# NON-ABORIGINAL HERITAGE TECHNICAL INFORMATION

APPENDIX G



# Non-Aboriginal heritage technical information

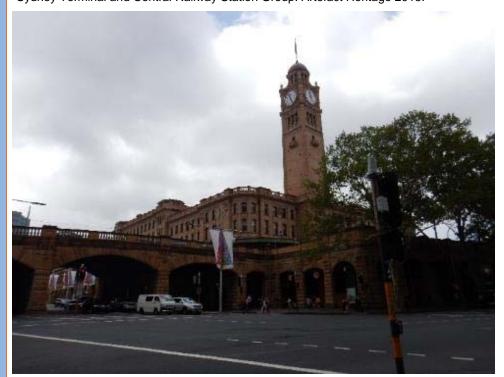
#### **Central Station site**

#### Sydney Terminal and Central Railway Station Group

Sydney Terminal and Central Railway Stations Group<sup>1</sup>

**Image** 

Sydney Terminal and Central Railway Station Group. Artefact Heritage 2015.



#### Significance

State

Description and statement of significance

Central Station is the largest railway station and transport interchange in NSW and is of State significance for its historical, aesthetic, technical values and for its research potential. With its grand sandstone edifices and approaches it is a well-known landmark in Sydney.

The site contains the original Sydney Railway Company grant on which the first Sydney Station and yards were opened, in 1855, and so represents over 150 years of railway operations in the same place, making it the oldest and the longest continuously operated yard in Australia.

The Sydney Terminal precinct has a high level of historic significance associated with its early government and institutional uses, as well as being the site of Sydney's second major burial ground, the Devonshire Street cemetery. Archaeological evidence of the government and institutional uses is rare and has high research potential.

Central Station site contains evidence of the first phase of railway construction in NSW and has been the major hub of rail transportation in NSW since the mid-19th century and has

<sup>&</sup>lt;sup>1</sup> Description and Statement of significance extracted from State Heritage Register inventory sheet "Sydney Terminal and Central Railway Station Group" last accessed via <a href="http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5012230">http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5012230</a> on 22/10/2015.

the ability to demonstrate the evolution of changes in the NSW railways and in railway technology over the past 150 years, from steam to electric, reflected in the changes in yard layout and in signalling work practices. The Darling Harbour branch line and associated sandstone Ultimo Railway Overbridge is the only remaining example of railway infrastructure built for the Sydney Railway Company and is the oldest piece of railway infrastructure in NSW. The Prince Alfred Sidings contains some of the oldest remaining workshops in the NSW railway system. The Prince Alfred Substation is part of the Bradfield 1926 electrification works and was designed by Bradfield himself. The site has technical heritage value in such elements as: the Darling Harbour Dive; Central Electrics flyovers; the elliptical arch construction of the Elizabeth Street Viaduct; the western approach ramp underbridge the three pin truss roof of the porte-cochère; the Devonshire Street subway (probably the first of its type in Australia); the underground men's toilets; and the early mail, parcels and luggage subway system.

The main terminus building, accentuated by its clock tower and approach ramps, exemplifies the predominant use of sandstone at the site and it has been sited to dominate its surroundings and to mark the importance of the railway to both the city and the State. The construction of the Sydney Terminus was the largest planned intervention into the urban fabric of Sydney at the time and it was the only major complex of the period where the urban setting was consciously designed to enhance and provide views to and from the main structure. With its multi layered access modes and above ground level platforms, not only was the development extraordinarily innovative but also the largest incursion into the southern part of Sydney prior to World War I.

Some of Sydney's most notable 19th and 20th century architects and engineers have worked on the Central Station site, including: James Wallace and William Randle who together designed and built the first railway from Sydney to Parramatta and the associated Darling Harbour Branch Line; the last serving Colonial Architect, James Barnet (Mortuary Station); the first NSW Government Architect, Walter Liberty Vernon (the main Terminus building and the Parcels Post Office); and the Chief Engineer for the City Underground and Sydney Harbour Bridge, Dr John Jacob Crew Bradfield (Central Electric). Mortuary Station, the main terminus building and the Parcels Post Office were the only designs undertaken for the NSW Railways by the Colonial Architect and the Government Architect within the Department of Public Works.

The main terminus building, constructed primarily in the early 20th century, is enhanced by its Neo-classical architectural features together with the high quality workmanship and materials it contains, from carved sandstone, marble and terrazzo to cedar joinery, acid etched glazing and metalwork balustrades.

The same fine quality in design, materials and workmanship is seen in Mortuary Station, the Railway Institute and also in the Neo-classical Chalmers Street Entrance, the Central Electric Station main façade and the Parcels Post Office, all of which tends to unify these buildings with the main terminus.

The Mortuary Station is a fine and rare example by James Barnet of the Gothic Revival architectural style and is the only remaining example of a mortuary station in NSW. The exemplary Federation Anglo-Dutch architectural style of the Railway Institute is significant and it was as the first institute of its type in Australia, demonstrating 19th century initiatives in railway workers educational and recreational facilities. The Parcels Post Office contains fine brickwork and sandstone detailed facades and documents the association of the site with railway postal services.

The significance of Central Station is widely appreciated by the broad community for its

sense of place and theatre; as an extraordinary place of work for employees past and present and their families; and by many specialist transport and heritage community groups.

The Bradfield designed former Lost Property Office was constructed between 1922 and 1926 as part of the electrical upgrades to Central Station. Extending the full width of the concourse, the building was constructed with a reinforced concrete roof, brick sidewalls and sandstone outer wall.

#### Impact type

**Direct impacts:** Physical impacts to the station would occur as a result of the excavation of the station box, demolition of the Rolling Stock Officers Building, Cleaners Amenity Building and garden as a result of station box excavation, impacts to underground pedestrian tunnels including Devonshire Street Tunnel, construction of new stairs on platforms 20/21 and 22/23, impacts associated with access and egress from Eddy Avenue, demolition, reconstruction and lengthening of platforms 12 to 15 (platform 15 will no longer serve as a working platform), extension of platforms 9-12, installation of the Sydney Yards Access bridge and construction site and use of a temporary worksite in the Sydney Yards.

Potential direct impacts: Vibration due to construction of the station box.

Indirect impacts: Views and vistas through the installation of the Sydney Yards Access bridge, alteration of platforms 9 to 15 and construction of a service building at the southern end of Platform 15.

# Heritage impact assessment

Excavation of the station box and pedestrian movement

Physical impacts associated with excavation of the station box would include the removal of platforms 12 to 15 and excavation below platforms 13, 14 and 15. The platforms are elements of moderate significance which were constructed in 1906 and extended to the south in the 1990s. There would be a major direct impact to these elements.

Excavation is proposed for the area below the Bradfield designed former Lost Property Office (Central Electric Building) constructed over the Eddy Avenue entrance to the station between 1922 and 1926. Modelling indicates that the closest façade of the Bradfield building would not experience vibration levels above the screening level for cosmetic damage.

Excavation works for the cut and cover box would result in minor vibration impacts to the closest intercity and suburban platforms, and to the main station buildings, as follows:

- Vibration levels for the main central station building and the Bradfield Building (Former Lost Property Office) would be below the screening level for cosmetic damage
- Vibration at the closest adjacent, but not directly affected, intercity platform (to the west of the station box) would be above the vibration screening level for cosmetic damage
- Vibration at the closest adjacent, but not directly affected, suburban platform (to the east of the station box) would be above the vibration screening level for cosmetic damage

The construction of the station box would cut three branches of the existing underground pedestrian routes which are elements of moderate/high significance. Note that the Devonshire Street Tunnel, which is an element of high significance would also be directly affected. A 45m section of tunnel would be demolished and reinstated. It is not structurally able to act as a bridge structure during construction and therefore would need to be removed during this process. The impacts would result in loss of original fabric and a change to the historical alignment and pedestrian flow of the tunnels, except for the Devonshire Street Tunnel, which would be reinstated in its current alignment and position.

A new platform would be constructed above the station box, which would include vertical transport such as lifts, providing pedestrian access to the underground metro platforms. The

removal of the platforms would create an opportunity for the new structure to express the evolution of the station. The architectural language should refer to, and bind, other elements of the Metro project providing a uniform layer expressing the contemporary use of the station.

A services building would be constructed at the southern end of the new platform. The building would be around seven metres in height and would obscure views from the platform to Sydney Yard. The impact could be partially mitigated by design.

A services building would also be constructed on Platform 15. The services building would be around seven metres in height, and would protrude several meters above the canopies. In the context of the new station additions it is unlikely to be visually dominant and would have minor visual impact. The construction of the services building would not impact original fabric as it would be located on a newly constructed platform. The construction of the new services building would require the removal of an existing structure which is a modern addition and an intrusive element. The removal and replacement of this element with an element of high quality design would be a positive heritage outcome.

There are likely to be impacts to elements of station infrastructure as a result of the demolition of Platforms 12-15, such as over head wiring structures, signalling, steel and timber furniture, awning and trusswork, goods lifts (at the southern end of platforms 14/15), signage, and hardwood buffers at the termination of the platform. Impacts to these items could be partially mitigated through removal and reinstatement where practicable, or through archival recording.

The southern end of the station box excavation would extend into the Sydney Yards, impacting the former timetable office/Rolling Stock Officers Building, an element of moderate significance, the Cleaners Amenities Building, an element of moderate significance and the garden, an element of high significance. It should be noted that as the garden is potentially of lower significance due to its condition and significance of its elements which have been assessed in the Central Station Conservation Management Plan as moderate at the highest.

Impacts to these items are a result of the application of a design option that, on balance, seeks to minimise the overall impacts of the services building by extending the station box, which would reduce the height of the services building on the southern end of the new platform by about 50 per cent, thus reducing visual impacts to the station. Potential direct impacts to the Bradfield Lost Property Building would be minimised as a result of the lengthening of the station box. Impacts to the former timetable office/Rolling Stock Officers Building, Cleaners Amenities Building and the garden would be direct and would result in a total loss of significance of these elements.

#### Removal of the temporary pedestrian bridge

The Environmental Impact Statement discussed the construction of a temporary access bridge. This bridge is no longer proposed.

As the station box would limit pedestrian access an underground pedestrian tunnel would be constructed across the southern end of the station box. As a result two new sets of stairs would be constructed at the northern ends of platforms 20/21 and 22/23. The platforms were constructed between 1922 and 1926 as part of the development of Central Electric Station. The two new stairs would provide access from the platforms to existing pedestrian tunnels leading out to Devonshire Street. The construction of the stairs would result in impacts to original platform fabric. The platforms surfaces are later additions of brick paving with original asphalt underneath the raised surface. Platforms 20/21 and 22/23 fabric and

paving are elements of moderate significance with the above ground platforms of the Central Electric Station having high significance as a group. Impacts to the fabric of the platforms would be minor in the context of the element and the item as a whole.

#### Northern Concourse

In order to provide additional space in the Northern Concourse for vertical transport from the metro platforms, Platforms 9 to 15 would be shortened at the northern end, with their northern extent becoming part of the northern concourse. Energy buffer stops would be installed at the new limits of the working platform. The existing buffer stops at the northern end of the platforms were introduced during upgrades to the station in 1998, and are located further south than the original stops constructed in 1906 which would not be impacted. The platforms would be lengthened by around 10m to the south to compensate for the loss of length to the north. The platforms would be visually similar on completion of works, and the extensions would not impact significant view corridors within or towards the station. The lengthening of the platforms would therefore have a negligible direct and indirect (visual) impact within the wider context of Central Railway Station.

Platforms 8/9, 10/11, 12/13 and 14/15 and their associated awnings were extended southwards in the late 1990s in preparation for the Olympics. The platform extensions, therefore, would not be fixed to fabric associated with the 1906 platforms, and the lengthening of the platforms would not result in additional impact to significant heritage fabric.

#### Sydney Yard Access Bridge and construction site

The construction of the Sydney Yard Access Bridge within the Sydney Yard would result in minor visual impacts to the Sydney Terminal and Central Railway Station Group as a whole. The establishment of the Sydney Yard Access Bridge and construction site would require excavation and the introduction of hard stand, and excavation of a crane pad. Cranes would stand to a height of around 50/60 metres and be present for approximately 7 months. The introduction of the cranes would result in a temporary minor visual impact as the cranes would be visually distant from the main station site. The setting of the Sydney Yards would not be visually compromised as it is a working rail corridor and work site, so plant and machinery would be in keeping with its use.

A heavy vehicle access would be created across existing tracks to the east of the crane pad. The access would be constructed of ballast or pavement and would not impact original fabric or require substantial subsurface excavation. Impacts as a result of the heavy vehicle access would be negligible.

There are no OHW structures within the portion of the Sydney Yard that would be used for the Sydney Yard Access Bridge construction site. OHW structures within the southern Sydney Yard were constructed after the mid twentieth century.

The bridge itself would be located around 250 m to the south of the station, and views from the platforms or station buildings would not be subject to major changes. Although there would be some visual impacts to views from passing trains, they would be in the context of the Sydney Yards as a functioning railway corridor with many visual elements.

Visual and vibration impacts to Mortuary Station are discussed separately in the Heritage Impact Assessment for that item.

Worksite within the Sydney Yard

The adaption of a portion of the Sydney Yard for a worksite is likely to result in a moderate impact. Currently this land is mostly vacant. The yards undergo continual modification and reconfiguration, reflecting ongoing upgrades to rail technology and the requirements of a working rail station, and the temporary use of this area for the project would represent the ongoing adaptation of an industrial railway landscape. There are no OHW structures within the portion of the Sydney Yard that would be used for the Sydney Yards Access Bridge construction site. OHW structures within the southern Sydney Yards were constructed after the mid twentieth century.

#### Services ring

Existing services would need to be relocated prior to excavation of the station box. A services ring would be excavated, generally by under boring. There is some potential to impact archaeological remains however any excavation would be under bored or within previous utility corridors.

#### Access and egress

There would be no substantial impacts to significant fabric as a result of emergency access and egress arrangements from the station's northern entry arrangements and access to Eddy Avenue. The retail stores to the west of the ramp would be demolished. These freestanding kiosks are intrusive elements, therefore demolition of these structures would provide a positive heritage impact.

#### Impacts in relation to heritage significance criteria

Although the project would result in major impacts to certain elements of the Sydney Terminal and Central Railway Stations Group, it would retain its State heritage significance as assessed against all relevant criteria.

Historical significance of the group would be impacted through demolition of significant fabric such as Platforms 12 to 15. Platforms 12-15 would be reinstated (although Platform 15 would no longer operate as a working platform), and the station would retain historical significance as a working transport hub which has continued its primary use for over 150 years. The Metro project would be the next phase in this evolution.

Aesthetic significance would be impacted by construction of the Sydney Yard Access Bridge and additions such as the services buildings on Platform 15. The aesthetic significance of many of the major structures within the group such as the Main Terminus would not be impacted. The new Metro Station design as a new phase of Central Station development would add a new aesthetic element to the station through architectural language that would refer to this new phase but bind it to the historical development of the station. Given high quality design of the new elements, aesthetic impacts to the item overall during the operational phase of the project would be negligible to minor.

Technical significance of the item would be impacted through removal of some original fabric which relates to construction and development of the station, such as platforms and underground tunnels. Examples of technical achievement would remain in many structural elements of the station that would not be impacted.

Research significance of the item would be impacted through the removal of any archaeological deposits, especially related to earlier phases of station development or the

Devonshire Street cemetery.

Summary of impacts

Physical impacts to the station would occur as a result of the excavation of the station box and reconstruction of platforms, demolition of structures in the Sydney Yard, changes to platforms 9-11, construction of stairwells on platforms 20/21 and 22/23, impacts to underground pedestrian tunnels including Devonshire Street Tunnel, service relocation, impacts associated with access and egress from Eddy Avenue, installation of the Sydney Yard Access Bridge including an associated construction site, and use of a temporary worksites in the Sydney Yards.

**Direct impacts: Moderate to major** 

Potential vibration impacts to station buildings during construction of the station box.

**Potential direct: Minor** 

The works are likely to result in moderate to major temporary visual impacts through the establishment of the Sydney Yards construction site, construction of the Sydney Yard Access Bridge, excavation of the station box and construction of Metro elements throughout the station. On completion of the works, the introduction of new station infrastructure may have a minor, or negligible, visual impact. The Sydney Yards Access Bridge would have a permanent minor visual impact.

#### Indirect impact: Moderate to major

# Application of CMP policies

The Central Station Conservation Management Plan (CMP) outlines heritage management policies for the item. Adherence to relevant policies has been discussed below.

#### Policy 1 - Overall heritage management of Central Station.

The government agency/ies responsible for the Central Station CMP area should continue to implement a heritage management structure for the CMP area:

Heritage management has been accounted for during design development for proposed works at Central Station. Detailed design would be informed by the CMP.

#### Policy 2 - Ongoing use as a Major Transport Complex:

The government agency/ies responsible for the Central Station CMP area should:

Recognise that the continuing and sustainable use of Central Station as a major transport hub in NSW is an essential part of its outstanding heritage value.

Recognise that the outstanding heritage values can be successfully balanced within the need for Central Station to continue as a major transport interchange in NSW including both major change and the management of ongoing minor technical adaptation, maintenance and repair; and

The project would be part of the continuing evolution of Central Station as a transport hub. Detailed design would facilitate the creation of a uniform layer to represent this new phase and to in turn recognise and highlight the heritage values of the station. Heritage interpretation incorporated into the design would draw the public's attention to the heritage values of the station and encourage engagement with its dynamic past.

#### Policy 5 - Setting, Views & Landscape

Ensure that the urban setting of Central Station is treated in an appropriate manner which recognises its outstanding heritage values and its listing as a major part of a Special Area in the Sydney LEP 2012.

While permanent visual impacts would result from construction of the Sydney Yard Access Bridge, the character of the station as a major urban transport hub would be maintained.

The majority of the project infrastructure would be constructed underground and would not impact on setting and views from the majority of the surrounding areas. An exception would be impacts to views from Mortuary Station into the rail corridor.

#### Policy 7 - Heritage Conservation and Major Works

Ensure the following are undertaken for major works within the CMP area:

Involvement of appropriate heritage professionals at an early stage including consideration of heritage opportunities and constraints surrounding the works prior to design work commencing;

Heritage consultants and architects have been involved in design development for works at Central Station. Detailed design would be undertaken in consultation with a heritage architect and would be informed by the CMP. Recommendations for consideration in the detailed design process have been included in this HIA.

#### Mortuary Railway Station

# Image Mortuary Station from Regent Street. Artefact Heritage 2015. Significance Description Constructed in 1869, the Mortuary Station is a single storey sandstone building designed in the Victorian Academic style, and attributed to James Barnet. The building consists of a platform with the railway line enclosed by nine arched bays, platform offices and waiting room. The building is approached from Regent Street. Statement of significance The former Mortuary Station is historically and socially significant as a physical reminder of former funeral customs in nineteenth century Australia, and of the central role in funeral

<sup>&</sup>lt;sup>2</sup> Description and Statement of significance extracted from State Heritage Register inventory sheet "Former Mortuary Railway Station including interior, grounds, fence and Railway" last accessed via <a href="http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2424246">http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2424246</a> on 09/12/2015.

services played by the railway. It would have been a place with memorably sad associations for many Sydney people over a long period. The building is aesthetically significant as a fine example of Gothic inspired design attributed to James Barnet, a style adopted for its religious associations in the construction of a funeral station. It is a rare surviving example of this building type in Australia.

#### Impact type

#### Indirect impacts: Views and vistas

# Heritage impact assessment

The construction of the Sydney Yard Access Bridge to provide access during and following construction of the project, would be elevated to the east of Mortuary Station, connecting Regent Street to the construction worksite within the Sydney Yard. The establishment of the construction sites, and the construction of crane pads immediately east of the former station to facilitate construction of the Sydney Yard Access Bridge would result in major temporary visual impacts through the introduction of a number of 50/60-metre-high cranes to be used during construction (a period of around 7 months). The cranes and Sydney Yard Access Bridge construction site would limit views to the east and southeast, although they would be in keeping with the character of the working rail corridor and work site.

The bridge, when finished, would impact views and vistas towards Mortuary Station from Regent Street and views from within the station group to Mortuary Station, including views from passing trains. Views from Mortuary Station into Sydney Yard would be significantly impacted. The bridge would significantly detract from the setting of the heritage item. Although the Sydney Yard is visually cluttered with overheard wiring, signage, signalling and other infrastructure, the construction of the bridge would constitute a major intrusive element which, due to its bulk and length would impact a number of key sightlines and the setting of Mortuary Station in general.

The impacts could only be partially mitigated through sensitive design.

Excavation works for the crane pad may result in minor vibration impacts to the item. Vibration would be above the vibration screening level for cosmetic damage

The historic and social significance of the item at State level would not be impacted. Impacts would primarily be in relation to views and setting, although there would be some visual connection lost with the working Sydney Yard which would have a minor impact on historical significance.

Indirect impact: Moderate to major

**Potential direct: Minor** 

#### Former Crown Hotel

Former Crown I	Hotel including interior*
Image	Former Crown Hotel
	1. 1. 1997
Significance	Local
Description	The former Crown Hotel is a two storey corner building built in the Federation Free Style of architecture. The design incorporates a curved symmetrical facade with a high parapet that represents the shape of a crown, in keeping with the original name of the building.
Statement of significance	The former Crown Hotel is a good example of an inner suburban hotel built in the Federation Free Style of architecture. It is an important local landmark in Regent Street which because of its corner location and high distinctive parapet has high townscape value. A hotel has existed on this site since at least 1858, trading originally under the name, 'The Crown Inn'
Impact type	Indirect impacts: Views and vistas
Heritage impact assessment	The heritage item is located to west of the Regent Street bridge, which would provide access during and following construction of the project. The bridge would be elevated to the east of the heritage item, connecting Regent Street to the construction worksite within the Sydney Yard.
	The construction of a worksite to facilitate access to the station from Regent Street, and the introduction of the Regent Street bridge, may have moderate visual impact on the item.
	The Sydney Yards Access Bridge construction site would be visible from the item, through the Regent Street access route. The cranes and large plant may be visible from the item and would result in a temporary moderate impact to setting and context.
	Indirect impact: Moderate

<sup>\*</sup> Description and Statement of significance extracted from State Heritage Register inventory sheet "Former Crown Hotel including interior" last accessed via <a href="http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2420310">http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2420310</a> on 04/02/2016

#### Co-Masonic Temple including interior

#### Co-Masonic Temple including interior\* **Image** Co-Masonic Temple. Artefact Heritage 2015 **Significance** Local **Description** Constructed c.1898, replacing the previous 1847 Wesleyan Church on the site, the heritage item is a detailed institutional building of 2 stories at the front sitting on a raised plinth and a single storey addition at the rear. The site has archaeological potential related to the earlier Church building located on the site, the re-use of materials from that building in the present building and the relatively large area of site remaining undeveloped that may contain material dating from first use of the site. Statement of Of historic significance due to its strong physical link to the Wesleyan Church and the Cosignificance masons. The Co-masonic temple is a rare and intact example of a Co-masonic Hall. Of aesthetic significance as a rare example of this building type in the city, for its strong streetscape contribution to Regent Street, for its continuity of the precinct centred around the Mortuary Station and the adjacent commercial terraces and as a well-designed modest institutional building. The site has archaeological potential in relation to the earlier Wesleyan Church that occupied the site. Impact type Indirect impact: Views and vistas Heritage The construction of the Regent Street bridge to provide access during and following impact construction of the project, would be elevated to the east of the heritage item, connecting assessment Regent Street to the construction worksite within the Sydney Yard. This is likely to impact on views and vistas towards the Co-Masonic Temple from Regent Street and has the potential to significantly detract from the setting of the heritage item. The Sydney Yards Access Bridge construction site including the 60m crane would be located to the north of the item but would be visible from it resulting in a temporary impact to setting and context. Indirect impact: Moderate to major

<sup>\*</sup> Description and Statement of significance extracted from State Heritage Inventory sheet "Co-Masonic Temple including interior" last accessed via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2424289 on 22/10/2015.

### Terrace Group including interior

Terrace group i	ncluding interiors
Image	Terrace group including interiors (99-105 Regent Street)
Significance	Local
Description	The heritage item consists of a two storey Federation building with four bays of ground floor shops with residences above on the first floor. Each bay steps down in line with the topography. The outer two bays have centrally located pediments within the parapet. Original shop fronts have been replaced with aluminium framed windows. The first floor is characterised by a pair of double hung sash windows with decorative mouldings.
Statement of significance	A good example of a late Victorian/Federation shop and residence development which is a prominent element within the streetscape of Regent Street. The building is evidence of the major commercial expansion that took place along Regent Street in the 1880s and 1890s, particularly on corner sites.
Impact type	Indirect impacts: Views and vistas
Heritage impact assessment	The heritage item is located to west of the Regent Street bridge, which would provide access during and following construction of the project. The bridge would be elevated to the east of the heritage item, connecting Regent Street to the construction worksite within the Sydney Yard.
	The construction of a worksite to facilitate access to the station from Regent Street, and the introduction of the Regent Street bridge, may have moderate visual impact on the item.
	The Sydney Yards Access Bridge construction site would be visible from the item, through the Regent Street access route. The cranes and large plant may be visible from the item and would result in a temporary moderate impact to setting and context.
	Indirect impact: Moderate

<sup>\*</sup> Description and Statement of significance extracted from State Heritage Register inventory sheet "Terrace Group Including Interiors (99-105 Regent Street)" last accessed via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2420309 on 03/01/2016.

#### Chippendale Conservation Area

#### **Chippendale Conservation Area\***

**Image** 

Chippendale Conservation Area (view from Regent Street). Artefact Heritage 2015



#### Significance

Local

#### Description

Primarily constructed between 1838 and 1950, the Chippendale Conservation Area consists of the area bounded by City Road, Broadway, Abercrombie, O'Connor, Balfour, Wellington, Regent and Cleveland Streets. The area includes the Cleveland Street, City Road and Broadway Streetscapes. It is characterised by residential and industrial developments with commercial development concentrated along the main thoroughfares.

Regent Street - west side only - Wellington Street to Cleveland Street Wide, heavily trafficked street with scattered deciduous street tree planting. A mixture of Victorian era terrace shops, early 20th century multi-storey warehouse/commercial development with one modern multi-storey commercial building (87-97 Regent St)

# Statement of significance

Chippendale is of historical significance for three key themes: 19th century industry, industrial working class residential and quality residential housing. Industry was the key historical role of Chippendale due to its location relative to the City. Housing for industrial workers is integral to the industrial history of Chippendale, evidenced by early housing in Elim and Chandler's Avenues.

Chippendale is also of historical significance for the extent of land resumption which occurred in the early 20th century which increased the dominance of industry in the area. Strickland House, the first public housing by the City Architect, is significant as evidence of the need to provide quality low income housing.

Chippendale's association with high quality 19th century residential housing predominantly predates the intrusion of the railway around Regent Street. Chippendale demonstrates several key period of layers for the development of inner city Sydney: the first layer as a direct result of the subdivision of the Cooper Estate and Shepherd's Nursery, subsequent layers

	from Railway construction and from the resumption era and the construction of industry and related housing for industrial workers
	Chippendale is an exceptional area with multiple key period layers, an early residential suburb profoundly affected by land resumptions and the construction of industrial buildings and associated Victorian working class housing. The area contains many intact buildings which are contributory to the area's significance.
Impact type	Indirect impacts: Views and vistas
Heritage impact assessment	The construction of a worksite to facilitate access to the Sydney Yard from Regent Street, and the introduction of the Sydney Yards Access Bridge would have moderate visuals impact on the conservation area. The Sydney Yards Access Bridge construction site would be visible from the north eastern corner of the conservation area through the Regent Street access route. The cranes and large plant may be visible from the conservation area and would result in a temporary moderate impact to setting and context.
	Indirect impact: Moderate

<sup>\*</sup> Description and Statement of significance extracted from State Heritage Inventory sheet "Chippendale Heritage Conservation Area" last accessed via http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2421466 on 22/10/2015

#### Archaeological assessment - Sydney Yard Access Bridge construction site

#### Previous archaeological investigations

The Archaeological Zoning Plan of Sydney<sup>3</sup> designated the Central Station precinct as containing areas of archaeological potential that are partly disturbed. The archaeological potential of the Central Station precinct was also assessed in the 2013 Conservation Management Plan (CMP).<sup>4</sup>

#### Discussion of archaeological potential and significance

The Central Railway Station Group has been built on the site of the two earlier Sydney railway terminals, the former Devonshire Street cemetery and a number of colonial era buildings. The group also includes a number of earlier railway buildings demolished in various phases of expansion. As such it is possible that archaeology may be encountered across the site relating to these various phases of development.

The archaeological potential of the Central Station precinct was assessed in the 2013 CMP. The proposed Sydney Yard Access Bridge construction site is not identified in the CMP as having archaeological potential.

Prior to the construction of Mortuary Station in 1869 the area remained largely undeveloped, consisting of a site of public pasturage known as the Government or Cleveland Paddocks. A Trigonometric survey plan dating to 1865 includes a number of small wooden buildings located behind Mortuary Station (the prospective location of which has been sketched) and within the proposed construction site (Figure 1). The purpose of these buildings is unclear but they are likely to have been sheds or workshops associated with the operation of the railway yard.

A section of the 1857 Prince Alfred Sewer passes to the north of Mortuary Station (illustrated in dashed pencil and by two red lines on the 1865 Trigonometric Survey plan on **Error! Reference source not found.**). The drain was originally constructed at a depth of 9 feet. Sydney Water Dial Before You Dig plans indicate that this sewer continues to be in use as a stormwater drain, albeit highly modified. The sewer is outside the construction site study area.

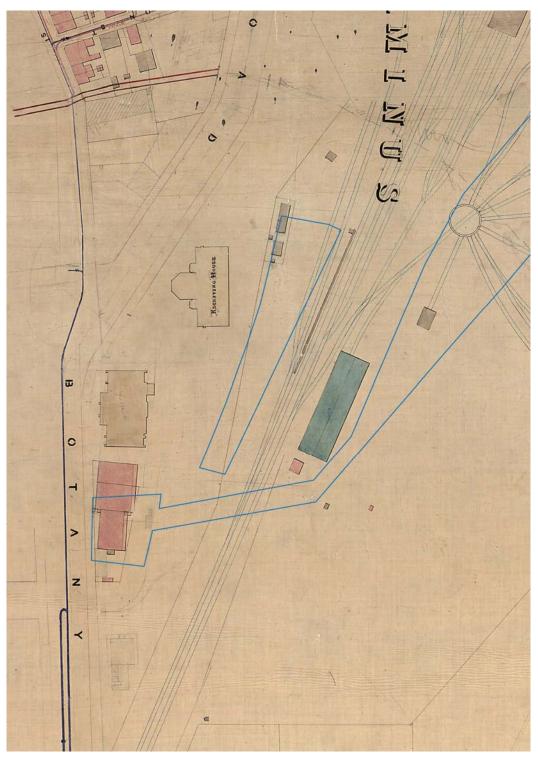
<sup>&</sup>lt;sup>3</sup> Archaeological Zoning Plan of Sydney, City of Sydney 1997, 18.

<sup>&</sup>lt;sup>4</sup> Rappaport & GAO 2013

By the late 19<sup>th</sup> century the study area contained numerous rail lines associated with Mortuary Station, the 1855 Darling Harbour Goods Line and various railway sidings (Figure 2).

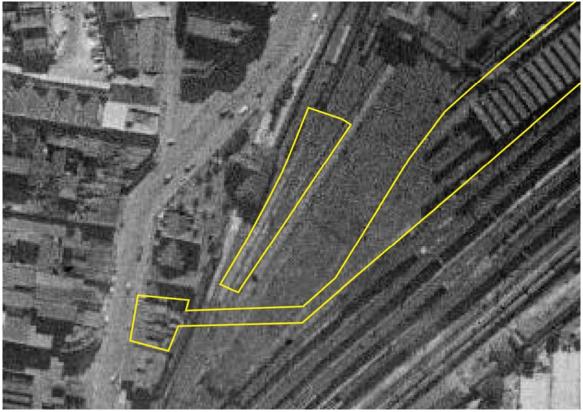
It is unlikely that archaeological remains of the former railway sheds would remain intact to the east of Mortuary Station. Archaeological remains of industrial wooden structures are often limited to postholes and other ephemeral evidence, and it is likely that the introduction of ballast and construction of track, installation of service and electrical lines and phases of demolition and construction and works associated with the ongoing modernisation of the railway precinct have, at least partially, impacted on archaeological remains.

**Figure 1:** Detail from 1865 Trigonometric Survey of Sydney, showing Mortuary Station, the wooden structures to the north-east and line of the Prince Alfred sewer to the north.<sup>5</sup>



<sup>&</sup>lt;sup>5</sup> Trigonometric Survey of Sydney, 1855 – 1865. Historical Atlas of Sydney. <u>www.photosau.com.au/CoSMaps/scripts/home.asp</u> viewed 1 June 2016.

Figure 2:1943 Aerial photograph showing Mortuary Station and associated rail lines. Lands and property Information.



#### **Archaeological impact assessment**

Excavation works required to establish the Sydney Yard Access Bridge construction site and construct the crane pads have nil to low potential to impact non-Aboriginal archaeological remains in this location. The evidence of previous structural remains in this location consists of a number of mid-19<sup>th</sup> century wooden structures associated with the first railway station. Archaeological remains associated with these structures is likely to have been impacted or removed by later construction works.

#### **Waterloo Station site**

#### Congregational church including interiors

Congregational c	church including interior <sup>6</sup>
Image	Congregational Church and street context. Artefact Heritage 2015.
Significance	Local
Description	Constructed in 1883, the heritage item consists of a two storey Victorian Gothic style church with cedar pulpit, gallery and staircase. The building is symmetrical in plan and elevation. The building sets back from Botany Road and presents a garden, fence, entrance steps to the front. The foundation stone inscribed year 1865, however, this is from the previous Congregation Chapel on the site.
Statement of significance	The Gothic church of rendered brick construction was constructed in 1883 to replace the congregation chapel built in 1865. The symmetrical design of the façade demonstrates high quality architectural traits of the building. It is one of the earliest worship venues in Waterloo.
Impact type	Indirect impact: Views and vistas
Heritage impact assessment	The heritage listing for the item recommends that alterations and additions be confined to the rear of the property, as this is an area with less significance.  The annex was constructed around 1886 and is a contributory element of the significance of the item.
	The toilet block is an element of little-moderate significance. Although portions of the toilet block are likely to have been constructed around the same time as the annex it has been modified (roof, internal fixtures, door, guttering) and is in poor condition. It is located at the rear of the church building, and is accessed via two separate doors from the annex.
	As the toilet block is not a contributory feature of the item, its removal would have a minor-moderate heritage impact, depending on the extent of impacts to the fabric of the annex wall required. Impacts to the fabric of the annex wall during demolition of the existing toilet block are expected to be moderate in localised areas where brickwork, render or other structural features would be removed to facilitate demolition of the toilet block and relocation of services.

<sup>&</sup>lt;sup>6</sup> Statement of significance extracted from State Heritage Inventory sheet "Congregational Church including interior" last accessed via <a href="http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2420461">http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2420461</a> on 22/10/2015.

Removal of a portion of the heritage curtilage would result in a minor-moderate impact, and would not impact the aesthetic or representative values of the item as a whole.

With regard to the proposed excavation for the cut and cover station modelling indicates that the closest façade of this item would not experience vibration levels above the vibration screening level for cosmetic damage. Construction works associated with the tanking of the station box, however, would require rock anchors to be placed directly under the church. Vibration from this activity would be above the screening criterion.

**Direct Impact: Minor to moderate** 

Potential direct impact: Minor to moderate

As the bulk of the new station would be located to the rear of the heritage item, and the heritage item is oriented to the west and away from the station site, demolition of existing buildings and construction of new station entrances would have a minor impact on the setting of the heritage item.

**Indirect impact: Minor** 

#### Archaeological assessment

The NAHIA and Historical Archaeological Assessment and Archaeological Research Design (ARD) have assessed the Waterloo Station site as having a moderate-high potential for locally significant archaeology. The small additional area to be excavated for the removal of the toilet block and associated works would share this level of potential and significance No additional archaeological consideration have been identified. The additional works would not impact archaeology to a greater extent that assessed in the NAHIA.

#### **Martin Place Station site**

#### Martin Place Station

Martin Place Rail	Martin Place Railway Station <sup>7</sup>	
Image	Station entrance in Martin Place [left] and public concourse [right].	
Significance	State	
Description	Constructed between 1973 and 1979 Martin Place Railway Station consists of an underground complex, accessed via stairs from Martin Place and then banks of three escalators to the concourse level. Pedestrian access is via arcades constructed at the same time as the station and leading to adjacent office and retail plazas.	
Statement of significance	Martin Place Railway Station is significant as a representative example of the most recent major railway construction undertaken in Sydney city, as part of the Eastern Suburbs Railway (ESR). The design of the Martin Place Station as displayed in its colour scheme particularly, reflects the design ideas of the 1920s city underground stations such as St James and Museum, and the individual colour schemes used for each of the stations on the ESR. Martin Place is a good example of a late Twentieth-Century International style structure which is highly intact with many of its original materials and finishes still in place.  Martin Place Station is listed on the SHR for its rarity values. The section 170 and LEP listings	
	for the item also recognise its representativeness, aesthetic, social and historical significance	
Impact type	Direct impact: Project connects directly to station	

<sup>&</sup>lt;sup>7</sup> Description and Statement of significance extracted from State Heritage Register inventory sheet "Martin Place Railway Station" last accessed via <a href="http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5012097">http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5012097</a> on 22/10/2015.

# Heritage impact assessment

An underground interchange from the Sydney Metro station to the Martin Place Railway Station would be provided through the excavation of a mined tunnel that would tie into the western extent of the existing Eastern Suburbs Line platform cavern. This connection would break through from the station cross passage beneath Martin Place and Elizabeth Street into the western end of the existing Martin Place station platform. The construction of the interchange would include the removal of red ceramic tiling and terrazzo panels from the western end of Martin Place Station as well as altering the configuration and movement of passengers through the station. The red ceramic tiling and terrazzo panels are key components of the aesthetic significance of the item. Red tiling is used sparingly within the platform cavern, with the eastern and western ends of the platform a key visible use of the material.

Breaking through into the Eastern Suburbs Line platform cavern, and utilities relocation works, would require the removal of section of the existing false roof. Only a small portion of the roof would be impacted and may be reinstated depending on fire safety rating.

The removal of three banks of circular seating on the platform is required to maintain pedestrian movement through the station. The original red moulded seating has been replaced by steel structures which do not contribute to the significance of the heritage item. The seating frame, and associated platform surface tile work are original and are significant elements of station fabric and design aesthetics.

Pillar stitching works would be required in the Eastern Suburbs Line platform cavern should weak ground conditions be encountered. This would require the excavation of bedrock and the installation of a cable and grout sleeve to reinforce the connection between the proposed mined tunnel and the Easter Suburbs Line. This would not impact on the heritage significance of the station as any fabric impacted would not be significant and would not result in discernable visual impacts.

The historical significance of the item would not be impacted as it would retain its use and character. There are other examples of red ceramic tiling and terrazzo panels throughout the item, which would not be impacted by the project.

The construction of the interchange would result in moderate impact to the heritage item's aesthetic significance through removal of original fabric.

The social significance of the item would not be impacted as it would retain its use as a railway station and public association with that use.

The representativeness of the item would not be impacted by the project as impacts to fabric would be limited to one discrete area, with examples of similar fabric remaining at other locations within the station.

The rarity of the item would not be adversely impacted as only a portion of fabric would be impacted.

**Direct impact: Moderate** 

#### Archaeological assessment

The additional proposed works would be internal to Martin Place Station, which has been previously excavated into bedrock. The pillar stitching reinforcement works within the Eastern Suburbs Line tunnel, if required due to weak ground conditions, would be excavated through bedrock.

The study area, therefore, has no archaeological potential.

## O'Connell Street future underground pedestrian link

#### Richard Johnson Square including monument and plinth

Richard Johnson	Square including monument and plinth
Image	Richard Johnson Square and monument.
Significance	Local
Description	Small paved square on the north-west corner of Hunter and Bligh Streets, containing an obelisk monument on tiered plinth.
Statement of significance	Richard Johnson Square is historically and culturally significant as an important example of 20th century civic planning. The square has moderate potential to contain locally significant remains of a former nineteenth century residences and nil-low potential to contain remains of a 1793 church.
Impact type	Indirect impact: Visual
Heritage impact assessment	The tunnel would be excavated below the item at depth so there would be no direct impacts to fabric or archaeology, or impacts to context and setting.
	The use of rock hammers in the construction of the tunnel directly below the heritage item have been assessed as being below the vibration screening level for cosmetic damage.
	There may be some minor visual impacts as a result of construction within the O'Connell Street site. These would be temporary.
	Indirect impact: Minor
	Potential direct impact: Neutral

#### **AFT House**

#### **AFT House**

#### **Image**

#### AFT House. Artefact Heritage 2016.



#### Significance

#### Local

#### **Description**

AFT House, originally a banking chamber with offices above, exemplifies the Art Deco style. It was constructed between 1939-1940 by Stuart Bros Ltd with a design by C. Bruce Dellit. The facade comprises two zones. The first consists of a decorative archway clad in granite, rising four floors in height, which dominates the streetscape. Above rises an expanse of sandstone. The building features stylised and geometric semi-abstract decoration. It has bronzed doors and carved panels beneath an arch. The entrance foyer has travertine clad walls and a marble floor, and retains original metal and glass light fittings and decorative lift doors. The former Egyptian Art Deco banking chamber is monumental. Two storeys in height, the chamber retains a vaulted ceiling and rich detailing. Contemporary office space on the upper levels consists of plasterboard and timber veneer stud wall with glazed sections and a suspended acoustic ceiling. The building is visually linked by design and materials to Manufacturers House adjacent, and fits well into the streetscape.

# Statement of significance

AFT House is one of Australia's finest examples of the Art Deco office building; the stylistic treatment of the main entry and lifts is unique in Sydney. Its formal qualities, especially at the top, make it significant in the streetscape. It is one of the finest works of Bruce Dellit, a leading practitioner of the period, responsible for notable Sydney landmarks including Hyde Park War Memorial and Kyle House (1931), his only other major office building. The ground floor interiors contain sufficient form and fabric to interpret the excellence of their Art Deco style. The building represents the departure, in the 1930s, from traditional architectural styles and adopted a new form of expression and adaptation of modern building technologies. These technologies are evident in the integration of decoration with the function of the building and its original zoned air conditioning system. AFT House is part of an ongoing tradition of the CBD as a financial and commercial focus and illustrates very well the principal design influence of the time.

#### Impact type

Indirect impact: Visual

Heritage impact assessment

Works for the project would require further excavation with the O'Connell Street site adjacent to the item. Any views of the construction site during construction would be minimal and have a negligible visual impact on the item.

Indirect impact: Negligible

#### Former NSW Club

#### Former NSW Club

#### **Image**

Former NSW Club. Artefact Heritage 2016.



#### **Significance**

#### State

#### **Description**

The New South Wales Club House Building is of the Italian palazzo style built between 1886-1887 by John Try and designed by William Wilkinson Wardell. The principal entrance to the club-house is from Bligh Street, the frontage of which is constructed in Pyrmont stone. The entrance is approached by a flight of stairs and lined with cast-iron lamp standards, leading to a spacious hall on the ground floor. The NSW Club building is marked by high ceilings and tall windows; the windows being semicircular headed on this floor. The ground floor's entrance hall and original dining room contain elaborate joinery and marble chimney pieces and is further distinguished by its richly painted and stencilled decorative scheme on its walls and ceilings.

# Statement of significance

The remnant building is of significance as the sole surviving example of a nineteenth century Sydney gentlemen's club, then an important and influential institution in Victorian colonial society in Australia.

The remnant building is of significance as one of surviving, albeit altered, examples of the works of the Victorian-era architect, William Wilkinson Wardell. The restrained classical elegance of its original Bligh Street facade is influenced by Italian Renaissance palazza. Behind the facade are spacious Victorian-era and Federation-era rooms, all with high ceilings and tall windows overlooking Bligh Street. These rooms contain elaborate joinery and marble chimney pieces, and a rich, masculine, painted and stencilled decorative scheme on the walls and ceilings, with remnants of embossed wallpaper of importance.

	The remnant building is also of significance because it demonstrates, by means of its surviving form, fabric and finishes the evolution of building conservation during the 1970's.
Impact type	Potential direct impact: vibration
	Indirect impact: visual
Heritage	Works for the project would require further excavation with the O'Connell Street site
impact	adjacent to the item. This work would result negligible impact to context and setting as view
assessment	lines from the item are generally away from the construction site to the south-east.
	Demolition of the former adjacent building at the site has been completed. Any construction
	adjacent to the Former NSW Club would be undertaken in a manner which would maintain
	the structural integrity of the item and avoid impacts to original fabric.
	Potential vibration levels as a result of the construction of the shaft and associated
	excavation works have the potential to exceed the vibration screening level for cosmetic
	damage.
	Potential direct impacts: Minor
	Indirect impacts: Negligible

#### **Radisson Plaza Hotel**

Rauissoii Fia	
Radisson Plaza H	lotel
Image	Radisson Plaza Hotel. Artefact Heritage 2016.
Significance	State
Description	Wales House was originally designed by Manson & Pickering, and built between 1922-1929 by Stuart Bros. It is a Modern Renaissance Style commercial building. It was purpose built for John Fairfax and Sons for publishing, and was later used by the Sydney Morning Herald.

# Statement of significance

The site of the building has a 99 year association from 1856 to 1955 with the publication of Australia's oldest surviving newspaper, the Sydney Morning Herald. The building itself was designed for this purpose which it fulfilled for 28 years from 1927 to 1955.

The building, with its rounded corner treatment on the prominent narrow-vee site provides a good and clearly visible element in the townscape. The building is a large and powerful reminder both of the success and prosperity of the publisher-owners, John Fairfax & Sons, and of the dominant role of newspapers in society at that time, before the advent of the electronic media.

The exterior treatment of the building is a fine example, in good condition, of the Interwar Commercial Renaissance Palazzo style, then popular for office buildings of this type. It reflects an image consistent with the perceived role of the Sydney Morning Herald - conservative, substantial, influential and responsible.

The only substantial and clearly visible surviving remnants of the original office layout are the Manager's Room with its adjacent Elevator Vestibule, portion of the adjoining Assistant Manager's Room, and the Board Room, all on the First Floor. Though now mostly incomplete, they serve as reminders of the quality of original finishes employed for these most important rooms. They are notable for their conservative and solid design and the emphasis placed on usage of Australian joinery timbers.

#### Impact type

#### Indirect impact: Visual

# Heritage impact assessment

Works for the project would require further excavation with the O'Connell Street site adjacent to the item. Any views of the construction site during construction would be minimal and have a negligible visual impact on the item.

Indirect impact: Negligible

#### **Public Trust Office**

#### **Public Trust Office**

**Image** 

Public Trust Office. Artefact Heritage 2016.



Significance

State

Description	The Public Trust Building is of the Inter-War Free Classical style designed by Ross & Rowe and was built in 1926. The building consists of eight storeys above a basement level. The sandstone façade fronting O'Connell Street is symmetrical, with three round arches of two storey high (ground and first floors), and unconventional order of architecture with attenuated pilasters spanning between the third and seventh floors. The second and seventh floor levels each consists of three bays of windows. The parapet is enriched with classical stone cornices and decorative embellishments. The inter-war period of this classical building is emphasised by its large metal framed windows and spandrel panels.
Statement of significance	The building is associated with the historical development of the Public Trustee in NSW. It is of social significance because of its association with the management of estates of deceased persons. It is the first office building purchased especially to accommodate the Public Trustee and is still being used as Head Office of the organisation. The building façade contributes to the streetscape character established by former Bank of New South Wales building on the corner of Hunter and Pitt Streets. It is a good example of the Inter-War Free Classical style of architecture designed by the well known architects Ross & Rowe.
Impact type	Indirect impact: Visual
Heritage impact assessment	Works for the project would require further excavation with the O'Connell Street site adjacent to the item. Any views of the construction site during construction would be minimal and have a negligible visual impact on the item.  Indirect impact: Negligible

#### **Manufacturers Mutual Building**

#### **Manufacturers Mutual Building**

#### **Image**

Manufacturers Mutual Building. Artefact Heritage 2016.



#### Significance

#### Local

#### **Description**

Manufacturers House was designed by S H Buchanan & Cowper and built between 1934-1935 by Robert Wall & Sons. The facade is tripartite with the central section including a higher parapet. The central bay includes five vertical window panels which finish above a two storey glazed doorway with a framed bronze beam and column which incorporates the signage to the building. The upper level windows have been extensively restored and at the lower level new timber double hung windows have been installed. The outer bays are lower, incorporating glazing to the mezzanine and lower doorways. The building features sunrise colortex brickwork with a lighter colour brick to the parapet and eighth floor, and Kanimbla granite to the base. The facade features chevron patterns in the granite and stepped pilasters which angle at the ninth floor. Internally the plan is symmetrical with a longer wing to the northern boundary. The interior has been completely remodelled.

# Statement of significance

Manufacturers House, is a nine storey building built for the NSW Chamber of Manufacturers in the early 1930s, in a modest Inter War Art Deco Style. The building comprises predominantly Australian materials, and is significant for its reflection of the cautious emergence of business confidence following the period of economic depression and industrial unrest of the late 1920s. The building is a rare and outstanding example of a highly intact original commercial face brick exterior of high quality design with outstanding potential to continue in its restored state. The building is well resolved in its detailing in both its interior and exterior and is particularly noted for its use of face brick and chevron motifs, and its relationship of materials to the adjacent Delfin House. The building is significant for its contribution to the development of the Hunter and O'Connell Street Art Deco precinct.

#### Impact type

#### No impact

# Heritage impact assessment

There is no direct view line between the construction site and the item. There would be no visual impacts as a result of construction at the O'Connell Street site.

Indirect impact: Neutral

#### **Qantas House**

# Qantas House including interiors8 **Image** Qantas House. Artefact Heritage 2015. **Significance** State **Description** Constructed between 1955 and 1957, Qantas House is distinguished by its graceful, segmented, curved facade which consists of a 46m high, double glazed curtain wall of green glass with enamelled blue-green steel spandrel panels. It is located on the western side of Chifley Square which itself is located at the intersection of Elizabeth, Hunter and Phillip Streets in Sydney. Statement of Qantas House, No. 1 Chifley Square, Sydney, designed in 1950 by Felix Tavener of Rudder significance Littlemore & Rudder, Architects and completed in 1957 represents the highest standard of architectural response to its urban setting and client needs through its form, composition and construction. A variant of the Post-War International style of architecture, Qantas House represents transitional aspects of 'moderate' 1930s European modernism, combined with the latest in post-war curtain wall technologies and materials and is the best design response to its setting in Australia from this period. Although altered internally, its external facade remains largely intact. The graceful doublecurved facade is coherently ordered and its shape reflects and visually reinforces the implementation of a long-planned extension to Elizabeth Street. It became the inspiration for the eventual completion of the ironically named, but no less significant, Chifley Square, modelled on a town planned scheme of some eighty years before. Qantas House is a key defining element in this important, planned, urban space; it provides an appropriate visual

<sup>&</sup>lt;sup>8</sup> Description and Statement of significance extracted from State Heritage Register inventory sheet "Qantas House" last accessed via <a href="http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5049926">http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5049926</a> on 22/10/2015.

	termination to important vistas and it visually links to adjoining important buildings and streets.
	Historically significant as the first planned world headquarters for Qantas Empire Airways, at the time Australia's only, and Government-owned, international airline, the building, and in particular the aerofoil-shaped aluminium mullions of its curtain wall, gives form to Qantas' forward looking and expansive image at a time when air travel was taking off. Qantas Airways remained as its sole occupant for twenty-five years and remains associated with the building through its lease of the ground floor. The building is highly regarded by the people of Sydney for its inherent aesthetic qualities and its association with Qantas, an Australian corporate icon.
	Qantas House is a fine example in the Australian context of intact, post-war, multi-storeyed office buildings from the first phase in the 1950s, and is from the small group in Sydney of this group designed prior to the amendments to the Heights of Buildings Act in 1957 that heralded the subsequent 'high-rise' phase. It has particular rarity within Australia for its unique shape, the outstanding quality of its curtain wall facade and its contribution to its urban setting. As such, it is considered to have heritage significance at a national level. A well known and much loved city landmark, Qantas House is an icon of its time; a quintessential Sydney building that represents a brave future and a strong sense of history
	and of place.
Impact type	No impact
Heritage impact assessment	There is no direct view line between the construction site and the item. There would be no visual impacts as a result of construction at the O'Connell Street site.  Indirect impact: Neutral
	man oot mpaot. House

#### **CML Building**

#### **CML** Building

#### **Image**

CML Building. Artefact Heritage 2016.



#### **Significance**

#### State

#### **Description**

Constructed in 1936, the former "City Mutual Life Assurance" building is one of the best intact examples of Art Deco style applied to a commercial office building in the Sydney CBD

# Statement of significance

The City Mutual Life Assurance Building is one of the foremost examples of high quality and well-designed commercial Art Deco architecture in Sydney's CBD and represents the culmination of the work of one of Australia's foremost proponents of this style, Emil Sodersteen. As a largely intact and well maintained late 1930's structure, the building demonstrates through its powerful exterior elevations and dramatic interior spaces the aesthetic and commercial aspects of Art Deco architecture in Australia.

The building occupies a dominant position in the surrounding urban context, serving as a backdrop to Richard Johnson Square and as a landmark in the Bligh and Hunter Streetscapes. Since its completion in 1936, the building has been a symbol of the Mutual Life Assurance Society and the building stands as a monument to the Society's participation in the evolution of Sydney's business and commerce.

#### Exterior

Exterior elevations to Bligh and Hunter Streets represent intact and well-maintained examples of late Art Deco commercial detailing and massing. The materials used to differentiate parts of the building and its proportions demonstrate the Art Deco preoccupation with the precision of modern technology and materials. The tower at the corner of Bligh and Hunter Streets is the focal point of the building and serves as a major landmark to the Richard Johnson Square and the Bligh and Hunter Streetscapes. Materials and detailing at lower elevations are oriented to the scale and perceptions of pedestrians. Such detailing includes the glossy granite building base at street level, bronze window sashes and sculptures (by Rayner Hoff) over the main entrances.

#### **Interior**

The lift foyer to the main entrance at the Hunter/Bligh Street corner is an intact and handsomely detailed expression of late 1930's commercial interior design. Scagliola walls, brass handrails and bronze fixtures as well as original indirect lighting fixtures demonstrate

the craftsmanship and integrity of the overall building design. Main lift foyers survive largely intact on all building levels. The ground floor main business chamber is the largest and most intact Art Deco commercial chamber in Sydney. It demonstrates Emil Sodersteen's considerable design abilities in accommodating a formally proportioned interior space within an irregular external building envelope. The streamlined space is a controlled image of commercial prestige highlighted by sophisticated detailing and craftsmanship. Scagliola wall and column surfacing, bronze window frames and detailed plasterwork emphasise the overall ambiance of the space. Other major interior spaces that reinforce the total building design include the secondary lift foyers on the ground, first and second floors, and the second floor Board Room. Impact type Indirect impact: Visual Heritage impact The tunnel would be excavated below the item at depth so therefore there would be no assessment direct impacts to fabric or archaeology, or impacts to context and setting. The use of rock hammers to be used in the construction of the tunnel directly below the heritage item have been assessed as being below the vibration screening level for cosmetic damage. Works for the project would require further excavation with the O'Connell Street site adjacent to the item. Any views of the construction site during construction would be minimal and have a negligible visual impact on the item. Indirect impact: Negligible Potential direct impact: Neutral

#### **Bennelong Stormwater Channel No. 29**

Bennelong Stormwater Channel No. 299	
Image	Curtilage of the Bennelong Stormwater Channel No. 29.  SYDNEY SEWERAGE. 1857
Significance	Local
Description	Constructed between 1856 and 1857, the Bennelong sewer consists of a combined sewer/stormwater drain. It is oviform in shape with dimensions of 1.5 metres by 1.2 metres. The system is constructed of brick with some sections tunnelled in sandstone along Tarpian Way (Circular Quay East).  This stormwater channel drains an area of 65 hectares in total, with its uppermost point being the Obelisk vent shaft at Hyde Park. From here it works its way down along Pitt, Castlereagh, Elizabeth, Phillip and Macquarie Streets to the outlet at Bennelong Point.
Statement of significance	The Bennelong Stormwater Channel is of high historical and technical significance as it was one of the five original combined sewers built in Sydney around 1857. The other four sewers were; Blackwattle Bay, Hay Street, Tank Stream and Woolloomooloo. These five sewers were responsible for greatly improving public health, hygiene and living standards for the city's residents. This was done by diverting stormwater and sewerage from the streets and discharging it out into the Harbour currents. The introduction of BOOS in 1889 diverted sewer flow to the ocean and eventually led to the drain being used predominantly for stormwater, hence further improving public health. Of the five combined sewers Bennelong is probably the most significant, as it is the most intact and was originally known as the "main sewer" because it serviced the CBD area. It was also the first oviform sewer to be built in Australia. Furthermore, the Margaret Street Sewer, which was once attached to the Bennelong system, contains the first sewer aqueduct to be built in Australia. This aqueduct runs along Hunter Street, which is part of the Bennelong catchment.
Impact type	No impact

<sup>&</sup>lt;sup>9</sup> Description and Statement of significance extracted from State Heritage Inventory sheet "Bennelong Stormwater Channel No. 29" last accessed via <a href="http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=4570854">http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=4570854</a> on 22/10/2015.

# Heritage impact assessment

The tunnel would be excavated below the item at depth through bedrock.

It is understood that due to the tunnel construction methodology vibration impacts that would exceed the level for cosmetic damage would only be applicable at a separation of less than one metre. It is therefore assumed that there would be no vibration impacts. The location of the channel should be confirmed prior to construction.

Potential direct impact: Neutral

#### **Archaeological assessment**

The excavation of the shaft and use of the O'Connell Street site as a construction site are unlikely to impact non-Aboriginal archaeology. Past activities at the site are likely to have removed any archaeological remains apart from possibly bases of deep wells (Casey and Lowe 2012a). As the basements have been cut down to around nine metres along Bligh Street at the location of the shaft excavation, it is unlikely that even the remains of deep wells would have been preserved.

The tunnel would be excavated at depth through bedrock. There would be no surface impacts outside the footprint of O'Connell Street therefore any archaeological remains associated with Richard Johnson Square including potential buried remains of the 1793 church, or nineteenth century structures would not be directly impacted.