heritage-listed, alongside modern post-1970s office blocks.

Listed heritage items within the Hunter Street Station (Sydney CBD) construction sites study areas were identified through a search of relevant state and federal statutory and non-statutory heritage registers.

A total of 16 listed heritage items were identified, including:

- No World, Commonwealth Heritage List, National listed heritage items
- Nine items listed as being of State heritage significance
- Seven items listed as being of local heritage significance.

These heritage items are listed under a number of registers, including the SHR, various s170 registers, SLEP 2012, the NTR, the RNE and the Australian Institute of Architects register (AIA).

One heritage item that is unlisted, Pangas House, has also been identified within the study area as having potential local heritage significance.

Existing heritage items within the vicinity of the Hunter Street Station (Sydney CBD) construction sites are shown in Figure 8-5.

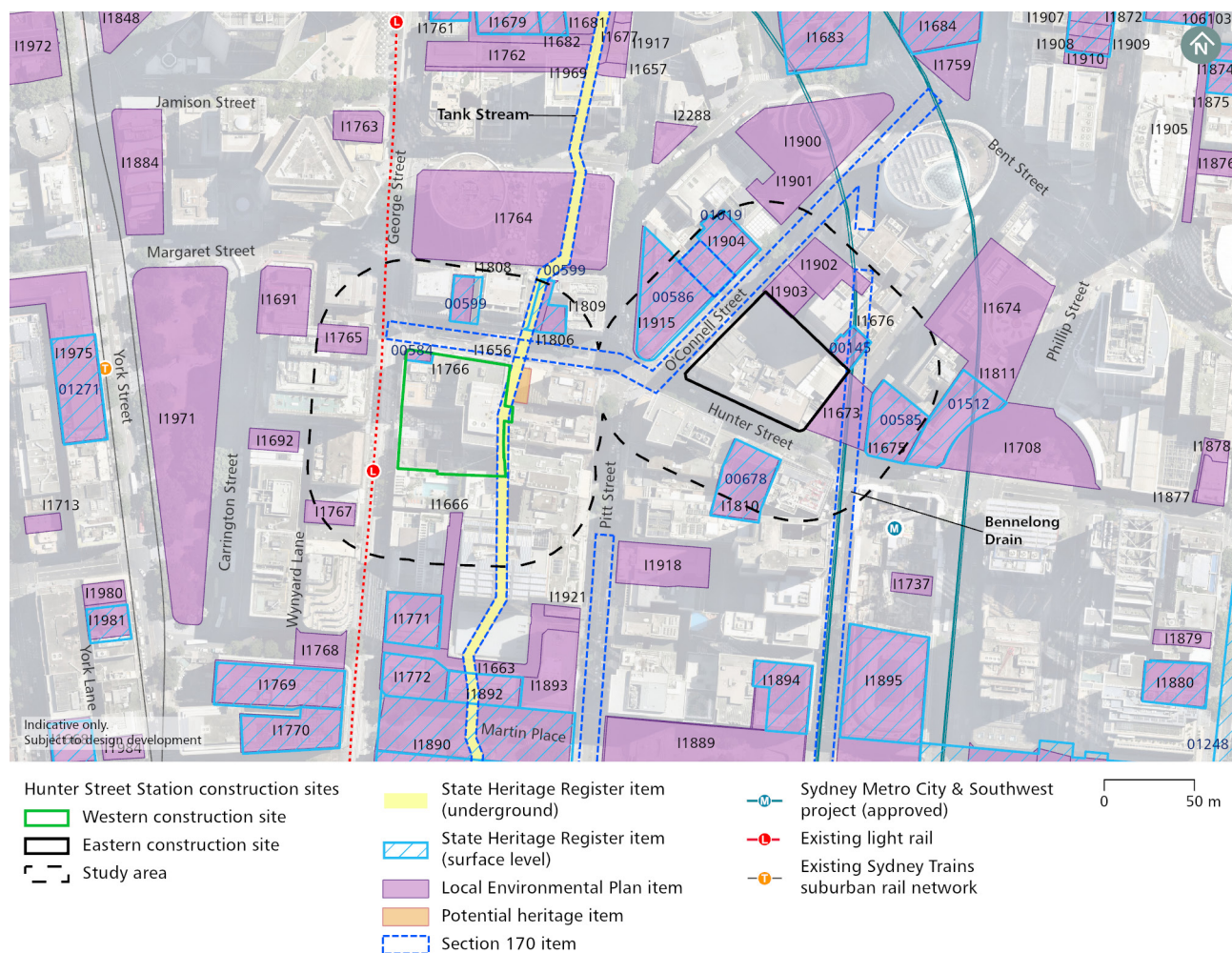


Figure 8-5 Hunter Street Station construction sites – heritage items

8.9.2 Potential impacts

Heritage items

The proposal would potentially impact on the listed heritage items identified in Table 8-7.

To minimise vibration impacts, further assessment (including a structural assessment) and vibration impact monitoring (if required) would be completed to ensure safe vibration levels for the structure are met.

Table 8-7 Hunter Street Station construction sites study area - Impacts on heritage items

Item and listing	Significance	Potential impact	Magnitude
Tank Stream <ul style="list-style-type: none"> • SHR item no. 00636 • Sydney Water s170 item no. 4573709 • SLEP 2012 (I1656) • RNE Place ID 14311 • NTR no. 6455 	State	Direct impact: Physical impact The heritage item is underground, located directly beneath and within the western construction site. However its fabric would not be directly excavated and nor would the heritage significant alignment of the Tank Stream be altered in any way as a result of the proposal.	Neutral
		Potential direct impact: Vibration Vibration levels are predicted to exceed the cosmetic damage screening criteria. Vibration is predicted to have a major potential for direct impact on the Tank Stream, due to its location within the western construction site, and close proximity in adjacent lots.	Moderate
		Indirect impact: Views and vistas (temporary) As the Tank Stream is located wholly underground, the proposed work would not result in impacts to the views and vistas to and from the item.	Neutral
Bennelong Stormwater Channel No 29A <ul style="list-style-type: none"> • Sydney Water s170 Item no. 4570854 	Local / Section 170	Direct impact: No physical impact The heritage item is located adjacent to the north-eastern corner of the eastern construction site, above the tunnel alignment. The work would not involve any direct excavation or removal of any portion of the item.	Neutral
		Potential direct impact: Vibration Vibration is predicted to be above the cosmetic damage screening criteria. Potential direct impacts associated with vibration would have the potential to be moderate where the Bennelong Stormwater Channel No 29A is in close proximity to the proposal.	Moderate
		Indirect impact: Views and vistas (temporary) As the heritage item is located wholly underground, the proposed work would not result in impacts to the views and vistas to and from the item.	Neutral
Skidders Family Hotel <ul style="list-style-type: none"> • SHR Item no. 00584 • SLEP 2012 Item no. I1766 • RNE Place ID 2395 • NTR no. 6218 	State	Potential direct impact: Physical impact The heritage item is located within the north-western corner of the western construction site. While the heritage item would not be demolished, there is potential for direct physical impact as the demolition of the adjacent building has the potential to directly damage the brick structure and façade of the heritage item.	Moderate
		Potential direct impact: Vibration Vibration to the structure is predicted to exceed cosmetic damage screening criteria. Vibration is predicted to have a moderate potential for direct impact on the Skidders Family Hotel due to its location within the western construction site.	Moderate
		Indirect impact: Views and vistas (temporary) The western construction site would be within the heritage curtilage of the heritage item. The demolition of existing buildings and construction activities would result in non-significant changes to the setting of the heritage item.	Negligible

Item and listing	Significance	Potential impact	Magnitude
NSW Club House Building <ul style="list-style-type: none"> • SHR Item no. 00145 • SLEP 2012 Item no. I1676 • RNE Place ID 2206 • NTR no. 6092 	State	Potential direct impact: Vibration Vibration to the structure is predicted to exceed the cosmetic damage screening criteria and would have moderate potential for direct impacts on the heritage item.	Moderate
		Indirect impact: Views and vistas (temporary) The eastern construction site would be within the expanded heritage curtilage of the heritage item. The demolition of existing buildings and construction activities would result in non-significant changes to the setting of the heritage item. The continued presence of the existing acoustic shed directly adjacent to the heritage item is not anticipated to cause any additional overshadowing impacts.	Negligible
Former Bank – Delfin House <ul style="list-style-type: none"> • SLEP 2012 Item no. I1903 • RNE Place ID 2206 • NTR no. 6403 	Local	Potential direct impact: Vibration Vibration levels are predicted to exceed the cosmetic damage screening criteria.	Moderate
		Indirect impact: Views and vistas (temporary) The heritage item is located directly abutting the north-western corner of the eastern construction site. The construction site is within the expanded heritage curtilage of the heritage item. The demolition of existing buildings and construction activities would result in non-significant changes to the setting of the heritage item. The continuing presence of the existing acoustic directly next to the heritage item would not result in any additional overshadowing impacts.	Negligible
Richard Johnson Square <ul style="list-style-type: none"> • SLEP 2012 Item no. I1673 • RNE Place ID 2363 • NTR no. 6093 (memorial only) 	Local	Potential direct impact: Vibration Vibration levels are predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located directly abutting the south-eastern edge of the eastern construction sites. The construction site would be within the expanded heritage curtilage of the heritage item. The demolition of existing buildings and construction activities nearby would result in non-significant changes to the setting of the heritage item. The construction of an acoustic shed directly next to the heritage item would result in temporary minor overshadowing of the item. The acoustic shed would also have a temporary impact to the overall urban context, due to its lack of architectural contribution to the streetscape.	Minor

Item and listing	Significance	Potential impact	Magnitude
City Mutual Life Assurance Building <ul style="list-style-type: none"> • SHR item no. 00585 • SLEP 2012 item no. I1675 • RNE Place ID 1814 • NTR no. 6091 • AIA listing no. 4700629 	State	Potential direct impact: Vibration Vibration levels are predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 20 metres south-east of the eastern construction site. The construction site would be within the expanded heritage curtilage of the heritage item. The significant views to the building would continue to be maintained along Hunter Street and Bligh/Castlereagh Street. The demolition of existing buildings and construction activities would result in non-significant changes to the setting of the heritage item. The continued presence of the acoustic shed temporarily located directly next to the heritage item, would result in a negligible, temporary impact to the immediate urban context of the building.	Negligible
Perpetual Trustee Company <ul style="list-style-type: none"> • SHR item no. 00678 • SLEP 2012 item no. I1810 • RNE Place ID 2424 • NTR no. 6317 • AIA listing no. 4700628 	State	Potential direct impact: Vibration Vibration levels are predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 20 metres south of the eastern construction site. The construction site would be within the expanded heritage curtilage of the heritage item. Vistas to the building along Hunter Street would not be impacted by the proposed work. The demolition of existing buildings and construction activities would result in non-significant changes to the setting of the heritage item. The continued presence of the acoustic shed temporarily located directly next to the heritage item, would result in a negligible, temporary impact to the immediate urban context of the building.	Negligible
Public Trust Office <ul style="list-style-type: none"> • SHR item no. 01019 • Department of Justice and Attorney General S170 Register (2011) [no item no. provided] • SLEP 2012 item no. I1904 	State	Potential direct impact: Vibration The vibration is predicted be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 20 metres north of the eastern construction site. The construction site would be within the expanded heritage curtilage of the heritage item. Vistas to the building along O'Connell Street would not be impacted by the proposed work. The demolition of existing buildings and construction activities would result in non-significant changes to the setting of the heritage item. The continued presence of the existing acoustic shed opposite the building would be temporary in nature, and would not overshadow the heritage item or impact its visual corridors.	Negligible

Item and listing	Significance	Potential impact	Magnitude
Little Hunter and Hamilton Street Precinct <ul style="list-style-type: none"> SHR item no. 00599 SLEP 2012 item no. I1808 	State	Potential direct impact: Vibration Vibration levels are predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 20 metres north of the western construction site. The construction site would be within the expanded heritage curtilage of the heritage item. Vistas to the building along O'Connell Street would not be impacted by the proposed work. The demolition of existing buildings and construction activities would result in non-significant changes to the setting of the heritage item.	Negligible
NSW Sports Club <ul style="list-style-type: none"> SHR item no. 00599 SLEP 2012 item no. I1808 RNE Place ID 2441 	State	Potential direct impact: Vibration Vibration levels are predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 20 metres north of the western construction site. The construction site would be within the expanded heritage curtilage of the heritage item. The demolition of the existing buildings and construction activities, would result in changes to the surrounding setting and context of the heritage item, including impacts to the view corridor from the building. The continued presence of the existing acoustic shed opposite the heritage item would be temporary in nature, and would not result in overshadowing of the item.	Negligible
Former Wales House <ul style="list-style-type: none"> SHR item no. 00586 SLEP 2012 item no. I1915 RNE Place ID 1841 NTR no. 6543 AIA listing no. 4700660 	State	Potential direct impact: Vibration Vibration levels are predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The western construction site would be visible along Hunter Street from the heritage item. The eastern construction site would be located directly opposite the heritage item on O'Connell Street. The demolition of existing buildings and construction activities would result in non-significant changes to the setting of the heritage item.	Minor
Former Industrial Building 'Manufacturers Mutual' <ul style="list-style-type: none"> SLEP 2012 item no. I1902 RNE Place ID 19546 NTR no. 6402 	Local	Potential direct impact: Vibration Vibration levels are predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 25 metres north-east of the western construction site. The construction site would be within the expanded heritage curtilage of the heritage item. Vistas to the building along O'Connell Street would not be impacted by the proposed work. The demolition of existing buildings and construction activities would result in changes which would not impact the setting of the heritage item significantly.	Negligible

Item and listing	Significance	Potential impact	Magnitude
Ash Street Laneway <ul style="list-style-type: none"> • SLEP 2012 item no. I1666 • RNE Place ID 2404 	Local	Potential direct impact: Vibration Vibration levels are predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The Ash Street laneway is located 25 metres south of the western construction site. The demolition of existing buildings and construction activities would not result in changes to the surrounding setting and context of the laneway. Views from the laneway are obscured by the Ivy development at the northern end, which abuts the western construction site.	Neutral
Former Commercial Building 'Peapes Menswear' <ul style="list-style-type: none"> • SLEP 2012 item no. I1765 	Local	Potential direct impact: Vibration Vibration levels are predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The demolition of existing buildings and construction activities would result in non-significant changes to the surrounding setting and context of the heritage item. The proposal would not obscure view corridors to the building, nor would the proposed development cause overshadowing impacts.	Negligible
Grand Hotel <ul style="list-style-type: none"> • SLEP 2012 item no. I1809 • NTR no. 6316 	Local	Potential direct impact: Vibration Vibration levels are predicted to be below the cosmetic damage screening criteria. Potential direct impacts associated with vibration are not anticipated.	Neutral
		Indirect impact: Views and vistas (temporary) The heritage item is located about 25 metres north-east of the western construction site. The construction site would be within the expanded heritage curtilage of the heritage item. Views and vistas to the building would not be impacted by the proposed work. The demolition of existing buildings and construction activities would result in non-significant changes to the surrounding setting and context of the heritage item.	Negligible

Unlisted potential heritage items

Unlisted potential heritage items are not listed heritage items but are identified as meeting criteria for heritage significance. There is one potential heritage item within the study area for the Hunter Street Station (Sydney CBD) construction sites, Pangas House. Table 8-8 identifies the significance of Pangas House, and potential impacts of the proposal. Section 6.2.3.17 of Technical Paper 3 (Non-Aboriginal heritage) assesses the heritage significance of the item and the potential impacts.

Table 8-8 Hunter Street Station (Sydney CBD) construction sites - Impacts on potential heritage item

Potential item	Potential heritage significance	Potential impact	Magnitude
Pangas House	Local	Potential direct impact: Vibration Vibration levels are predicted to exceed the cosmetic damage screening criteria, and would have potential for moderate direct impacts on Pangas House.	Moderate
		Indirect impact: Views and vistas (temporary) The western construction site would be located directly adjacent to the potential heritage item. The demolition of existing buildings and construction activities would result in non-significant changes to the setting of the potential heritage item, which is currently surrounded by large modern structures.	Negligible

Archaeological resources

Table 8-9 identifies a summary of significant archaeological resources that may be present, the potential for those archaeological resources to occur within the study area and their likely heritage significance. There is no potential for predicted significant resources at the Hunter Street Station (Sydney CBD) eastern construction site.

Table 8-9 Summary of significant non-Aboriginal archaeological resources with the Hunter Street Station (Sydney CBD) construction sites

Site	Phase	Predicted archaeological resources	Potential for occurrence	Heritage significance
Hunter Street Station (Sydney CBD) western construction site	Phase 1 (1788 – 1840)	Archaeological resources related to this phase could include brick and stone footings, hearths, domestic or underfloor deposits (discarded coins, ceramic, pins, buttons, glass), cooking and kitchen remains (bone, utensils), yard and workshop surfaces and isolated rubbish deposits.	Low	State
	Phase 2 (1840 – 1900)	Archaeological resources related to this phase could include former stone sett or woodblock road surfaces and brick or stone-cut drainage modifications.	Moderate	Local

Excavation work within the Hunter Street Station (Sydney CBD) construction sites would involve mined excavation for all areas of ground, except for within the footprint of Skinners Family Hotel. The removal of this archaeological resource would result in a major impact to State significant archaeological resources relating to De Mestre's counting house and residence, and a major impact to locally significant resources related to former road surfaces of the original carriage lane of De Mestre Place. Any potential State significant archaeological resources located below Skinners Family Hotel would be preserved.

8.10 Cumulative impacts

Potential cumulative impacts were considered for assessment based on the likely interactions of the proposal with other projects that met the adopted screening criteria. The approach to assessment and the other projects considered are described further in Appendix G (Cumulative impacts assessment methodology).

As no impacts to The Bays tunnel launch and support site have been identified in this assessment, there is negligible potential for cumulative impacts on non-Aboriginal heritage between the proposal and major civil construction work between Westmead and The Bays (Stage 1 of the planning approval process), the WestConnex M4-M5 Link and the Western Harbour Tunnel and Warringah Freeway Upgrade projects.

The adoption of the mitigation and management measures set out in Section 8.11 and Section 14.8 are expected to result in the adequate management of settlement and vibration impacts of non-Aboriginal heritage items. Potential cumulative settlement and vibration impacts to these items would be managed through consultation with the relevant stakeholders and coordinating construction programs with other nearby projects.

8.11 Mitigation and management measures

The Construction Environmental Management Framework (Appendix C) describes the approach to environmental management, monitoring and reporting during construction. Specifically, it lists the requirements to be addressed by the construction contractor in developing the Construction Environmental Management Plans, sub-plans, and other supporting documentation for each specific environmental aspect.

The environmental management approach for the project is detailed in Chapter 23 (Synthesis of the Environmental Impact Statement). Under these broad frameworks and as outlined within the Concept assessment, a series of performance outcomes have been developed to define the minimum environmental standards that would be achieved during construction of the proposal (refer to Section 8.11.2), and mitigation measures that would be implemented during construction to manage potential identified impacts (refer to Section 8.11.3).

The environmental management approach for this proposal has also considered the relevant Conditions of Approval for the Sydney Metro West Concept, to ensure that this proposal would be carried out in accordance with these conditions.

8.11.1 Concept Conditions of Approval

The Conditions of Approval for the Sydney Metro West Concept were received on 11 March 2021. The Concept Conditions of Approval that relate to non-Aboriginal heritage are presented in Table 8-10, along with consideration of their relevance to this proposal.

Table 8-10 Concept Conditions of Approval – Non-Aboriginal heritage

Reference	Condition	Relevance to this proposal
C-B4	The relevant future stage application relating to the design of stations must include a Heritage Interpretation Strategy, prepared in consultation with Heritage NSW, which outlines how key Aboriginal and non-Aboriginal heritage values and stories of Heritage items will be interpreted in the project design, including station and precinct urban design. The Heritage Interpretation Strategy must include procedures for how to include results of archaeological findings (historical and Aboriginal archaeological results) when they become available.	Not relevant - This proposal does not include station design. The Heritage Interpretation Strategy will be prepared as part of future planning applications for Sydney Metro West. However, any archaeological results as a result of unexpected finds during construction of this proposal would be considered in implementation of the Heritage Interpretation Strategy.
C-B5	The Heritage Interpretation Strategy must be prepared in accordance with the <i>NSW Heritage Manual</i> , the <i>NSW Heritage Office's Interpreting Heritage Places and Items: Guidelines</i> (August 2005), and the <i>NSW Heritage Council's Heritage Interpretation Policy</i> .	Not relevant - This proposal does not include station design. The Heritage Interpretation Strategy will be prepared as part of future planning applications for Sydney Metro West.

Reference	Condition	Relevance to this proposal
C-B6	<p>The Heritage Interpretation Strategy must include, but not be limited to:</p> <ol style="list-style-type: none"> A discussion of key interpretive themes, stories and messages proposed to interpret the history and significance of archaeological excavation, the affected Heritage items and sections of heritage conservation areas (if applicable); Options for the re-purposing of archaeological finds (results and artefacts), heritage features or listed items salvaged or protected during construction stages of the CSSI, and how they will be integrated into the final project design; Aboriginal cultural and heritage values of the project area including the results of any archaeological investigations undertaken (or any interim results of any archaeological investigations that have commenced but have yet to be completed) and key socio-cultural values identified in the Aboriginal Cultural Heritage Assessment Report referred to in Condition C-A1 of this schedule, and those of any future stages of the CSSI; Details of the audience, potential devices to be employed in interpretation, possible locations for interpretation and how this will be incorporated into design; Engagement with the Relevant Council(s) and regard for any relevant council heritage interpretation guidelines; and With respect to the Parramatta construction site and (a) above, any discussion must include how the heritage interpretation of the CSSI relates to the heritage interpretations of other projects in Parramatta, including State Significant Development projects and other SSI projects. 	Not relevant - This proposal does not include station design. The Heritage Interpretation Strategy will be prepared as part future planning applications for Sydney Metro West.

8.11.2 Performance outcomes

Construction performance outcomes were developed for the proposal as part of the Concept assessment. Performance outcomes for the proposal identify measurable, performance-based standards for environmental management. Identified performance outcomes in relation to non-Aboriginal heritage for construction of the proposal include:

- Direct impacts on World Heritage and National Heritage List items are avoided
- Impacts on State Heritage Register items are avoided or minimised so that the overall heritage value of the item is maintained
- Impacts to non-Aboriginal heritage items and archaeology are avoided or minimised where feasible and reasonable
- Accidental impacts to heritage items are avoided.

Chapter 23 (Synthesis of the Environmental Impact Statement) describes how the proposal addresses these performance outcomes. The design of the proposal has aimed to avoid and minimise impacts to heritage where practicable, for example through the selection of the construction sites. Investigations would be carried out prior to demolition work to ensure the conservation of heritage items' fabric and significance. Opportunities would be considered for the adaptive reuse of salvaged fabric associated with the potential heritage item to be demolished.

8.11.3 Mitigation measures

The mitigation measures that would be implemented to address potential non-Aboriginal heritage impacts are described in Table 8-11.

Table 8-11 Mitigation measures – Non-Aboriginal heritage

Reference	Impact	Mitigation measure	Applicable location(s)
NAH1	Archival recording	<p>Archival recording and reporting of the following heritage items would be carried out in accordance with the NSW Heritage Office's <i>How to Prepare Archival Records of Heritage Items</i> (1998), and <i>Photographic Recording of Heritage Items Using Film or Digital Capture</i> (2006):</p> <ul style="list-style-type: none"> • Former Skinners Family Hotel (SHR item no. 00584) • NSW Club House Building (SHR item no. 00145) • Former Bank – Delfin House (SLEP 2012 item no. 11903) • Richard Johnson Square (SLEP 2012 item no. 11673). <p>Archival recording should be carried out at the following sites as potential heritage items of local significance prior to the commencement of work for the following items:</p> <ul style="list-style-type: none"> • Gilbey's Distillery, 26-32 Pyrmont Bridge Road, Pyrmont (potential archaeological site and local heritage item) • Pangas House, 15-17 Hunter Street, Sydney (potential local heritage item). 	<p>Pyrmont Station western construction site</p> <p>Hunter Street Station (Sydney CBD) construction sites</p>
NAH2	Investigations	<p>Investigations would be carried out for the Tank Stream (SHR item no. 00636) and Bennelong Stormwater Channel No 29A (Sydney Water s170 item no. 4570854) to confirm and record the location, depth, and ascertain the current integrity, extent and condition of the heritage items.</p> <p>Surveys are to be carried out under the supervision of a heritage consultant in consultation with Sydney Water.</p>	Hunter Street Station (Sydney CBD) construction sites
NAH3	Demolition	<p>A method for the demolition of existing buildings and/or structures at specified construction site would be developed to minimise direct and indirect impacts to adjacent and/or adjoining heritage items.</p> <p>A structural engineering investigation would be carried out to heritage items, prior to demolition of adjacent existing buildings and/or structures to ensure the conservation of the items fabric and significance.</p> <p>A detailed methodology for the protection of the Former Skinners Family Hotel, Tank Stream and Bennelong Stormwater Channel No 29A would be developed by suitably qualified heritage engineers and consultants.</p>	Hunter Street Station (Sydney CBD) construction sites
NAH4	Salvage	<p>Prior to commencement of demolition of Gilbey's Distillery, significant heritage fabric which has a reuse in the project or elsewhere would be identified and considered for salvage.</p>	Pyrmont Station western construction site
NAH5	Heritage interpretation	<p>Heritage Interpretation Plans would be prepared in accordance with the line-wide Heritage Interpretation Strategy being prepared for Sydney Metro West.</p>	<p>Pyrmont Station construction sites</p> <p>Hunter Street Station (Sydney CBD) construction sites</p>

Reference	Impact	Mitigation measure	Applicable location(s)
NAH6	Archaeology	An Archaeological Research Design would be prepared to identify the excavation methodology for predicted locally significant non-Aboriginal archaeological resources at the Pyrmont Station and Hunter Street Station (Sydney CBD) construction sites. Archaeological mitigation measures recommended in the Archaeological Research Design would be carried out in accordance with Heritage NSW guidelines, and where appropriate, supervised by a suitably qualified Excavation Director with experience in managing State significant archaeology.	Pyrmont Station construction sites Hunter Street Station (Sydney CBD) construction sites
NAH7	Archaeology	An Archaeological Excavation Report would be prepared by the Excavation Director and be provided to the Heritage NSW within 12 months of the completion of archaeological excavations specified in the Archaeological Research Design.	Pyrmont Station construction sites Hunter Street Station (Sydney CBD) construction sites
NAH8	Ground movement and settlement assessment	Where required, further assessments at later design stages and during detailed construction planning would be carried out to check the preliminary findings of the ground movement assessment in relation to listed heritage buildings. Other listed heritage infrastructure would also be subject to such further assessment of ground movement where identified as being required in Technical Paper 3 (Non-Aboriginal heritage).	Pyrmont Station construction sites Hunter Street Station (Sydney CBD) construction sites Tunnel alignment
NAH9	Monitoring	Where required, heritage items identified by NAH8 as requiring further assessment should undergo instrumentation and monitoring as part of further assessments and during the work.	Pyrmont Station construction sites Hunter Street Station (Sydney CBD) construction sites

8.11.4 Interactions between mitigation measures

Mitigation measures in other chapters that are relevant to the management of potential non-Aboriginal heritage impacts include:

- **Chapter 7 (Noise and vibration)** – Specifically measures which address the management of potential vibration impacts to heritage structures during construction
- **Chapter 11 (Landscape and visual amenity)** – Specifically measures which address the management of potential visual impacts to heritage items during construction
- **Chapter 14 (Groundwater and ground movement)** – Specifically measures which address the management of ground settlement.

Together, these measures would minimise the potential non-Aboriginal heritage impacts of this proposal. A full list of mitigation measures is presented in Chapter 23 (Synthesis of the Environmental Impact Statement).

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