

6. BUILT HERITAGE ASSESSMENT

The following sections provide an assessment of potential heritage impacts as a result of the works proposed as part of the project. A list of the heritage items located within the study area of each catchment is provided as well as relevant description and heritage significance assessments. This information forms the base for assessing direct and visual heritage impacts.

6.1 Marrickville Station Catchment

The Marrickville Station Catchment includes two heritage items including the Marrickville Railway Station Group, and Stone house, including interiors. The buffer zone around the station catchment includes two heritage items.

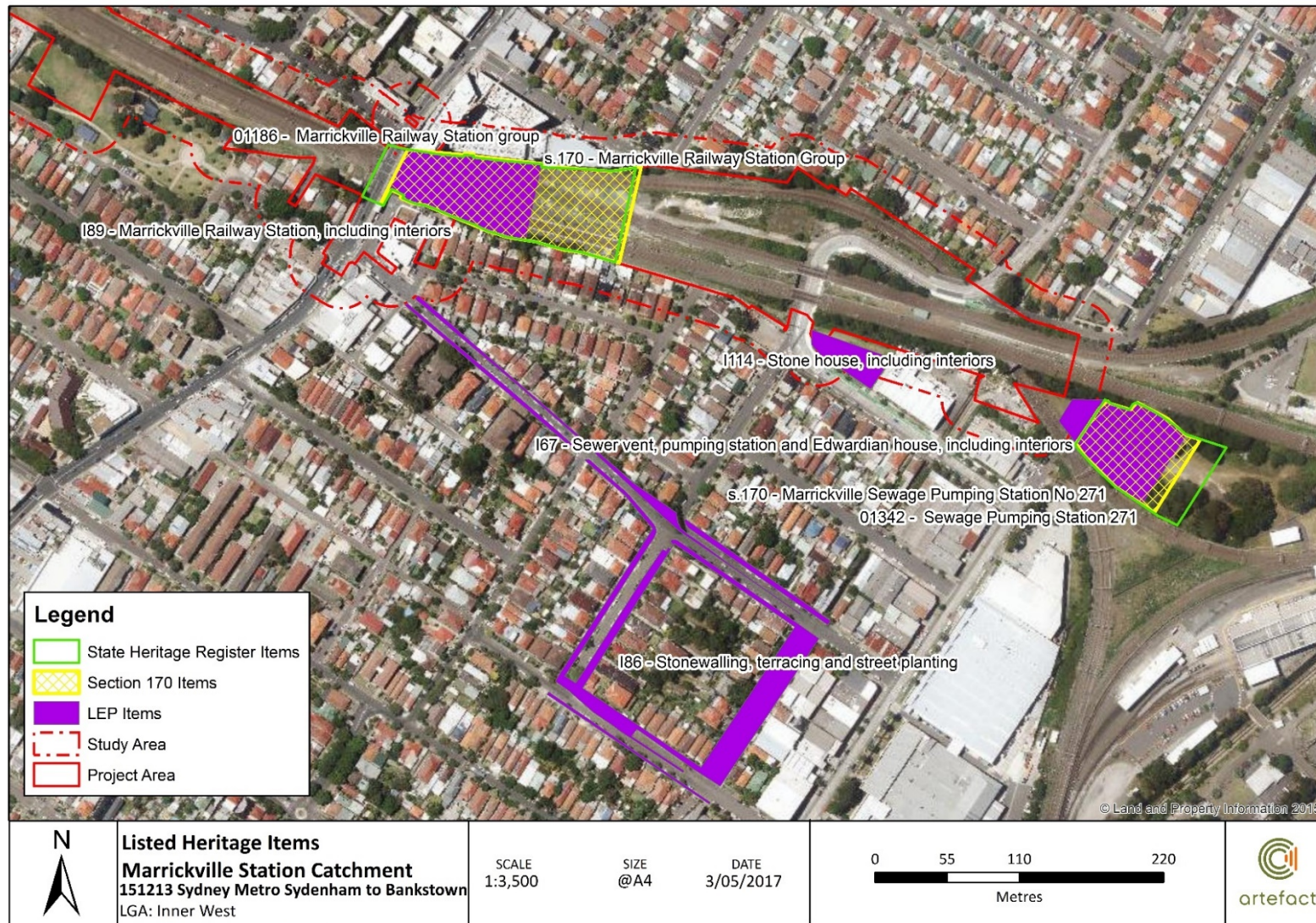
6.1.1 Summary of heritage listings

The table below provides a summary of the heritage items located within the station catchment and within the 25-metre buffer zone. An aerial map showing the heritage items within the station catchment is also provided below.

Table 22: Heritage items within Marrickville Station Catchment and buffer zone

Item	Suburb	Significance	Listing
Within project area			
Marrickville Railway Station Group	Marrickville	State	SHR (01186) RailCorp S.170 Heritage and Conservation Register (4801091) Marrickville LEP 2011 (189)
Stone house, including interiors	Marrickville	Local	Marrickville LEP 2011 (1114)
Within buffer zone (outside project area)			
Sewage Pumping Station 271	Marrickville	State	SHR (01342) Sydney Water S.170 Heritage and Conservation Register (4571727) Marrickville LEP 2011 (167)
Stonewalling, terracing and street planting	Marrickville	Local	Marrickville LEP 2011 (186)

Figure 118: Aerial map showing heritage items within study area: Marrickville



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6.1.2 Existing environment

Marrickville Railway Station Group

Marrickville Station was built by Alexander Scouller using a design by NSW Government Railways, between 1894-1895.

Marrickville Station consists of one wayside platform (Platform 2) to the south and an island platform (Platform 1) to the north (Figure 119 to Figure 128). Passenger rail only uses the south side of the island platform, with the Metropolitan Goods Line running on the north. The station buildings are original, as is the booking office at the western end of Platform 2 (Figure 124). The station is accessed via the stairs from the Illawarra Road overbridge and via a second set of stairs on the south which give access to Platform 2 (Figure 129, Figure 130).

Marrickville is located on the Sydenham to Bankstown Line which was opened as far as Belmore on 1 February 1895. Some changes were made to the station layout with construction of the Metropolitan Goods Line in 1917. A new up platform and building were built with overhead booking office, and the up side of the island platform was withdrawn from use as one of the goods lines now passed it. The platforms were lengthened to the eastern ends in 2011.¹⁰⁰

The Marrickville TAP project included upgrades to the station such as the installation of two new stairs and lifts, new concourse buildings, new canopies, and adaptive reuse of station buildings. The 1917 booking office was relocated along Platform 2.¹⁰¹

Figure 119: View of Platform 2 building, south-east aspect



Figure 120: View of Platform 2 building, south-west aspect



Figure 121: View of Platform 2 buildings, west aspect



Figure 122: View of Platform 2 buildings, south-west aspect



¹⁰⁰ David Scobie Architects Pty Ltd 2016

¹⁰¹ RPS 2013

Figure 123: View of Platform 2, east aspect



Figure 125: View of Platform 1 and 2, west aspect



Figure 127: View of Platform 1 building, east aspect



Figure 124: View of Platform 2 booking office, west aspect



Figure 126: View of Platform 1 building, west aspect



Figure 128: View of Platform 1 building, south aspect



Figure 129: View of stairs and overbridge, west aspect



Figure 130: View of overbridge, west aspect



Sewage Pumping Station 271

The Sewage Pumping Station 271 was designed and built by the Public Works Department.

The complex consists of a combined boiler house and engine room, a large chimney stack and a residence (Figure 131 to Figure 142). The pumping station/ boiler house is designed in classic Federation Romanesque style (Figure 131, Figure 135). Decorative Gothic buttresses with steep copings flank its sides, round headed windows surmounted by arches of rusticated sandstone typify the window openings, and the walls and gables are accentuated by machicolation motifs. The gables have sandstone copings with bracketed kneelers. The windows are small paned figured glass with pivotal awnings typical of the Federation style. The internal doors are round headed diagonal panelled double doors and are similar in style to the external doors.

The building originally had a slate roof with terracotta hips, ridges and finials. Both the boiler and engine house have since been clad in terracotta tile. The gable roofs have monitors, which are centrally placed and continue approximately half the length of the roof and are fitted with fixed steel louvres. The roof truss in the engine house is a delicate hand-wrought Warren truss strengthened internally with matchboarding. The exposed rafters are rounded on the ends and this attention to detail is typical of the quality of carpentry throughout. The internal pilasters, which correspond with the buttresses, hold the overhead crane rail. The overhead crane is a simple undertrussed steel girder hand operated crane typical of the early twentieth century.

The residence is an unadorned two storey brick building designed in Federation Queen Anne style (Figure 140, Figure 141). Masonry is English bond and the facade is accentuated by timber filigree detailing.

The chimney stack is polychromatic brickwork on a square base which changes to an octagonal shaft some three metres above the ground (Figure 142). It is finished with an ornate cap. The stack is a local landmark.

The station is substantially intact and in good condition. The residence building is in good condition and the fabric is substantially intact.

A series of low level sewage pumping stations were constructed to transport waste against gravity by means of a series of rising mains. The low level portions of Marrickville, Newtown, Erskineville, Alexandria and St Peters are still serviced by a low level sewer which discharges into the wells of Marrickville Pumping Station. The sewage is then pumped to the high level of the Eastern Branch of the Southern and Western Suburbs Ocean Outfall Scheme (SWOOS). Marrickville SPS also receives

stormwater discharge from the Central stormwater channel during certain high tides in the Cooks River.

Figure 131: View of pumping station, south-east aspect



Figure 132: View of brick paving, north-east aspect



Figure 133: View of pumping station, south-west aspect



Figure 134: View of retaining wall and brick paving, south-east aspect



Figure 135: View of pumping station, north-west aspect



Figure 136: View of pumping station, with stack and residence in background, north-west aspect



Figure 137: View of pumping station and stack, north-east aspect



Figure 138: View of pumping station and brick paving, south aspect



Figure 139: View of retaining wall, north-west aspect



Figure 140: View of residence, north-east aspect



Figure 141: View of residence, north-west aspect



Figure 142: View of stack, west aspect



Stone house, including interiors

The house at 1 Myrtle Street, Marrickville was built as *Loch Lomond* as the home of James Meek Jnr circa 1870s. James Meek Snr built a stone cottage in Harriet Street in 1860 which was subsequently demolished. *Loch Lomond* was built by his son to the same design but on a larger scale. James Jnr, who married Harriet Fairburn in 1866, lived in Loch Lomond and raised their eight children there until a new residence, *Myrtle Grove*, was built in 1887. The house was occupied by C.G. Neilson in the 1920s under the name of *Stonehenge*.¹⁰²

The house is the largest of the rock faced sandstone houses found in close proximity of early sandstone quarries in Marrickville. It has smooth faced cut stone quoins and surrounds to the French door openings on the verandah, a slate roof and late Victorian columns. The original detailing to the doors and windows has been lost. Modifications to the house include the addition of security features, brick and metal boundary wall treatment along Myrtle Street and a metal and timber lean-to addition to the west of the original dwelling (Figure 143).

Figure 143: View of Stone house, north-east aspect (Source: OEH SHI)



6.1.3 Description of elements

The tables below outline the main structures and elements comprised within the Marrickville Railway Station Group and Sewage Pumping Station 271. Information such as date, description and condition is provided, and the significance of each element has been graded.

Marrickville Railway Station Group

Table 23: Elements of Marrickville Railway Station Group (CMP 2016)

Elements	Date	Description	Condition	Significance
Platform 1	1895	Platform 1 has an asphalt surface above concrete coping and the original brick face wall.	Generally good	Exceptional
Platform 1 building (Type 11) ¹⁰³	1895	External: Rectangular polychromatic face brick building with gabled roof and surrounding cantilevered awning clad in corrugated roof sheeting. The face brick is in English bond, with dark brick walls and lighter salmon coloured bricks forming a dado, framing the upper half of the windows and doors and with a diamond pattern dentil course at the high level. The building is eight bays in length, with the bays	Generally good	Exceptional

¹⁰² Cashman, Richard. & Meader, Chrys. & Carolan, Anne. (1990). *Marrickville, rural outpost to inner city*. Petersham, N.S.W : Hale & Iremonger, quoted on Marrickville Heritage Society's website, *Tracking Heritage: Loch Lomond, Marrickville's Oldest House*, <http://marrickville-heritage.blogspot.com.au/>

¹⁰³ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		<p>defined by engaged brick piers which coincide with the awning brackets. Original chimneys with cement mouldings and terracotta flues remain but have been painted.</p> <p>The cantilever awning is on filigreed steel brackets supported on decorative cement capped brick engaged piers and bolt fixings to the station building brick walls. The soffit lining is the underside of the corrugated steel roof fixed to intermediate exposed purlins. There is a decorative timber moulding at the junction with the brick wall.</p> <p>The awning returns around both ends of the building and at the stair end becomes a canopy supported on timber posts. The awning edges are finished with a decorative timber boarded valance. The end awning and timber valance are not original but constitute a sympathetic addition to the building.</p> <p>The external walls rise from a projecting brick plinth (now painted) with a decorative two-part cement dado moulding which frames the salmon brick dado and is continuous between door and window openings. Decorative cement window and door frames rise above the dado moulding, each with a decorative keystone.</p> <p>The original window and door openings have segmental arches and the windows feature a decorative moulded cement sill. The original timber windows were double hung with a double paned lower sash and a multi-paned upper sash featuring coloured glass. Much of the original coloured window glass as well as the original fanlights above the door openings remain on the southern side but several have been bricked up on the goods line side. The doors were timber panelled but most have been removed or, on the northern side, bricked up. The end brick gables feature a louvre within round brick window frames in salmon coloured voussoir shaped bricks with four cement keystones.</p> <p>Internal: The building comprises a booking hall, still accessible via the original set of double doors at the bottom of the stairs; a booking office; station master's room; general waiting room; ladies room and ladies toilets, a store and men's toilets. The internal usage has now changed and the toilets have modern fitouts and finishes. Original plaster wall finishes and plaster ceilings and ceiling roses remain in the general waiting room, the ladies waiting room, and ladies toilets as well as the station master's room.</p>		
Platform 2	1911	Platform 2 is made of the original brick face wall below concrete coping, brick coping and an asphalt surface.	Generally good	Exceptional
Platform 2 building (Type 11) ¹⁰⁴	1911	External: Rectangular face brick building with gabled roof and integral shallower sloped single cantilevered awning. The face brick is in Flemish bond and the building is four bays in length, with the bays defined by engaged brick piers which coincide with the awning supports. The original chimney with cement mouldings and terracotta flue has been removed.	Generally good	High

¹⁰⁴ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		<p>The cantilever awning is on standard double bowed steel brackets supported on decorative cement haunches and bolt fixings to the station building brick walls. The soffit lining of corrugated steel is fixed to intermediate exposed purlins and follows the roof slope. There is a decorative timber moulding at the junction with the brick wall. Vertical timber boards form a valance at each end of awning. The awning roof as for the main roof is corrugated steel.</p> <p>The external walls rise from a projecting brick plinth four courses high with a decorative dado moulding run in cement which is continuous between door and window openings. Decorative cement window and door frames rise above the dado moulding. The rear or southern side of the building reflects the same detailing.</p> <p>The original window openings feature a moulded cement sill with a scalloped fringe. The original timber windows were double hung with a single paned lower sash and a six paned upper sash which featured coloured glass. Most of the original window glass as well as the upper glazing bars remain but have been obscured by the installation of vandal proof fibreglass sheeting. Original door openings featured fanlights matching the upper window sashes, which have also been removed. One original timber panelled door remains. The rear of the building has been painted and all the window openings bricked up.</p> <p>Internal: The building comprises a general waiting room; ladies room and ladies toilets, a store and men's toilets.</p>		
Overbridge - Illawarra Road	1911. c.2013	Steel girders and a concrete slab supported on central brick piers and side brick abutments. Part of the overbridge was impacted during the TAP upgrades.	Generally good	Brick parapets including curbs, piers and panels - Exceptional Structure below the deck level - Moderate
Platform 2 booking office	1917, relocated	<p>The original timber framed overhead booking office dating from 1895 was demolished and the existing timber framed booking office located on Platform 2 built in 1917-18. The building is a simple, rectangular weatherboard clad timber framed structure, with a gable roof clad in corrugated steel which extends as an awning with exposed rafters on the platform side. Originally the roof extended to the east over the open public space and ticket collection booth, but this has been replaced by a later gabled awning structure on timber posts. Externally the original ticket window survives as does two of the original timber double hung windows; the door has been replaced by a flush type. The booking office was relocated on Platform 2 as part of the TAP upgrades.</p> <p>Internal: Internally much of the fabric survives including the timber lining boards, the timber boarded ceiling and the built in desk and cupboards, although it would appear much of this dates from the alterations and additions of the mid-1940s.</p>	Generally good	Exceptional

Elements	Date	Description	Condition	Significance
Pedestrian steps: northern set	1917, c.2013	The original access stairs from the overbridge to platform 1 have the original steel stringers but have new concrete treads and a new steel balustrade. The stairs were upgraded as part of the recent TAP upgrades. Their integrity has been severely impacted overtime.	Generally good	Little
Pedestrian steps: southern set	1985, c.2013	The later stairs on the south were constructed from steel stringers supported on steel columns and with precast concrete treads. The stairs were constructed in replacement of the previous steps as part of the recent TAP upgrades.	Generally good	Little

Sewage Pumping Station 271

Table 24: Elements of Sewage Pumping Station 271 (CMP 2005)

Significance Grading	Elements
Exceptional	<p>The elements identified as being of Exceptional Significance generally include those essential for the presentation of the item to the wider public and its general identification in the wider community. These include:</p> <ul style="list-style-type: none"> • The ongoing use of SP0271/DP271 in its original function • The original structure of the pumping station building and Engineer's Residence including: <ul style="list-style-type: none"> – The brickwork stack and flue – Original decorative sandstone and brickwork • Other original fabric elements including: <ul style="list-style-type: none"> – Evidence of original roof battens, slates or fixings – Evidence of original door and window hardware – Evidence of original fixtures including of machinery and electricity associated with the successive steam, diesel and electrical powering of SP0271 and original operation of the site. – Original T & G timber ceiling and crane, warren truss bracket and crane – Original external fabric and footprint of the wet wells including original stonework. – Evidence of original colour schemes and finishes (dado tiles etc) – Specific to the Engineers Residence, original significant fabric includes (but is not restricted to) internal elements such as original timber joinery, original locks and doors including pantry (meat safe) door, domestic fixtures including gas fittings, original timber and pressed metal ceilings, fireplaces, skirting boards and picture rails. • Original movable elements associated with the operation of SP0271 including the diesel engine and pump, tools, historic documents of significance, maps affixed to office walls, clocks and various movable elements as identified as significant by Sydney Water's Movable Heritage Project. • The structural exterior elements of SP0271 and original spatial composition of the site, including: <ul style="list-style-type: none"> – The overall scale and volume of the buildings – All elevations of the Engineers House – The original fenestration (including multipane glass) and timber joinery – The original entrances and doors (southern office and northern elevations) – The relationship of the engineer's house to pumping station building. • The non-structural exterior elements of SP0271 that participate in the landscape, including: <ul style="list-style-type: none"> – The rear retaining stairway and wall with sandstone capping – Trachyte cobbles, sandstone kerbing, formal roadway and the original 'turf' between the roadway encircling the site and the pumping station buildings.

<p>High</p>	<p>The following elements have been identified as elements of High Significance:</p> <ul style="list-style-type: none"> • The structural exterior and interior elements of SP0271 including: <ul style="list-style-type: none"> – The rear (northern) elevation generally below the level of the rear boundary wall as visible from the northern side of the boundary (excluding those elements identified as exceptionally significant) – Internal walling, including load-bearing walls and partitions • The original non-structural elements that are important in demonstrating the original character of the buildings, including: <ul style="list-style-type: none"> – The internal layout and architectural composition/organisation of the boilerhouse, engine house, office and engineers house. – Notable original interior features as identified in future inspection of the interior of the Engineers House, possibly including original interior decoration, including the joinery, floorboards, skirtings, and picture rails, ceilings and doors. – Potential archaeological evidence of demolished coal store and footings of coal bunker.
<p>Medium</p>	<p>The following elements have been identified as elements of Medium Significance:</p> <ul style="list-style-type: none"> • The landscaping of the site as open space and plantings and domestic garden and low front paling fence of the Engineers House. • The stormwater channel • Variety of original or early interior and exterior features including: <ul style="list-style-type: none"> – Painted finishes of pumping station and unfinished boiler room. – Change room, toilet and store room in the boiler room and tools – Office hand basin and table – On site vent stack on site and case iron surface fitting.
<p>Little</p>	<p>Elements of Little Significance include areas and elements that are not important for the retention of significance or presentation of the item, or whose significance can be demonstrated through information recorded in the technical documentation. These elements may contribute to the ongoing significant function of the place, but in themselves are not significant fabric. This includes:</p> <ul style="list-style-type: none"> • Various elements added in the recent decades: <ul style="list-style-type: none"> – Various electrical kiosks and other electrical equipment including meter boards – Pumps and engines, rising mains and other infrastructure machinery regularly replaced or updated. – Railings around the wet wells and stormwater well – Various safety equipment and recent installations such as the emergency shower equipment – New elements including, floorings such as linoleum in the Office building, terracotta tiled roof, removed dado tiles and roller door. – Electrical substation on site – Low level access chambers positioned on grassed area next to southern elevation. – The 1940s addition to the rear of the boiler house. Whilst this element is associated with the retention of coal to power the boilers, and therefore with the early function of the place, this significance is associated with the space itself and not the fabric which is presently structurally unsound and inconsistent with the originally open elevation. – All furniture and non-original/early finishes, fixtures and elements in the Engineers House and grounds.
<p>Intrusive</p>	<p>The elements detracting from the presentation of sewage pumping station and subsequently detracting from the derived aspects of the cultural significance of the item. Intrusive elements include:</p>

Significance Grading Elements

- The railway goods line which must be crossed to access the site. Whilst this may be considered intrusive in terms of accessing the site, it is consistent with the industrial character of the site and area.
- Concrete patching to repair trachyte paving

6.1.4 Statements of significance

The following statements of significance for the heritage items located within the project area are reproduced from the SHR and SHI listings, and the relevant CMPs where applicable.

Table 25: Statements of significance for Marrickville Station Catchment

Item	Statement of Significance	Listing
Marrickville Railway Station Group	<p><i>The railway station at Marrickville is significant as it is a station on the Sydenham to Bankstown Line which was constructed to relieve congestion on the Main South Line as well as to encourage suburban development and the growth of agriculture in the late 19th and early 20th century. The highly intact main platform building represents the period of transition from the boom time of the 1880s to the standardisation of NSW railway building design from the 1890s onwards, while the booking office on Platform 2 reflects a later period of expansion in the first quarter of the 20th century.</i></p>	SHR
	<p><i>Marrickville Railway Station is significant at a State level as the platform building demonstrates the high level of aesthetic design of the pre-1900 standard buildings, which included the use of polychromatic brickwork, decorative dentil coursing, ornate awning brackets and carved bargeboards. The platform building is intact and is representative of a small group of such ornate platform buildings including Canterbury and Belmore on the Bankstown Line. The platform building on platform 2 provides an interesting contrast, demonstrating the simpler design of the standard platform buildings of the 1910/20s.</i></p>	
	<p><i>Also of significance is the intactness of the weatherboard booking office which is unusual for being one of the few examples of a booking office located on a platform with street entry only and no access from the footbridge or overbridge, though the structure itself is representative of a standard design.</i></p>	
	<p><i>The Marrickville Railway Station Group demonstrates State historical significance as an important station through:</i></p> <ul style="list-style-type: none"> • <i>involvement in the expansion of suburban Sydney;</i> • <i>local associations with Marrickville politician and contractor A.H. Scouller;</i> • <i>aesthetic significance as a relatively intact assemblage of station buildings and structures spanning 1895-1917 and demonstrating various economies and design motivations</i> • <i>social significance in its association with the local community;</i> • <i>the 1917 Booking Office having research potential to demonstrate the design of these buildings and rarity values.</i> <p><i>Overall, the component structures of the Marrickville Railway Station Group are excellent representative examples of their types and the level of significance of the Marrickville Railway Station Group is regarded as having state significance.</i></p>	CMP
Sewage Pumping Station 271	<p><i>SPS 271 displays a high level of architectural sophistication in the execution of Federation Queen Anne and Romanesque styles. It has the highest level of aesthetic significance of pumping stations within the Sydney Water sewerage system and is the most intact example of a pair of stylistically complete Federation industrial buildings. It is</i></p>	SHR

Item	Statement of Significance	Listing
	<p><i>technologically unique (one of only three of its type), having the dual function of carrying both sewage and stormwater. It has a high level of industrial archaeological value evidenced by the Blackstone three-cylinder diesel pump (steam driven until 1954) which dates from c. 1920, and an outstanding level of technological significance due to the manner and method in which it functioned within the SWOOS system. It had the unique capability of pumping waste from the sewage wells to either the high-level sewer or the eastern stormwater channel. It is one of the oldest SPS's still functioning, and presently discharges into the SWOOS</i></p>	
	<p><i>SP0271 is of State historic and aesthetic significance. Historically, it is one of the oldest sewage pumping stations still in active service in the Sydney Water system and is technologically unique in having the dual function of carrying sewage and stormwater. SP0271 is one of only two pumping stations which were originally powered by steam. The importance of the station is reinforced by the provision of a substantial house for the housing of the site engineer which survives intact. Aesthetically, it is one of the finest examples of a large scale Federation Period public utility building in Sydney, displaying a high level of excellence in its design, construction and craftsmanship. The existing chimney is significant in its own right, being an excellent example of a substantial stack constructed in ornamental brickwork which is also a local landmark. The station reveals information about early steam and diesel technologies and is significant as a representative example of a sewage pumping station which still fulfils its role over 100 years after its introduction, as originally designed and constructed albeit with mechanical and electrical upgrading</i></p>	CMP
Stone house, including interiors Include	<p><i>This is the largest of the relatively small number of buildings which illustrate the use of stone in the residential development in this area. It was well built and lies in close proximity to the old Schwebel quarries.</i></p>	SHI

6.1.5 Heritage impacts

Direct impacts

Marrickville Railway Station Group

The table below provides an assessment of the direct impacts of the project on the fabric of each element constituting the railway station and an assessment of the subsequent impacts on the heritage values of the station group as a whole.

Table 26: Assessment of direct impacts for Marrickville Railway Station Group

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platform 1 (1895)	Exceptional	Retention of western section of platform; removal of eastern section with new platform to be rebuilt in straight alignment and extended towards the east; platform canopies and platform screen doors to be anchored on the portion of retained platform; new building and canopies to be anchored on the portion of reconstructed platform	<p>The western section of the platform would be retained including the structure underneath the platform building. The removal of the eastern section of Platform 1 would involve demolition eastward of the central platform building. This would have a major impact on the original platform including the loss of approximately half its fabric and brick face.</p> <p>The eastern section of the platform would be reconstructed to accommodate the straight rail line alignment required for Metro trains. This would result in the loss of the original curvilinear form of the platform and of the symmetry created with Platform 2 when the latter was constructed in 1911. This would have a major impact on the original platform layout. A new platform building, canopies and platform screen doors would be anchored on the reconstructed platform and would not further impact significant fabric.</p> <p>New platform canopies and platform screen doors would be anchored on the portion of Platform 1 to be retained. This would result in a moderate impact where pylons and struts are anchored in the platform.</p> <p>Overall, the proposal would result in a major impact on the platform and station group as a whole.</p>	Major
Platform 1 building (Type 11) (1895). ¹⁰⁵	Exceptional	Retention for re-use with potential retrofitting	<p>The retention of the platform building is a positive heritage outcome in the context of the project.</p> <p>Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to remove any intrusive modifications to the structure. Additions to the building and platform should be designed to be sympathetic to the heritage context and minimise fabric and visual impacts.</p> <p>This aspect of the project would have a minor impact on the heritage values of the building and station overall.</p>	Minor

¹⁰⁵ See Section 2.2.6 Station building types

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platform 2 (1911)	Exceptional	Partial retention on the western side; removal of eastern section with retention of structure underneath platform building; platform to be rebuilt in straight alignment and extended towards the east; station buildings, platform canopies and platform screen doors to be anchored on both the retained and new platforms.	<p>A portion of the platform would be retained on the western side as well as the structure underneath the heritage building. However, the majority of the platform would be removed on the eastern side. This would have a major impact on the original platform including the loss of most of its fabric and brick face.</p> <p>The eastern section of the platform would be reconstructed to accommodate the straight rail line alignment required for Metro trains. This would result in the loss of the original curvilinear form of the platform and of the symmetry with Platform 1. This would have a major impact on the original platform layout.</p> <p>The new platform buildings, platform canopies and platform screen doors would be constructed both on the retained and new platforms. There would be a moderate impact on the portion of retained platform where pylons and struts are anchored. Elements to be anchored on the reconstructed platform would not further impact significant fabric.</p> <p>Overall, the proposal would result in a major impact on the platform and station group as a whole.</p>	Major
Platform 2 building (Type 11) (1911) ¹⁰⁶	High	Retention for re-use with potential retrofitting	<p>The retention of the platform building is a positive heritage outcome in the context of the project.</p> <p>Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to remove any intrusive modifications to the structure. Additions to the building and platform should be designed to be sympathetic to the heritage context and minimise fabric and visual impacts.</p> <p>This aspect of the project would have a minor impact on the heritage values of the building and station overall.</p>	Minor
Overbridge - Illawarra Road (1911, c.2013)	Brick parapets including curbs, piers and panels - Exceptional Structure below the deck level - Moderate	Removal and replacement	<p>The overbridge is proposed to be removed and replaced. This would include the demolition of the bridge deck, adding new parapets, throw screens, waterproofing, and asphalt. It would also include new abutments, bridge beams, and concrete slab. Utility modifications/relocations, bridge drainage, line markings, road level adjustments, and makeup panels would be conducted. The bridge is an element of exceptional significant and its heritage value would be removed. This aspect of the project would result in a major impact on the heritage values of the overbridge and station overall.</p>	Major

¹⁰⁶ See Section 2.2.6 Station building types

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platform 2 booking office (1917, relocated)	Exceptional	Retention in current location	The structure is proposed to be retained in its current location. This would result in a neutral impact on the Platform 2 booking office.	Neutral
Pedestrian steps: northern set (1917, c. 2014-2016)	Little	Retention	The existing stairs were installed as part of the recent TAP upgrade and the original stairs are no longer present. The existing stairs have little significance within the station group. It is proposed to retain them with the Metro concourse. This would result in a neutral impact on the steps and station overall.	Neutral
Pedestrian steps: southern set (1985, c.2014-2016)	Little	Retention	The existing stairs were installed as part of the recent TAP upgrade and the original stairs are no longer present. The existing stairs have little significance within the station group. It is proposed to retain them with the Metro concourse. This would result in a neutral impact on the steps and station overall.	Neutral

When considering cumulative impacts, it is assessed that the project would result in a major direct impact on Marrickville Railway Station Group overall.

Sewage Pumping Station 271

No direct impacts to the Sewage Pumping Station 271 are proposed as part of the Metro project.

Direct impacts on the Sewage Pumping Station 271 would be neutral.

Stone house, including interiors

No direct impacts to the Stone house, including interiors are proposed as part of the Metro project.

Direct impacts on the Stone house, including interiors would be neutral.

Visual impacts

Marrickville Railway Station Group

There would be some difference visually between the proposed upgrade for the project, and the recent TAP upgrade undertaken by Sydney Trains. The TAP upgrade concourse and lifts would remain with some cosmetic modifications. Pedestrian steps would also be retained. The upgrades to be undertaken as part of the project would be distinguishable and recognisable across the station as a new phase in development of the station and the Bankstown Line.

The contemporary nature of the new development would differ from the existing heritage character of the station group, which would create a contradistinctive relationship between the historic components of the site and the new elements. The new platform building on Platform 1 would be low in scale and bulk and located away at a distance from the heritage building. The canopy design has aimed to reduce bulk and height. Canopies would be glazed adjacent to heritage buildings to maximise potential view lines.

Ribbon canopies would cover enclosed stairways from the concourse to the platforms diminishing views down towards the retained significant platform buildings. Some views from the concourse to the Platform 1 building would be discernible, while views towards the Platform 2 building would generally

be obscured by canopies between the stairs and the Platform 2 building. Ribbon canopies would extend along both platforms with separation of at least two meters from the significant Platform 1 and Platform 2 buildings. Views of the Platform 1 building would be available from Station Street.

The TAP upgrades resulted in some impacts to historic context and setting of the station. The additional structures and canopies proposed as part of the project would further modernise the station setting. While positive impacts include general refresh and removal of intrusive elements, the open historic setting and character of the station would be diminished.

The proposed platform screen doors would rise to human height to accommodate the specific workings of Metro trains. This would have a minor impact on external views from the platform buildings and from the concourse towards the heritage buildings and a moderate impact on internal views as a result of visual clutter. Existing views from the new Illawarra Road overbridge would not be significantly affected in comparison with existing views and vistas. The new platform screen doors would partially obscure views towards the Platform 1 and Platform 2 building, where they would result in a moderate visual impact.

The visual impacts of the upgraded station on the Marrickville Railway Station Group would be moderate overall.

Existing views from the new Illawarra Road overbridge would not be significantly impacted compared to existing views and vistas. The proposed replacement of the Illawarra Road overbridge with a sympathetically designed structure would have a moderate visual impact on the station group, although views from the overbridge to the significant station buildings would be retained.

Additional impacts such as the services building to be constructed to the north-east of the station in the rail corridor, landscaping, new pavement, kerbside facilities and signage would have a minor impact on the setting and context of the station as they would be in keeping with the use of the station.

Overall, the proposed platform canopies and platform building would have a moderate visual impact on the character and setting of Marrickville Station. The new platform screen doors would result in a moderate impact. Some views onto the Platform 1 building of exceptional significance and onto the Platform 2 building of high significance would be retained for continued appreciation by the public and users, although the ribbon canopies on the stairs and platforms would obscure views from most areas apart from the section of the concourse and Station Street. This assessment considers the balance of impacts as a result of new high quality design structures being added, and the positive impacts of removal of intrusive elements, and refresh of the station. The assessment also considers the high quality, sensitive design of the new Metro layer which would remain distinguishable from the original elements.

When considering cumulative impacts, it is assessed that the project would result in a moderate visual impact on Marrickville Railway Station Group.

Sewage Pumping Station 271

The heritage item is located approximately 350 metres from Marrickville Railway Station. Such distances would prevent any significant visual impacts onto the pumping station and would likely be negligible. Any views of the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact.

Visual impacts on the Sewage Pumping Station 271 would be negligible.

Stone house, including interiors

The heritage-listed stone house is located approximately 150m from Marrickville Station and 20m south of the existing railway corridor. There would be no significant visual impacts onto the heritage item as a result of the proposed design at Marrickville Station. Any views of the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact.

Visual impacts on the heritage-listed Stone house would be negligible.

Stonewalling, terracing and street planting

The closest section of the heritage stonewalling, terracing and street planting is located approximately 65m from the south boundary of Marrickville station. The station is presently screened from the item by existing commercial and residential development located along Station Street and Schwebel Street. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact.

Visual impacts on the heritage-listed stonewalling, terracing and street planting would be negligible.

Potential direct impacts

The following table provides an assessment of potential direct impacts on heritage items within the station catchment.

Table 27: Potential direct impact assessment

Item	Potential direct impact assessment	Impact
Marrickville Railway Station Group	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Sewage Pumping Station 271	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Stone house, including interiors	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Stonewalling, terracing and street planting	Vibration levels would be under the cosmetic damage screening level.	Negligible

6.1.6 Assessment against conservation management policies

Marrickville Railway Station Group

The conservation policies provided in the Conservation Management Plan (CMP) prepared for the site for Marrickville Railway Station Group (2016) have been reviewed. Policies provided in the CMP relevant to assessing the impacts of the project have been extracted and provided below for reference.

Table 28: Relevant conservation policies – Marrickville Railway Station Group¹⁰⁷

Policy	Assessment of impacts against recommendations
6.1 Adaptive Reuse	<p><i>Retain the 1917/1944 Ticket office building in its relocated setting and conserve and enhance the present interior and exterior with all fittings.</i></p> <p>The booking office would be retained in its current location.</p>
6.3 Adaptive Reuse	<p><i>Consider the re-use of redundant spaces in the two buildings [Platform Buildings 1 and 2) for the provision of facilities and amenities which relate to the railway service and passenger and customer amenity and discuss with Property Group to determine the appropriate adaptive reuse options consistent with heritage significance.</i></p> <p>Adaptive reuse (retrofitting) would be considered during detailed design in accordance with mitigation measure NAH5 (Section 10).</p>
12.3 Gardens & Landscape	<p><i>Canopies to the Platforms are proposed generally across the Sydney Trains rail network for additional amenity and should they be proposed at Marrickville, they should be located a respectful distance from the heritage buildings, adopt a complementary form, utilise suitable materials in appropriate painted colours and finishes and be visually recessive and unobtrusive.</i></p> <p>Architectural design principles and the heritage strategy for the project consider the design of canopies, and recommend that they are set back from heritage items with the aim of opening up viewlines and providing a clear delineation between the heritage elements and new Metro design layer. The form and fabric of the canopies would be considered during detailed design in consultation with a heritage architect and the design review panel.</p>
13.1 Associated Sites	<p><i>Support the upgrading of the Illawarra Road bridge in rationalising the services and removing the vandalism and graffiti damage</i></p> <p>The bridge has found to be in such poor condition that options for upgrade have been discounted</p>
18.1 Built Heritage	<p><i>Ensure appropriate conservation of the Scouller station building on Platform 1</i></p> <p>The Platform 1 station building would be conserved</p>
18.2 Built Heritage	<p><i>Ensure appropriate conservation of the southern station building on Platform 2</i></p> <p>The Platform 2 station building would be conserved</p>
18.3 Built Heritage	<p><i>Ensure appropriate conservation of the two Platforms and associated elements</i></p> <p>Platforms 1 and 2 would be partially impacted by the project. Sections of original fabric would be retained. Justification is discussed in Section 5.3. Platform furniture and associated moveable heritage would be conserved and managed under the moveable heritage strategy and salvage strategy as discussed in the mitigation measures where appropriate.</p>
18.4 Built Heritage	<p><i>Ensure appropriate conservation of the Illawarra road bridge and associated elements</i></p>

¹⁰⁷ David Scobie Architects Pty Ltd 2016

Policy	Assessment of impacts against recommendations
	The bridge has found to be in such poor condition that options for upgrade have been discounted
21.5 Materials and Techniques	<i>Original and early stone masonry (Platform edges) and brickwork should be retained intact and maintained. If new stone is required, a durable stone of suitable colour and texture should be used. Where brick repairs are required, the original bricks should be reused wherever possible, or recycled bricks of the same size and shape as the originals. In both cases, masonry units should be laid with mortar of matching appearance, strength and composition to the original. Consolidants or sealants should not be used.</i>
	Platforms 1 and 2 would be partially removed. Sections of original masonry would be retained. Salvage and reuse of original fabric to be removed would be managed under the salvage requirements of mitigation measure NAH7 (Section 10).
22.1 Managing Change	<i>It is recognised that in the future certain building works may be required for changing passenger and staff facilities however these should be incorporated after appropriate heritage impact analysis, followed by sympathetic design and construction to reduce any adverse heritage impact on the significance of the place.</i>
	Reduction in heritage impacts has been a key consideration during the design process. Heritage experts have been consulted during the design and options phases. Results of this consultation have informed this impact assessment. The design review panel would continue to provide heritage input during detail design in order to ensure design is sympathetic to heritage values in accordance with mitigation measure NAH2 (Section 10).
22.2 Managing Change	<i>Removal of fabric of exceptional or high significance may be acceptable where that fabric has ceased to function and is actively contributing to deterioration in other significant fabric. Otherwise, such fabric should be removed only as a last resort after all other options have been considered. Where multiple elements are present, it may be acceptable to remove some of these elements provided that overall significance is not diminished.</i>
	Significant fabric associated with Platforms 1 and 2 and the overbridge would be removed. Justification of this impact is provided in Section 5.3. There is provision for salvage of significant fabric in mitigation measure NAH7 (Section 10). The Platform 1 building of exceptional significance and the Platform 2 building of high significance would be conserved.
22.3 Managing Change	<i>All works to the buildings and site, including unavoidable alteration or removal of significant fabric, should be recorded to an appropriate archival standard. Where fabric of state significance is to be removed, the Heritage Council guidelines for archival recording indicate that the appropriate standard will include measured drawings and archival photographs.</i>
	Archival recording would be undertaken in accordance with NAH12 (Section 10).
22.4 Managing Change	<i>Any demolition carried out to the buildings or other site elements should be performed with extreme care with the objective of removing the minimum amount of material, and recovering as much of it as possible in re-useable condition. Materials or components which have any likelihood of being re-used in future works should be protected, catalogued and stored in the dedicated Heritage store on Platform 1.</i>
	Mitigation measures NAH4 and NAH8 address protection of non-impacted fabric during construction (Section 10).
22.7 Managing Change	<i>Alterations and additions to original or early fabric of the buildings and other site elements should be confined to:</i> <ul style="list-style-type: none"> • <i>the removal of intrusive elements, and elements of little significance that interfere with interpretation, when they are no longer needed</i>

Policy	Assessment of impacts against recommendations
	<ul style="list-style-type: none"> • <i>the removal of elements of little or no significance that are contributing to the deterioration of original or early fabric</i> • <i>the reinstatement where appropriate of original or early fabric that has since been removed and for which good evidence exists</i> • <i>works to conserve the existing significant fabric, and</i> • <i>fully reversible works to adapt the place for changing uses as required.</i>
	<p>Platform buildings and the booking office would be retained and conserved. Justification for removal of portions of Platforms 1 and 2 and overbridge are discussed in section 5.3.</p>
22.8 Managing Change	<p><i>Any alterations and additions to significant buildings and site elements should be confined to very minor works that are complementary and subservient to the original. Where new work is added to the old work, the new work should be shaped to fit the old rather than the old being altered to accommodate the new. It also implies that the original and early fabric should remain visually prominent after the alteration or addition.</i></p>
	<p>This recommendation would be considered as part of detailed design in accordance with project's design principles and heritage strategy. Canopy design for the new Metro layer aim to enable design and materials of the new layer to be easily discernible from the historic layer.</p>
22.9 Managing Change	<p><i>Any new external elements attached to the original buildings should be designed and constructed in the same style, design detail and materials as the original elements, continuing a process that has been occurring at the station for nearly 100 years. The reuse of surplus original components in any new elements is encouraged.</i></p>
23.1 New Intervention, New Work	<p><i>Any new building structures independent of the original Platform 1 and 2 buildings such as the lift, stairs and canopies are to be of a minimal size and simple contemporary design that is sympathetic to the character of the precinct. They should not imitate the original design details; however it is preferred that similar building materials are used in the external finishes where appropriate.</i></p>
	<p>This recommendation would be considered as part of detailed design in accordance with the design principles and heritage strategy</p>
23.2 New Intervention, New Work	<p><i>Where glass is used in contemporary canopies, it should incorporate a film (e.g. white sand-blast type) to reflect the tradition of toplight glazing in addition to producing dirt and debris hiding qualities.</i></p>
	<p>This recommendation would be considered as part of detailed design in accordance with the design principles and heritage strategy</p>
23.3 New Intervention, New Work	<p><i>Where steel is used for structural columns and beams, traditional plate and expressed web type sections should be used to reflect the traditional detailing of steelwork.</i></p>
	<p>This recommendation would be considered as part of detailed design in accordance with the design principles and heritage strategy</p>
23.4 New Intervention, New Work	<p><i>The orientation of new elements such as canopies, lifts and stairs should reflect the alignment and geometry of the related Platform and building elements and structures.</i></p>
	<p>This recommendation would be considered as part of detailed design in accordance with the design principles and heritage strategy</p>
23.5 New Intervention, New Work	<p><i>The colour of new materials used for cladding stairs and lifts should be dark and not light so as to allow the existing historic colours to remain visually dominant.</i></p>

Policy	Assessment of impacts against recommendations
	This recommendation would be considered as part of detailed design in accordance with the design principles and heritage strategy

Sewage Pumping Station 271

The conservation policies provided in the Conservation Management Plan (CMP) prepared for the site for Sewage Pumping Station 271 (2005) have been reviewed. Policies provided in the CMP relevant to assessing the impacts of the project have been extracted and provided below for reference.

Table 29: Relevant conservation policies - Sewage Pumping Station 271¹⁰⁸

Policy	Assessment of impacts against recommendations
7.2.1 Ongoing Use of the Asset	<i>Maintain operational use of the sewage and stormwater pumping stations and the residential use of the former engineers cottage.</i>
	The use of the item would not change as a result of the project
7.2.2 Conservation of Significant Fabric	<i>The significance of SP0271 is dependent upon the conservation of the identified historic fabric of the item. It should be recognised that significant fabric includes landscape elements (paving, kerbing), buildings, works, subsurface remains and movable elements.</i>
	All significant fabric would be conserved
7.3.2 Future Development and Change	<i>The ability of the site to absorb change and conserve its significance requires consideration of the impact of change on the heritage significance of SP0271. Additions and upgrading of the precinct should not compromise the overall heritage significance of SP0271. New material should be of a form, detail, colour and material which is sympathetic to significant fabric and sited in a place consistent with its original function. It should also be distinct from the significant fabric.</i>
	No change to the item is proposed as part of the project
7.4.1 Preservation of Engineering Heritage and Technical Significance Background	<i>The technical significance of the item is gained through preservation of the surviving historic records, including photographs, oral history recordings and architectural drawings and plans. Prior to any future major works, an archival recording should be undertaken to encapsulate the surviving original features and fabric subjected to rapid deterioration. This recording is to be undertaken in accordance with current NSW Heritage Office Guidelines on archival and photographic recording for items of State significance.</i>
	As impacts are assessed as negligible archival recording has not been recommended
7.5.1 Views, Vistas and Setting	<i>The site of SP0271 largely retains its original configuration and setting. Conservation of the setting provides a boundary, views to the item and enables appreciation of the aesthetic qualities of the site.</i>
	There would be no change to configuration and setting as a result of the project

6.1.7 Overview of impacts

The table below provides a summary of impacts in accordance with the guidelines by the NSW OEH (Statement of Heritage Impact, 2002).

¹⁰⁸ Sydney Water 2005

Table 30: Summary of Heritage Impacts – Marrickville Station Catchment

Impact on a heritage item	Discussion
Aspects that respect or enhance the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> • Retention for re-use of the Platform 1 building of exceptional significance, the Platform 2 building of high significance and the booking office of exceptional significance. • Potential for positive heritage impacts during retrofitting and upgrade works to significant elements to be retained • Negligible visual impacts on heritage items located within the buffer zone • Provided that mitigation measures are implemented, negligible to minor potential direct impacts as a result of vibrational work in the vicinity of heritage items • Continued use of the heritage item in its historical function as part of the evolution of the Bankstown Line
Aspects that would detrimentally impact on the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> • Partial demolition of Platforms 1 and 2 of exceptional significance • Demolition of Illawarra Road overbridge • Loss of curvilinear platform lines and near-symmetry of platform layout caused by the straightening of Platforms 1 and 2 • Major direct impacts on the fabric of the station • Moderate visual impacts on the setting of the station catchment

6.1.8 Statements of heritage impact

The following statements of heritage impact are provided for the heritage items located within Marrickville Station Catchment and the 25-metre buffer zone:

Marrickville Railway Station Group

The direct impacts of the project on Marrickville Railway Station Group would be major overall. The platform building of exceptional significance and the Platform 2 building of high significance would be retained and retrofitted with potential for positive impact. The Illawarra Road overbridge would be removed and replaced. The Platform 2 booking office of exceptional significance would be retained in its current location. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

Marrickville Station is assessed at State significant under the following criteria: historical and aesthetic significance, rarity, representatives and research potential.

The SHR statement of significance focusses largely on the values of the platform buildings which are rare and representative and have historical and aesthetic significance at a State level. The booking office is assessed as having research potential in relation to its fabric and construction.

As they are to be retained, platform buildings 1 and 2 dated 1895 and 1911, of exceptional and high significance would still contribute to the overall significance of Marrickville Station as a major station on the Bankstown Line. The two platform buildings are good examples of their respective types and would still contribute to the aesthetic and historical significance and representativeness and rarity values of the station. The partial retention of platforms 1 and 2 would retain representative samples of the original 1895 and 1911 platforms. The booking office, an element of exceptional significance would be retained in its current location.

The statement of significance provided in the CMP acknowledges the importance of the station in facilitating the expansion of urban Sydney. The retained elements of the station would continue to represent this historical value. The project would enable the station to continue to play a role in the growth and development of Sydney and the local area.

Visual impact would be moderate as new elements would diminish views to significant platform buildings, impact context and setting and introduce visual clutter.

Although there would be significant changes as a result of the new Metro design layer being added to the station, this evolution would enable the station to continue its use as a transport hub. The new Metro layer which would remain distinguishable from the original elements and therefore the historic values of the station could be appreciated in the context of the evolution of the station.

When assessed cumulatively, the level of heritage impact of the project on Marrickville Railway Station Group would be major. The heritage item would continue to meet the threshold for State significance for the historical and aesthetic significance of the station in the context of its evolution and retained elements, as well as under rarity and representativeness as demonstrated by the retained elements of high and exceptional significance. The station would still reach the threshold of State significance under research potential, as the booking office, to which this criteria primarily refers in the SHR statement of significance would be retained.

Sewage Pumping Station 271

The direct impacts of the project onto the Sewage Pumping Station 271 would be neutral. The proposed works in the vicinity would result in a negligible visual impact overall. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

When assessed cumulatively, the level of heritage impact of the project on the Sewage Pumping Station 271 would be negligible. The heritage item would continue to meet the threshold for local significance.

Stone house, including interiors

The direct impacts of the project onto the Stone house would be neutral. The proposed works in the vicinity would result a negligible visual impact overall. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

When assessed cumulatively, the level of heritage impact of the project on the Stone house would be negligible. The heritage item would continue to meet the threshold for local significance.

Stonewalling, terracing and street planting

The direct impacts of the project onto the Stonewalling, terracing and street planting would be neutral. The proposed works in the vicinity would result a negligible visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Stonewalling, terracing and street planting would be negligible. The heritage item would continue to meet the threshold for local significance.

6.2 Dulwich Hill Station Catchment

The Dulwich Hill Station Catchment includes one heritage item, the Dulwich Hill Railway Station Group, and one conservation area, the South Dulwich Hill Heritage Conservation Area. The buffer zone around the station catchment includes one heritage item and one conservation area.

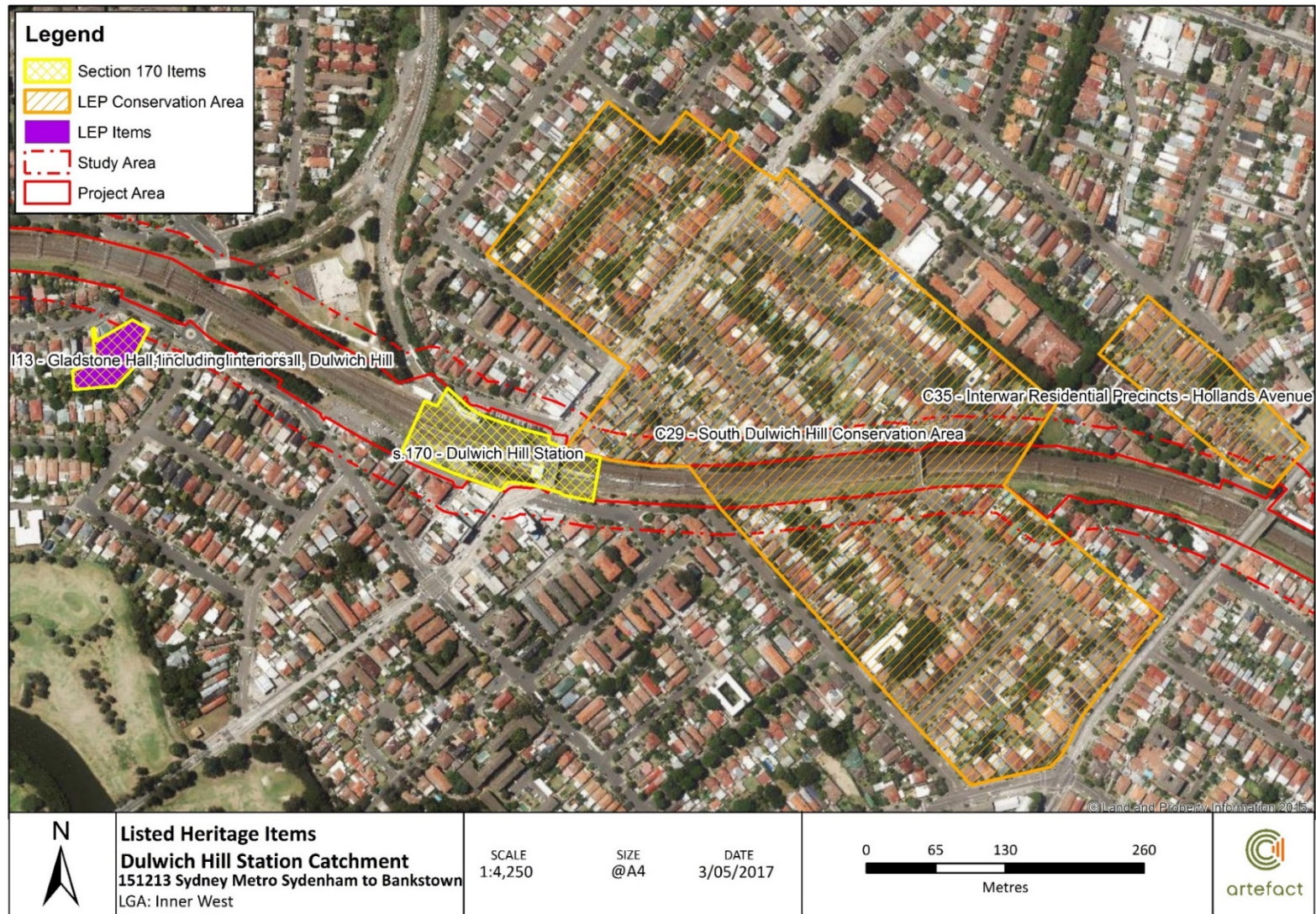
6.2.1 Summary of heritage listings

The table below provides a summary of the heritage items located within the station catchment and within the 25-metre buffer zone. An aerial map showing the heritage items within the station catchment is also provided below.

Table 31: Heritage items within Dulwich Hill Station Catchment and buffer zone

Item	Suburb	Significance	Listing
Within project area			
Dulwich Hill Railway Station Group	Dulwich Hill	Local	RailCorp S.170 Heritage and Conservation Register (4801909)
South Dulwich Hill Heritage Conservation Area	Dulwich Hill	Local	Marrickville LEP 2011 (C29)
Within buffer zone (outside project area)			
Inter-War Heritage Conservation Area Group—Hollands Avenue; Jocelyn Avenue and Woodbury Street	Dulwich Hill	Local	Marrickville LEP 2011 (C35)
Gladstone Hall, including interiors	Dulwich Hill	Local	Department of Health S.170 Heritage and Conservation Register (3540048) Marrickville LEP 2011 (I13)

Figure 144: Aerial map showing heritage items within study area: Dulwich Hill



File Path: C:\Users\GIS\Desktop\GIS\Mapping\151213_Sydney_Metro_Bankstown_Sydenham\MXD\Heritage_Detail_DH

6.2.2 Existing environment

Dulwich Hill Railway Station Group

Dulwich Hill Station was designed and built by NSW Government Railways between 1895 and 1935. It was officially opened as Wardell Road on 1 February 1895. The station was renamed as Dulwich Hill on 1 July 1920. The platform building dates from 1935 and replaced the original timber building. Historic plans dated 1935 show the demolition of the original platform building and the construction of a new brick platform building; a new overhead weatherboard booking and parcels office and bookstall; and the relocation of the stairs to the platform to accommodate modifications.

Dulwich Hill Station consists of a single island platform with an original platform building, and stair access to an original timber framed weatherboard clad overhead booking office (Figure 145 to Figure 158). The station is accessible via the booking office building from the Wardell Road overbridge (Figure 145, Figure 146).

Figure 145: View of Platform 1 and 2 building north-west aspect



Figure 146: View of Platform 1 and 2 building, west aspect



Figure 147: View of Platform 1 and 2 building, east aspect



Figure 148: View of Platform 1 and 2 building, west aspect



Figure 149: View of Platform 1 and 2 building, east aspect



Figure 150: View of Platform 1 and 2, north-west aspect



Figure 151: View of overhead booking office, west aspect



Figure 152: View of overhead booking office, south-west aspect



Figure 153: View of overhead booking office and stairs, south-east aspect



Figure 154: View of overhead booking office and stairs, east aspect



Figure 155: View of overbridge, south-east aspect



Figure 156: View of overbridge abutments, south-east aspect



Figure 157: View of overbridge and overhead booking office, south-east aspect



Figure 158: View of stairs, east aspect



South Dulwich Hill Heritage Conservation Area

The South Dulwich Hill HCA is located between Cannonbury Grove and Livingstone Road in Marrickville/Dulwich Hill and dates to 1901-1920.

The South Dulwich Hill HCA is suburban in character. It was within the part of the extensive Petersham Estate that was known as the Petersham Farms, and was used for orchards and market gardens before the first subdivision in 1901, with a second in 1907. Most lots had been developed by 1920. The short period of development has led to a highly consistent built form that demonstrates Marrickville's mature twentieth century suburban cultural landscape, with detached, single storey Federation bungalows set on low-density lots with setbacks and space for front and rear gardens and side driveways to most properties.

The streetscape rhythms are well expressed and are enhanced by the gentle undulation in the local topography. A high proportion of houses are substantially intact and have retained much of their original detailing such as face brickwork, slate roofs and decorative terracotta ridge capping; tall

rough-cast chimneys, timber windows, hoods, timber verandah detailing and face brick facades. This establishes an integrity that underlies the streetscapes in this area.

Many of the 'Federation' houses in the area demonstrate an important local variation to the style. Instead of the usual steep pitched roof rising high to a cross-ridge, the houses built in this part of Marrickville are characterised by a lower-pitched roof which rises to a long cross-ridge set at the height of the gable-ended return. This pattern is not a common one in Sydney and is likely that a local builder was responsible, but whatever the reason, the built forms of the houses in the HCA demonstrate a consistency and cohesive character not seen in many other areas.

Major structural alterations and additions such as second storeys are rare, creating a roofscape that has retained its integrity when viewed obliquely or from side streets. The alterations that have been made include mainly the replacement of roof cladding (retaining the original roof forms); removal of timber-framed windows and insertion of Aluminium-framed windows, the replacement or alteration of front fences and the construction of carports and garages forward of the building line. Many houses have undergone alterations and additions particularly in the migrant style. Most of these have been made to the rear of properties and are not highly visible elements in the local streetscape and include the loss of significant fabric such as timber windows and face brickwork. Others have introduced colour schemes and applied decorative elements that are visually prominent and intrusive in the streetscape views, although their impact could be reversed. Evidence was also found of more recent layers, including the rendering and stripping of detail associated with the current fashion for gentrification. Although some of these have affected the aesthetic values of their immediate streetscape their contribution to the unity of the rhythms of the facades and roofscapes of the Conservation Area remains.

The area also contains several notable examples of Inter-War residential flat building development, including the blue-black brick development with Dutch detailing in Keith Street and the P&O influenced block in Wardell Street.

Streetscapes in the area possess an open, suburban quality due to the low density and single storey development. They are notable for their unity of built form and strong roof patterns, extensive brick paving (part of the Depression employment relief scheme) and in the case of Margaret Street and Cannonbury Grove, outstanding street trees, with avenue plantings of mature Ficus in the pavement of Margaret Street and Brush Box in Cannonbury Grove.

Fence styles vary, with a high proportion of original iron palisade fences west of Wardell Street, and low brick walls in face brick to match the house to the east. The low height has allowed the fences in the area to remain reasonably neutral elements in oblique views along the streetscapes of the area. Kerbs and gutters are mainly concrete. Verges are wide, and include street planting in a grassed strip between the footpath and carriageway.

Figure 159: View of conservation area near railway corridor, west aspect

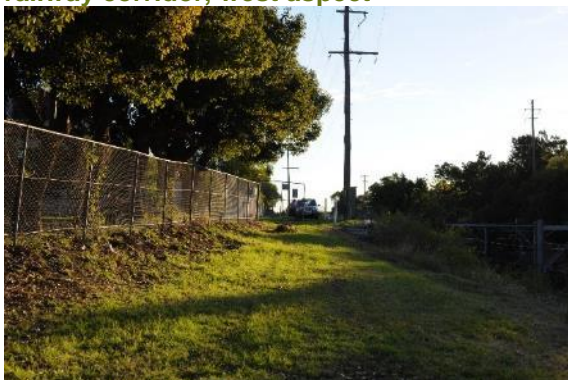


Figure 160: View of conservation area near railway corridor, east aspect



Figure 161: View of conservation area near railway corridor, north aspect



Figure 162: View of conservation area near railway corridor, north aspect



Figure 163: View of conservation area near railway corridor, north aspect



Figure 164: View of conservation area near railway corridor, west aspect



Figure 165: View of conservation area near railway corridor, south-west aspect



Figure 166: View of conservation area near railway corridor, south-west aspect



Figure 167: View of conservation area near railway corridor, north aspect



Figure 168: View of conservation area near Albermarle Street bridge, north-west aspect



6.2.3 Description of elements

Dulwich Hill Railway Station Group

The table below outlines the main structures and elements comprised within the railway station group. Information such as date, description and condition is provided, and the significance of each element has been graded.

Table 32: Elements of Dulwich Hill Station Group

Elements	Date	Description	Condition	Significance
Platforms 1/2	1935	One vertical brick island type, with asphalt surface and original brick platform face and edge.	Good	High
Platforms 1/2 building (Type 13) ¹⁰⁹	1935	<p>External: The building is rectilinear in plan with parapeted gable ends and a half hipped awning to both elevations. The sides of the gables are characterised by the bricks being corbelled. It is constructed of red bricks in stretcher bond. A soldier course of darker bricks is used at the window heads and as a single band at awning height on the gable ends. These same bricks also are used to create a series of frames on each elevation which suggest window openings. The window sills are bullnose bricks. Both the brick heads and sills have been painted. Windows are in timber and were originally either double hung with an upper sash of six panes, or in the toilets, with a fixed lower sash with an upper sash of louvres. All windows have been later modified and both the glazing bars and glazing removed or obscured. The original external panelled doors have been removed and replaced with flush doors. The roof and awnings are clad with corrugated steel, the roof space being ventilated by a single metal louvre in each gable end. Beneath the awning the soffit is clad with fibre cement and exposed battens at the joints.</p> <p>Internal: The interior consists of a series of discrete spaces arranged in a linear plan. From the access end the rooms are: general waiting area, station master's office, ladies waiting room and ladies toilet, store and men's toilet. Within the waiting room the original plaster ceiling and plaster wall finishes remain as does the original timber seats. The station master's room has a new hardboard ceiling while the toilet fitouts are later.</p>	The building is in moderate condition as the external brick walls are stained from old graffiti removal, overpainting, and the brickwork is damaged where the original male toilet modesty screen has been removed.	High
Overhead booking office	1935	<p>This is a square timber framed weatherboard clad building consisting of a booking hall with an open side to the Wardell Road entry, a booking office and a bookstall. It is designed in the Inter-War Transitional style. The building is in a good state of preservation retaining original double hung windows, internal and external weatherboard cladding as well as the exposed timber post structure with diagonal bracing and fibre cement wall and ceiling cladding. Roofing is corrugated steel. The overhead booking office is supported on steel beams which span between steel platform trestles and face brick piers on the southern embankment.</p> <p>Internal fixtures and fittings have been replaced with modern office furniture. The roof has been replaced with corrugated metal sheets and doors replaced or boarded.</p>	Good	High

¹⁰⁹ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		<p>One ticket window has been replaced with a modern equivalent and one has been boarded.</p> <p>Integrity: good; original setting, form and function substantially intact. Most internal features removed/replaced in previous upgrades; notable original attributes: simple open floor-plan of bookings/parcels office; ticket window with brass coin tray; bookstall; weatherboard siding; multi-pane sash windows; covered booking hall with AC ceiling, horizontal band of windows; association with substantially intact stair including balusters and newels</p> <p>Unusual features: Skillion roof bookstall forms part of original design. Became standard with later examples; only example to retain evidence of a horizontal band of glazing along its booking hall walls.</p>		
Stairs	1935	The Dulwich Hill stairs are a typical example of Inter-War platform access stairs with a timber overhead booking office attached. The stairs are substantially intact including balusters and newel posts. It is constructed with a steel beam girder with rolled steel joist.	Good	Moderate
Overbridge	c.1930, c.1975	The Wardell Road Overbridge consists of a modern reinforced, prestressed concrete road deck spanning between lateral concrete beams which bear on the original face brick platform and embankment piers on each side.	Good	Moderate

6.2.4 Statements of significance

The following statements of significance for the heritage items located within the project area are reproduced from the SHI listings.

Table 33: Statements of significance for Dulwich Hill Station Catchment

Item	Statement of Significance	Listing
Dulwich Hill Railway Station Group	<i>Dulwich Hill Railway Station has local historical significance as it is one of the stations to be located on the Sydenham to Bankstown Line which was built to take pressure off the traffic on the Main South Line as well as promote agriculture and suburban development in the late 19th and early 20th centuries. While the original 1895 station buildings are no longer extant, the replacement 1935 group of structures including both the overhead booking office and the platform building are significant as they represent typical examples of the Inter-War Eclectic style utilised by NSW Railways. The overhead booking office is especially significant as it retains its original configuration and much of its original fabric</i>	SHI
South Dulwich Hill Heritage Conservation Area	<i>The South Dulwich Hill Heritage Conservation Area is of historical significance as an area developed in the Federation period as a series of c. 1910 subdivisions in the vicinity of the Wardell Road (now Dulwich Hill) Railway Station which opened in 1889. The Area is of aesthetic significance for its many good quality individual examples and small groups of Federation bungalows that retain original timber joinery, window hoods and detailing to gables and verandas to a quality and consistency rare in the Council area. The area includes excellent examples of the Marrickville Iron Palisade fence, particularly in Cannonbury Grove. The area contains a good collection of a locally significant variation of the 'standard' Federation bungalow design with a low ridgeline set parallel to the street alignment. The Area also includes streetscapes of a high quality. This quality is derived from the consistency</i>	SHI

Item	Statement of Significance	Listing
	<i>of subdivision pattern, setbacks, built forms, roof volumes, materials, detailing, and garden spaces. The built forms of the area are representative of the Marrickville area in the early years of the 20th Century as it transformed from a dense urban to detached suburban cultural landscape which includes detached late Federation bungalows and wide lots allowing asymmetrical siting of houses to provide for a side driveway (later development).</i>	

6.2.5 Heritage impacts

Direct impacts

Dulwich Hill Railway Station Group

The table below provides an assessment of the direct impacts of the project on the fabric of each element constituting the railway station and an assessment of the subsequent impacts on the heritage values of the station group as a whole.

Table 34: Assessment of direct impacts for Dulwich Hill Railway Station Group

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platforms 1/2 (1935)	High	Removal apart from structure underneath heritage building; platform to be rebuilt in a similar curve to the existing and extend further towards the western end; covered concourse, access stairs, lift shaft, platform canopies and platform screen doors to be anchored on the west side of the new platform; new services building to be located on western end of reconstructed platform	<p>It is proposed to remove the 1935 island platform apart from the structure underneath the heritage building. This would have a major impact on the fabric of the platform including the loss of the original brick face.</p> <p>The platform would be reconstructed to accommodate the rail lines required for the Metro trains. A curve similar to the original curve of the platform would be recreated. This would result in a moderate impact on the original platform layout.</p> <p>The new covered concourse, access stairs, lift shaft, platform canopies, platform screen doors and services building would be anchored and constructed on the new platform. This would not further impact significant fabric.</p> <p>The complete demolition of Platform 1/2 to be reconstructed to accommodate the workings of the new Metro trains would result in a major impact on the station group overall.</p>	Major
Platform 1/2 building (Type 13) (1935) ¹¹⁰	High	Retention for re-use with potential retrofitting	<p>The retention of the platform building is a positive heritage outcome in the context of the project.</p> <p>Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to remove any intrusive modifications to the structure. Additions to the building and platform should be designed to be</p>	Minor

¹¹⁰ See Section 2.2.6 Station building types

Element	Significance	Proposed action	Assessment of impact	Impact summary
			<p>sympathetic to the heritage context and minimise fabric and visual impacts.</p> <p>This aspect of the project would have a minor impact on the heritage values of the building and station overall.</p>	
Overhead booking office (1935)	High	Removal	<p>It is proposed to remove the building and the original brick pier and steel beam structure.</p> <p>The building was ranked in second position in the Sydney Trains Overhead Booking Offices Heritage Conservation Strategy¹¹¹ and recommended for retention. It was given an overall score of eight out of nine in the strategy. Its removal would result in a major impact on the setting of the station as a whole and removal of a building type that is significant in the context of Sydney Trains heritage assets as a group.</p> <p>Removal would result in a major impact on the fabric and heritage values of the booking office and Dulwich Hill Railway Station as a whole.</p>	Major
Stairs (1935)	Moderate	Removal	<p>It is proposed to remove the stairs and footbridge. The stairs were assessed as having moderate significance as per the Railway Footbridges Heritage Conservation Strategy.¹¹² The removal of the stairs would result in a major impact on the fabric and historical values of the stairs and the station catchment as a whole.</p>	Major
Overbridge (c.1930; c.1975)	Moderate	Retention and upgrade	<p>The structure is proposed to be retained and regraded for ongoing use. The proposed works would involve protection and maintenance works. This would involve the removal and replacement of non-significant parapets. It is expected this aspect of the project would result in a minor impact on the heritage values of the overbridge and station overall.</p>	Minor

When considering cumulative impacts, it is assessed that the project would result in a major direct impact on Dulwich Hill Railway Station Group overall.

South Dulwich Hill Heritage Conservation Area

It is proposed to upgrade the existing railway tracks and associated overhead wiring between Marrickville and Dulwich railway stations as part of the installation of the new Metro train lines. The Albermarle Street overbridge would be removed and replaced. The curtilage of the South Dulwich Hill HCA comprises a 295m section of railway line starting approximately 100m east of Dulwich Hill Station. Direct impacts proposed within the curtilage of the conservation area would include an upgrade of railway tracks and related overhead wiring, and removal and replacement of the Albermarle Street overbridge. No areas of heritage significance within the conservation area would be

¹¹¹ Australian Museum Consulting 2014. *Railway Overhead Booking Offices Heritage Conservation Strategy*. Prepared for Transport for NSW.

¹¹² NSW Government Architect's Office Heritage Group 2016. *Railway Footbridges Heritage Conservation Strategy*. Prepared for Sydney Trains.

directly impacted by the works. Alterations to the railway line and the Albermarle Street overbridge would be in line with the existing setting and nature of this portion of the conservation area.

Direct impacts of the works onto the South Dulwich Hill HCA would be negligible.

Visual impacts

Dulwich Hill Railway Station Group

The new concourse would be modern in style, and would be considerably larger in scale in comparison with the 1935 platform building. Medium-scale ribbon canopies would extend from the concourse, covering the central access stairs and along the length of the platform to the west. There would not be canopies above, or adjacent to, the heritage building, which would remain clearly visible from the concourse, and separated from the new layers of development. The nature of the chosen materials and the contemporary nature of the proposed new concourse, canopies and station buildings would be suitable within the present context as a contrastive design to be easily differentiated from the heritage components of the site. The proposed concourse and station and services buildings would be sited away from the heritage building.

The removal of the overhead booking office, one of two significant station buildings within the station group, would result in a major visual impact on the station as a significant portion of its heritage fabric would be removed. The overhead booking office is a rare example of an Inter-War transitional booking office with good condition and integrity. The building was ranked in second position in a recent study on those grounds.¹¹³ Its removal would result in a major impact on the setting of the station as a whole.

The proposed platform screen doors along Platform 1/2 would rise to human height to accommodate the specific workings of Metro trains. This would have a minor impact on external views from the platform buildings and from the new concourse towards the heritage buildings and a moderate impact on internal views as a result of visual clutter.

Overall, the proposed ribbon canopies, covered concourse and station infrastructure would have a major impact on the character and setting of Dulwich Hill Station. The removal of the overhead booking office would remove an element of high significance in the station. The new Metro concourse would add considerable bulk to the station. The platform screen doors would result in a moderate visual impact.

When considering cumulative impacts, it is assessed that the project would result in a major visual impact on Dulwich Hill Railway Station Group.

South Dulwich Hill Heritage Conservation Area

The South Dulwich Hill HCA comprises a portion of land extending from the north of Dulwich Hill Railway Station, approximately 125m from the north boundary of the station, across the railway line and to the south-east where it reaches Beauchamp Road. The proposed railway track upgrade and the removal and replacement of the Albermarle Street overbridge would remain in line with the existing character of this portion of the HCA and would have a neutral visual impact onto it.

The project would involve the construction of a new concourse, medium-scale canopies along the western side of Dulwich Hill station and new Metro infrastructure along the southern boundary of Dulwich Hill station. It would also involve the removal of elements of high significance within the station group, namely the overhead booking office and associated stairs. There are some views from

¹¹³ Australian Museum Consulting 2014. Railway Overhead Booking Offices Heritage Conservation Strategy. Prepared for Transport for NSW.

residential allotments within the HCA onto the eastern side of the station. These views are generally limited by mature trees and the siting of the station catchment in an embankment below street level. The bulk of the additions proposed would be concentrated on the western side of the station catchment further from views. The visual impacts of the proposed works on the contributory items in proximity would be minor. The remainder of the HCA does not share views to and from the station catchment and would not be impacted by the works.

Visual impacts on the Dulwich Hill HCA would be negligible.

Inter-War Heritage Conservation Area Group

The Inter-War HCA is located approximately 25m north of the railway corridor and 490m east from the eastern edge of the station platform. Current views from the HCA towards the railway line are screened by houses along Marrickville Avenue. The section of the conservation area located within the buffer zone in the corner of Marrickville Avenue and Livingstone Road is also screened by existing vegetation along the railway corridor. Additionally, the railway corridor is located in an embankment below street level and only limited views are available from the surrounding environment. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the HCA and would have a neutral visual impact.

Visual impacts on the Inter-War HCA Group would be negligible.

Gladstone Hall, including interiors

Gladstone Hall is located approximately 40m south of the railway corridor and 270m from the western edge of the platform of Dulwich Hill Railway Station. Views from the heritage item towards the railway line are limited as they are screened by vegetation within the curtilage of the item as well as along the railway corridor. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact.

Visual impact on Gladstone Hall would be neutral.

Potential direct impacts

The following table provides an assessment of potential direct impacts on heritage items within the station catchment.

Table 35: Potential direct impact assessment

Item	Potential direct impact assessment	Impact
Dulwich Hill Railway Station Group	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
South Dulwich Hill Heritage Conservation Area	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor

Item	Potential direct impact assessment	Impact
Inter-War Heritage Conservation Area Group	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Gladstone Hall, including interiors	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor

6.2.6 Overview of impacts

The table below provides a summary of impacts in accordance with the guidelines by the NSW Office of Environment & Heritage (Statement of Heritage Impact, 2002).

Table 36: Summary of Heritage Impacts – Dulwich Hill Station Catchment

Impact on a heritage item	Discussion
Aspects that respect or enhance the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> Retention for re-use of the Platform 1/2 building of high significance Retention and re-use of the Wardell Road overbridge including the original brick piers Potential for positive heritage impacts during retrofitting and upgrade works to the platform building to be retained Negligible direct and visual impacts on the South Dulwich Hill HCA Neutral to negligible visual impacts on heritage items in the vicinity Provided that mitigation measures are implemented, negligible to minor potential direct impacts as a result of vibrational work in the vicinity of heritage items Continued use of the heritage item in its historical function as part of the evolution of the Bankstown Line
Aspects that would detrimentally impact on the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> Demolition of elements of high significance within the station group: Platform 1/2 and the overhead booking office with associated stairs Major direct and impacts on the fabric of the station Major visual impacts on the setting of the station catchment and views onto the platform building of significance

6.2.7 Statements of heritage impact

The following statements of heritage impact are provided for the heritage items located within Dulwich Hill Station Catchment and the 25-metre buffer zone:

Dulwich Hill Railway Station Group

The direct impacts of the project on Dulwich Hill Railway Station would be major overall. The Platform 1/2 building would be retained and retrofitted with potential for positive impact. The removal of the overhead booking office, one of two significant buildings within the station group, would have major

direct and visual impacts. The visual impact of the new development on the setting of the item and significant views would also be major with considerable bulk added to the station group as a result of construction of the new concourse. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

The demolition of Platform 1/2 and the overhead booking office and stairs would remove a substantial portion of the 1935 layer of re-development of Dulwich Hill Railway Station and impact the integrity of the station as a whole. The representativeness significance of the station as a railway station in the Inter-War Railway Eclectic style would be severely diminished. The platform building would remain a good example of the type. The significant brick abutments and piers of the Wardell Road overbridge would be retained.

When assessed cumulatively, the level of heritage impact of the project on Dulwich Hill Railway Station Group would be major. However, based on the historical significance of the station and the aesthetic values of the retained platform building, the heritage item would continue to meet the threshold for local significance.

South Dulwich Hill Heritage Conservation Area

The direct impacts of the project on the South Dulwich Hill HCA would be negligible. Works within the boundaries of the HCA and in its vicinity would result in negligible visual impacts. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

When assessed cumulatively, the level of heritage impact of the project on the South Dulwich Hill HCA would be negligible. The HCA would continue to meet the threshold for local significance.

Inter-War Heritage Conservation Area Group

The direct impacts of the project onto the Inter-War HCA Group would be neutral. The proposed works in the vicinity would result a negligible visual impact overall. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

When assessed cumulatively, the level of heritage impact of the project on the Inter-War HCA Group would be negligible. The HCA would continue to meet the threshold for local significance.

Gladstone Hall, including interiors

The direct impacts of the project onto Gladstone Hall would be neutral. The proposed works in the vicinity would result a neutral visual impact overall. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

When assessed cumulatively, the level of heritage impact of the project on Gladstone Hall would be neutral. The heritage item would continue to meet the threshold for local significance.

6.3 Hurlstone Park Station Catchment

The Hurlstone Park Station Catchment comprises two heritage items, the Hurlstone Park Railway Station Group and the Hurlstone Park Railway Underbridge. The buffer zone around the station catchment does not comprise any heritage items or conservation areas.

6.3.1 Summary of heritage listings

The table below provides a summary of the heritage items located within the station catchment and within the 25-metre buffer zone. An aerial map showing the heritage items within the station catchment is also provided below.

Table 37: Heritage items within Hurlstone Park Station Catchment and buffer zone

Item	Suburb	Significance	Listing
Within project area			
Hurlstone Park Railway Station Group	Hurlstone Park	Local	RailCorp S.170 Heritage and Conservation Register (4802051) Canterbury LEP 2012 (I124)
Hurlstone Park Railway Underbridge	Hurlstone Park	Local	RailCorp S.170 Heritage and Conservation Register (4805737) Canterbury LEP 2012 (I126)

Hurlstone Park Station has been nominated for SHR listing as of 17 March 2016.

The Hurlstone Park Heritage Assessment study (Paul Davies September 2016) was prepared and has recently been given a gateway Determination by the Department of Planning and Environment. There are a number of heritage items identified for listing and Heritage Conservation Areas within the buffer zone of the Hurlstone Park Station Catchment. There would be no direct impacts to any newly identified heritage items as a result of the project and indirect impacts are expected to be minor. Detailed design would consider the character of the Heritage Conservation Areas in the vicinity of the station.

Figure 169: Aerial map showing heritage items within study area: Hurlstone Park



6.3.2 Existing environment

Hurlstone Park Railway Station Group

Hurlstone Park Station was designed and built by NSW Government Railways. Hurlstone Park Station was opened as Fern Hill on 27 November 1894. It was renamed Hurlstone Park on 19 August 1911. In this year the Metropolitan Goods line was built past the station as well as a new Down platform. In 1915 the original timber station building was replaced by brick buildings on both platforms and an overhead booking office (Figure 170 to Figure 181). The latter was replaced in the 1980s by a new booking office (Figure 170).

Hurlstone Park Station consists of one wayside platform on the south and an island platform on the north. Passenger rail only uses the south side of the island platform, with the Metropolitan Goods Line running on the north. The station is accessed via the overbridge and overhead booking office from Floss Street. The overbridge is excluded from the heritage listing (Figure 182, Figure 183).

Figure 170: View of overhead booking office, south aspect



Figure 171: View of Platforms, south-west aspect



Figure 172: View of Platform 2 stairs, north-east aspect



Figure 173: View of Platform 2 building, north-east aspect



Figure 174: View of Platform 1 building, south-west aspect



Figure 175: View of stairs and overhead booking office, north-east aspect



Figure 176: View of Platform 1 building, north-east aspect



Figure 177: View of Platform 2 building, east aspect



Figure 178: View of cutting, south-west aspect



Figure 179: View of cutting, west aspect



Figure 180: View of Platform 1 building, south-west aspect



Figure 181: View of Platform 1 building, west aspect



Figure 182: View of overbridge, north-east aspect



Figure 183: View of overbridge, north-east aspect



Hurlstone Park Railway Underbridge

The Hurlstone Park Railway Underbridge was designed by engineering staff, New South Wales Government Railways and constructed by day labour. It consists of a single span, double track, prestressed concrete girder railway bridge, with 9.85 metre clear span between brick abutments, consisting of parallel, post-tensioned precast I-shaped concrete girders transversely post-tensioned in-situ to create a homogeneous structure carrying ballasted tracks (Figure 184 to Figure 187). The concrete girders rest on concrete padstones on top of each brick abutment. The bridge carries the double track Bankstown Railway over Foord Avenue. It was constructed shortly after the first prestressed bridge at Dombarton in 1962.

The viaduct is in good condition with the following defects: spalling concrete girders, minor cracks in headstock and water seepage through abutments. No recent condition report for the M25 part of the bridge has been reviewed.

Figure 184: View of railway corridor section of underbridge, south-west aspect **Figure 185: View of underbridge, south aspect**



Figure 186: View of underbridge, north aspect **Figure 187: View of underbridge detail, west aspect**



6.3.3 Description of elements

Hurlstone Park Railway Station Group

The table below outlines the main structures and elements comprised within the railway station group. Information such as date, description and condition is provided, and the significance of each element has been graded.

Table 38: Elements of Hurlstone Park Station Group

Elements	Date	Description	Condition	Significance
Platform 1	1894	Platform 1 has an asphalt surface with the original brick face with a concrete edge. The northern side of this platform (not used and fenced off) which extends only to the western end of the platform building has a concrete edge but the face is buried below the ballast of the raised railway lines	Generally good	High
Platform 2	1894	Platform 2 also has its original brick face with a concrete edge and asphalt surface.	Generally good	High
Platform building, platform 1 (Type 11) ¹¹⁴	1915	<p>External: Rectangular face brick building with gabled roof and integral shallower sloped single cantilevered awning. The face brick is in stretcher bond and the building is six bays in length, with the bays defined by engaged brick piers which coincide with the awning supports. There is a further open veranda bay at the eastern end. Original chimneys with cement mouldings and terracotta flues have been removed.</p> <p>The northern cantilever awning on the goods line side has been removed. The remaining southern cantilever awning has standard double bowed steel brackets supported on decorative cement haunches and bolt fixings to the station building brick walls. The soffit lining is corrugated steel fixed to intermediate exposed purlins and follows the roof slope. There is a decorative timber moulding at the junction with the brick wall. Vertical timber boards form a valance at each end of the awning. On the eastern end of the building the vertical boarding fills the whole width of the gable end and the roof is supported on two timber posts to form an open veranda for one bay. The awning roofs as for the main roof is corrugated steel.</p> <p>The external walls rise from a projecting brick plinth five/six courses high with a decorative dado moulding run in cement which is continuous between door and window openings. Decorative cement window and door frames rise above the dado moulding. The northern side of the building reflects the same detailing.</p> <p>The original window openings feature a moulded cement sill with a scalloped fringe. The original timber windows were double hung with a single paned lower sash and a six paned upper sash. If the upper sashes featured coloured glass, none now remain. The original window glass as well as the upper glazing bars have been removed in most cases. Most of the windows now contain diamond pattern vandal proof fibreglass sheeting and/or hardboard coverings. Original door openings featured fanlights matching the upper window sashes, which have also been removed. One original timber panelled door remains. The original slate thresholds remain on the northern side only.</p> <p>Internal: The building comprises a station master's office; general waiting room; ladies room and ladies toilets, a store and men's toilets. The internal usage has now changed and the toilets have modern fitouts and finishes. Original plaster wall finishes and plaster</p>	Generally good	High

¹¹⁴ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		ceilings remain in the general waiting room, the ladies waiting room, and ladies toilets. The men's toilets retain the original painted brick walls but the ceiling has been removed. The station master's office has lost all internal finishes due to fire damage.		
Platform building, platform 2 (Type 11). ¹¹⁵	1915	<p>External: Rectangular face brick building with gabled roof and integral shallower sloped single cantilevered awning. The face brick is in stretcher bond and the building is four bays in length, with the bays defined by engaged brick piers which coincide with the awning supports. The original chimney with cement mouldings and terracotta flue has been removed.</p> <p>The cantilever awning is on standard double bowed steel brackets supported on decorative cement haunches and bolt fixings to the station building brick walls. The soffit lining of corrugated steel is fixed to intermediate exposed purlins and follows the roof slope. There is a decorative timber moulding at junction with the brick wall. Vertical timber boards form a valance at each end of awning. The awning roofs as for the main roof is corrugated steel.</p> <p>The external walls rise from a projecting brick plinth four/five courses high with a decorative dado moulding run in cement which is continuous between door and window openings. Decorative cement window and door frames rise above the dado moulding. The rear or southern side of the building against the rock cutting reflects the same detailing.</p> <p>The original window openings feature a moulded cement sill with a scalloped fringe. The original timber windows were double hung with a single paned lower sash and a six paned upper sash which featured coloured glass. The original window glass as well as the upper glazing bars have been removed in several cases. Most of the windows now contain diamond pattern vandal proof fibreglass sheeting and/or hardboard coverings. Original door openings featured fanlights matching the upper window sashes, which have also been removed. One original timber panelled door remains. The original slate thresholds remain.</p> <p>Internal: The building comprises a general waiting room; ladies room and ladies toilets, a store and men's toilets. The waiting room and ladies waiting room retains the original plaster wall finishes, ripple iron ceiling, plaster ceiling rose and timber floor. The ladies toilets retain the original timber partitions and fittings but have not been used in many years. The men's toilets retains the original painted brick walls, urinal stalls, some timber partitions but the ceiling has been removed.</p>	Generally good externally except for some damage to the brickwork where the toilet modesty screens have been removed and some paint graffiti damage. Internally the disused waiting rooms and toilets in the building on Platform 2 are in a poor condition, with peeling paint, damage from water ingress.	High
Footbridge	1915	Haunched steel beam girder design consists of tapered cantilevers bearing on platform trestles and brick abutments and supporting shallow beams over the railway tracks. The original access stairs remain including the original newel posts.	Good	High (stairs) Moderate (footbridge) Little (deck)

¹¹⁵ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
Brick abutments	c.1915	Face brick abutments supporting the overbridge and overhead booking office.	Good	High
Overhead booking office	c.1980	The original timber framed overhead booking office dating from 1915 has been demolished and replaced by a new structure erected on the original footbridge.	Good	Little
Landscape/natural features		Excavated rock face to rear of Platform 2 and wayside building.	Good	High

6.3.4 Statements of significance

The following statements of significance for the heritage items located within the project area are reproduced from the SHI listings.

Table 39: Statements of significance for Hurlstone Park Station Catchment

Item	Statement of Significance	Listing
Hurlstone Park Railway Station Group	<i>Hurlstone Park Railway Station has local historical significance as it is one of the stations to be located on the Sydenham to Bankstown Line which was built to take pressure off the traffic on the Main South Line as well as promote agriculture and suburban development in the late 19th and early 20th centuries. The platform buildings, footbridge and stairs are significant as examples of the designs used by NSW Railways during the period 1910 to 1920. The wayside platform buildings are good examples of their type, being relatively intact, with the original 1915 men's toilet on platform 2, although long disused, still retaining its original configuration.</i>	SHI
Hurlstone Park Railway Underbridge	<i>The Foord Avenue bridge is of local significance as the first prestressed concrete railway bridge built for the metropolitan network, the second within the NSW rail network. The bridge is a good and early representative example of prestressed concrete girder construction.</i>	SHI

Hurlstone Park Station has been nominated for SHR listing as of 17 March 2016.

6.3.5 Heritage impacts

Direct impacts

Hurlstone Park Railway Station Group

The table below provides an assessment of the direct impacts of the project on the fabric of each element constituting the railway station and an assessment of the subsequent impacts on the heritage values of the station group as a whole.

Table 40: Assessment of direct impacts for Hurlstone Park Railway Station Group

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platform 1 (1894)	High	Removal; platform to be rebuilt in straight alignment; covered concourse, access stairs, lift shafts, platform canopies,	<p>The platform would be removed to allow for the construction of a new platform to accommodate the straight rail lines required for the Metro trains. This would result in the complete loss of the fabric of the platform including the original brick face and curved layout. This would have a major impact on the original platform.</p> <p>The new covered concourse, access stairs, lift shafts, platform canopies and platform screen doors would be</p>	Major

Element	Significance	Proposed action	Assessment of impact	Impact summary
		platform screen doors and station buildings to be anchored on new platform	<p>anchored and constructed on the new platform. This would not further impact significant fabric.</p> <p>The complete demolition of Platform 1 to be reconstructed in a straight alignment would result in a major impact on the platform and the station group.</p>	
Platform 2 (1894)	High	Removal apart from structure underneath heritage building; platform to be rebuilt in straight alignment; covered concourse, access stairs, lift shafts, platform canopies, platform screen doors and station buildings to be anchored on new platform	<p>The platform would be removed apart from the structure underneath the heritage building to allow for the construction of a new platform to accommodate the straight rail alignment required for the Metro trains. This would result in the complete loss of the fabric of the platform including the original brick face and curved layout. This would have a major impact on the original platform.</p> <p>The new covered concourse, access stairs, lift shafts, platform canopies and platform screen doors would be anchored and constructed on the new platform. This would not further impact significant fabric.</p> <p>The complete demolition of Platform 2 to be reconstructed in a straight alignment would result in a major impact on the platform and the station group.</p>	Major
Platform building, platform 1 (Type 11) (1915). ¹¹⁶	High	Removal	The Platform 1 building would be removed to allow for the construction of a new paid concourse, canopies and station buildings. Its removal would have a major impact on the fabric of the building and on Hurlstone Park Station as a whole.	Major
Platform building, platform 2 (Type 11) (1915). ¹¹⁷	High	Retention for re-use with potential retrofitting	<p>The retention of the platform building is a positive heritage outcome in the context of the project.</p> <p>Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to remove any intrusive modifications to the structure. Additions to the building and platform should be designed to be sympathetic to the heritage context and minimise fabric and visual impacts.</p> <p>This aspect of the project would have a minor impact on the heritage values of the building and station overall.</p>	Minor
Footbridge (1915)	High (stairs) Moderate (footbridge) Little (deck)	Removal	<p>The footbridge including significant stairs would be fully removed to allow for the construction of a new concourse, canopies and station buildings.</p> <p>The footbridge was assessed as having moderate significance as per the Railway Footbridges Heritage Conservation Strategy.¹¹⁸ It was highlighted for careful conservation and adaptation.</p>	Major

¹¹⁶ See Section 2.2.6 Station building types

¹¹⁷ See Section 2.2.6 Station building types

¹¹⁸ NSW Government Architect's Office Heritage Group 2016. *Railway Footbridges Heritage Conservation Strategy*. Prepared for Sydney Trains.

Element	Significance	Proposed action	Assessment of impact	Impact summary
			This removal would have a major impact on the fabric of the footbridge and on Hurlstone Park Station as a whole.	
Brick abutments (c.1915)	High	Retention and upgrade	The brick abutments are proposed to be retained and regraded for ongoing use as the overbridge structure. It is expected this aspect of the project would result in a minor impact on the heritage values of the brick abutments and station overall.	Minor
Overhead booking office (c.1980)	Little	Removal	It is proposed to remove the overhead booking office. This would result in a neutral impact on the station catchment. The overhead booking office is not identified as significant in the Sydney Trains Overhead Booking Office Conservation Strategy.	Neutral
Landscape /natural features	High	Retention	It is proposed to retain the sandstone wall on platform 2. This would result in a neutral positive impact on Hurlstone Park Railway Station.	Neutral positive

When considering cumulative impacts, it is assessed that the project would result in a major direct impact on Hurlstone Park Railway Station Group overall.

Hurlstone Park Railway Underbridge

It is proposed to undertake a general maintenance works overhaul on the bridge and to apply waterproofing to the whole bridge deck to mitigate future water attributed problems and assist with minimising future maintenance works. The non-significant parapets would be removed and replaced with new precast parapets with the screens pre-installed. The project would have a negligible impact on the heritage values of the overbridge.

Direct impacts of the works on the Hurlstone Park Railway Underbridge would be negligible.

Visual impacts

Hurlstone Park Railway Station Group

The contemporary nature of the new concourse, canopies and station buildings would be suitable within the present context as a contradistinctive design to be easily differentiated from the heritage components of the site. A new platform building on Platform 1 would be located opposite the Platform 2 building of a similar scale itself but of a contemporary style. The footprint of the overall concourse and new platform building as well as the platform canopies and platform screen doors would add considerable bulk to the originally low-scale station and impact the open context and setting. The Metro concourse would be located to the east of the retained platform building. Although the height and open layout of the new concourse would allow some views onto the retained building on Platform 2 from the concourse, views from Duntroon Street on the platform building would be impeded. Views would also be obscured by ribbon canopies over the two sets of access stairs from the concourse to the platforms. These canopies would extend along the platforms, with a gap of at least two metres at either side of the Platform 2 building. The canopy fabric adjacent to the Platform building would be glazed to maximise visibility. The visual impact of the new concourse on the setting of the railway station would be major overall.

The removal of the curved platforms, the Platform 1 building and the footbridge stairs would result in the loss of a majority of the heritage components of the site. This would have a major visual impact on

the station. The new structures would come to replace the heritage components of the station group and the overall character of the station would be significantly altered. Although the removal of the c.1980 overhead booking office would present an opportunity to enhance views onto the Platform 2 building, these views would eventually be mostly screened by the new concourse and ribbon canopies.

The platform screen doors along the reconstructed platforms would rise to human height to accommodate the specific workings of Metro trains. This would have a minor impact on external views from the platform buildings and from the new concourse towards the heritage buildings and a moderate impact on internal views as a result of visual clutter.

Overall, the proposed concourse, canopies and platform building would result in a major visual impact. Views onto the Platform 2 building would be partially retained from the concourse, although views from Duntroon Street would be impeded. Views of the curved platforms, Platform 1 building and footbridge stairs would be lost due to the removal of these elements; this would also result in a major impact. The platform screen doors would result in a moderate visual impact overall.

When considering cumulative impacts, it is assessed that the project would result in a major visual impact on Hurlstone Park Railway Station Group.

Hurlstone Park Railway Underbridge

It is proposed to undertake a general maintenance works overhaul on the bridge and to apply waterproofing to the whole bridge deck to mitigate future water attributed problems and assist with minimising future maintenance works. The non-significant parapets would be removed and replaced with new precast parapets with the screens pre-installed. The maintenance and waterproofing works to Hurlstone Park Railway Underbridge are unlikely to significantly alter the existing aesthetics of the bridge and visual impacts on the bridge are anticipated to be negligible.

The heritage item is located approximately 180m west of Hurlstone Park Railway Station. Current views on the station are very limited. The proposed redevelopment of Hurlstone Park Railway Station would have a negligible visual impact on the underbridge. New Metro tracks and overhead wiring would be in keeping with the current setting of the heritage item and would have a neutral visual impact.

Visual impact on Hurlstone Park Railway Underbridge would be negligible.

Potential direct impacts

The following table provides an assessment of potential direct impacts on heritage items within the station catchment.

Table 41: Potential direct impact assessment

Item	Potential direct impact assessment	Impact
Hurlstone Park Railway Station Group	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Hurlstone Park Railway Underbridge	Vibration levels would be under the cosmetic damage screening level.	Negligible

6.3.6 Overview of impacts

The table below provides a summary of impacts in accordance with the guidelines by the NSW OEH (Statement of Heritage Impact, 2002).

Table 42: Summary of Heritage Impacts – Hurlstone Park Station Catchment

Impact on a heritage item	Discussion
Aspects that respect or enhance the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> Retention for re-use of the Platform 1 building with opportunity for positive impact Retention and upgrade works to the Duntroon Street overbridge Retention of the sandstone wall on Platform 2 Negligible direct and visual impacts to Hurlstone Park Railway Underbridge Provided that mitigation measures are implemented, negligible to minor potential direct impacts as a result of vibrational work in the vicinity of heritage items Continued use of the heritage item in its historical function as part of the evolution of the Bankstown Line
Aspects that would detrimentally impact on the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> Demolition of elements of high significance within the station group: the two original 1894 platforms, the 1915 Platform 1 building and the 1915 footbridge stairs and posts Major direct and visual impacts on the station catchment due to the removal of the original platforms, Platform 1 building and footbridge

6.3.7 Statements of heritage impact

The following statements of heritage impact are provided for the heritage items located within Hurlstone Park Station Catchment and the 25-metre buffer zone:

Hurlstone Park Railway Station Group

The direct impacts of the project on Hurlstone Park Railway Station would be major. Most elements of high significance within the station would be removed apart from the less prominent of two 1915 platform buildings, the Platform 2 building. This would have major direct and visual impacts on the station as a whole. The visual impact on the setting of the station and significant views to and from the station would also be major. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

The project would remove all original elements at Hurlstone Park Railway Station apart from the Platform 2 building, the brick abutments of the Duntroon Street overbridge, and the sandstone wall on Platform 2. This would significantly impact the integrity, aesthetics and representativeness significance of the station. The removal of most original elements would severely impact the legibility of the historical values of the place as one of the original railway stations on the Sydenham to Bankstown Line. The Platform 2 building would remain the sole tangible element to represent the heritage significance of the railway station. The Platform 2 building would retain some of the heritage values of the place and Hurlstone Park Railway Station would retain its historical use.

There are unlikely to be direct impacts to the currently unlisted items and HCAs discussed in the Hurlstone Park Heritage Study (Paul Davies 2016) and currently being determined by DP&E. The detailed design for the station catchment would consider the context and setting of the items and HCAs.

When assessed cumulatively, the level of heritage impact of the project on Dulwich Hill Railway Station Group would be major. Based on the historical significance of the station and the heritage values of the retained platform building, the heritage item would continue to meet the threshold for local significance.

Hurlstone Park Railway Underbridge

The direct impacts of the project on the Hurlstone Park Railway Underbridge have been anticipated to be negligible. Works to the Hurlstone Park Railway Underbridge and in its vicinity would result in negligible visual impacts. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Hurlstone Park Railway Underbridge would be negligible. The heritage item would continue to meet the threshold for local significance.

6.4 Canterbury Station Catchment

The Canterbury Station Catchment comprises three heritage items including the Canterbury Railway Station Group, the Canterbury (Cooks River) Underbridge and the Canterbury (Cooks River/Charles St) Underbridge - Main Line. The buffer zone around the station catchment comprises four heritage items.

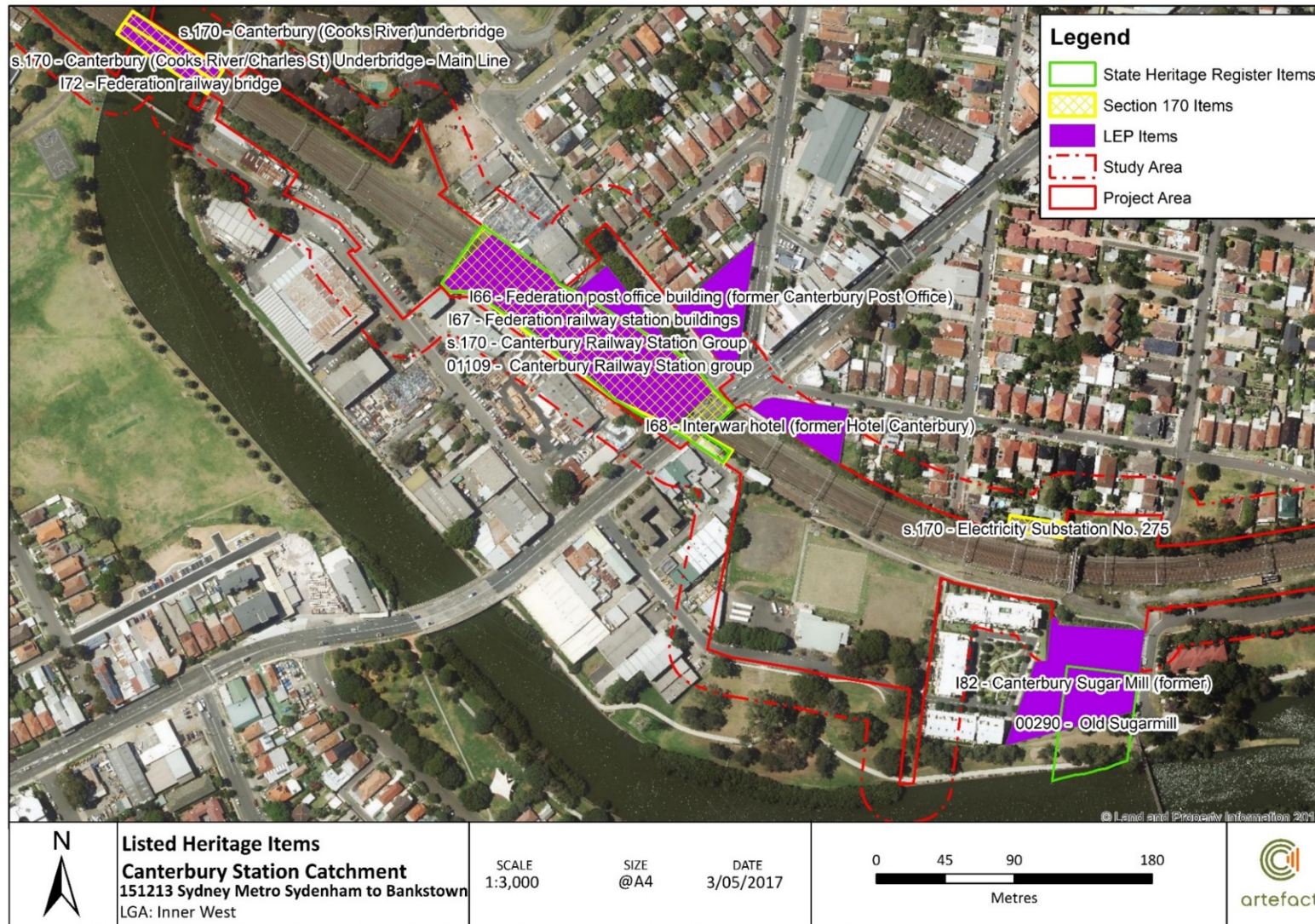
6.4.1 Summary of heritage listings

The table below provides a summary of the heritage items located within the station catchment and within the 25-metre buffer zone. An aerial map showing the heritage items within the station catchment is also provided below.

Table 43: Heritage items within Canterbury Station Catchment and buffer zone

Item	Suburb	Significance	Listing
Within project area			
Canterbury Railway Station Group	Canterbury	State	SHR (01109)
			RailCorp S.170 Heritage and Conservation Register (4801100) Canterbury LEP 2012 (I67)
Canterbury (Cooks River) Underbridge	Canterbury	Local	RailCorp S.170 Heritage and Conservation Register (4801568) Canterbury LEP 2012 (I72)
Canterbury (Cooks River/Charles St) Underbridge - Main Line	Canterbury	Local	RailCorp S.170 Heritage and Conservation Register (5062566)
Within buffer zone (outside project area)			
Old Sugarmill	Canterbury	State	SHR (00290)
			Canterbury LEP 2012 (I82)
Inter-War Hotel (former Hotel Canterbury)	Canterbury	Local	Canterbury LEP 2012 (I68)
Federation Post Office Building (former Canterbury Post Office)	Canterbury	Local	Canterbury LEP 2012 (I66)
Electricity Substation no. 275	Canterbury	Local	Ausgrid S.170 Heritage and Conservation Register (3430425)

Figure 188: Aerial map showing heritage items within study area: Canterbury



File Path: C:\Users\GIS\Desktop\GIS\GIS_Mapping\151213_Sydney_Metro_Bankstown_Sydenham\MXD\Heritage_Detail_Canterbury

6.4.2 Existing environment

Canterbury Railway Station Group

Canterbury Station was designed by N.S.W. Government Railways and built by J.J. Scouller. Canterbury Station consists of one wayside (Platform 2) on the south and one island (Platform 1) on the north, with both original platform buildings remaining (Figure 189 to Figure 194). The northern side of the island platform is not used for passenger services. The wayside platform is accessed from the footbridge via a ramp, while the island platform is accessed by stairs (Figure 195, Figure 196). An overhead booking office accessed from the Canterbury Road overbridge on the east and from Broughton Street on the north was rebuilt in the late 1980s (Figure 197). The railway was electrified in 1926.

Canterbury Station was expanded in 1915 in conjunction with the construction of the Metropolitan Goods Line. It has three platforms, only two of which are now used. One of the platforms faces one of the two goods lines. Canterbury Park Racecourse is adjacent, and a branch line formerly led to sidings used on race days (now demolished).

Canterbury signal box was commissioned on 13 December 1915 as part of the resignalling and track alterations of Canterbury station in preparation for the opening of the new Metropolitan Goods Line from Lidcombe via Enfield Marshalling Yards to Rozelle, in April 1916 (Figure 198). The signal box was constructed with a mechanical interlocking lever frame using 68 of the 72 possible lever positions, which controlled the operation of signals and points in a set sequence.

The signal box controlled all train movements through Canterbury on both the Bankstown suburban line and Metropolitan Goods line. Through ancillary lever frames 'B' and 'C', the signal box controlled the storage sidings for the Canterbury Racecourse special trains and the shunting of the local goods sidings.

Two extensions have been added to the signal box. The western annex in 1937, and the eastern annex in 1968 to provide additional space to accommodate signalling relays, circuits and equipment. In 1994 a start was made on replacing the life expired signalling system and equipment on the Bankstown Line and the Metropolitan Goods Line. This resulted in the closure of Canterbury signal box on the weekend of 30/31 December 1996. After its closure it was sealed in its 'as closed condition' by the Heritage Section of the State Rail Authority to preserve the building and its internal signalling equipment.

Figure 189: View of Platform 1 building, south-east aspect **Figure 190: View of Platform 2 building, south-east aspect**

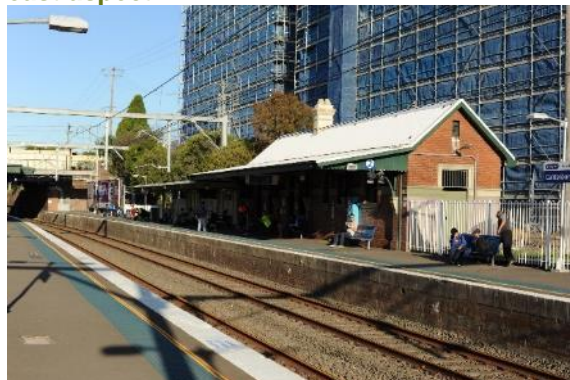


Figure 191: View Platform 2 building detail, south-east aspect



Figure 193: View of Platform 1 building, east aspect



Figure 195: View of footbridge, south-east aspect



Figure 197: View of overhead booking office, west aspect



Figure 192: View of Platform 1 building, south-east aspect



Figure 194: View of Platform 1 building detail, south-east aspect



Figure 196: View of stairs to Platform 1, north-west aspect



Figure 198: View of signal box, south aspect



Canterbury (Cooks River) Underbridge

The bridge was constructed in 1916 by day labour and designed by NSW Government Railways. It is a three span, double track, brick arch railway bridge, with 16.16 metres clear spans between intermediate foundations and abutments (Figure 199 to Figure 202). The arches are semi-circular in elevation with plain brick spandrel walls and stone coursing above the crown of the arches. The bridge is in good condition with some minor cracking and staining of the brickwork.

Figure 199: View of railway corridor, west aspect



Figure 200: View of railway corridor with brick walls of underbridge, west aspect



Figure 201: View of underbridge with brick arches, west aspect



Figure 202: View of underbridge, west aspect



Canterbury (Cooks River/Charles St) Underbridge – Main Line

The bridge is located on the Bankstown Line and is adjacent to the 1916 brick arch Canterbury (Cooks River) Underbridge that is part of the goods line. The original bridge was constructed in 1895. The bridge directly adjoins the structure of the 1916 brick underbridge. The existing bridge is a replacement bridge to the original 1895 bridge which was planned with a similar structure to the original but with welded steel deck girders and precast concrete units on top. It was designed by McMillan Britton & Kell and the work was undertaken in 1993.

Today the bridge has three sets of iron piers with riveted cross beams in between brick abutments (Figure 203, Figure 204). It has a steel girder with concrete top and access walkway along the south side. The bridge was refurbished in 1993, however it retains the original piers and abutments. The bridge is in good condition.

Figure 203: View of Canterbury (Cooks River) Underbridge - Main Line, north-east aspect (Sydney trains)



Figure 204: Close up view of underbridge structure, north-west aspect (Sydney trains)



6.4.3 Description of elements

Canterbury Railway Station Group

The table below outlines the main structures and elements comprised within the railway station group. Information such as date, description and condition is provided, and the significance of each element has been graded.

Table 44: Elements of Canterbury Station Group

Elements	Date	Description	Condition	Significance
Platform 1	1895	Platform 1 has an asphalt surface with its original brick face and a concrete edge. The northern or 'goods' side of this platform is constructed in the same manner.	Generally good	High
Platform building, platform 1 (Type 11). ¹¹⁹	1895	<p>External: Rectangular polychromatic face brick building with gabled roof and surrounding cantilevered awning clad in corrugated roof sheeting. The face brick is in stretcher bond, with dark brick walls and lighter salmon coloured bricks forming a dado, framing the upper half of the windows and doors and with a diamond pattern dentil course at the high level. The building is eight bays in length, with the bays defined by engaged brick piers which coincide with the awning brackets. Original chimneys with cement mouldings and terracotta flues remain but have been painted.</p> <p>The cantilever awning is on filigreed steel brackets supported on decorative cement capped brick engaged piers and bolt fixings to the station building brick walls. The soffit lining is the underside of the corrugated steel roof fixed to intermediate exposed purlins. There is a decorative timber moulding at the junction with the brick wall.</p> <p>The canopy returns around the western end of the building but not the eastern or stair access end. The awning edges are finished with a decorative timber boarded valance. The end canopy and timber valance are not original but constitute a sympathetic addition to the building.</p> <p>The external walls rise from a projecting brick plinth (now painted) with a decorative two part cement dado moulding which frames the salmon brick dado and is continuous</p>	Generally good	Exceptional

¹¹⁹ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		<p>between door and window openings. Decorative cement window and door frames rise above the dado moulding, each with a decorative keystone.</p> <p>The original window and door openings have segmental arches and the windows feature a decorative moulded cement sill. The original timber windows were double hung with a double paned lower sash and a multi-paned upper sash featuring coloured glass. Much of the original coloured window glass remains as well as the original fanlights above the door openings. The doors were timber panelled.</p> <p>The end brick gables feature a louvre within a round brick window frames in salmon coloured voussoir shaped bricks with four cement keystones.</p> <p>Internal: The building comprises a booking hall entered by a set of double doors at the bottom of the stairs; a booking office; station master's room; general waiting room; ladies waiting room and ladies toilet, a lamp room and men's toilet. The internal usage has now changed, and the toilets have modern fitouts.</p>		
Platform 2	1895	Platform 2 has an asphalt surface with its original brick face and a concrete edge. The northern or 'goods' side of this platform is constructed in the same manner.	Generally good	High
		<p>External: Rectangular face brick building with gabled corrugated steel roof and integral shallower sloped cantilevered awning. The face brick is in stretcher bond. The building is four bays in length, with the bays defined by engaged brick piers which coincide with the awning supports. The original chimney with cement mouldings and terracotta flue remains.</p> <p>The cantilever awning is on standard double bowed steel brackets supported on decorative cement haunches and bolt fixings to the station building brick walls. The soffit lining is the underside of the corrugated steel roofing fixed to intermediate exposed purlins. There is a decorative timber moulding at junction with brick wall. Vertical timber boards form valances at each end of awning.</p>		
Platform building, platform 2 (Type 11). ¹²⁰	1915	<p>The external walls rise from a projecting brick plinth three/four courses high with a decorative dado moulding run in cement which is continuous between door and window openings. Decorative cement window and door frames rise above the dado moulding.</p> <p>The original window openings feature a moulded cement sill with a scalloped fringe. The original timber windows were double hung with a single paned lower sash and a six paned upper sash featuring coloured glass, with glass louvres in the toilet windows. The original window glass as well as the upper glazing bars has been removed from all but one window. Original door openings featured fanlights matching the upper window sashes. All the original timber panelled doors have been removed.</p> <p>Internal: The building comprises a general waiting room; ladies room and ladies toilets and men's toilets. The internal usage has now changed and the toilets have</p>	Generally good	High

¹²⁰ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		modern fitouts and finishes. The waiting room and ladies room have original ripple iron ceiling, ceiling rose and plaster wall finishes.		
Signal box	1915	<p>External: Canterbury signal box is located beside the Bankstown suburban line, in the Canterbury Station Catchment. It is a two storey timber framed structure clad in 'checked and chamfered' weather boards. It has a hipped, galvanised corrugated iron roof with wide eaves on all sides. The first floor (or operating level) has wood framed, sliding windows on three sides with a blank rear wall. On the eastern end of the building there is a landing, incorporating an enclosed toilet. The landing extends past the front of the building over a public walkway to a flight of metal stairs. The ground floor incorporates the interlocking room and relay room. The interlocking room has four windows in the front wall. In the rear is the relay room, featuring four windows in the rear wall. The eastern extension is flat roofed and is constructed of precast concrete panels between exposed verticals simulating timber weatherboards. There is one door at the eastern end of this extension (2009).</p> <p>Internal: The interior walls and ceiling of the first floor are lined with wall boards, and the timber floor is covered in linoleum. On the ground floor, the interlocking room is unlined, and the long and narrow lined relay room houses signalling relays which control the operation of signalling circuits.</p>	The exterior is in reasonably good condition with some peeling of paint. A fire has caused some internal damage to the rear wall and ceiling of the operating level and there is evidence of past white ant activity (Jeff Moonie, 2000).	High
Footbridge	1915, 1947	Haunched steel beam girder design consists of tapered cantilevers bearing on platform trestles and brick piers on each side support shallow beams over the railway tracks. The footbridge has been extended in 1947. Its timber deck has been covered with concrete and concrete treads replace the original timber steps. The footbridge and stairs have been roofed over and the deck partly enclosed in lightweight panels.	Good	Moderate
Overbridge	c.1917	The overbridge consists of steel girders supporting a jack arched brick and concrete deck. The girders span the up and down lines supported on concrete and brick abutment walls. The parapet walls are brick.	Good	High
Overhead booking office and concourse	Late 1980s	The original timber clad overhead booking office has been demolished and replaced by a new steel framed metal hipped roof structure.	Good	Little
Canopies	Late 1980s	New steel framed and metal roof clad canopies have been erected over the access stairs to the island platform and at the eastern end of the wayside station building, as well as the access ramp.	Good	Little

6.4.4 .Statements of significance

The following statements of significance for the heritage items located within the project area are reproduced from the SHR and SHI listings.

Table 45: Statements of significance for Canterbury Station Catchment

Item	Statement of Significance	Listing
Canterbury Railway Station Group	<i>Canterbury Railway Station possesses historical significance as it is a station on the Sydenham to Bankstown Line which was constructed to relieve congestion on the Main South Line as well as to encourage suburban development and the growth of agriculture in the late 19th and early 20th century. The main platform building represents the period of transition from the boom time of the 1880s to the standardisation of NSW railway building design from the 1890s onwards.</i>	SHR
	<i>Canterbury Railway Station is significant at the state level as the platform 1 Building demonstrates the high level of aesthetic design of the pre-1900 standard railway buildings, which included the use of polychromatic brickwork, decorative dentil coursing, ornate awning brackets and carved bargeboards. This platform building is relatively intact and is representative of a small group of such ornate platform buildings including Marrickville and Belmore on the Bankstown Line.</i>	
	<i>The Canterbury signal box is of historical significance as it is representative of the development of railway signalling technology in the first decades of the 20th century. As it was is [sic] intact internally it is capable of providing information about the workings of a signal box of this era.</i>	
Canterbury (Cooks River) Underbridge	<i>The Cooks River Underbridge is of local significance as the longest span brick arch rail viaduct within the NSW rail network, with clear spans of 16.16m between piers, demonstrating the technical limits for this construction type. The bridge is part of the original infrastructure for the Metropolitan Goods Line, one of the most significant and effective railway projects in New South Wales during the 20th century, which allowed freight trains to traverse the metropolitan area independent of the passenger train network. It is a good representative and early example of brick arch construction in the style of elliptical elevation, typical of this era of underbridge construction (1884 – 1924).</i>	SHI
Canterbury (Cooks River/Charles St) Underbridge – Main Line	<i>The bridge over Cook's River at Canterbury is historically significant as a major piece of infrastructure constructed as part of the Bankstown Line in 1895. At the time of construction it was the largest bridge on the line. It is technically significant for its 1890s construction methodology and materials. It still retains its original piers and abutments</i>	SHI

6.4.5 Heritage impacts

Direct impacts

Canterbury Railway Station Group

The table below provides an assessment of the direct impacts of the project on the fabric of each element constituting the railway station and an assessment of the subsequent impacts on the heritage values of the station group as a whole.

Table 46: Assessment of direct impacts for Canterbury Railway Station Group

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platform 1 (1895)	High	Removal; platform to be rebuilt in straight alignment; covered concourse, access stairs, lift shaft, platform canopies and	The platform would be removed to allow for the construction of a new platform to accommodate the straight rail lines required for the Metro trains. This would result in the complete loss of the fabric of the platform including the original brick face and curved layout. This would have a major impact on the original platform. The new covered concourse, access stairs, lift shaft, platform canopies and platform screen doors would	Major

Element	Significance	Proposed action	Assessment of impact	Impact summary
		platform screen doors to be anchored on new platform	<p>be anchored and constructed on the new platform. This would not further impact significant fabric.</p> <p>The complete demolition of Platform 1 to be reconstructed in a straight alignment would result in a major impact on the station group.</p>	
Platform building, platform 1 (Type 11) (1895). ¹²¹	Exceptional	Retention for re-use with potential retrofitting	<p>The retention of the platform building is a positive heritage outcome in the context of the project.</p> <p>Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to remove any intrusive modifications to the structure. Additions to the building and platform should be designed to be sympathetic to the heritage context and minimise fabric and visual impacts.</p> <p>If these considerations are implemented, it is expected this aspect of the project would have a minor impact on the heritage values of the building and station overall.</p>	Minor
Platform 2 (1895)	High	Removal apart from structure underneath heritage building; platform to be rebuilt in straight lines; covered concourse, access stairs, lift shafts, platform canopies and platform screen doors to be anchored on new platform	<p>The platform would be removed apart from the structure underneath the heritage building to allow for the construction of a new platform to accommodate the straight rail line alignment required for the Metro trains. This would result in the complete loss of the fabric of the platform including the original brick face and curved layout. This would have a major impact on the original platform.</p> <p>The new covered concourse, access stairs, lift shafts, platform canopies and platform screen doors would be anchored and constructed on the new platform. This would not further impact significant fabric.</p> <p>The demolition of Platform 2 to be reconstructed in straight line alignment would result in a major impact on the station group.</p>	Major
Platform building, platform 2 (Type 11) (1915). ¹²²	High	Retention for re-use with potential retrofitting	<p>The retention of the platform building is a positive heritage outcome in the context of the project.</p> <p>Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to remove any intrusive modifications to the structure. Additions to the building and platform should be designed to be sympathetic to the heritage context and minimise fabric and visual impacts.</p> <p>This aspect of the project would have a minor impact on the heritage values of the building and station overall.</p>	Minor

¹²¹ See Section 2.2.6 Station building types

¹²² See Section 2.2.6 Station building types

Element	Significance	Proposed action	Assessment of impact	Impact summary
Signal box (1915)	High	Retention	The retention of the signal box is a positive heritage outcome in the context of the project.	Neutral
Footbridge (1915, 1947)	Moderate	Removal for replacement with new covered concourse including access stairs and lift shafts	It is proposed to remove the footbridge. The footbridge was assessed as having moderate significance as per the Railway Footbridges Heritage Conservation Strategy. ¹²³ This would result in a major impact on the footbridge and a moderate impact on Canterbury Railway Station overall.	Moderate
Overbridge (c.1917)	High	Retention and upgrade	Maintenance and protection works are proposed for the bridge. This would involve removal and replacement of the brick parapets. The project would result in a moderate impact on the heritage values of the overbridge and station overall.	Moderate
Overhead booking office and concourse (Late 1980s)	Little	Removal for replacement with new covered concourse including access stairs and lift shafts	It is proposed to remove the overhead booking office. This would result in a neutral impact on the station catchment. The overhead booking office is not identified as significant in the Sydney Trains Overhead Booking Office Conservation Strategy.	Neutral
Canopies (Late 1980s)	Little	Removal for replacement with new platform canopies	It is proposed to remove the canopies. This would result in a neutral impact on the station catchment.	Neutral

When considering cumulative impacts, it is assessed that the project would result in a moderate direct impact on Canterbury Railway Station Group overall.

Canterbury (Cooks River) Underbridge

Maintenance and protection works are proposed for the bridge. This would include utility modifications/relocations, asphalt removal and reapplication, waterproofing, removal and replacement of parapets, line marking, and adjusting fencing, traffic barriers and tie-ins. The removal and replacement of the parapets would have a moderate direct impact on the underbridge. Direct impacts of the works onto Canterbury (Cooks River) Underbridge would be moderate.

Canterbury (Cooks River/Charles St) Underbridge – Main Line

Maintenance and protection works are proposed for the bridge. This would include utility modifications/relocations, asphalt removal and reapplication, waterproofing, removal and replacement of parapets, line marking, and adjusting fencing, traffic barriers and tie-ins. The removal and the replacement of the parapets would have a minor direct impact on the underbridge. Direct impacts of the works onto Canterbury (Cooks River/Charles St) Underbridge – Main Line would be minor.

¹²³ NSW Government Architect's Office Heritage Group 2016. *Railway Footbridges Heritage Conservation Strategy*. Prepared for Sydney Trains.

Visual impacts

Canterbury Railway Station Group

Medium-scale ribbon canopies and platform screen doors would be located along the reconstructed platforms. The contemporary nature of the new concourse, canopies and station buildings would be suitable within the present context as a contradistinctive design to be easily differentiated from the heritage components of the site. This would not have a significant impact on internal views. The ribbon canopies from the concourse to the west would be elevated enough to allow views from the concourse onto the two retained significant platform buildings. The canopies would not continue above these structures, further facilitating the views from the concourse and lifts. Although the station currently has an open layout and setting, the existing canopies over the access stairs from the concourse obscure views, and these would be removed. Views are not currently available from the walled concourse. New canopies on the western side of the station away from the heritage buildings. New station buildings would be located at a notable distance at the western side of the station of Platform 2. The new Metro concourse would have a moderate visual impact on Canterbury Railway Station.

The removal of the footbridge, the integrity of which has been impacted over time, would result in a moderate visual impact on the station catchment. The removal of the overhead booking office is of little significance and would not result in a negative visual impact on the station catchment. The removal of the existing footbridge and overhead booking office would enlarge views onto the heritage buildings from Canterbury Road and result in a positive heritage outcome. Such views would also be available from the new Metro concourse. Enhanced views on the heritage buildings of exceptional and high significance would result in a positive visual impact.

The construction of the covered activation area from Canterbury Road would be located at street level in the location of the current pedestrian ramp and would be visible from the platform buildings. Views towards this area are not of high significance, and views towards the heritage buildings would be opened. This would have a negligible visual impact on Canterbury Railway Station.

The removal of the brick parapets of the overbridge would have a moderate visual impact to the current view of the bridge. The platform screen doors along the platforms would rise to human height to accommodate the specific workings of Metro trains. This would have a minor impact on external views from the platform buildings and from the new concourse towards the heritage buildings and a moderate impact on internal views as a result of visual clutter.

When considering cumulative impacts and balancing the positive impacts in relation to removal of intrusive elements and high quality design of the new metro layer, it is assessed that the project would result in a moderate visual impact on Canterbury Railway Station Group.

Canterbury (Cooks River) Underbridge

Maintenance and protection works are proposed for the bridge. The removal and replacement of the parapets would have a moderate visual impact on the underbridge. The heritage item is located approximately 200m to the northwest of Canterbury Railway Station. Current views on the station are very limited. The proposed redevelopment of Canterbury Railway Station would have a negligible visual impact on the underbridge. New Metro tracks and overhead wiring would be in keeping with the current setting of the heritage item and would have a neutral visual impact.

Visual impacts on Canterbury (Cooks River) Underbridge would be minor.

Canterbury (Cooks River/Charles St) Underbridge – Main Line

Maintenance and protection works are proposed for the bridge. The removal and replacement of the parapets would have a moderate visual impact on the underbridge. The heritage item is located approximately 200m to the northwest of Canterbury Railway Station, adjacent to the Canterbury (Cooks River) Underbridge. Current views on the station are very limited. The proposed redevelopment of Canterbury Railway Station would have a negligible visual impact on the underbridge. Any new Metro tracks and overhead wiring would be in keeping with the current setting of the heritage item and would have a neutral visual impact.

Visual impacts on Canterbury (Cooks River/Charles St) Underbridge – Main Line would be minor.

Old Sugarmill

The Old Sugarmill is located approximately 30m south of the railway corridor and 270m south-east of Canterbury station. Current views towards the railway line are screened by the rise of Hutton Street as it goes west. Some vegetation also screens partial views towards the railway corridor. Views towards the station are screened by contemporary residential development. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. It is proposed to replace the existing Church St/Hutton St footbridge with a new footbridge with fully enclosed safety screen and demolition of the redundant pier on the down side. The replacement footbridge is unlikely to significantly alter the aesthetics of the existing environment and visual impacts of the new bridge on the heritage item are anticipated to be negligible.

Visual impacts on the Old Sugarmill would be negligible.

Inter-War Hotel (former Hotel Canterbury)

The Inter-War Hotel is located approximately 45m east of the current station entrance. There is currently a direct view from the hotel towards the station entrance. Views towards the railway corridor are screened as the railway line is located in a cutting at a lower level. The removal of the overhead booking office would not significantly impact the heritage item as the booking office is a c1980s structure of little significance. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. There are no views from the heritage item onto the Church St/Hutton St footbridge.

Visual impacts on the Inter-War Hotel would be neutral.

Federation Post Office Building (former Canterbury Post Office)

The post office is located approximately 15m north of the current station entrance. There is currently a direct view from the former post office towards the station entrance. Views towards the railway corridor are screened as the railway line is located in a cutting at a lower level. The removal of the overhead booking office would not significantly impact the heritage item as the booking office is a c1980s structure of little significance. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. There are no views from the heritage item onto the Church St/Hutton St footbridge.

Visual impacts on the Federation Post Office Building would be neutral.

Electricity Substation no. 275

The electricity substation is located approximately 10m north of the railway corridor and 210m south-east of the station. Current views towards the railway line are partially obstructed as the railway

corridor is in a cutting at this location. Views towards the station are screened as the railway line turns slightly north. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. It is proposed to replace the existing Church St/Hutton St footbridge with a new footbridge with fully enclosed safety screen and demolition of the redundant pier on the down side. The replacement footbridge is unlikely to significantly alter the aesthetics of the existing environment and visual impacts of the new bridge on the heritage item are anticipated to be negligible.

Visual impacts on the Electricity Substation no. 275 would be negligible.

Potential direct impacts

The following table provides an assessment of potential direct impacts on heritage items within the station catchment.

Table 47: Potential direct impact assessment

Item	Potential direct impact assessment	Impact
Canterbury Railway Station Group	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Canterbury (Cooks River) underbridge	Vibration levels would be under the cosmetic damage screening level.	Negligible
Canterbury (Cooks River/Charles St) Underbridge - Main Line	Vibration levels would be under the cosmetic damage screening level.	Negligible
Old Sugarmill	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Inter-War Hotel (former Hotel Canterbury)	Vibration levels would be under the cosmetic damage screening level.	Negligible
Federation Post Office Building (former Canterbury Post Office)	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Electricity substation no. 275	Vibration levels would be under the cosmetic damage screening level.	Negligible

6.4.6 Overview of impacts

The table below provides a summary of impacts in accordance with the guidelines by the NSW OEH (Statement of Heritage Impact, 2002).

Table 48: Summary of Heritage Impacts – Canterbury Station Catchment

Impact on a heritage item	Discussion
Aspects that respect or enhance the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> • Retention for re-use of the Platform 2 building with opportunity for positive impacts • Retention of the Signal Box and the overbridge • Views on the Platform 2 building from the new concourse • Neutral to negligible visual impacts on heritage items in the vicinity • Provided that mitigation measures are implemented, negligible to minor potential direct impacts as a result of vibrational work in the vicinity of heritage items • Continued use of the heritage item in its historical function as part of the evolution of the Bankstown Line
Aspects that would detrimentally impact on the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> • Demolition of elements of high significance within the station group: the two original 1894 platforms • Removal of the footbridge of moderate significance within the station group • Moderate direct and visual impacts on the station catchment due to the removal of the original platforms and additional of new elements

6.4.7 Statements of heritage impact

The following statements of heritage impact are provided for the heritage items located within Canterbury Station Catchment and the 25-metre buffer zone:

Canterbury Railway Station Group

The direct impacts of the project on Canterbury Railway Station would be moderate. All elements of exceptional and high significance within the station catchment would be retained apart from the original brick platforms and their curved layout. The Platform 1 building of exceptional significance, the Platform 2 building, the Signal Box and the overbridge of high significance would be retained for future use. This is anticipated to have a minor impact and present opportunity for a positive outcome. Views onto the platform buildings would be enhanced from the Canterbury Road overbridge and would also be appreciated from the new Metro concourse. This would result in a positive visual impact. The removal of the original curved platforms would result in a major direct and visual impact. The removal of the footbridge would result in moderate direct and visual impacts. The new Metro concourse would create a contradistinctive relationship with the remaining heritage elements. The concourse would be located on the western side of the station at a notable distance from the Platform 1 building and a setback from the Platform 2 building. The new concourse would have a moderate visual impact overall. The construction of the covered activation area would have a negligible visual impact. The removal of the brick parapets of the overbridge would have a moderate direct impact. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

The impacts of the removal of the original 1895 brick platforms and 1915 footbridge within Canterbury Railway Station would be balanced by the retention of all other significant elements including the 1895 platform building, the 1915 platform building and overbridge. This would enable the station to conserve its historic, aesthetic and representativeness significance. The 1895 platform building is an excellent example of its type and would continue to demonstrate the heritage values of the station as one of the original railway stations on the Sydenham to Bankstown Line. The retention of the 1915 platform

building and overbridge would retain two elements of the subsequent layer of development of the station.

When assessed cumulatively, the level of heritage impact of the project on Canterbury Railway Station Group would be moderate.

Canterbury Station is State significant under the following criteria: historical and aesthetic significance, research potential, rarity and representativeness.

The SHR statement of significance discusses the historical significance of the station, particularly in regard to the significant station buildings which have historical and aesthetic significance at a State level. The buildings demonstrate late nineteenth century railway design and are representative of a small group of ornate station structures. Both platform buildings would be retained.

The historical significance of the station is also in relation to its use and development as a transport hub. Canterbury Station has had previous intervention, particularly changes as part of the development of the Metropolitan Goods Line in 1915. The introduction of the Metro design layer would continue this evolution of the station to respond to transport requirements.

Research potential and rarity are discussed particularly in terms of the signal box, which will be retained. Representativeness applies to the platform buildings and signal box which demonstrate good, intact examples of their types. All buildings to in the statement of significance will be retained.

Based on the historical significance of the station and the heritage values of the retained buildings, the heritage item would continue to meet the threshold for State significance.

Canterbury (Cooks River) Underbridge

The direct impacts of the project on the Canterbury (Cooks River) Underbridge would be moderate. Works to the Canterbury (Cooks River) Underbridge and in its vicinity would result in minor visual impacts. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Canterbury (Cooks River) Underbridge would be moderate. The heritage item would continue to meet the threshold for local significance.

Canterbury (Cooks River/Charles St) Underbridge – Main Line

The direct impacts of the project on the Canterbury (Cooks River/Charles St) Underbridge – Main Line would be minor. Works to the Canterbury (Cooks River/Charles St) Underbridge – Main Line and in its vicinity would result in minor visual impacts. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Canterbury (Cooks River/Charles St) Underbridge – Main Line would be minor. The heritage item would continue to meet the threshold for local significance.

Old Sugarmill

The direct impacts of the project onto the Old Sugarmill would be neutral. The proposed works in the vicinity would result a negligible visual impact overall. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

When assessed cumulatively, the level of heritage impact of the project on the Old Sugarmill would be negligible. The heritage item would continue to meet the threshold for local significance.

Inter-War Hotel (former Hotel Canterbury)

The direct impacts of the project onto the Inter-War Hotel would be neutral. The proposed works in the vicinity would result in a neutral visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Inter-War Hotel would be neutral. The heritage item would continue to meet the threshold for local significance.

Federation Post Office Building (former Canterbury Post Office)

The direct impacts of the project onto the Federation Post Office Building would be neutral. The proposed works in the vicinity would result a neutral visual impact overall. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

When assessed cumulatively, the level of heritage impact of the project on the Federation Post Office Building would be neutral. The heritage item would continue to meet the threshold for local significance.

Electricity Substation no. 275

The direct impacts of the project onto the Electricity Substation no. 275 would be neutral. The proposed works in the vicinity would result a negligible visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Electricity Substation no. 275 would be negligible. The heritage item would continue to meet the threshold for local significance.

6.5 Campsie Station Catchment

The Campsie Station Catchment comprises one heritage item, the Campsie Railway Station Group. The buffer zone around the station catchment comprises six heritage items.

6.5.1 Summary of heritage listings

The table below provides a summary of the heritage items located within the station catchment and within the 25-metre buffer zone. An aerial map showing the heritage items within the station catchment is also provided below.

Table 49: Heritage items within Campsie Station Catchment and buffer zone

Item	Suburb	Significance	Listing
Within project area			
Campsie Railway Station Group	Campsie	Local	RailCorp S.170 Heritage and Conservation Register (4801101) Canterbury LEP 2012 (I40)
Within buffer zone (outside project area)			
Federation commercial building–Coffill's Buildings	Campsie	Local	Canterbury LEP 2012 (I41)
Inter-War Commercial Building–Station House	Campsie	Local	Canterbury LEP 2012 (I42)
Inter-War Court House (former) Campsie Court House	Campsie	Local	Canterbury LEP 2012 (I44)
War Memorial Clock Tower	Campsie	Local	Canterbury LEP 2012 (I34)
Federation house	Campsie	Local	Canterbury LEP 2012 (I61)
Federation villa	Campsie	Local	Canterbury LEP 2012 (I62)

Figure 205: Aerial map showing heritage items within study area: Campsie



File Path: C:\Users\GIS\Desktop\GIS\GIS_Mapping\151213_Sydney_Metro_Bankstown_Sydenham\MXD\Heritage_Detail_Campsie

6.5.2 Existing environment

Campsie Railway Station Group

Campsie Station was designed and built by NSW Government Railways between 1895-1915. Campsie Station consists of one wayside platform on the south and an island platform on the north, both with original station buildings (Figure 206, Figure 207). Passenger rail only uses the south side of the island platform, with the Metropolitan Goods Line running on the north. Most of the overhead booking office and the access stairs are modern, with part of the original 1915 booking office being adapted (Figure 208 to Figure 211). The station is accessed from the Beamish Street overbridge (Figure 212 to Figure 215). Beamish Street is the main commercial shopping strip in Campsie.

The station was opened in 1895 with a timber waiting shed on an island platform with the down line on its south side and the up line to the north in the present position of the Goods Line. A new booking office was constructed in 1905 and the platform extended in 1906.

The present station layout and station buildings date from 1915 and were constructed for the opening of the goods lines in 1916. The new layout featured an overhead timber booking office on a steel girder footbridge with stairs to the platform, a new brick station building on the existing island platform, and a new side (down) platform to the south with a brick station building. The new buildings replaced all previous platform structures. The brick and stone retaining wall on the south was also constructed at this time to accommodate the new down platform. A new jack-arch overbridge also replaced a previous timber bridge to carry Beamish Street across the four railway lines.

A northern side platform was also constructed in 1916 for the goods line and was used by railway employees so that they could travel to and from the Enfield/ Chullora workshops area. However, the existing concrete platform and stairs date from c.1950. An overhead parcels office was constructed c.1950 on the footbridge.

Part of the TAP program at Campsie included a new overhead concourse. Remnant elements of the original booking office building were retained within the concourse and a Dutch gable roof profile was constructed at the street elevation. The original booking hall and the northern section of the building were removed; as were the ticket windows, ticket collector's cabin; and the majority of doors and windows.¹²⁴

Figure 206: View of platforms, east aspect



Figure 207: View of Platform 1 building, west aspect



¹²⁴ Simpson Dawbin Associates 2002; OEH 2013 *Campsie Railway Station Group*.

Figure 208: View of station entrance, south aspect



Figure 209: View of overhead booking office, east aspect



Figure 210: View of stairs and canopy, south aspect



Figure 211: View of stairs, north aspect



Figure 212: View of overbridge, west aspect



Figure 213: View of overbridge, north-west aspect



Figure 214: View of overbridge and stone retaining wall, west aspect



Figure 215: View of stone retaining wall, south-east aspect



6.5.3 Description of elements

Campsie Railway Station Group

The table below outlines the main structures and elements comprised within the railway station group. Information such as date, description and condition is provided, and the significance of each element has been graded.

Table 50: Elements of Campsie Station Group

Elements	Date	Description	Condition	Significance
Platform 1	1894	Platform is brick faced with asphalt surface. Platform 1 is an island platform arrangement although the south side of the platform is not used.	Generally good	High
Platform 2	1894	Platform is brick faced with asphalt surface. Platform 2 is a wayside platform.	Generally good	High
Platform building, platform 1 (Type 11). ¹²⁵	1915	<p>External: Rectangular face brick building with gabled roof and integral shallower sloped single cantilevered awning. The face brick is in stretcher bond and has been painted. The building is six bays in length, with the bays defined by engaged brick piers which coincide with the awning supports. There is a further open veranda bay at the eastern end. The original chimneys with cement mouldings and terracotta flues remain.</p> <p>The northern cantilever awning on the goods line side has been removed. The remaining southern cantilever awning has standard double bowed steel brackets supported on decorative cement haunches and bolt fixings to the station building brick walls. The soffit lining is corrugated steel fixed to intermediate exposed purlins and follows the roof slope. There is a decorative timber moulding at the junction with the brick wall. Vertical timber boards form a valance at each end of the awning. On the eastern end of the building the vertical boarding fills the whole width of the gable end and the roof is supported on two timber posts to form an open veranda for one bay. The awning roof as for the main roof is corrugated steel.</p> <p>The external walls rise from a projecting brick plinth three/four courses high with a decorative dado moulding run in cement which is continuous between door and</p>	Good	High

¹²⁵ See Section 2.2.6 Station building types

Elements	Date	Description	Condition Significance
		<p>window openings. Decorative cement window and door frames rise above the dado moulding. The northern side of the building reflects the same detailing.</p> <p>The original window openings feature a moulded cement sill with a scalloped fringe. The original timber windows were double hung with a single paned lower sash and a six paned upper sash featuring coloured glass. Much of the original coloured window glass as well as the upper glazing bars has been removed and replaced with vandal-proof fibreglass sheeting. Original door openings featured fanlights matching the upper window sashes. All the original timber panelled doors have been either removed or modified, and the original thresholds have also been removed.</p> <p>Internal: The building comprises a station master's office; general waiting room; ladies room and ladies toilets, a store and men's toilets. The internal usage has now changed and the toilets have modern fitouts and finishes. Original plaster wall finishes, ripple iron ceilings, and timber cornices remain as well as ceiling roses in the general waiting room, the ladies waiting room, and ladies toilets. The men's toilets retain the original painted brick walls but the ceiling has been replaced.</p>	
<p>Platform building, platform 2 (Type 11).¹²⁶</p>	<p>1915</p>	<p>External: Rectangular face brick building with gabled corrugated steel roof and integral shallower sloped single cantilevered awning. The face brick is in stretcher bond and has been painted. The building is four bays in length, with the bays defined by engaged brick piers which coincide with the awning supports. The original chimney with cement mouldings and terracotta flue still remains.</p> <p>The cantilever awning is on standard double bowed steel brackets supported on decorative cement haunches and bolt fixings to the station building brick walls. The soffit lining is the underside of the corrugated steel roof and is fixed to intermediate exposed purlins. There is a decorative timber moulding at junction with brick wall. Vertical timber boards form a valance at each end of awning.</p> <p>The external walls rise from a projecting brick plinth three/four courses high with a decorative dado moulding run in cement which is continuous between door and window openings. Decorative cement window and door frames rise above the dado moulding. The rear or southern side of the building against the rock cutting reflects the same detailing.</p> <p>The original window openings feature a moulded cement sill with a scalloped fringe. The original timber windows were double hung with a single paned lower sash and a six paned upper sash which featured coloured glass. The original window glass as well as the upper glazing bars has been removed in several cases. Most of the windows now contain diamond pattern vandal proof fibreglass sheeting and/or hardboard coverings. The original door openings featured fanlights matching the</p>	<p>Generally good High</p>

¹²⁶ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		<p>upper window sashes. One original timber panelled door has been replaced with a modern flush door.</p> <p>Internal: The building comprises a general waiting room; ladies room and ladies toilets a store and men's toilets. The waiting room and ladies waiting room retains the original plaster wall finishes, ripple iron ceiling, plaster ceiling rose and timber floor. The ladies toilets retain the original timber partitions and fittings but have not been used in many years. The men's toilets have a modern fitout but the original brick painted wall finish remains.</p>		
Concourse including overhead booking office, Parcels Office and footbridge	2002 1915 c.1950s 1915,1947	<p>The modern building incorporates all functions within it. It consists of a large concourse, new access stairs and canopies, a ticket office, access lifts to platforms 1 and 2, new public toilets and retail areas on Beamish Street. The existing structure has been built on the footprint of the original 1915 footbridge and stairs. Like the original footbridge the current concourse is located off the Beamish Street overbridge such that its eastern edge is directly accessible from the street. The overhead booking office was expanded and extensively modified c.1950s. Parts of the 1915 booking office and 1950s parcels office have been incorporated within the new building and serve as retail shops. These parts are identifiable by the retained original fabric including ripple iron ceilings, weatherboards and ceiling roses. However, these sections have also been modified and reconfigured with new glazing and shopfront designed to simulate the original detailing. This part of the building is covered by a corrugated steel half gabled roof which is juxtaposed with a corrugated steel gabled station entry. The western end of the concourse looks out onto the station through a clear glass and metal framed wall, which extends all along the length of the concourse. The entire area is roofed by a steel space frame structure covered with metal deck roof sheeting.</p> <p>The northern end of the concourse is connected to the 1947 footbridge (which was an extension of the 1915 footbridge), which comprises of a riveted steel plate girder substructure and latticed steel framing. This section of the footbridge like the original footbridge had timber floor construction and timber steps leading down to the disused platform 3 although it currently has a concrete slab and steps. Retail shops bordering the north-eastern corner of the concourse along Beamish Street date from the c.1950s.</p>	Good	Little Moderate Moderate
Overbridge	1915	<p>The Beamish Street overbridge crosses over the eastern end of the station and runs parallel to the footbridge. The structure is a steel jack-arch overbridge which comprises of filled in arched brickwork between steel web-girders, supported by central brick piers and side brick and stone abutments.</p>	Good	High
Footbridge	1947, 2002	<p>The footbridge is a steel beam girder design. It has been heavily modified and subsumed by the modern concrete concourse. It was a typical footbridge type that is still well represented in the Sydney Trains network.</p>	Good	Little

Elements	Date	Description	Condition	Significance
Platform 3	1916, c.1950	Platform 3 is a disused wayside platform. Platform 3 was originally constructed in 1916 as a brick face platform. It was replaced by the existing concrete platform c.1950.	Generally good	Moderate
Platform canopies, platforms 1- 3	2002	Steel framed canopies with corrugated steel roofs were constructed over the new stairs and to the existing station buildings.	Good	Little
Landscape/natural features	1915	Cambered stone and brick retaining wall to the east of the wayside platform building.	Generally good	High

6.5.4 .Statements of significance

The following statement of significance for the heritage item located within the project area is reproduced from the SHI listing.

Table 51: Statements of significance for Campsie Station Catchment

Item	Statement of Significance	Listing
Campsie Railway Station Group	<i>Campsie Railway Station has local significance as a station which has its origins in the 1890s expansion of the railways undertaken to encourage agriculture and suburban growth in the late 19th and early 20th century. The existing station layout, platform buildings and overbridge date from 1915 and demonstrate the ongoing expansion of the railways in the early 20th Century and represent the period of suburban development particularly the War Service residential development that took place during the interwar period along this line. The station is associated historically with the movement of railway employees to and from the Enfield/Chullora workshops area. The extant largely intact 1920s platform buildings and the Beamish Street overbridge are representative of railway structures of this period</i>	SHI

6.5.5 .Heritage impacts

Direct impacts

Campsie Railway Station Group

The table below provides an assessment of the direct impacts of the project on the fabric of each element constituting the railway station and an assessment of the subsequent impacts on the heritage values of the station group as a whole.

Table 52: Assessment of direct impacts for Campsie Railway Station Group

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platform 1 (1894)	High	Removal apart from structure underneath heritage building; platform to be rebuilt in straight alignment; covered concourse, access stairs, lift shafts, platform canopies and platform screen doors to be anchored on new platform	<p>The platform would be removed apart from the structure underneath the heritage building to allow for the construction of a new platform to accommodate the straight rail line alignment required for the Metro trains. This would result in the almost complete loss of the fabric of the platform and of the original curved layout of the station platforms. This would have a major impact on the platform.</p> <p>The new covered concourse, access stairs, platform canopies and platform screen doors would be anchored and constructed on the new platform. This would not further impact significant fabric.</p>	Major

Element	Significance	Proposed action	Assessment of impact	Impact summary
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			The complete demolition of Platform 1 to be reconstructed in straight lines would result in a major impact on the station group.	
Platform 2 (1894)	High	Removal apart from structure underneath heritage building; platform to be rebuilt in straight alignment; covered concourse, access stairs, lift shaft, platform canopies and platform screen doors to be anchored on new platform	<p>The platform would be removed apart from the structure underneath the heritage building to allow for the construction of a new platform to accommodate the straight rail line alignment required for the Metro trains. This would result in the almost complete loss of the fabric of the platform and of the original curved layout of the station platforms. This would have a major impact on the platform.</p> <p>The new covered concourse, access stairs, platform canopies and platform screen doors would be anchored and constructed on the new platform. This would not further impact significant fabric.</p> <p>The complete demolition of Platform 2 to be reconstructed in straight lines would result in a major impact on the station group.</p>	Major
Platform building, platform 1 (Type 11) (1915). ¹²⁷	High	Retention for re-use with potential retrofitting	<p>The retention of the platform building is a positive heritage outcome in the context of the project.</p> <p>Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to remove any intrusive modifications to the structure. Additions to the building and platform should be designed to be sympathetic to the heritage context and minimise fabric and visual impacts.</p> <p>The project would have a minor impact on the heritage values of the building and station overall.</p>	Minor
Platform building, platform 2 (Type 11) (1915). ¹²⁸	High	Retention for re-use with potential retrofitting	<p>The retention of the platform building is a positive heritage outcome in the context of the project.</p> <p>Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to remove any intrusive modifications to the structure. Additions to the building and platform should be designed to be sympathetic to the heritage context and minimise fabric and visual impacts.</p> <p>The project would have a minor impact on the heritage values of the building and station overall.</p>	Minor

¹²⁷ See Section 2.2.6 Station building types

¹²⁸ See Section 2.2.6 Station building types

Element	Significance	Proposed action	Assessment of impact	Impact summary
Concourse including overhead booking office and Parcels Office	Little (Concourse) Moderate (Overhead booking office and Parcels Office)	Retention and partial removal for upgrading	<p>It is proposed to retain the existing new concourse elements (c2001) including concrete deck, lifts, stairs, roof, gateline and customer toilets. The existing (original) concourse steel structure would be retained and refurbished.</p> <p>It is proposed to remove the 1915 overhead booking office, the c.1950 Parcels Office, and the remaining concourse structures between the gateline and Beamish Street.</p> <p>The overhead booking office scored four out of nine in the Sydney Trains Overhead Booking Offices Heritage Conservation Strategy ¹²⁹. Remnant elements of the building are wholly incorporated into the modern overhead concourse.</p>	Moderate
Overbridge (1915)	High	Retention and upgrade	<p>Due to the integrity of the early elements having been greatly compromised overtime, their removal would result in a moderate heritage impact on Campsie Railway Station overall.</p> <p>The structure is proposed to be retained and upgraded for ongoing use. The removal of the concourse structures between the gateline and Beamish Street and the construction of a new deck would not impact on the significant fabric of the overbridge, which consists of the arched brickwork between steel web-girders, brick piers, and side brick and stone abutments. It is expected this aspect of the project would result in a minor impact on the heritage values of the overbridge and station overall.</p>	Minor
Footbridge (1947, 2002)	Little	Retention	<p>It is proposed to retain the footbridge.</p> <p>The footbridge was assessed as having little significance as per the Railway Footbridges Heritage Conservation Strategy ¹³⁰. Footbridges of little significance can be conserved and adapted or where there is no reasonable alternative, demolished.</p> <p>The retention of the footbridge would result in a neutral impact on Campsie Railway Station.</p>	Neutral
Platform 3 (1916, 1950)	Moderate	Removal	<p>It is proposed to remove the platform. This would result in a moderate impact on the station catchment.</p>	Moderate
Platform canopies, platforms 1- 3 (2002)	Little	Removal	<p>It is proposed to remove the platform canopies. This would result in a neutral impact on the station catchment.</p>	Neutral

¹²⁹ Australian Museum Consulting 2014. *Railway Overhead Booking Offices Heritage Conservation Strategy*. Prepared for Transport for NSW.

¹³⁰ NSW Government Architect's Office Heritage Group 2016. *Railway Footbridges Heritage Conservation Strategy*. Prepared for Sydney Trains.

Element	Significance	Proposed action	Assessment of impact	Impact summary
Landscape / natural features (n/a,1915)	High	Removal to accommodate new covered concourse, access stairs and lift shaft	It is proposed to remove the cambered stone and brick retaining wall to accommodate the new covered concourse, access stairs and lift shaft. This would result in a major impact on the wall. However, as the wall's significance is mainly in relation to its aesthetic qualities rather than its purpose or historical significance, this would result in a moderate impact on the station catchment overall.	Moderate

When considering cumulative impacts, it is assessed that the project would result in a moderate direct impact on Campsie Railway Station Group overall.

Visual impacts

Campsie Railway Station Group

The proposed canopy above the concourse would rise to a similar height as the existing shopfronts on Beamish Street. Three ribbon canopies would extend from the concourse to cover access to the platforms. The canopies would end at least two metres from the significant heritage buildings on Platforms 1 and 2. Two ribbon canopies would extend east of the heritage buildings on Platforms 1 and 2 along the platforms. The height of the canopies would allow views of the heritage structures to be retained from the concourse.

The contemporary nature of the canopies and station buildings would be suitable within the present context as a contradistinctive design to be easily differentiated from the heritage components of the site. The scale and height of the proposed canopy structure, the footprint of the new platform building as well as the platform canopies and platform screen doors would add considerable bulk to the originally low-scale station catchment. It is noted that the station is located in an embankment below street level.

The upgraded Metro concourse would be located to the east of the retained platform building. Although the height and open layout of the upgraded concourse would allow views onto the retained platform buildings from the concourse, the upgraded structure would be visually dominant within the station group. Overall, the visual impact of the upgraded concourse on the setting of the railway station would be moderate.

The upgraded concourse would replace elements of little or moderate significance within the station group. Early elements of the station such as the 1915 overhead booking office and the c.1950 Parcels Office have been detractingly modified overtime and can no longer be easily appreciated in their existing context. Their integrity has been greatly impacted overtime and they no longer make a significant contribution to the station group. Their removal would result in a minor visual impact. The removal of the cambered stone retaining wall located along the wayside platform would result in moderate visual impacts.

The platform screen doors along the reconstructed platforms would rise to human height to accommodate the specific workings of Metro trains. This would have a minor impact on external views from the platform buildings and from the new concourse towards the heritage buildings and a moderate impact on internal views as a result of visual clutter.

Overall, the proposed upgraded concourse and canopies would result in a moderate visual impact. Views onto the platform buildings would be allowed from the upgraded concourse. Views on the curved platforms, cambered stone and brick retaining wall would be fully lost. This would have a major impact. Loss of views onto impacted elements such as the overhead booking office and the

Parcels office would have a moderate impact. The platform screen doors would result in a moderate visual impact overall.

When considering cumulative impacts, it is assessed that the project would result in a moderate visual impact on Campsie Railway Station Group.

Federation commercial building–Coffill’s Buildings

Coffill’s Buildings is located approximately 30m north-east of the station entrance. The construction in the vicinity of Coffill’s Buildings consists of new Metro tracks, the removal of shops along Beamish Street, new station canopy, and new station buildings such as lifts and the unpaid concourse. There is a direct visual connection between Coffill’s Buildings and the station entrance. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. The removal of the shops along Beamish Street would open views up towards Coffill’s Buildings from the south on Beamish Street and from South Parade. The new canopy and station buildings would be made in a proportional design to the existing and not impact on significant views to and from Coffill’s Buildings. It is proposed to upgrade the existing Duck Street footbridge and provide a deflection wall for collision protection. The works are unlikely to significantly alter the aesthetics of the bridge and visual impacts on the heritage item, located at a notable distance, are anticipated to be negligible.

Visual impacts on the Coffill’s Federation Commercial Building would be negligible.

Inter-War Commercial Building–Station House

Station House is located approximately 35m south-east of the station entrance. The construction in the vicinity of Station House consists of new Metro tracks, the removal of shops along Beamish Street, new station canopy to a height of approximately 5.25m above the current street level, and new station buildings such as lifts and the unpaid concourse. There is a direct visual connection between Station House and the station entrance. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. The removal of the shops along Beamish Street would open views up towards Station House from the north on Beamish Street and from North Parade. The new canopy and station buildings would be made in a proportional design to the existing and not impact on significant views to and from Station House.

Visual impacts on the Inter-War Commercial Building –Station House would be negligible.

Inter-War Court House (former) Campsie Court House

Campsie Court House is located approximately 10m north of the railway corridor and 240m west of the western end of the station platforms. The construction in the vicinity of the Court House consists of new Metro tracks. Current views towards the railway line are partially screened by vegetation. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. It is proposed to upgrade the existing Lock Street overbridge and provide a deflection wall for collision protection. The works are unlikely to significantly alter the aesthetics of the bridge and visual impacts on the heritage item, located at a notable distance, are anticipated to be negligible.

Visual impacts on the Inter-War Court House would be neutral.

War Memorial Clock Tower

The War Memorial Clock Tower is located approximately 55m south of the station entrance. The construction in the vicinity of the clock tower consists of new station buildings and a new canopy

approximately 5.25m in height above the current street level. Current views towards the station are screened by commercial buildings along the north side of Anzac Mall. Changes to the station buildings would not impact views and vistas from the heritage item.

Visual impacts on the War Memorial Clock Tower would be neutral.

Federation house

The Federation House is located approximately 30m south of the railway corridor and 185m south-east of the station entrance. The construction in the vicinity of the Federation House consists of new Metro tracks and the construction of a new building along South Parade. Current views towards the railway line are partially screened by vegetation. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. The new building along South Parade would not impact on significant views to and from the heritage item. It is proposed to upgrade the existing Duck Street footbridge and provide a deflection wall for collision protection. The works are unlikely to significantly alter the aesthetics of the bridge and visual impacts on the heritage item are anticipated to be negligible.

Visual impacts on the Federation House would be negligible.

Federation villa

The Federation villa is located approximately 30m south of the railway corridor and 130m south-east of the station entrance. The construction in the vicinity of the Federation villa consists of new Metro tracks and the construction of a new building along South Parade. Current views towards the railway line are partially screened by vegetation. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. The new building along South Parade would not impact on significant views to and from the heritage item. It is proposed to upgrade the existing Duck Street footbridge and provide a deflection wall for collision protection. The works are unlikely to significantly alter the aesthetics of the bridge and visual impacts on the heritage item are anticipated to be negligible.

Visual impacts on the Federation villa would be negligible.

Potential direct impacts

The following table provides an assessment of potential direct impacts on heritage items within the station catchment.

Table 53: Potential direct impact assessment

Item	Potential direct impact assessment	Impact
Campsie Railway Station Group	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Federation commercial building– Coffill’s Buildings	Vibration levels would be under the cosmetic damage screening level.	Negligible

Item	Potential direct impact assessment	Impact
Inter-War Commercial Building– Station House	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Inter-War Court House (former) Campsie Court House	Vibration levels would be under the cosmetic damage screening level.	Negligible
War Memorial Clock Tower	Vibration levels would be under the cosmetic damage screening level.	Negligible
Federation house	Vibration levels would be under the cosmetic damage screening level.	Negligible
Federation villa	Vibration levels would be under the cosmetic damage screening level.	Negligible

6.5.6 Overview of impacts

The table below provides a summary of impacts in accordance with the guidelines by the NSW OEH (Statement of Heritage Impact, 2002).

Table 54: Summary of Heritage Impacts – Campsie Station Catchment

Impact on a heritage item	Discussion
Aspects that respect or enhance the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> Retention for re-use of elements of high significance within the station group including the two platform buildings and the overbridge Potential for positive heritage impacts during retrofitting and upgrade works to the platform buildings to be retained Minor direct and visual impacts on the overbridge Neutral to negligible visual impacts on heritage items in the vicinity Provided that mitigation measures are implemented, negligible to minor potential direct impacts as a result of vibrational work in the vicinity of heritage items Continued use of the heritage item in its historical function as part of the evolution of the Bankstown Line
Aspects that would detrimentally impact on the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> Removal of elements of high significance within the station group including Platforms 1 and 2 and the cumbered stone retaining wall along the wayside platform Removal of elements of moderate significance including the overhead booking office, Parcels Office, and Platform 3 Moderate direct and visual impacts overall

6.5.7 Statements of heritage impact

The following statements of heritage impact are provided for the heritage items located within Campsie Station Catchment and the 25-metre buffer zone:

Campsie Railway Station Group

The direct impacts of the project on Campsie Railway Station would be moderate. Elements of high significance within the station would be retained. The original 1894 platforms and the 1915 cambered stone retaining wall would be removed. This would result in moderate to major direct and visual impacts. Other elements to be removed are of little or moderate significance and would result in minor to moderate direct and visual impacts. The visual impact of the new development on the setting of the station would remain moderate overall. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

The removal of some elements of high and moderate significance within Campsie Railway Station would generally be balanced by the retention of the 1915 platform buildings and overbridge. This would enable the station to continue to demonstrate its historic and aesthetic significance, and representativeness. The integrity of some elements of the station has been greatly impacted over time so that its subsequent layers of development are no longer easily legible. The retention of the 1915 elements would allow the station to retain the historical values of the place as one of the original railway stations on the Sydenham to Bankstown Line. The two platform buildings are good examples of their type and would continue to contribute to the aesthetic significance of the station.

When assessed cumulatively, the level of heritage impact of the project on Campsie Railway Station Group would be moderate. Based on the historical significance of the station and the heritage values of the retained platform buildings, the heritage item would continue to meet the threshold for local significance.

Federation Commercial Building–Coffill’s Buildings

The direct impacts of the project onto the Federation Commercial Building would be neutral. The proposed works in the vicinity would result in a negligible visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Federation Commercial Building would be negligible. The heritage item would continue to meet the threshold for local significance.

Inter-War Commercial Building–Station House

The direct impacts of the project onto the Inter-War Commercial Building–Station House would be neutral. The proposed works in the vicinity would result in a negligible visual impact overall. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

When assessed cumulatively, the level of heritage impact of the project on the Inter-War Commercial Building–Station House would be negligible. The heritage item would continue to meet the threshold for local significance.

Inter-War Court House (former) Campsie Court House

The direct impacts of the project onto the Inter-War Court House would be neutral. The proposed works in the vicinity would result in a neutral visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Inter-War Court House would be neutral. The heritage item would continue to meet the threshold for local significance.

War Memorial Clock Tower

The direct impacts of the project onto the War Memorial Clock Tower would be neutral. The proposed works in the vicinity would result in a neutral visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the War Memorial Clock Tower would be neutral. The heritage item would continue to meet the threshold for local significance.

Federation house

The direct impacts of the project onto the Federation House would be neutral. The proposed works in the vicinity would result in a negligible visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Federation House would be negligible. The heritage item would continue to meet the threshold for local significance.

Federation villa

The direct impacts of the project onto the Federation villa would be neutral. The proposed works in the vicinity would result in a negligible visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Federation villa would be negligible. The heritage item would continue to meet the threshold for local significance.

6.6 Belmore Station Catchment

The Belmore Station Catchment comprises two heritage items, the Belmore Railway Station Group and the Post-war bus shelter and public lavatories. The buffer zone around the station catchment comprises one heritage item.

6.6.1 Summary of heritage listings

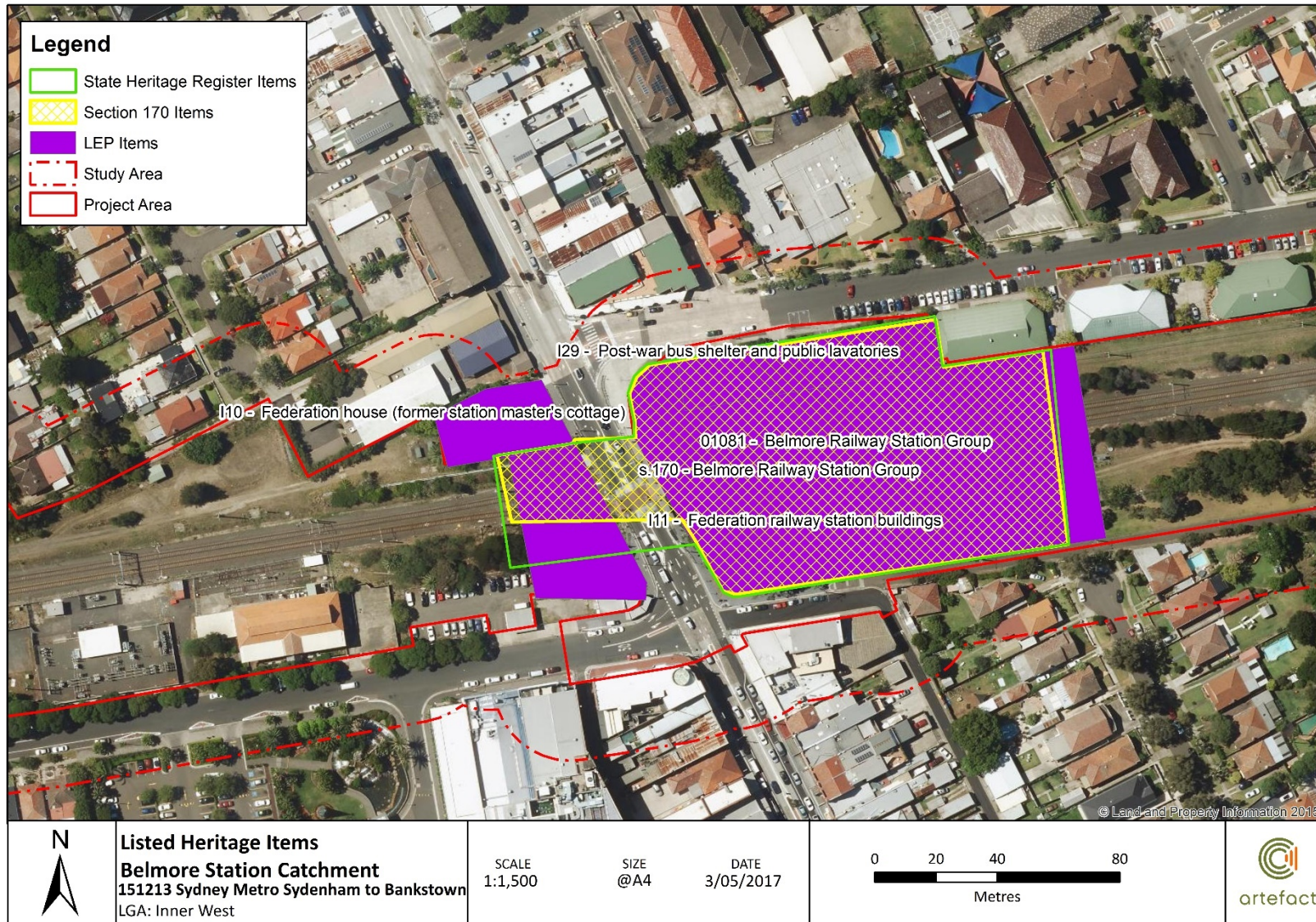
The table below provides a summary of the heritage items located within the station catchment and within the 25-metre buffer zone. An aerial map showing the heritage items within the station catchment is also provided below.

Table 55: Heritage items within Belmore Station Catchment and buffer zone

Item	Suburb	Significance	Listing
Within project area			
Belmore Railway Station Group	Belmore	State	SHR (No. 01081)
			RailCorp S.170 Heritage and Conservation Register (4801084)
Post-war bus shelter and public lavatories	Belmore	Local	Canterbury LEP 2012 (I11)
			Canterbury LEP 2012 (I29)
Within buffer zone (outside project area)			
Federation House (former station master's cottage)	Belmore	Local	Canterbury LEP 2012 (I10)

The post-war bus shelter and public lavatories have been nominated for SHR listing as of 17 March 2016.

Figure 216: Aerial map showing heritage items within study area: Belmore



6.6.2 Existing environment

Belmore Railway Station Group

Belmore Station was designed and built by NSW Government Railways between 1895 and 1937. Belmore Station has a single island platform with the original platform building and a modified booking office and concourse with an access lift (Figure 217 to Figure 230). The platform is accessed directly via the modern stairs through the concourse from the overbridge on Burwood Road. Burwood Road is the main commercial shopping strip in the suburb.

Belmore is located on the Sydenham to Bankstown Line and was opened as the initial terminus station on 1 February 1895. Its initial construction name was Burwood Road but it was named Belmore on opening. The locality and station were named after the Earl of Belmore, Governor of New South Wales between 1868 and 1872.

The station was built when Belmore was still rural. The station layout featured a typical brick station building on an island platform. A station master's residence was also built in 1895 and is still extant at 346 Burwood Road, opposite the station, but is now in private ownership.

Prior to 1909 there were sidings for the storage of locomotives due to the railway terminating at Belmore. Suburban development intensified post World War I when many War Service homes were built in the area. Sidings at the station were extended during the 1920s for Belmore and Canterbury Councils for the purposes of unloading timber and other material for house construction and municipal works.

In 1925-26 a number of works were undertaken in preparation for electrification of the line including a substation and platform extension (Figure 231). The substation is now used as a signals training facility.

The overhead timber booking office at Belmore was constructed c.1937 at the top of the steps fronting onto the down side of Burwood Road to take the ticket selling and parcel functions. The change was also made to most other stations built to a similar configuration. The station master's office remained in the platform building for another forty years, but this function too has now moved to the street level building and the platform building remains largely unused.

Figure 217: View of overhead booking office, north aspect



Figure 218: View of station entrance, north aspect



Figure 219: View of station entrance, south aspect



Figure 220: View of platform building, east aspect



Figure 221: View of stairs, south aspect

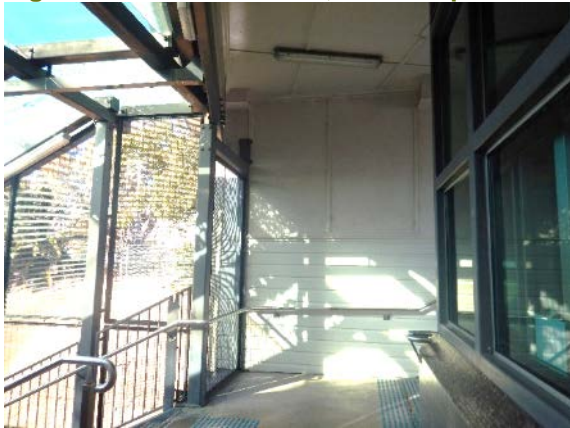


Figure 222: View of stair canopy, east aspect



Figure 223: View of platform building, west aspect



Figure 224: View of platform and overbridge, west aspect



Figure 225: View of platform building, east aspect



Figure 226: View of platform building detail, north aspect



Figure 227: View of overhead booking office, west aspect



Figure 228: View of cutting, south-west aspect



Figure 229: View of old bubbler



Figure 230: View of brick abutments under overbridge, east aspect



Figure 231: View of substation, south aspect



Post-war bus shelter and public lavatories

The bus shelter was built circa 1940s and the lavatories were added in the 1950s. This was the bus terminus for many years thus requiring some capital investment. The bus shelter is a modern style rendered masonry bus shelter with a flat concrete roof. The toilets are rendered masonry located adjacent to the bus shelter and are decorated with fluted pilasters and a wavy patterned parapet.

Figure 232: View of bus shelter, east aspect



Figure 233: View of bus shelter, west aspect



Figure 234: View of public lavatories, south-west aspect



Figure 235: View of public lavatories, south-west aspect



Figure 236: View of bus shelter, east aspect



6.6.3 Description of elements

Belmore Railway Station Group

The table below outlines the main structures and elements comprised within the railway station group. Information such as date, description and condition is provided, and the significance of each element has been graded.

Table 56: Elements of Belmore Station Group

Elements	Date	Description	Condition	Significance
Platforms 1/2	1895, 1907	One island platform with asphalt surface, original brick platform face and edge. The platform was lengthened in 1907.	Generally good	High
Platform 1/2 building (Type 11) ¹³¹	1895	<p>External: Rectangular polychromatic face brick building with gabled roof and surrounding cantilevered awning clad in corrugated roof sheeting. The face brick is in stretcher bond, which was originally a dark brick up to a dado (the lower brick walls have now been painted) of lighter salmon coloured bricks which frame the upper half of the windows and doors, with a diamond pattern dentil course at the high level. The building is eight bays in length, with the bays defined by engaged brick piers which coincide with the awning brackets. Original chimneys with cement mouldings and terracotta flues remain but have been painted.</p> <p>The cantilever awning is on filigreed steel brackets supported on decorative cement cornices on engaged brick piers and bolt fixings to the station building brick walls. The soffit lining is the underside of the corrugated steel roof fixed to intermediate exposed purlins. There is a decorative timber moulding at the junction with the brick wall. The awning returns around the eastern end of the building but has been removed at the western end. The edge of the awning is finished with a decorative timber boarded valance. The end awning and timber valance are not original but constitute a sympathetic addition to the building.</p> <p>The external walls rise from a projecting brick plinth (now painted) with a decorative two part cement dado moulding which frames the salmon brick dado and is continuous between door and window openings. Decorative cement window and door frames rise above the dado moulding, each with a decorative keystone.</p> <p>The window and door openings have segmental arches and the windows feature a decorative moulded cement sill. The original timber windows were double hung with a double paned lower sash and a multi-paned upper sash featuring coloured glass of which some still remains. This detail continued through in the fanlights above the doors. The doors were timber panelled and most still remain. The end brick gable walls feature a louvre within a round brick window framed in salmon coloured voussoir shaped bricks, with four cement keystones.</p> <p>Internal: The building comprises a booking hall originally entered by a set of double doors at the bottom of the stairs; a booking office; station master's room; general</p>	Good	Exceptional

¹³¹ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		waiting room; ladies waiting room and ladies toilet, a lamp room and men's toilet. The internal usage has now changed, and the toilets have modern fitouts.		
Overhead booking office and concourse	1937, 2008	<p>External: The original weatherboard overhead booking office was constructed in 1937, and had a hipped roof clad in Marseille pattern terracotta tiles which have been replaced by new terracotta tiles. It was constructed by placing steel beams across the Up line and supporting them on brick piers on the railway embankment on the north and on steel trestles on the platform. As well as accommodating the station master and ticket selling facilities it contained a parcels office and a booking hall which opened onto Burwood Road, with a bookstall in the north western corner. The building was substantially modified in 2008 by opening up the front wall on Burwood Road to provide larger full height glazing and more open access to the booking hall. The stairs were replaced and covered with a glazed canopy as well as the addition of an access lift.</p> <p>Internal: The booking office which is on the platform side of the building contains the area for ticketing and also contains the station master's office as well as staff facilities in the old parcels office. The interior of the booking office and open booking hall has hardboard lined ceilings with timber battens. The walls in the booking office and old parcels office are also lined with hardboard, while the booking hall is lined with weatherboards. The timber floors have been replaced with concrete with carpet internally and tiles in the open booking hall. The original timber panelled doors and ticket window have been replaced.</p>	Good	High
Overbridge	Modified 1961	The Burwood Road overbridge was originally a wooden structure, supported on brick piers. In 1961 the roadway deck was replaced with prestressed concrete which spans between concrete abutments on each side. The only original element of the bridge is the central brick pier.	Good	Little
Platform canopies	2008	Modern glass canopy covers the stairway access from the booking hall concourse.	Good condition	Intrusive

6.6.4 Statements of significance

The following statements of significance for the heritage items located within the project area are reproduced from the SHR and SHI listings.

Table 57: Statements of significance for Belmore Station Catchment

Item	Statement of Significance	Listing
Belmore Railway Station Group	<i>Belmore Station is of State significance as it was the initial terminus station on the Sydenham to Bankstown Line which had been constructed to relieve congestion on the Main South Line as well as to promote agriculture and suburban growth. The platform building represents the period of transition from the boom time of the 1880s to the standardisation of NSW railway building design of the 1890s onwards and the high level of aesthetic design of pre-1900 standard railway buildings, which included the use of polychromatic brickwork, decorative dentil coursing, ornate awning brackets and carved bargeboards. The building is relatively intact and is representative of a small group of such ornate</i>	SHR

Item	Statement of Significance	Listing
	<i>platform buildings including Canterbury and Marrickville on the Bankstown Line.</i>	
Post-war bus shelter and public lavatories	<i>Evidence of the provision of services by Canterbury Council for an increasingly settled community. Of local social significance.</i>	SHI

6.6.5 Heritage impacts

Direct impacts

Belmore Railway Station Group

The table below provides an assessment of the direct impacts of the project on the fabric of each element constituting the railway station and an assessment of the subsequent impacts on the heritage values of the station group as a whole.

Table 58: Assessment of direct impacts for Belmore Railway Station Group

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platform 1/2 (1895, 1907)	High	Removal apart from structure underneath heritage building; platform to be rebuilt in straight alignment; covered concourse, access stairs, lift shafts, platform station building, platform canopies and platform screen doors to be anchored on new platform	<p>The platform is proposed to be removed apart from the structure supporting the heritage building. This would have a major impact on the fabric of the platform including the loss of the original platform brick face.</p> <p>The platform would be reconstructed in a straight alignment and extended to accommodate the workings of the new Metro trains. This would result in the loss of the historic curved platform. This would have a major impact on the original platform layout.</p> <p>The new covered concourse, access stairs, lift shafts, platform station building, platform canopies and platform screen doors would be anchored and constructed on the new platform. This would not further impact significant fabric</p> <p>The complete demolition of Platform 1/2 to be reconstructed in straight lines and extended to accommodate the workings of the new Metro trains would result in a major impact on the station group overall.</p>	Major
Platform building (Type 11) (1895) ¹³²	Exceptional	Retention for re-use with potential retrofitting	<p>The retention of the platform building is a positive heritage outcome in the context of the project.</p> <p>Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to remove any intrusive modifications to the structure. Additions to the building and platform should be designed to be sympathetic to the heritage context and minimise fabric and visual impacts.</p> <p>The project would have a minor impact on the heritage values of the building and station overall.</p>	Minor

¹³² See Section 2.2.6 Station building types

Element	Significance	Proposed action	Assessment of impact	Impact summary
Overhead booking office and concourse (1937, 2008)	High	Retention for re-use with potential retrofitting	<p>The retention of the overhead booking office is a positive heritage outcome in the context of the project.</p> <p>The overhead booking office scored five out of nine in the Sydney Trains Overhead Booking Offices Heritage Conservation Strategy¹³³. The strategy recommends adaptive reuse of the building.</p> <p>Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to remove any intrusive modifications to the structure. Additions to the building should be designed to be sympathetic to the heritage context and minimise fabric and visual impacts.</p> <p>The project would have a minor impact on the heritage values of the overhead booking office and station overall.</p>	Minor
Overbridge (Modified 1961)	Little	Retention and upgrade	<p>The structure is proposed to be retained and upgraded for ongoing use. The proposed works would include protection works, bridge widening, maintenance works, and retaining wall works. The project would result in a negligible impact on the heritage values of the overbridge and station overall.</p>	Negligible
Platform canopies (2008)	Little	Removal for replacement with new covered concourse including access stairs and lift shafts	<p>The canopies are proposed to be removed. This would result in a neutral impact on the station catchment.</p>	Neutral

When considering cumulative impacts, it is assessed that the project would result in a moderate direct impact on Belmore Railway Station Group overall.

Post-war bus shelter and public lavatories

No direct impacts to the Post-war bus shelter and public lavatories are proposed as part of the Metro project. Direct impacts related to construction sites are assessed in Section 8.3.6 of this report.

Direct impacts on the Post-war bus shelter and public lavatories would be neutral.

Visual impacts

Belmore Railway Station Group

The proposed new structures would be sited on the east side of Belmore Station with the retained overhead booking office, concourse and platform building located on the west side. There would be visual impacts resulting from the removal of the original brick face and curved layout of the original island platform. The contemporary nature of the new development would differ from the existing

¹³³ Australian Museum Consulting 2014. *Railway Overhead Booking Offices Heritage Conservation Strategy*. Prepared for Transport for NSW.

heritage character of the station group and create a contradistinctive relationship with the historic components of the site. The new concourse and access stairs would add considerable footprint and bulk within the station and would be situated in proximity of the platform building. Although they would not obstruct any significant views, this is likely to dominate the platform building and would have a moderate visual impact. The new station buildings would be of a similar scale as the heritage buildings and located at a notable distance. They would result in a minor visual impact. The concourse canopy would rise high above the platform building which would allow new views onto the building of exceptional significance from the concourse. The existing intrusive canopy structure located in between the overhead booking office and the platform building would be removed, enhancing views from the booking office. The canopy would extend from the concourse to the eastern edge of the significant platform building with at least two metres separation. Canopies would not extend between the Platform building and the overhead booking office, retaining the relationship between these structures.

The platform screen doors along the reconstructed platforms would rise to human height to accommodate the specific workings of Metro trains. This would have a minor impact on external views from the platform buildings and from the new concourse towards the heritage buildings and a moderate impact on internal views as a result of visual clutter.

The new station building on platform 1 and 2 and the new services building would not visually dominate the retained heritage buildings, as they would be located at a distance to the east.

Overall, the project would add a contemporary layer of development on the east side of the station in contrast with the heritage components on the west side. Views onto the heritage buildings within the station catchment would not be obstructed, although the new structures would be large in scale and may be dominant. The project offers opportunity for positive impacts by enhancing views onto the 1895 platform building from both eastern and western angles. The project would alter the existing setting of Belmore Railway Station but visual impacts would remain moderate.

When considering cumulative impacts, it is assessed that the project would result in a moderate visual impact on Belmore Railway Station Group.

Post-war bus shelter and public lavatories

No visual impacts to the Post-war bus shelter and public lavatories are proposed as part of the Metro project. Visual impacts related to construction sites are assessed in Section 8.3.6 of this report.

There are views to and from the post-war shelters and public lavatories and Belmore Railway Station Group. The project at Belmore Station would not significantly alter views onto the Platform building of exceptional significance which would continue to be appreciated from the heritage item. The new Metro concourse would add considerable bulk to the railway station. It would be located approximately 50 metres from the post-war shelters and public lavatories. The new concourse would be visible in the background of the heritage item and would result in a minor visual impact.

Visual impacts on the post-war shelters and public lavatories would be minor.

Federation House (former station master's cottage)

The Federation House is located approximately 15m north of the railway corridor and 25m north-west of the station entrance. The construction in the vicinity of the Federation House consists of new Metro tracks, new station canopy to a height of approximately 6.15m above the current street level, and new station buildings such as lifts and the unpaid concourse. There is a direct visual connection between the Federation House and the station entrance. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. The current heritage station buildings adjacent to the Federation House would

be retained. The new canopy and station buildings would be located on the east side of the station and would be partially screened by the retained heritage station buildings, with some views on the new canopy located behind the platform building. This would not significantly change the view from the Federation house. No views towards the Federation House would be impacted.

Visual impacts on the Federation House would be negligible.

Potential direct impacts

The following table provides an assessment of potential direct impacts on heritage items within the station catchment.

Table 59: Potential direct impact assessment

Item	Potential direct impact assessment	Impact
Belmore Railway Station Group	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Post-war bus shelter and public lavatories	Vibration levels would be under the cosmetic damage screening level.	Negligible
Federation House (former station master's cottage)	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor

6.6.6 Overview of impacts

The table below provides a summary of impacts in accordance with the guidelines by the NSW OEH (Statement of Heritage Impact, 2002).

Table 60: Summary of Heritage Impacts – Belmore Station Catchment

Impact on a heritage item	Discussion
Aspects that respect or enhance the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> Retention for re-use of the element of exceptional significance: the Platform 1/2 building Retention for re-use of elements of high significance within the station group: the overhead booking office and the concourse Removal of intrusive canopy concealing views onto platform building for enhanced views on the platform building of exceptional significance Potential for positive heritage impacts during retrofitting and upgrade works to significant elements to be retained Neutral direct and minor visual impacts to the post-war bus shelters and public lavatories Neutral to negligible visual impacts to heritage items in the vicinity Provided that mitigation measures are implemented, negligible to minor potential direct impacts as a result of vibrational work in the vicinity of heritage items

Impact on a heritage item	Discussion
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- Continued use of the heritage item in its historical function as part of the evolution of the Bankstown Line

Aspects that would detrimentally impact on the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.

- Removal of an element of high significance within the station group, the original 1895 island platform and loss of its curved layout
- Moderate direct impact caused by the removal of the original island platform
- Moderate visual impact caused by the bulk and footprint of the new covered concourse

6.6.7 Statements of heritage impact

The following statements of heritage impact are provided for the heritage items located within Belmore Station Catchment and the 25-metre buffer zone:

Belmore Railway Station Group

The direct impact of the project onto Belmore Railway Station Group would be moderate. All elements of exceptional and high significance within the station would be retained apart from the original 1895 brick island platform and its curved layout. The retention and retrofitting of the retained elements are anticipated to have a minor impact and present opportunity for a positive outcome. Views onto the Platform 1/2 building would be enhanced from the overhead booking office and would also be appreciated from the new Metro concourse. The scale and bulk of the new development is likely to dominate the platform building and this would result in a moderate visual impact. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

The impacts of the removal of the original 1895 island platform within Belmore Railway Station would be balanced by the retention of all other significant elements comprising the 1895 platform building, the 1937 overhead booking office and the remaining elements of the overbridge. This would enable the station to conserve its historic, aesthetic and representativeness significance. The platform building is an excellent example of its type and would continue to demonstrate the heritage values of the station as one of the original railway stations on the Sydenham to Bankstown Line. The retention of the overhead booking office, although detractingly modified, would conserve a good example of an inter-war weatherboard booking office and continue contribute to the setting of the station.

When assessed cumulatively, the level of heritage impact of the project on Belmore Railway Station Group would be moderate.

Belmore railway Station is State significant as the initial terminus station on the line. The SHR statement of significance lists the station building as having State technical and aesthetic significance and the station buildings and overhead booking office as being representative at a State level. All buildings that are listed as contributing to the State significance of the item will be retained.

Based on the historical significance of the station and the heritage values of the retained buildings, the heritage item would continue to meet the threshold for State significance.

Post-war bus shelter and public lavatories

The direct impacts of the project on the Post-war bus shelter and public lavatories would be neutral. Works to the heritage item and in its vicinity would result in minor visual impacts. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Post-war bus shelter and public lavatories would be minor. The heritage item would continue to meet the threshold for local significance.

Federation House (former station master's cottage)

The direct impacts of the project onto the Federation House would be neutral. The proposed works in the vicinity would result in a negligible visual impact overall. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

When assessed cumulatively, the level of heritage impact of the project on the Federation House would be negligible. The heritage item would continue to meet the threshold for local significance.

6.7 Lakemba Station Catchment

The Lakemba Station Catchment includes one heritage item, the Lakemba Railway Station Group. The buffer zone around the station catchment includes three heritage items.

6.7.1 Summary of heritage listings

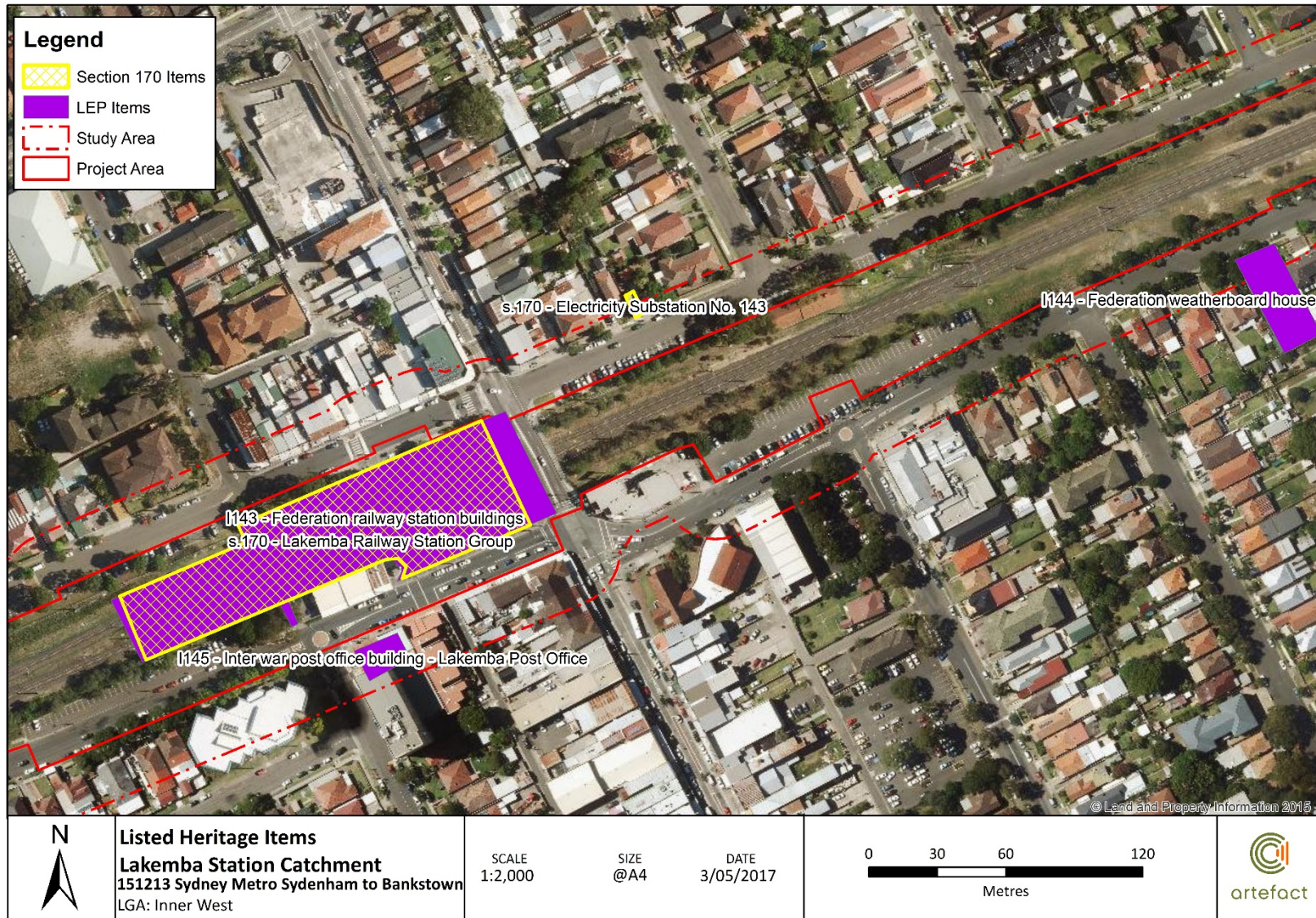
The table below provides a summary of the heritage items located within the station catchment and within the 25-metre buffer zone. An aerial map showing the heritage items within the station catchment is also provided below.

Table 61: Heritage items within Lakemba Station Catchment and buffer zone

Item	Suburb	Significance	Listing
Within project area			
Lakemba Railway Station Group	Lakemba	Local	RailCorp S.170 Heritage and Conservation Register (4801916) Canterbury LEP 2012 (I143)
Within buffer zone (outside project area)			
Federation weatherboard house	Lakemba	Local	Canterbury LEP 2012 (I144)
Inter-War post office building - Lakemba Post Office	Lakemba	Local	Canterbury LEP 2012 (I145)
Electricity Substation no. 143	Lakemba	Local	Ausgrid S. 170 Heritage and Conservation Register (3430296)

Lakemba Station has been nominated for SHR listing as of 17 March 2016.

Figure 237: Aerial map showing heritage items within study area: Lakemba



6.7.2 Existing environment

Lakemba Railway Station Group

Lakemba Station was designed and built by NSW Government Railways between 1909 and 1926. Lakemba Station has a single island platform with the original platform building and a large modern footbridge, booking office, central concourse, concessionaire, and easy access lift (Figure 238 to Figure 253). The footbridge is accessed from Railway Parade to the north and The Boulevard to the south, both commercial shopping strips.

Lakemba Station was opened on 14 April 1909. The original station at Lakemba had an island platform with entrance steps from the Haldon Street overbridge. A small timber station building with a ticket and parcels office was at the Belmore end with a small signal frame on the Bankstown side of the building. On 24 December 1919, a new brick station building with cantilever awnings and a signal box was opened at the Bankstown end of the station. A haunched beam footbridge with overhead booking office was erected with electrification in 1926.

On 31 January 1921, terminal arrangements were introduced at the Bankstown end of the station, providing for a locomotive to shunt into the engine dead-end. The down train would proceed into the Terminal Siding where the light engine would couple on to the train, the train engine uncoupled and the train hauled into the up platform for the return journey. The uncoupled locomotive would then move into the engine dead-end ready for the next train from Sydney. These arrangements were no longer necessary after electrification.

In 2001 the overhead booking office, concourse, and canopies were upgraded.

The War Memorial monument was dedicated on Sunday 19 April 1953 (Figure 254). It bears the inscription: 'In memory of our fallen comrades'.

Figure 238: View of station entrance with 2001 editions, south-east aspect **Figure 239: View of platform and stairs with 2001 canopies, south-west aspect**



Figure 240: View of platform building, south-west aspect



Figure 241: View of platform building detail, north aspect



Figure 242: View of Platform 1, north-east aspect



Figure 243: View of Platform 1, north-west aspect



Figure 244: View of station, east aspect



Figure 245: View of platform, north-east aspect



Figure 246: View of footbridge, north-east aspect



Figure 247: View of stairs, east aspect



Figure 248: View of Platform 1, south-west aspect



Figure 249: View of overhead booking office, south-west aspect



Figure 250: View of footbridge, west aspect



Figure 251: View of overhead booking office, south-west aspect



Figure 252: View of footbridge, east aspect



Figure 253: View of overbridge, south-east aspect



Figure 254: View of War Memorial, south aspect



6.7.3 Description of elements

Lakemba Railway Station Group

The table below outlines the main structures and elements comprised within the railway station group. Information such as date, description and condition is provided, and the significance of each element has been graded.

Table 62: Elements of Lakemba Station Group

Elements	Date	Description	Condition	Significance
Platform 1/2	1919	One island platform, with thin asphalt surface and battered-profile original brick platform face and edge. Minor portion of brick coping removed and replaced with concrete coping at the western end. Concrete platform extension at west end of original platform. High level of integrity and in good condition overall.	Good	High
Platform building, platform 1/2 (Type 11) ¹³⁴	1919	<p>External: Rectangular face brick building with gabled roof and integral shallower sloped cantilevered awnings. The face brick in stretcher bond has been painted. The building is six bays in length, with the bays defined by engaged brick piers which coincide with the awning supports. Original chimneys with cement mouldings and terracotta flues have been removed.</p> <p>The cantilever awnings have standard double bowed steel brackets supported on decorative cement haunches and bolt fixings to the station building brick walls. Soffit lining of timber boards fixed to intermediate exposed purlins follows the roof slope. There is a decorative timber moulding at the junction with the brick wall. Vertical timber boards form a valance at each end of the awnings. The awning roof as for the main roof is corrugated steel.</p> <p>The external walls rise from a projecting brick plinth three/four courses high with a decorative dado moulding run in cement which is continuous between door and window openings. Decorative cement</p>	Generally good	High

¹³⁴ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		<p>window and door frames rise above the dado moulding.</p> <p>The original window openings feature a moulded cement sill with a scalloped fringe. The original timber windows were double hung with a single paned lower sash and a six paned upper sash featuring coloured glass. The original window glass as well as the upper glazing bars has been removed. Original door openings featured fanlights matching the upper window sashes. All the original doors have been removed and most of the door openings bricked up, the original thresholds have also been removed.</p> <p>Internal: The building comprises a booking office; general waiting room; ladies room and ladies toilets and men's toilets. The original timber framed signal box which is shown on the original drawings at the stair access end of the platform building has either been removed, or was never constructed. The internal usage has now changed and the toilets have modern fitouts and finishes.</p>		
Footbridge and stairs	1926	<p>Haunched steel beam girder design; consists of tapered cantilevers bearing on platform trestles and supporting shallow beams over the railway tracks. The structure was augmented with the construction of the new overhead booking office, concourse, overhead canopies and lift shafts. However, the original form of the footbridge has remained legible and all original access stairs including star pattern cast iron newel posts remain.</p>	Good	Moderate
War Memorial	1953	<p>Outside the station entrance is a War Memorial. It is a sandstone block broken column (symbolising sacrifice) on a plain plinth. It bears the inscription: 'In memory of our fallen comrades'. This memorial was unveiled by His Excellency the Governor of NSW Lieutenant General Sir John Northcott KCMG CB MVO Sunday 19th April 1953'. Located on a small square lawn area, with plantings along the fence line.</p>	Good	High
Overhead booking office /concourse	2001	<p>The original timber framed overhead booking office dating from 1926 has been demolished and replaced by a new structure erected on the original footbridge consisting of a booking office, a central concourse, and a concessionaire.</p>	Good	Little
Canopies	2001	<p>New steel framed metal roofed canopy constructed over original station access stairs and extending to eastern end of station building.</p>	Good	Intrusive

6.7.4 Statements of significance

The following statement of significance for the heritage item located within the project area is reproduced from the SHI listing.

Table 63: Statements of significance for Lakemba Station Catchment

Item	Statement of Significance	Listing
Lakemba Railway Station Group	<i>Lakemba Railway Station has local historical significance as it was one of the stations to be located on the Sydenham to Bankstown Line which was built to take pressure off the traffic on the Main South Line as well as promote agriculture and suburban development in the late 19th and early 20th centuries. The station reflects the extension of the line to Bankstown in 1909 and the platform building and associated stairs reflect the development of suburbs in the area after World War I. The platform building and stairs are also significant as examples of the design and technology of these structures built by NSW Railways between 1910 and the 1950s</i>	SHI

Lakemba Station has been nominated for SHR listing as of 17 March 2016.

6.7.5 Heritage impacts

Direct impacts

Lakemba Railway Station Group

The table below provides an assessment of the direct impacts of the project on the fabric of each element constituting the railway station and an assessment of the subsequent impacts on the heritage values of the station group as a whole.

Table 64: Assessment of direct impacts for Lakemba Railway Station Group

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platform 1/2 (1919)	High	Removal apart from structure underneath heritage building and the current concourse and stairs; platform to be rebuilt in straight alignment; platform canopies and platform screen doors to be anchored on new platform	<p>The platform is proposed to be removed apart from the structure underneath the heritage building and the current concourse and stairs. This would have a major impact on the fabric of the platform including the loss of the original brick face.</p> <p>The platform would be reconstructed in a straight alignment and extended to accommodate the workings of the new Metro trains. This would result in the loss of the historic curved platform. This would have a major impact on the original platform layout.</p> <p>The platform canopies and platform screen doors would be anchored and constructed on the new platform. This would not further impact significant fabric.</p> <p>The demolition of Platform 1/2 to be reconstructed in straight lines and extended to accommodate the workings of the new Metro trains would result in a major impact on the station group overall.</p>	Major
Platform building, platform 1/2 (Type 11) (1919) ¹³⁵	High	Retention for re-use with potential retrofitting	<p>The retention of the platform building is a positive heritage outcome in the context of the project.</p> <p>Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to</p>	Minor

¹³⁵ See Section 2.2.6 Station building types

Element	Significance	Proposed action	Assessment of impact	Impact summary
			<p>remove any intrusive modifications to the structure. Additions to the building and platform should be designed to be sympathetic to the heritage context and minimise fabric and visual impacts.</p> <p>If these considerations are implemented, it is expected this aspect of the project would have a minor impact on the heritage values of the building and station overall.</p>	
Footbridge and stairs (1926)	Moderate	Retention with new lifts constructed to platform	<p>It is proposed to retain the footbridge and stairs and construct new lifts to the platform.</p> <p>The footbridge was assessed as having moderate significance as per the Railway Footbridges Heritage Conservation Strategy.¹³⁶</p> <p>The retention of the footbridge and stairs and the construction of the new lifts to the platform would have a minor impact on the original footbridge and station overall.</p>	Minor
War Memorial (1953)	High	Retention; construction of new platforms and toilets in proximity	<p>It is proposed to retain the memorial. This would result in a neutral impact on the memorial and the station catchment. The construction of the new straight platforms and toilets in proximity of the memorial would have a neutral impact on the memorial provided that demolition and construction works are carried out so as to minimise any direct impacts and that the memorial is adequately protected during the works.</p>	Neutral
Overhead booking office /concourse (2001)	Little/ Intrusive	Existing concourse structure retained and expanded with new lifts to platforms	<p>It is proposed to retain the existing concourse structure including stairs to platforms, stairs and lifts to the north and south entries. The canopy over the stairs to platform would be removed and replaced with a new canopy. The existing lift to the platform would be removed and replaced. This would result in a neutral impact on the Lakemba Railway Station, whilst offering opportunity for a positive visual impact. The overhead booking office is not identified as significant in the Sydney Trains Overhead Booking Office Conservation Strategy.</p>	Neutral
Canopies (2001)	Intrusive	Removal of the canopy over the stairs to the platform for replacement with new canopy. Retention of the concourse canopy.	<p>It is proposed to remove the modern canopies over the stairs to the platform. The concourse canopy would be retained. This would result in a minor positive impact on the station catchment.</p>	Minor positive

¹³⁶ NSW Government Architect's Office Heritage Group 2016. *Railway Footbridges Heritage Conservation Strategy*. Prepared for Sydney Trains.

When considering cumulative impacts, it is assessed that the project would result in a moderate direct impact on Lakemba Railway Station Group overall.

Visual impacts

Lakemba Railway Station Group

The proposed new structures would be sited on the east side of Lakemba Station with the retained Platform 1/2 building located approximately in the centre of the platform. The contemporary nature of the new development would differ from the existing heritage character of the station group; this would create a contradistinctive relationship with the historic building. Platform canopies would be located between the new concourse and the platform building. This would result in a minor impact on views from a western angle when looking towards the west façade of the platform building. The building would be clearly visible from the concourse and stairs. Platform screen doors would generally have a moderate impact on internal views. The removal and replacement of the lifts to the platform would have a minor visual impact.

The visual impacts of the expanded concourse on Lakemba Railway Station Group would be moderate overall. The expanded concourse would add considerable footprint and bulk within the station and would be situated in proximity of the platform building. Although they would not obstruct any significant views, this is likely to dominate the platform building; this would have a moderate visual impact. There would be visual impacts resulting from the removal of the original brick face and curved layout of the platform. This visual impact would be major. There would be moderate visual impacts caused by the expansion of the existing concourse which incorporates elements of the original footbridge and stairs. The intrusive canopy structure currently obstructing views to the platform building would be removed.

It is proposed to undertake a maintenance works overhaul and apply waterproofing to the full deck of the Haldon Street overbridge situated in proximity of Lakemba Railway Station. The works would also include new compliant protection screens, medium level traffic barriers and a deflection wall enclosing the existing concrete columns. New post and panel retaining walls would be installed on either side of the corridor to accommodate track realignment and platform extension works. The works to the bridge would be located at a notable distance from the platform building and would be mostly screened by the concourse. These works are unlikely to significantly alter the existing aesthetics of the bridge. The new retaining walls would be located along the embankments and would not be visually intrusive. The visual impacts of the works to the Haldon Street overbridge on Lakemba Railway Station would be minor.

The new services building would not visually dominate the remaining heritage structures as it would be located around 200m to the west.

Overall, the project would add a contemporary layer of development on the east side of the station in contrast with the heritage components on the west side. Views onto the heritage buildings within the station catchment would not be obstructed, although the new structures would be large in scale and may be dominant. The expanded concourse would offer views onto the platform building. The project would alter the existing setting of Lakemba Railway Station but visual impacts would remain moderate.

When considering cumulative impacts, it is assessed that the project would result in a moderate visual impact on Lakemba Railway Station Group.

Federation weatherboard house

The Federation weatherboard house is located approximately 20m south of the railway corridor and 335m east of the eastern edge of the station platform. The construction in the vicinity of the Federation weatherboard house consists of new Metro tracks. Current views towards the railway line

are screened by vegetation. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. Distance and mature trees prevent views from the heritage item on Lakemba Station Catchment. Therefore, views and vistas from the heritage item would not be impacted.

Visual impacts on the Federation weatherboard house would be neutral.

Inter-War post office building - Lakemba Post Office

The Inter-War post office is located approximately 25m south-west of the station entrance. The construction in the vicinity of the post office consists of a new station canopy and new station buildings including the expanded concourse. There are views between the post office and the current station entrance. The new canopy and station buildings would be mostly screened by existing single-storey retail buildings located on the north side of The Boulevard. The proposed works would be larger in scale than the existing development and part of the new canopy would be seen above existing roof lines. However, the scale and character of the new structure would not significantly detract from the existing.

Visual impacts on the Inter-War post office would be negligible.

Electricity Substation no. 143

The electricity substation no.143 is located approximately 25m north of the railway corridor and 95m north-east of the eastern edge of the station platform. The construction in the vicinity of the substation consists of new Metro tracks. Current views towards the railway line and the station are screened by vegetation. Any views on the new Metro tracks and overhead wiring would be in keeping with the current views and vistas of the heritage item and would have a neutral visual impact. Distance and vegetation prevent views between the heritage item and Lakemba Station Catchment. The new canopy and northern entrance concourse would remain outside views from the heritage item.

Visual impacts on the electricity substation no.143 would be neutral.

Potential direct impacts

The following table provides an assessment of potential direct impacts on heritage items within the station catchment.

Table 65: Potential direct impact assessment

Item	Potential direct impact assessment	Impact
Lakemba Railway Station Group	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Federation weatherboard house	Vibration levels would be under the cosmetic damage screening level.	Negligible
Inter-War post office building - Lakemba Post Office	Vibration levels would be under the cosmetic damage screening level.	Negligible
Electricity Substation no. 143	Vibration levels would be under the cosmetic damage screening level.	Negligible

6.7.6 Overview of impacts

The table below provides a summary of impacts in accordance with the guidelines by the NSW OEH (Statement of Heritage Impact, 2002).

Table 66: Summary of Heritage Impacts – Lakemba Station Catchment

Impact on a heritage item	Discussion
Aspects that respect or enhance the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none">• Retention of the Platform 1/2 building of high significance• Potential for positive heritage impacts during retrofitting and upgrade works to the platform building to be retained• Neutral to negligible visual impacts to heritage items in the vicinity• Provided that mitigation measures are implemented, negligible to minor potential direct impacts as a result of vibrational work in the vicinity of heritage items• Continued use of the heritage item in its historical function as part of the evolution of the Bankstown Line
Aspects that would detrimentally impact on the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none">• Removal of elements of high significance within the station group including the original 1919 island platform• Major direct impacts caused by the removal of elements of high significance• Moderate visual impacts caused by the scale of the new development

6.7.7 Statements of heritage impact

The following statements of heritage impact are provided for the heritage items located within Lakemba Station Catchment and the 25-metre buffer zone:

Lakemba Railway Station Group

The direct impacts of the project on Lakemba Railway Station would be moderate. The original island platform would be removed. This would also result in a major direct impact. The visual impact of the new development on the setting of the station would be moderate overall. The expanded concourse would offer views on the platform building to be retained. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

The removal of the original 1919 island platform within Lakemba Railway Station would remove an element of high significance within the station group. The removal of this structure would alter the aesthetics and representativeness significance of the station and impact its integrity overall. The Platform 1/2 building would remain the tangible element to represent the heritage significance of the railway station. This would retain some of the historical values of the place as one of the original railway stations of the second stage of development of the Sydenham to Bankstown Line. The platform building is a good example of its type and would contribute to the aesthetic significance of the station. Overall, Lakemba Railway Station would continue to meet the threshold for local significance.

When assessed cumulatively, the level of heritage impact of the project on Lakemba Railway Station Group would be moderate. Based on the historical significance of the station and the heritage values of the retained platform building, the heritage item would continue to meet the threshold for local significance.

Federation weatherboard house

The direct impacts of the project onto the Federation weatherboard house would be neutral. The proposed works in the vicinity would result in a neutral visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Federation weatherboard house would be neutral. The heritage item would continue to meet the threshold for local significance.

Inter-War post office building - Lakemba Post Office

The direct impacts of the project onto the Inter-War post office building would be neutral. The proposed works in the vicinity would result in a negligible visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Inter-War post office building would be negligible. The heritage item would continue to meet the threshold for local significance.

Electricity Substation no. 143

The direct impacts of the project onto the Electricity Substation no. 143 would be neutral. The proposed works in the vicinity would result in a neutral visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Electricity Substation no. 143 would be neutral. The heritage item would continue to meet the threshold for local significance.

6.8 Wiley Park Station Catchment

The Wiley Park Station Catchment includes one heritage item, the Wiley Park Railway Station Group. The buffer zone around the station catchment also includes one heritage item.

6.8.1 Summary of heritage listings

The table below provides a summary of the heritage items located within the station catchment and within the 25-metre buffer zone. An aerial map showing the heritage items within the station catchment is also provided below.

Table 67: Heritage items within Wiley Park Station Catchment and buffer zone

Item	Suburb	Significance	Listing
Within project area			
Wiley Park Railway Station Group	Wiley Park	Local	RailCorp S.170 Heritage and Conservation Register (4801946) Canterbury LEP 2012 (I159)
Within buffer zone (outside project area)			
Inter-War water pumping station–Lakemba Pumping Station (WP0003)	Wiley Park	Local	Sydney Water S.170 Heritage and Conservation Register (4570136) Canterbury LEP 2012 (I158)

Figure 255: Aerial map showing heritage items within study area: Wiley Park



File Path: C:\Users\GIS\Desktop\GIS\GIS_Mapping\151213_Sydney_Metro_Bankstown_Sydenham\MXD\Heritage_Detail_WP

6.8.2 Existing environment

Wiley Park Railway Station Group

Wiley Park Station was designed by NSW Government Railways and built by Canterbury Council. Wiley Park Station consists of two wayside platforms with original platform buildings and an original overhead booking office, all which have been modified by varying degrees (Figure 256 to Figure 265). The platforms are accessed by earth supported ramps via the overbridge from King Georges Road, a main road (Figure 257 to Figure 259). The overhead booking office building is flanked by commercial shops. The 1974 concrete overbridge is excluded from this listing.

Wiley Park Station was opened on 19 June 1938, much later than other stations on the line. The reason for the station was suburban development of the 1930s and the need for an interchange with King Georges Road. Unusually, the station was financed and constructed by the local Council (Canterbury Council) and handed over to the NSW Government Railways after completion. The station was built with an overhead booking office as the major building with ramps leading down to the two side platforms and their small platform shelters. The building on the Platform 1 appears to have been modified in recent years.

Figure 256: View of station entrance, south-west aspect



Figure 257: View of access ramp, north-east aspect



Figure 258: View of platform, north-east aspect



Figure 259: View of access ramp, east aspect



Figure 260: View of Platform 1 building, west aspect



Figure 261: View of Platform 1 building detail, west aspect



Figure 262: View of platforms, south-west aspect



Figure 263: View of Platform 2 building, south aspect



Figure 264: View of landscaping, east aspect



Figure 265: View of abutments of overbridge, north-east aspect



6.8.3 Description of elements

Wiley Park Railway Station Group

The table below outlines the main structures and elements comprised within the railway station group. Information such as date, description and condition is provided, and the significance of each element has been graded.

Table 68: Elements of Wiley Park Station Group

Elements	Date	Description	Condition	Significance
Platform 1	1938	Platform 1 is a wayside platform with asphalt surface, steel rail posts and concrete cast in situ platform walls and edge. Typical example of 1930s-1940s platform.	Generally good	High

Elements	Date	Description	Condition	Significance
Platform 2	1938	Platform 2 is a wayside platform with asphalt surface, steel rail posts and concrete cast in situ platform walls and edge. Typical example of 1930s-1940s platform.	Generally good	High
Platform building, platform 1 (Type 13). ¹³⁷	1938	<p>External: Rectangular painted brick building which originally had a hipped terracotta Marseille pattern tile roof. The roof was detractingly replaced after a fire with a simple metal clad skillion roof which cantilevers at the platform side to form a boxed awning. The windows are timber framed and originally had glass louvres which have been removed and boarded up or fitted with fixed glass. Original single panel timber doors have been removed and replaced with flush doors. The brick work detailing includes brick-on-edge above the openings and a soldier course above, running around all elevations; a soldier course at ground level and splayed brick reveals to the openings. The building has lost integrity due to the replacement of its roof in form and material, and the brick facade having been painted.</p> <p>Internal: The building comprises a ladies waiting room and ladies toilets, a central station master's office (not used) and men's toilets. The toilets now have modern fitouts and finishes. A fire in the roof has resulted in the loss of the original ceilings. In the station master's office, the ceiling lining is the exposed underside of the metal deck and in the toilets a fibre cement sheeting.</p>	Good	High
Platform building, platform 2 (Type 13). ¹³⁸	1938	<p>External: Small rectangular red face brick shelter building with a hipped terracotta Marseille pattern tile roof in the same original style as the building on Platform 1. The building is enclosed on three sides with an opening to the platform for access to the timber seating on three sides. Windows on the lateral walls were originally timber framed in three bays each with three horizontal glazing bars, but have since been bricked up. The brick work detailing includes brick-on-edge above the openings and a soldier course above, running around all elevations; a soldier course at ground level and splayed brick reveals to the openings.</p> <p>The awning consists of the northern third of the main hipped roof supported on two hardwood cantilevers which rise vertically on brick haunches on each side of the main opening. The soffit lining is asbestos cement, extending around the building as an eaves soffit.</p> <p>Internal: Internally the shelter has a concrete floor, rendered walls and a hardboard ceiling with battens. The timber slatted seats are original.</p>	Good.	High
Overhead booking office	1938	External: The overhead booking office is a timber framed, weatherboard clad building which was originally roofed with a hipped terracotta Marseille pattern tile roof, which following a fire in the roof has been replaced by corrugated steel. The frontage to King Georges Road has a cantilevered awning with Art Deco style horizontal banding supported on exposed hardwood cantilevers. The building retains original timber framed double hung windows, but the glazing	Good	High

¹³⁷ See Section 2.2.6 Station building types

¹³⁸ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		<p>overlooking the station has been replaced with metal cladding.</p> <p>Internal: The building consists of the booking office, (the parcels office and its door to King Georges Road has been removed) an entry concourse and ticket collection booth. The two front ticket windows have been removed and the internal ticket window replaced. On the north side the original book stall has been removed for later retail spaces.</p> <p>Roof replaced with corrugated metal sheets; Internal fixtures and fittings replaced with modern office furniture; Internal floor plan reorganised and staff toilet added; Doors removed and/or replaced; Two ticket windows removed, one replaced with modern equivalent; Bookstall extended; front door and façade replaced with new shopfront glazing; Footbridge windows and weatherboard siding replaced with corrugated metal screen wall; Footbridge and ramps upgraded with new fencing and awnings.</p> <p>Notable original attributes: weatherboard siding; multi-pane sash windows; covered booking hall with AC ceilings; cantilever awning over footpath; original ticket collector's cabin and window; early safe.</p> <p>A good example of the restrained Inter-War Domestic style with good integrity.</p>		
Footbridge	1938	Concrete platform supported on steel beams bearing on platform trestles and natural earth embankment on each side. Ramp balustrades have been replaced with tubular looped steel design. New corrugated steel canopies and metal handrails have been added to the footbridge.	Good	Moderate
Access ramp canopies	Modern	Modern steel framed and steel roofed canopies have been erected over both platform access ramps which continue up to the footbridge.	Good	Little
Landscape/natural features		Earth and stone formed retaining walls along southern boundary. Grass verges with mature plantings along both boundaries.	Good	High

The King Georges Road overbridge is excluded from the S170 and LEP listings for Wiley Park Railway Station.

6.8.4 Statements of significance

The following statement of significance for the heritage item located within the project area is reproduced from the SHI listing.

Table 69: Statements of significance for Belmore Station Catchment

Item	Statement of Significance	Listing
Wiley Park Railway Station Group	<i>Wiley Park Railway Station is historically significant at a local level as it was the last of the stations erected on the Sydenham to Bankstown Line which had been built to relieve congestion on the Main Southern Line and to promote agriculture and suburban development in the late 19th and early 20th centuries. The brick platform building and overhead booking</i>	SHI

Item	Statement of Significance	Listing
	<p>office reflect the need to service the growing population in the area in the 1930s. The station is significant as unlike other stations in the Metro network it was a station which was not financed and constructed by the State Government, but by the Local Council.</p> <p>While the overall integrity of the complex has been compromised by alterations and additions the overhead booking office and brick waiting room on platform 2 have a moderate level of integrity and are representative of the Inter-War Railway Domestic style utilised by NSW Railways at the time.</p>	

6.8.5 Heritage impacts

Direct impacts

Wiley Park Railway Station Group

The table below provides an assessment of the direct impacts of the project on the fabric of each element constituting the railway station and an assessment of the subsequent impacts on the heritage values of the station group as a whole.

Table 70: Assessment of direct impacts for Wiley Park Railway Station Group

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platform 1 (1938)	High	Removal; platform to be rebuilt in a straight alignment; covered concourse, access stairs, lift shafts, platform canopies and platform screen doors to be anchored on new platform	<p>The platform is proposed to be removed and reconstructed in a straight alignment to accommodate the workings of the new Metro trains. This would have a major impact on the platform and include the loss of a typical example of its type.</p> <p>The new covered concourse, access stairs, lift shaft, platform canopies and platform screen doors would be anchored and constructed on the new platform. This would not further impact significant fabric.</p> <p>The complete demolition of Platform 1 to be reconstructed in straight lines to accommodate the workings of the new Metro trains would result in a major impact on the station group overall.</p>	Major
Platform 2 (1938)	High	Removal; platform to be rebuilt in a straight alignment; covered concourse, access stairs, lift shafts, platform canopies and platform screen doors to be anchored on new platform	<p>The platform is proposed to be removed and reconstructed in straight lines to accommodate the workings of the new Metro trains. This would have a major impact on the platform and include the loss of a typical example of its type.</p> <p>The new covered concourse, access stairs, lift shaft, platform canopies and platform screen doors would be anchored and constructed on the new platform. This would not further impact significant fabric.</p> <p>The complete demolition of Platform 2 to be reconstructed in straight lines to accommodate the workings of the new Metro trains would result in a major impact on the station group overall.</p>	Major

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platform building, platform 1 (Type 13) (1938). ¹³⁹	High	Removal; replacement with platform canopies and platform screen doors to be anchored on new platform	The building is proposed to be removed. This would have a major impact on the building and on Wiley Park Railway Station as a whole.	Major
Platform building, platform 2 (Type 13) (1938). ¹⁴⁰	High	Removal; replacement with platform canopies and platform screen doors to be anchored on new platform	The building is proposed to be removed. This would have a major impact on the building and on Wiley Park Railway Station as a whole.	Major
Overhead booking office (1938)	High	Removal for replacement with new covered concourse including access stairs and lift shafts	<p>The building is proposed to be removed.</p> <p>The overhead booking office scored seven out of nine in the Sydney Trains Overhead Booking Offices Heritage Conservation Strategy.¹⁴¹ The strategy recommends adaptive reuse of the building.</p> <p>The removal of the overhead booking office would have a major impact on the building and on Wiley Park Railway Station as a whole.</p>	Major
Footbridge (1938)	Moderate	Removal for replacement with new covered concourse including access stairs and lift shafts	<p>It is proposed to remove the footbridge and stairs for replacement with a new covered concourse including access stairs and lift shafts.</p> <p>The stairs were assessed as having moderate significance as per the Railway Footbridges Heritage Conservation Strategy.¹⁴²</p> <p>The removal of the footbridge and stairs would have a major impact on the footbridge and a moderate impact on the station overall.</p>	Major
Access ramp canopies (Modern)	Little	Removal for replacement with new covered concourse including access stairs and lift shafts	It is proposed to remove the access ramp canopies. This would result in a neutral impact on the station catchment.	Neutral
Landscape/natural features	Moderate	Retain in majority; new station building to be	It is proposed to mostly retain the existing landscape within the redevelopment of the station catchment apart from an area located west of the platforms along the southern	Moderate

¹³⁹ See Section 2.2.6 Station building types

¹⁴⁰ See Section 2.2.6 Station building types

¹⁴¹ Australian Museum Consulting 2014. *Railway Overhead Booking Offices Heritage Conservation Strategy*. Prepared for Transport for NSW.

¹⁴² NSW Government Architect's Office Heritage Group 2016. *Railway Footbridges Heritage Conservation Strategy*. Prepared for Sydney Trains.

Element	Significance	Proposed action	Assessment of impact	Impact summary
		constructed along the southern boundary to the west of the platforms	boundary where a new station building would be erected. This would result in a moderate impact on the landscape features and a minor impact on Wiley Park Railway Station overall.	

When considering cumulative impacts, it is assessed that the project would result in a major direct impact on Wiley Park Railway Station Group overall.

Visual impacts

Wiley Park Railway Station Group

The proposed canopy above the new concourse would be larger in scale in comparison with the existing structures on the site. However, all station buildings which include the Platform 1 building, Platform 2 building and the overhead booking office are proposed to be removed. Therefore, the scale of the proposed new development would not visually impact the heritage components of the site as these would no longer be present. Visual impacts would rather result from the removal of all heritage structures at Wiley Park Railway Station. As all original elements of the station dated 1938 are removed, all views and appreciation of these elements would be lost. This would have a major visual impact on Wiley Park Railway Station as a whole. Any visual impacts resulting from the proposed upgrade works to the King Georges Road overbridge would not further detract significant views as the setting of the station would have been fully impacted.

Medium-scale canopies and platform screen doors would be located along the reconstructed platforms on the west side of the station. The nature of the new concourse, canopies and station buildings would introduce a contemporary design to the station in replacement of the existing heritage buildings. A new service building would be located at the western end of the platforms along the southern boundary. The scale and height of the proposed canopy structure, the footprint of the overall concourse, stairs, new platform and station buildings as well as the platform canopies and platform screen doors would add considerable bulk to the originally low-scale station catchment. The 1930s station catchment would be redeveloped into a contemporary transport interchange.

The proposed removal of all significant buildings and structures within the station would result in a major visual impact as no original elements would be retained to demonstrate the significance of the station for future appreciation. The project would remove the late 1930s precinct.

When considering cumulative impacts, it is assessed that the project would result in a major visual impact on Wiley Park Railway Station Group.

Inter-War water pumping station– Lakemba Pumping Station (WP0003)

The Lakemba Pumping Station is located approximately 40m south-west of the station platforms. The construction in the vicinity of the pumping station consists of new platform screen doors, platform canopies, and a concourse canopy to a height of approximately 6.15m above the concourse. Views towards the railway corridor are mostly screened by existing vegetation. Views towards the station are mostly screened due to the cutting for the railway line and station buildings being located below street level. The proposed works would be keeping with the current visual landscape to and from the heritage pumping station. Trees are proposed to be planted on the southern side of the station that would screen views further.

Visual impacts on the Inter-War water pumping station would be negligible.

Potential direct impacts

The following table provides an assessment of potential direct impacts on heritage items within the station catchment.

Table 71: Potential direct impact assessment

Item	Potential direct impact assessment	Impact
Wiley Park Railway Station Group	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Inter-War water pumping station– Lakemba Pumping Station (WP0003)	Vibration levels would be under the cosmetic damage screening level.	Negligible

6.8.6 Overview of impacts

The table below provides a summary of impacts in accordance with the guidelines by the NSW OEH (Statement of Heritage Impact, 2002).

Table 72: Statement of Heritage Impacts – Wiley Park Station Catchment

Impact on a heritage item	Discussion
Aspects that respect or enhance the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none">• Negligible visual impacts on the Lakemba Pumping Station (WP0003)• Provided that mitigation measures are implemented, negligible to minor potential direct impacts as a result of vibrational work in the vicinity of heritage items
Aspects that would detrimentally impact on the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none">• Removal of all original elements within the catchment dated 1938: Platform 1, Platform 2, the Platform 1 building, the Platform 2 building, the overhead booking office and remaining original elements of the footbridge• Major direct and visual impacts on the station catchment due to the removal of all original structures and redevelopment of the 1930s station catchment into a contemporary transport interchange

6.8.7 Statements of heritage impact

The following statements of heritage impact are provided for the heritage items located within Wiley Park Station Catchment and the 25-metre buffer zone:

Wiley Park Railway Station Group

The impacts of the project on Wiley Park Railway Station would be major. All elements of high significance within the station would be removed. There would be no tangible elements of significance remaining. This would have major direct and visual impacts on the station as a whole. The new development would introduce contemporary structures and alter the character of the station from a

late 1930s precinct into a contemporary transport interchange. The setting of the station would be fully impacted.

The demolition of all original structures of high and moderate significance at Wiley Park Railway Station would remove the original station dated 1938. Wiley Park Railway Station is historically significant on the Sydenham to Bankstown Line for being an infill station and for being the last of the stations to be constructed. The station is also significant for having been financed and constructed by the Local Council rather than the State government. Therefore, the station has social and rarity values. The demolition of these structures would deprive the station of any tangible elements of significance. Good examples of the Inter-War Railway Domestic style in the NSW railway networks would be lost and the aesthetic significance of the station would be fully impacted. Although all original buildings have been subject to detracting modifications overtime, their significance is retained in their historical and representative values as well as in substantial original fabric. By removing all heritage components, the project would result in Wiley Park Railway Station no longer meeting the threshold for local significance.

When assessed cumulatively, the level of heritage impact of the project on Wiley Park Railway Station Group would be major. The significance of the station is encompassed in its historical use which is represented by tangible elements including platforms and individual buildings. By removing these elements, there would be no tangible elements to represent the historic role of the station. The aesthetic significance of the station found in its Inter-War Railway Domestic style would also be lost. Interpretation would be able to convey the previous significance of the site but would not fully mitigate impacts and would not enable the heritage item to retain its local significance. As a result of the project, the heritage item would no longer meet the threshold for local significance and is likely to be delisted.

Inter-War water pumping station– Lakemba Pumping Station (WP0003)

The direct impacts of the project onto the Inter-War water pumping station would be neutral. The proposed works in the vicinity would result in a negligible visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Inter-War water pumping station would be negligible. The heritage item would continue to meet the threshold for local significance.

6.9 Punchbowl Station Catchment

The Punchbowl Station Catchment comprises one heritage item, the Punchbowl Railway Station Group. The buffer zone around the station catchment comprises two heritage items.

6.9.1 Summary of heritage listings

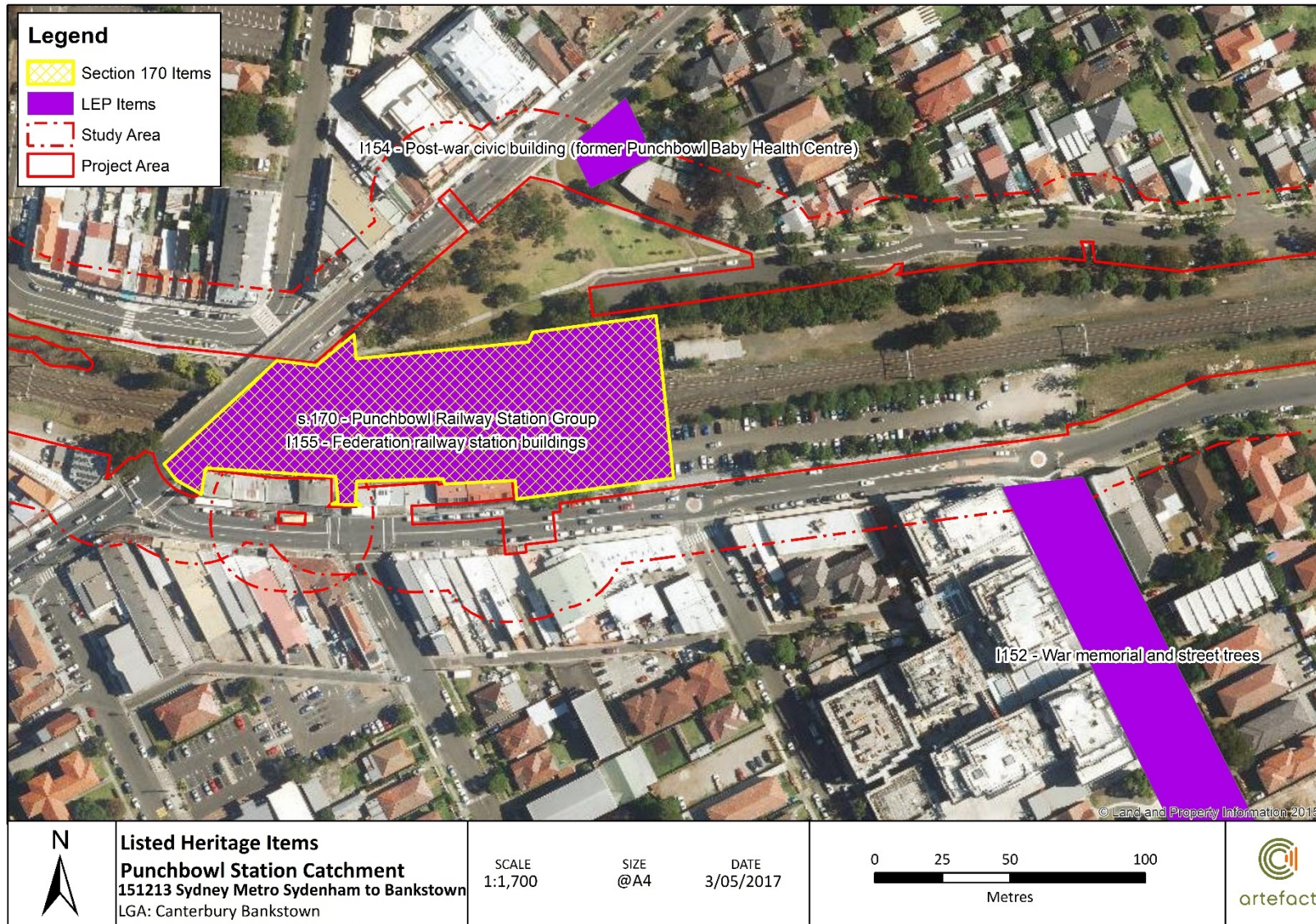
The table below provides a summary of the heritage items located within the station catchment and within the 25-metre buffer zone. An aerial map showing the heritage items within the station catchment is also provided below.

Table 73: Heritage items within Punchbowl Station Catchment and buffer zone

Item	Suburb	Significance	Listing
Within project area			
Punchbowl Railway Station Group	Punchbowl	Local	RailCorp S.170 Heritage and Conservation Register (4802009) Canterbury LEP 2012 (I155)
Within buffer zone (outside project area)			
War Memorial and street trees	Punchbowl	Local	Canterbury LEP 2012 (I152)
Post-war Civic Building (former Punchbowl Baby Health Centre)	Punchbowl	Local	Canterbury LEP 2012 (I154)

The War Memorial and street trees have been nominated for SHR listing as of 17 March 2016.

Figure 266: Aerial map showing heritage items within study area: Punchbowl



6.9.2 Existing environment

Punchbowl Railway Station Group

Punchbowl Station was designed by NSW Government Railways and built by George Leggo between 1909 and 1929. Punchbowl Station consists of a single island platform with two later built station buildings (Figure 267 to Figure 274). The platforms are accessed by a central set of stairs which lead down from the footbridge associated with the original timber framed and weatherboard overhead booking office (Figure 275 to Figure 278). The station can be accessed by steps either from The Boulevard to the south, which is a major shopping street, or from the north via Warren Reserve and Punchbowl Road. Immediately to the west of the overhead booking office, the Punchbowl Road overbridge crosses the rail line.

The modern concrete girder overbridge is excluded from the listings.

Punchbowl Station was opened along with the line extension on 14 April 1909, at the same time as Bankstown and Lakemba. The contract for construction of station buildings was awarded to G. Leggo of Paddington. Block signalling was introduced in 1916, and a covering erected over the platform signal levers the next year.

A goods siding was opened in 1919 (removed 1981) and a station building awning added in 1924. In 1929 following electrification that occurred in 1926, there were further modifications with an overhead booking office erected, platforms lengthened, and the removal of the stairway to the overbridge. There were further developments in the 1940s, with the construction of a new lamp room and a new parcels office. A notable railway development in proximity of the station was the opening of an electric train depot in 1926. The depot closed in 1995. The northern and southern c.1930s footbridge stairs were replaced in 2014.¹⁴³

Figure 267: View of platform building, east aspect



Figure 268: View of platform and overbridge, west aspect



¹⁴³ Artefact 2013

Figure 269: View of platform building, east aspect



Figure 270: View of Platform 1, east aspect



Figure 271: View of platform building, east aspect



Figure 272: View of platform building, east aspect



Figure 273: View of platform building, west aspect



Figure 274: View of platform building, west aspect



Figure 275: View of overhead booking office and footbridge, north aspect



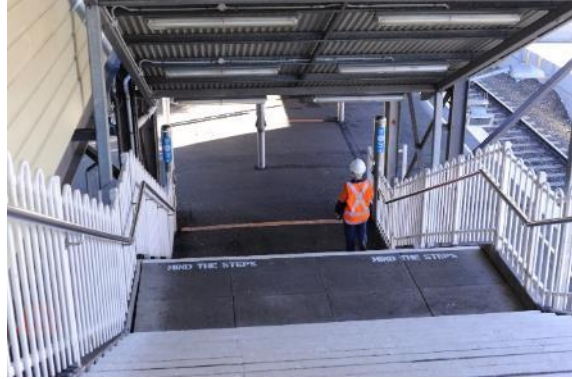
Figure 276: View of overhead booking office and footbridge, east aspect



Figure 277: View of overhead booking office and Platform 1, west aspect



Figure 278: View of stairs, east aspect



War Memorial and street trees

The War Memorial consists of a trachyte obelisk with laurel wreath and gilt name plate. It has a sandstone column constructed of blocks in the form of a cenotaph (Figure 279). It was dedicated in 1919 to the Punchbowl soldiers who fought in the Great War, 1914-1918. It is set in centre of the road in a memorial garden. The memorial was relocated from a site closer to Punchbowl Station in 1979.¹⁴⁴

The War Memorial has the following inscription: “To the Punchbowl Soldiers who fought in the Great War 1914-1919. Their fellow citizens raised this token of appreciation”.

The street trees are a planting of palms and exotics along a wide median strip up The Broadway, plus palms along Hillcrest Road (Figure 279, Figure 280). The listing includes a tall araucaria in front of No.28 The Broadway. The plantings around the War Memorial date from c.1960s and are not included in the listing.

Figure 279: View of War Memorial, south aspect



Figure 280: View of street trees, north-west aspect



6.9.3 Description of elements

Punchbowl Railway Station Group

¹⁴⁴ Register of War Memorials in NSW, *Punchbowl Cenotaph*.

The table below outlines the main structures and elements comprised within the railway station group. Information such as date, description and condition is provided, and the significance of each element has been graded.

Table 74: Elements of Punchbowl Station Group

Elements	Date	Description	Condition	Significance
Platform 1/2	1909	One island platform with asphalt surface and original brick face and edge.	Generally good	High
Overhead booking office	1929	<p>The overhead booking office is a timber framed, weatherboard clad building with a hipped corrugated steel clad roof. It is designed in the Inter-War Transitional style. The original 1929 roof configuration consisted of a simple hipped roof with Dutch gables on the eastern and western ends and which covered the booking office, the parcels office, the booking hall and the eastern and western footbridges. The later lamp room addition extended the western side of the building to the north to make the building L shaped. A bookstall was added which added a further northern but smaller extension with an awning roof. The ticket collection cabin connected to the main booking office has been removed.</p> <p>Overall form and patterns of glazing have been altered by the early addition of the hipped roof lamp room (now used for storage), skillion roof bookstall, enclosure of footbridges, and curvilinear profile of modern footbridge and stair awnings; lamp room and bookstall additions otherwise sympathetic to historic function; Internal fixtures and fittings replaced with modern office furniture; doors relocated; ticket windows replaced with modern ticket windows or removed; ticket collector's cabin removed; footbridge stairs, balusters and rails replaced. Notable original attributes: simple open floor-plan of bookings/parcels office; internal tongue-and-groove board lining; external weatherboard siding; multi-pane sash windows; covered booking hall with AC ceiling; Dutch-gable roof vents.</p>	Good	High
Footbridge	1930, 2014	Typical footbridge with standard concrete platform supported on steel beams bearing on steel platform trestles and steel trestles on each side of the tracks from the Inter-War period. Extensive modifications including new balustrades to footbridge and stairs, new concrete treads and risers, a new glass enclosure and roofing canopies. The stairs to the street also have a new substructure.	Fair	Moderate
Toilet block, platform 1/2	1970s	The male and female toilets originally had a hipped roof which was replaced with a flat roof matching the adjacent main platform building. The roof spans between both buildings. Like the main building, the toilet is a simple rectangular building, with external walls of face brick, while the windows are aluminium framed.	Good	Moderate
Platform building, platform 1/2	Early 1980s	<p>External: Simple rectangular face brick building with a flat metal deck roof and high profiled metal fascia which extends as a cantilever awning on both sides. The windows are timber double hung and the doors are flush.</p> <p>Internal: The building consists of a station master's office, sign-on room a store and waiting room. Inside the waiting room the walls are face brick with a concrete floor, while the other rooms have their internal walls rendered. The metal clad soffit of the awning continues through as the internal ceiling to all rooms.</p>	Good	Moderate

Elements	Date	Description	Condition	Significance
Canopies and extensions to overhead booking office	c.2000s	A modern steel framed and steel roofed canopy has been erected over the platform access stairs and extends from the end of the main station building up to the overhead booking office. A contemporaneous canopy with glazed walling also extends across the southern footbridge.	Good	Little

6.9.4 Statements of significance

The following statements of significance for the heritage items located within the project area are reproduced from the SHI listings.

Table 75: Statements of significance for Belmore Station Catchment

Item	Statement of Significance	Listing
Punchbowl Railway Station Group	<i>Punchbowl Railway Station has local historical significance as it was one of the stations to be located on the Sydenham to Bankstown Line which was built to take pressure off the traffic on the Main South Line as well as promote agriculture and suburban development in the late 19th and early 20th centuries. The station reflects the extension of the line to Bankstown in 1909 and the overhead booking office, footbridge and stairs, reflect the development of suburbs in the area during the Interwar period. The overhead booking office has local aesthetic and technical significance as an example of the design by NSW Railways of these timber overhead structures built between 1910 and the 1950s. The overhead booking office is also significant as it is a fine example of its type, and because it is relatively intact with an unaltered lamp room.</i>	SHI
War Memorial and street trees	<i>An important streetscape with plantings typical of the early twentieth century in a street specially left wider than the others in the estate by the developer. Few other such streets survive in the Municipality.</i>	SHI

Punchbowl Station has been nominated for SHR listing as of 17 March 2016.

6.9.5 Heritage impacts

Direct impacts

Punchbowl Railway Station Group

The table below provides an assessment of the direct impacts of the project on the fabric of each element constituting the railway station and an assessment of the subsequent impacts on the heritage values of the station group as a whole.

Table 76: Assessment of direct impacts for Punchbowl Railway Station Group

Element	Significance	Proposed action	Assessment of impact
Platform 1/2 (1909)	High	Removal; platform to be rebuilt in straight alignment; covered concourse, access stairs, lift shafts, platform canopies and platform screen doors to be anchored on new platform	<p>The platform is proposed to be removed. This would have a major impact on the platform including the loss of the original brick face.</p> <p>The platform would be reconstructed in a straight alignment and extended to accommodate the workings of the new Metro trains. This would result in the loss of the historic curved platform. This would have a major impact on the original platform layout.</p> <p>The new covered concourse, access stairs, lift shaft, platform canopies and platform screen doors would be anchored and constructed on</p>

Element	Significance	Proposed action	Assessment of impact	
			the new platform. This would not further impact on significant fabric.	
			The complete demolition of Platform 1/2 to be reconstructed in straight lines and extended to accommodate the workings of the new Metro trains would result in a major impact on the station group overall.	
Overhead booking office (1929)	High	Removal for replacement with new covered concourse including access stairs and lift shafts	<p>It is proposed to remove the original overhead booking office for replacement with a new covered concourse including access stairs and lift shafts.</p> <p>The overhead booking office scored seven out of nine in the Sydney Trains Overhead Booking Offices Heritage Conservation Strategy¹⁴⁵. The strategy recommends adaptive reuse of the building.</p> <p>The removal of the overhead booking office would have a major impact on the original footbridge and station overall.</p>	Major
Footbridge (1930, 2014)	Moderate	Removal for replacement with new covered concourse including access stairs, lift shafts and station buildings	<p>It is proposed to remove the footbridge for replacement with a new covered concourse including access stairs and lift shafts.</p> <p>The footbridge was assessed as having moderate significance in the Railway Footbridges Heritage Conservation Strategy¹⁴⁶.</p> <p>This would have a major impact on the remaining original elements of the footbridge and a moderate impact on the station overall.</p>	Major
Toilet block, platform 1/2 (1970s)	Moderate	Removal for replacement with new covered concourse including access stairs and lift shafts	<p>It is proposed to remove the toilet block on Platform 1/2 for replacement with a new covered concourse including access stairs, lift shafts and new station buildings. This would have a major impact on the toilet block of moderate significance and a moderate impact on the station overall.</p>	Major
Platform building, platform 1/2 (early 1980s)	Moderate	Removal for replacement with new covered concourse including access stairs, lift shafts and station buildings	<p>It is proposed to remove the main building on Platform 1/2 for replacement with a new covered concourse including access stairs, lift shafts and new station buildings. This would have a major impact on the building of moderate significance and a moderate impact on the station overall.</p>	Major
Canopies and extensions to	Little	Removal for replacement with new covered concourse	<p>It is proposed to remove the canopies and extensions. This would result in a neutral impact on the station catchment.</p>	Neutral

¹⁴⁵ Australian Museum Consulting 2014. *Railway Overhead Booking Offices Heritage Conservation Strategy*. Prepared for Transport for NSW.

¹⁴⁶ NSW Government Architect's Office Heritage Group 2016. *Railway Footbridges Heritage Conservation Strategy*. Prepared for Sydney Trains.

Element	Significance	Proposed action	Assessment of impact
overhead booking office (c.2000s)		including access stairs and lift shafts	

When considering cumulative impacts, it is assessed that the project would result in a major direct impact on Punchbowl Railway Station Group overall.

Visual impacts

Punchbowl Railway Station Group

The proposed canopies above the new concourse would be larger in scale in comparison with the existing structures on the site. However, all station buildings including the Platform 1/2 building and toilet block as well as the overhead booking office and footbridge are proposed to be removed. Therefore, the scale of the proposed new development would not visually impact the heritage components of the site as they would no longer be present. Visual impacts would rather result from the removal of all structures at Punchbowl station. As the original platform dated 1909 and the original overhead booking office and stairs dated 1929-30 are proposed to be removed, all views and appreciation of these elements would be lost. There would be visual impacts resulting from the removal of the original brick face and curved layout of the platform, and of the replacement of the original island platform with two wayside platforms. This would result in a major visual impact on Punchbowl Railway Station. The removal of later structures including the 1970s toilet block and early 1980s platform building would have moderate visual impacts on the station. Any visual impacts resulting from the proposed upgrade works to the Punchbowl Road overbridge would not further detract significant views as the setting of the station would have been fully impacted.

The nature of the new concourse, canopies and station buildings would introduce a contemporary design to the station in replacement of the existing buildings. New platform buildings, medium-scale canopies and platform screen doors would be located along the reconstructed platforms on the east side of the station. The scale and height of the proposed canopy structure, the footprint of the overall concourse, stairs, new platform and station buildings as well as the platform canopies and platform screen doors would add considerable bulk to the originally low-scale station catchment. As a result, the new Metro station would come to replace the early nineteenth-century railway station with layers of 1970s and 1980s development with a contemporary transport interchange.

The proposed removal of all significant buildings and structures within the station would have a major visual impact where no original elements are retained to demonstrate the significance of the station for future appreciation. The project would fully re-develop the existing early nineteenth-century railway station with layers of 1970s and early 1980s development into a modern precinct.

When considering cumulative impacts, it is assessed that the project would result in a major visual impact on Punchbowl Railway Station Group.

War Memorial and street trees

No works are proposed to the War Memorial and street trees located on The Broadway as part of the project. A small section of the curtilage of the War Memorial and street trees is located within the study area where roads in proximity of Punchbowl Railway Station would provide access during the construction phase of the project. The area of impact does not comprise any of the significant trees which form part of the heritage significance of the item, and the War Memorial is located outside the project area to the south-east. Therefore, it is assessed that visual impacts to the heritage item would remain neutral and that any visual impacts of road works would be negligible.

Punchbowl Railway Station is located 150 to 275 metres away from the north boundary of the heritage item and views from this vantage point onto the station would be mostly screened by existing mature trees along The Boulevard. It would remain outside the visual catchment of the remainder of the curtilage of the heritage item including the listed trees and War Memorial as it would be screened by existing development on The Broadway. The works to Punchbowl Railway Station would result in a neutral visual impact on the item.

Visual impacts on the War Memorial and street trees would be negligible.

Post-war Civic Building (former Punchbowl Baby Health Centre)

The Post-war Civic Building is located approximately 80m north of the eastern end of the station platforms. The construction in the vicinity of the baby health centre consists of new platform screen doors, platform canopies, and a concourse canopy to a height of approximately 5.4m above the concourse. Views towards the railway corridor, platforms and station are mostly screened by vegetation and reduced by the distance. The proposed works would be keeping with the current visual landscape to and from the heritage item.

Visual impacts on the Post-war Civic Building would be negligible.

Potential direct impacts

The following table provides an assessment of potential direct impacts on heritage items within the station catchment.

Table 77: Potential direct impact assessment

Item	Potential direct impact assessment	Impact
Punchbowl Railway Station Group	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
War Memorial and street trees	Vibration levels would be under the cosmetic damage screening level.	Negligible
Post-war Civic Building (former Punchbowl Baby Health Centre)	Vibration levels would be under the cosmetic damage screening level.	Negligible

6.9.6 Overview of impacts

The table below provides a summary of impacts in accordance with the guidelines by the NSW OEH (Statement of Heritage Impact, 2002).

Table 78: Summary of Heritage Impacts – Punchbowl Station Catchment

Impact on a heritage item	Discussion
Aspects that respect or enhance the heritage significance of the heritage items located within the	<ul style="list-style-type: none"> • Neutral direct and negligible visual impacts on the War Memorial and street trees located along The Broadway • Negligible visual impacts on the Post-war Civic Building (former Punchbowl Baby Health Centre)

Impact on a heritage item	Discussion
station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> • Provided that mitigation measures are implemented, negligible to minor potential direct impacts as a result of vibrational work in the vicinity of heritage items
Aspects that would detrimentally impact on the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> • Removal of all elements of high significance within the station group including the 1909 island platform and the 1929 overhead booking office • Removal of all elements of moderate significance within the station group including the remaining original elements of the 1930 footbridge, the 1970s toilet block and the early 1980s platform building • Major direct and visual impacts on the station catchment due to the removal of all original structures and redevelopment of the early nineteenth-century catchment into a contemporary transport interchange

6.9.7 Statements of heritage impact

The following statements of heritage impact are provided for the heritage items located within Punchbowl Station Catchment and the 25-metre buffer zone:

Punchbowl Railway Station Group

The impacts of the project on Punchbowl Railway Station would be major. All elements of high and moderate significance within the station would be removed. There would be no tangible elements of significance remaining. This would have major direct and visual impacts on the station as a whole. The new development would introduce contemporary structures and alter the character of the station from an early nineteenth-century station with layers of 1970s and early 1980s development into a contemporary transport interchange. The setting of the station would be fully impacted.

The demolition of all original structures of high and moderate significance at Punchbowl Railway Station would remove the original station developed between 1909 and 1929 as well as its later layers of development dated from the 1970s and early 1980s. Punchbowl Railway Station is historically significant for being one of the original railway stations dated from the second stage of development of the Sydenham to Bankstown Line. A good example of an Inter-War Transitional style overhead booking office in the NSW railway networks would be lost, as would the original island platform. Therefore, the aesthetic significance of the station would be fully impacted. Although the existing structures have been subject to modifications overtime, their significance is retained in their historical and representative values as well as in substantial original fabric.

When assessed cumulatively, the level of heritage impact of the project on Punchbowl Railway Station Group would be major. The significance of the station is encompassed in its historical use which is represented by tangible elements including platforms and individual buildings. By removing these elements, there would be no tangible elements to represent the historic role of the station. The aesthetic significance of the station demonstrated in its nineteenth-century architecture with layers of 1970s and early 1980s development would also be lost. Interpretation would be able to convey the previous significance of the site but would not fully mitigate impacts and would not enable the heritage item retain its local significance. Therefore, the heritage item would no longer meet the threshold for local significance and would likely be delisted.

War Memorial and street trees

The direct impacts of the project onto the War Memorial and street trees would be neutral. The proposed works in the vicinity would result in a negligible visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the War Memorial and street trees would be negligible. The heritage item would continue to meet the threshold for local significance.

Post-war Civic Building (former Punchbowl Baby Health Centre)

The direct impacts of the project onto the Post-war Civic Building would be neutral. The proposed works in the vicinity would result in a negligible visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Post-war Civic Building would be negligible. The heritage item would continue to meet the threshold for local significance.

6.10 Bankstown Station Catchment

The Bankstown Station Catchment includes two heritage items, the Bankstown Railway Station Group and the Bankstown Parcels Office (former). The buffer zone around the station catchment includes one heritage item.

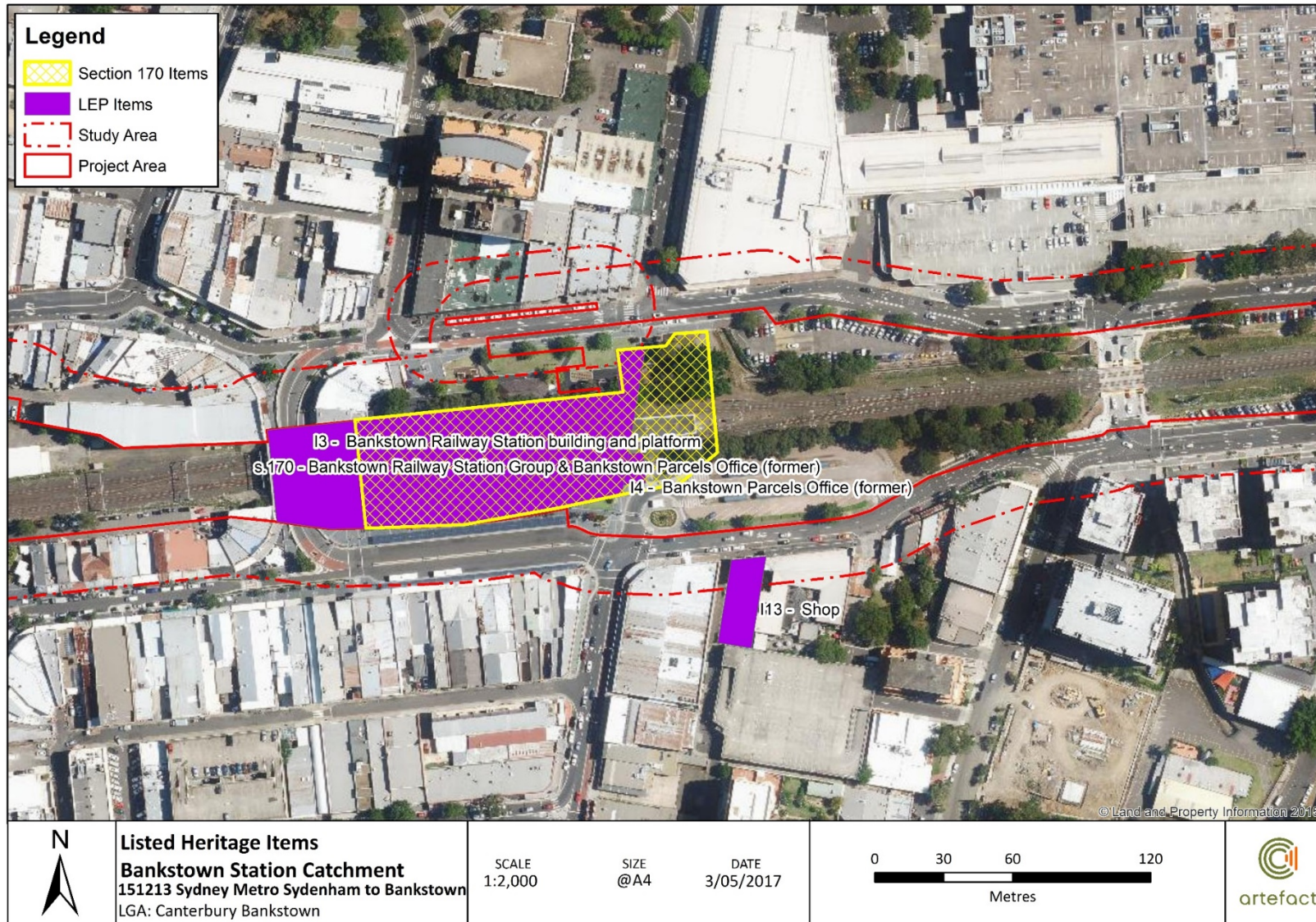
6.10.1 Summary of heritage listings

The table below provides a summary of the heritage items located within the station catchment and within the 25-metre buffer zone. An aerial map showing the heritage items within the station catchment is also provided below.

Table 79: Heritage items within Bankstown Station Catchment and buffer zone

Item	Suburb	Significance	Listing
Within project area			
Bankstown Railway Station Group	Bankstown	Local	RailCorp S.170 Heritage and Conservation Register (4802067) Bankstown LEP 2015 (I3)
Bankstown Parcels Office (former)	Bankstown	Local	RailCorp S. 170 Heritage and Conservation Register (4802067) Bankstown LEP 2015 (I4)
Within buffer zone (outside project area)			
Shop	Bankstown	Local	Bankstown LEP 2015 (I13)

Figure 281: Aerial map showing heritage items within study area: Bankstown



File Path: C:\Users\GIS\Desktop\GIS\GIS_Mapping\151213_Sydney_Metro_Bankstown_Sydenham\MXD\Heritage_Detail_BT

6.10.2 Existing environment

Bankstown Railway Station Group

Bankstown Station was designed by NSW Government Railways and built by George Leggo between 1908 and 1948. Bankstown Station is accessed from North Terrace and Old Town Centre Plaza. It has one island platform, an original building on the platform, an overhead booking office, a footbridge and a former parcels office which is located on the south side of the station opposite the east end of the platform (Figure 282 to Figure 287). The North Terrace overbridge crosses over the western end of the station and runs parallel to the footbridge (Figure 288, Figure 289). There is a considerably high level of commercial activity on either side of the station.

The construction contract for the Belmore to Bankstown section was awarded to Monie Bro on 13 November 1907. Bankstown Station was opened as a terminal on 14 April 1909, with Lakemba and Punchbowl Stations also opening at the same date. The extension of the line to Bankstown triggered a huge real estate boom in the area from 1909 until the late 1920s.

The original island platform was 145 metre long, with the tender for construction of the original brick buildings being awarded to George Albert Leggo on 25 August 1908. A contract was also awarded around this time for the construction of a station master's residence, which was to be located on the northern side of the tracks, near the goods yard and a goods shed built to the west of the old Chapel Road overbridge.

During 1910 a single tier water tank on a steel stand was erected on the south side, at the western end of the platform, near the overbridge, for the use of locomotives off terminating trains. The tank was removed in c.1970s. In the early 1920s, a pillar water tank and ash pit were provided for the up track locomotives.

The station expanded as Bankstown developed into a major centre. The station was provided with a parcels office in 1915, though this was superseded by a new parcels office and booking office in 1925, as well as platform extensions in 1926 for the electrification of the railway.

A TAP upgrade was proposed on the footbridge and overhead booking office in 2012. Works including installation of new stairs, ramps, canopies and ticket barriers were completed in 2015.

Figure 282: View of platform building, west aspect



Figure 283: View of Platform 1, west aspect



Figure 284: View of platform building, east aspect



Figure 285: View of Platform 1, east aspect



Figure 286: View of platform building detail, east aspect



Figure 287: View of Platform 1, west aspect



Figure 288: View of overbridge, west aspect



Figure 289: View of overbridge abutment, west aspect



Bankstown Parcels Office (former)

The parcels office is a Railway Stripped Functionalist style building (Figure 290 to Figure 292). It is a polychromatic brick face building with a flat roofed structure with asymmetrical massing. The building is accessible from the tracks and from the street as it has an entrance portal to its western face, a brick and concrete entrance portico to its eastern face and a timber and metal platform facing the tracks. The building has a number of Inter-War Functionalist influenced elements such as steel-framed circular porthole windows, steel-framed, multi-paned ribbon windows which are set within recessed and continuous stretches of concrete sills and lintels. The parcels office is currently used as a storage facility.

The building is of masonry construction with a parapeted roof and simple geometric massing. The building relies on simple but effective fenestration for decorative effect, including ribbon and porthole

windows, as well as the use of heeler and bullnosed bricks. The main elevation uses simple stepped massing to create interest, with a central recessed portico flanked by two, bullnosed brick piers. A dominant porthole window with stepped recessed sills and eight bands of horizontal projecting dichromatic brickwork in a garden wall bond add to the visual effect. The rear elevation of the building is similarly arranged, with the addition of a cantilevered steel awning over the entrance and a single bullnosed brick pier. The street elevation of the building is defined by steel framed ribbon windows interspersed with courses of heeler bricks in a lighter colour than the main bond, and bands of projecting dichromatic brickwork in garden wall bond. The overall design is characteristic of twentieth century railway Functionalism and displays the heavy influence of naval design in both massing and decorative detail.

No original plans for the former Bankstown Parcels Office have been located, but it is an excellent example of the Functionalist style in a railway context. Between 1925 and 1950, the State Rail Authority of NSW (SRA) planned buildings at 70 locations that reflected Art Deco and Functionalist design influences.

The bulk of these were passenger platform buildings, but in some instances ancillary building (most commonly parcels offices) were also erected under these design influences. Of these, only one other example of a Functionalist parcels office has survived, at Granville Station in Sydney's west. Although useful as a comparative example, the Granville parcels office does not display the same degree of architectural finesse or design detail as the Bankstown Parcels Office. The buildings erected during this period fall into four major design categories, of which twentieth Century Functionalist is the least common. This style is characterised by the use of projecting parapets to conceal the roof form; curves in the plan form; cantilevered steel awnings; steel framed windows (usually arranged in horizontal or vertical strips of glazing); porthole windows (often with recessed sills); horizontal string courses; stacked forms; complex geometric massing and decorative brickwork. The design was strongly influenced by the work of Willem Dudok; a Dutch architect whose style became popular in England in the early twentieth century before making its way to Australia in the Inter-War period. The Dudok style was disseminated in Australia by a number of architects, particularly Harry Rembert, then an architect with the NSW Government Architect's Office. The twentieth Century Functionalist style was generally reserved for major junction or terminal stations and the appearance of this style is generally a good indicator of the station's importance in the metropolitan rail network. Interestingly, the platform buildings at Bankstown Station are earlier and not executed in this style. The former Bankstown Parcels Office is a particularly fine example of the style, indicating the presence of an experienced and confident architect, itself an unusual occurrence in a department that looked almost exclusively to its engineers for building design. Understandably, these buildings that were designed by architects from outside the railways tend to "stand out" and the former Bankstown Parcels Office is likely to be such a building.

Figure 290: View of parcels office, north aspect



Figure 291: View of parcels office, west aspect



Figure 292: View of parcels office, south-west aspect



6.10.3 Description of elements

Bankstown Railway Station Group

The table below outlines the main structures and elements comprised within the railway station group. Information such as date, description and condition is provided, and the significance of each element has been graded.

Table 80: Elements of Bankstown Station Group

Elements	Date	Description	Condition	Significance
Platform 1/2	1909	Platform 1/2 has is an island platform arrangement with original brick faces.	Good	High
Platform building, platform 1/2 (Type 11). ¹⁴⁷	1909, 1923	<p>External: Rectangular building eight bays long with stretcher bond brickwork. The bays are defined by engaged brick piers that have decorative concrete corbels and standard steel double bowed brackets that support cantilevered awnings. The awnings which have curtain board fascia are integrated with the gable roof of the building and the roofing material for both the awning and the roof is corrugated steel. The roof has original timber finials. The brickwork is polychromatic with dark bricks throughout and a dado of lighter ochre coloured bricks which are also repeated at a ceiling level as a moulded course. Original chimneys with cement mouldings and terracotta flues have been retained.</p> <p>The external walls rise from a projecting brick plinth with a decorative two part cement dado moulding which is continuous between door and window openings. Cement window and door frames rise from the dado moulding. Most of the door and window openings are original and the windows feature a decorative moulded cement sill. The original timber windows were double hung with double paned lower sashes and in some cases louvered upper sashes and in others multi-paned upper sashes featuring coloured glass. The doors are timber panelled and had fanlights fitted with multi-paned coloured glass sashes. The eastern end brick gable wall features a louvre within a round brick window framed in voussoir shaped bricks, with four cement keystones. Most of the original windows have been retained, while some have</p>	Good	Exceptional

¹⁴⁷ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		<p>been fitted with steel safety grills towards the inside and in other cases a few windows have been removed and the openings have been bricked in. Most of the original doors have been retained, and some have been fitted with flyscreen meshes towards the outer side and aluminium safety grills towards the inside. The original door opening to the eastern end gable wall has been readjusted so as to centre it, and it has been fitted with a new timber panelled door and fanlight. Part of the western end gable wall has been demolished and the openings created have been fitted with two new multi-paned windows and fanlights.</p> <p>Internal: The building was originally six bays long and comprised of a booking office, a general waiting room, a ladies waiting room with an attached lavatory and male toilets. In 1923 two bays were added to the eastern end of the building and a parcels office was incorporated as part of the building. Currently the building comprises of a control room, staff locker and lounge areas, public toilets and a store. Original pressed metal ceilings with ceiling roses have been retained in some of the rooms.</p>		
Overbridge	1909, 1997	<p>The Bankstown City Plaza overbridge crosses over the western end of the station. The structure is a modified steel jack-arch overbridge which comprises of filled in arched brickwork between steel web-girders, supported by central brick piers and side brick abutments. The bridge has been widened and modified with new concrete structure and new surfacing. The brick piers and abutments have been retained. The concrete planks are supported on the existing brick piers and abutment banks seats. The overall length of the bridge is approximately 26m. The original brick parapets have been removed.</p>	Fair	Moderate
Overhead booking office (Type 19) ¹⁴⁸	1948	<p>External: It is a weatherboard structure occupying most of the western side of the footbridge and it includes an office space to the north. The booking office had five ticket windows facing onto the concourse. The attached office space has an original timber double hung window with multi-paned upper and lower sashes and an original timber multi-paned pivot fanlight. Both the windows have been fitted with steel safety grilles to the outside. Adjacent to the booking office is a three storey brick shopping centre which is not included in the listing.</p> <p>Internal: The original booking office was larger than it is currently. Part of the southern end of the original booking office was partitioned off and integrated with the tenancy space next to it. All the original windows along the western face of the booking office have been removed. There were initially five ticketing windows and one has been retained. Other original fabric that remains includes the original internal wall between the booking office and office space to its north and all steel structural columns.</p>	Good	Moderate
Footbridge	1948	<p>The footbridge runs over the western end of the platforms. The entrances to the station are from Old Town Centre Plaza and North Terrace via the footbridge. However, unlike this north-south orientated entrance, the original entrance to the station was along the east-west</p>	Good	Little

¹⁴⁸ See Section 2.2.6 Station building types

Elements	Date	Description	Condition	Significance
		central axis of the footbridge connecting the existing stairs to the overbridge to the west. The footbridge comprises of a concourse area and stairs that lead down to the platforms. It is made of in-situ reinforced concrete slabs resting on a system of steel columns, girders and braces and is a fully covered structure. It has weatherboard walls and a combination of roof types including pyramid roofs and hipped roofs and all the roofs are made of corrugated steel sheeting. The original functions on the footbridge included a booking office and newsagency along its western end, two porter cabins and a staff room to the eastern edge. Currently the footbridge accommodates the booking office, a newsagency along its west end, the station manager's office at its south-western corner, a lift and ticket barriers to its north-western end.		
Canopies	Modern	The canopy which covers the space on the platforms between the platform building and the stairs leading down from the footbridge is a recent structure. It is composed of a series of overlapping canopies. The central canopy has two sections, one is a gabled roof structure made of aluminium and glass, the other is corrugated steel, flat roofed structure, and it is flanked on either side by corrugated steel, skillion roofed canopies. All the canopies rest on steel I columns and beams.	Good	Intrusive
Landscape/natural features		There is a palm tree planted next to the eastern end entrance portico of the former parcels office and it is possible that the tree was planted at the time of construction of the parcels office.	Good	Moderate

6.10.4 Statements of significance

The following statements of significance for the heritage items located within the project area are reproduced from the SHI listings.

Table 81: Statements of significance for Belmore Station Catchment

Item	Statement of Significance	Listing
Bankstown Railway Station Group	<i>Bankstown Railway Station complex has local significance as a station which dates from the early 20th century expansion of the railways between Belmore and Bankstown undertaken to accommodate suburban development, particularly the war service residential development which took place during the interwar period. The collection of railway structures dating from the 1909 opening of the station and its expansion in the 1940s reflect the real estate boom in the area and the development of Bankstown into a major centre. The 'initial island' platform building, Railway Stripped Functionalist style former parcels office, timber overhead booking office and footbridge collectively characterise the type of construction and architectural style employed in early 20th century railway station buildings and associated structures in the Sydney region.</i>	SHI
Bankstown Parcels Office (former)	<i>The Former Bankstown Parcels Office is an excellent example of Inter-War Functionalist design in an urban railway setting. The building is well executed and displays many typical stylistic elements of Functionalist station buildings in NSW. The building's design displays a sound understanding of the philosophies and architectural principles of Functionalism. The building has significance as part of a wider typological group in NSW, as well as part of a smaller sub-set of similar buildings in Sydney's western suburbs, and individually. The building is notable for its use of decorative bonded brickwork, bullnosed and heeler bricks,</i>	SHI

Item	Statement of Significance	Listing
	<i>parapeted roof line, ribbon and porthole windows. The building demonstrates the effects of war time financial constraints on building programs for large organisations such as State Rail and has social value through its reflection of these war time values.</i>	

6.10.5 Heritage impacts

Direct impacts

Bankstown Railway Station Group

The table below provides an assessment of the direct impacts of the project on the fabric of each element constituting the railway station and an assessment of the subsequent impacts on the heritage values of the station group as a whole.

Table 82: Assessment of direct impacts for Bankstown Railway Station Group

Element	Significance	Proposed action	Assessment of impact	Impact summary
Platform 1/2 (1909)	High	Existing station platforms would be retained and a new island platform would be provided to the east of the new station entrance. Platform to be rebuilt in straight alignment to the east; covered concourse, access stairs, lift shafts, platform canopies and platform screen doors to be anchored on section of extended platform	The platform is proposed to be retained except for the eastern end of the platform. The platform would be reconstructed in a straight alignment and extended to the east to accommodate the workings of the new Metro trains. This would result in the loss of the historic curved platform. This would have a major impact on the original platform layout. The new covered concourse, access stairs, lift shaft, platform canopies and platform screen doors would be anchored and constructed on the new platform. This would not further impact significant fabric. A platform canopy would be constructed on the existing platform to the east of the current station building. This would have a moderate direct impact to the platform. The partial removal of the eastern end of Platform 1/2 to be reconstructed in straight lines and extended to accommodate the workings of the new Metro trains would result in a major impact on the station group overall.	Major
Platform building, platform 1/2 (Type 11) (1909, 1923). ¹⁴⁹	Exceptional	Retention for re-use with potential retrofitting	The retention of the platform building is a positive heritage outcome in the context of the project. Retrofitting for new accommodation should be designed to minimise impacts to original fabric. Original layout should be preserved where possible. The opportunity could be taken to remove any intrusive modifications to the structure. Any additions to the building and platform should be designed to be sympathetic to the heritage context and minimise fabric and visual impacts. The project would have a minor impact on the heritage values of the building and station overall.	Minor

¹⁴⁹ See Section 2.2.6 Station building types

Element	Significance	Proposed action	Assessment of impact	Impact summary
Overbridge (1909, 1997)	Moderate	Retention and upgrades	The structure is proposed to be retained for ongoing use with a maintenance and protection works overhaul. This would involve removal and replacement of the non-significant parapets. This would result in a minor impact on the overbridge and Bankstown Railway Station.	Minor
Overhead booking office (Type 19) (1948) ¹⁵⁰	Moderate	Retention for ongoing use	The structure is proposed to be retained for ongoing use. This would result in a neutral impact on the overhead booking office and Bankstown Railway Station. The overhead booking office is not identified in the Sydney Trains Overhead Booking Office Conservation Strategy.	Neutral
Footbridge (1948, 2012-13)	Little	Retention for ongoing use	The structure is proposed to be retained for ongoing use. This would result in a neutral impact on the footbridge and Bankstown Railway Station. The footbridge was assessed as having little significance as per the Railway Footbridges Heritage Conservation Strategy. ¹⁵¹ Footbridges of little significance can be conserved and adapted or where there is no reasonable alternative, demolished.	Neutral
Canopies (Modern)	Intrusive	Retention for ongoing use	The structure is proposed to be retained for ongoing use. This would result in a neutral impact on Bankstown Railway Station.	Neutral
Landscape/natural features	Moderate	Retention	Landscape elements at Bankstown Railway Station are limited to a palm tree next to the eastern end entrance portico which may have been planted at the time of construction of the parcels office. The tree is proposed to be retained as existing. This would result in a neutral impact on the existing landscape features and Bankstown Railway Station.	Neutral

When considering cumulative impacts, it is assessed that the project would result in a moderate direct impact on Bankstown Railway Station Group overall.

Bankstown Parcels Office (former)

The parcels office is a Railway Stripped Functionalist style building with polychromatic brick face, flat roofed structure with asymmetrical massing. The parcels office has good integrity and is currently used as a storage facility. The structure is proposed to be retained for ongoing use. This would result in a neutral direct impact on the parcels office and Bankstown Railway Station.

Any retrofitting for re-use of the parcels office should be designed to minimise impacts to original fabric. The original layout should be preserved where possible. The opportunity could be taken to

¹⁵⁰ See Section 2.2.6 Station building types

¹⁵¹ NSW Government Architect's Office Heritage Group 2016. *Railway Footbridges Heritage Conservation Strategy*. Prepared for Sydney Trains.

remove any intrusive modifications to the structure. If these considerations are implemented, it is expected the project would have a minor direct impact on the heritage item.

Direct impacts of the works onto Bankstown Parcels Office (former) would be neutral.

Visual impacts

Bankstown Railway Station Group

The proposed new structures would be sited on the east side of Bankstown Station on a platform extension and be located at a distance from the existing station buildings. The overhead booking office, footbridge, platform building and part of the brick platform would remain on the west side. There would be a visual impact resulting from straightening of the eastern curved layout of the platform. This visual impact would be moderate overall.

The contemporary nature of the new development would differ from the existing heritage character of the station group, however, this would create a contradistinctive relationship with the historic components of the site. The new station buildings would be of a similar scale as the heritage buildings and located at a notable distance. This would have a minor visual impact. The new concourse and access stairs would add considerable footprint and bulk within the station. However, they would also be located at a distance of approximately 80 metres from the platform building. The bulk of the new covered concourse would be reduced by this distance so that visual impacts would remain minor. A new platform canopy would be located on the current platform to the east of the station building and would extend within two meters of the significant platform building resulting in a moderate visual impact.

Medium-scale canopies and platform screen doors would be located to the east of the new concourse and would be mostly screened from significant views. Platform screen doors would rise to human height along the platform extension to accommodate the specific workings of Metro trains. These screen doors would be made of a steel structure and glazing. The proposed platform screen doors would not be located along the original platform and would not obstruct views onto the platform building.

Overall, the project would add a contemporary layer of development on the east side of the station in contrast with the heritage components on the west side. Views onto the heritage buildings within the station catchment would be partially obscured by the large ribbon canopy extending from the concourse to the west. The new concourse would be large in scale but would be located at a notable distance from the heritage structures so that they would not be overly dominant. The project would alter the existing setting of Bankstown Railway Station and the large ribbon canopy would partially obstruct views onto the platform building, resulting in moderate visual impacts overall.

The services building would not visually dominate significant elements of the station catchment as it is located around 150m to the east.

When considering cumulative impacts, it is assessed that the project would result in a moderate visual impact on Bankstown Railway Station Group.

Bankstown Parcels Office (former)

The Railway Stripped Functionalist building has a number of Inter-War Functionalist influenced elements such as steel-framed circular porthole windows, steel-framed, multi-paned ribbon and has good integrity. The structure is proposed to be retained for ongoing use. This would result in a neutral visual impact on the parcels office and Bankstown Railway Station.

Any retrofitting for re-use of the parcels office should be designed to minimise impacts to original fabric and retain original detailing and features. The original layout should be preserved where

possible. The opportunity could be taken to remove any intrusive modifications to the structure. If these considerations are implemented, it is expected the project would have a minor visual impact on the heritage item.

Visual impacts on Bankstown Parcels Office (former) would be neutral.

Shop

The Shop is located approximately 55m south-east of the eastern end of the station platforms. Views towards the railway corridor and station are currently mostly screened by vegetation and the existing bus interchange along South Terrace. The proposed new canopy and concourse would be located in the eastern section of the station to the north of the heritage item but would remain mostly screened by existing development and vegetation.

Visual impacts on the Shop would be negligible.

Potential direct impacts

The following table provides an assessment of potential direct impacts on heritage items within the station catchment.

Table 83: Potential direct impact assessment

Item	Potential direct impact assessment	Impact
Bankstown Railway Station Group	Vibration levels would be under the cosmetic damage screening level.	Negligible
Bankstown Parcels Office (former)	Modelling indicates that the closest façade of this item would experience vibration levels above the screening level for cosmetic damage. Further assessment and management would be undertaken in accordance with management measures outlined in Technical Paper 2 - Noise and vibration assessment.	Minor
Shop	Vibration levels would be under the cosmetic damage screening level.	Negligible

6.10.6 Overview of impacts

The table below provides a summary of impacts in accordance with the guidelines by the NSW Office of Environment & Heritage (Statement of Heritage Impact, 2002).

Table 84: Summary of Heritage Impacts – Bankstown Station Catchment

Impact on a heritage item	Discussion
Aspects that enhance the heritage significance of the heritage items located within the station catchment and the 25-metre buffer zone.	<ul style="list-style-type: none"> Retention for re-use of the element of exceptional significance, the Platform 1/2 building, with potential for positive heritage impacts during retrofitting and upgrade works Retention for ongoing use of elements of moderate significance within the station including the overhead booking office and overbridge Neutral impacts of the retention of elements of little or intrusive significance such as the modified footbridge or modern canopies Neutral to minor direct and visual impacts of the retention of the Parcels Office, with potential for positive heritage impacts if retrofitted for re-use Neutral to negligible visual impacts to heritage items in the buffer zone

Impact on a heritage item	Discussion
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- Provided that mitigation measures are implemented, negligible to minor potential direct impacts as a result of vibrational work in the vicinity of heritage items
- Continued use of the heritage item in its historical function as part of the evolution of the Bankstown Line

Aspects that would detrimentally impact on the heritage

significance of the heritage items located within the station catchment and the 25-metre buffer zone.

- Major direct and moderate visual impacts to the 1909 platform of high significance
- Moderate visual impact on the Bankstown Railway Station Group overall

6.10.7 Statements of heritage impact

The following statements of heritage impact are provided for the heritage items located within Bankstown Station Catchment and the 25-metre buffer zone:

Bankstown Railway Station Group

The direct impacts on Bankstown Railway Station would be moderate. The platform building of exceptional significance would be retained with potential for positive impact. The eastern curve of the original platform of high significance would be removed which would result in a major direct impact. All other heritage elements would be retained. Views onto the heritage buildings would not be obstructed by the new Metro concourse which would be located at a notable distance from the existing station. Views onto the heritage buildings within the station catchment would be partially obscured by the large ribbon canopy extending from the concourse to the west. Due to the obstruction of views, visual impacts on the station would be moderate overall. Potential direct impacts as a result of vibration would be negligible.

The retention of all elements of significance at Bankstown Railway Station, apart from the curved eastern section of the original platform, would enable the station to continue to demonstrate its historic, aesthetic and representativeness significance. The retention of the platform building of exceptional significance would retain the historical values of the place as one of the original railway stations dating from the early 20th century expansion of the railways between Belmore and Bankstown on the Bankstown Line. The platform building is an excellent example of its type and would continue to contribute to the presentation of the station.

When assessed cumulatively, the level of heritage impact of the project on Bankstown Railway Station Group would be moderate. Based on the historical significance of the station and the heritage values of the retained buildings, the heritage item would continue to meet the threshold for local significance.

Bankstown Parcels Office (former)

The direct impacts of the project onto the Bankstown Parcels Office (former) would be neutral. The proposed works in the vicinity would result in a neutral visual impact overall. Potential direct impacts as a result of vibration would be minor provided that mitigation measures are implemented.

When assessed cumulatively, the level of heritage impact of the project on the Bankstown Parcels Office (former) would be neutral. The heritage item would continue to meet the threshold for local significance.

Shop

The direct impacts of the project onto the Shop would be neutral. The proposed works in the vicinity would result in a negligible visual impact overall. Potential direct impacts as a result of vibration would be negligible.

When assessed cumulatively, the level of heritage impact of the project on the Shop would be negligible. The heritage item would continue to meet the threshold for local significance.

7. ARCHAEOLOGICAL ASSESSMENT

The potential for a site to contain historical archaeology is assessed by identifying former land uses and associated features through historical research, and evaluating whether subsequent actions (either natural or human) may have impacted on evidence for these former land uses. The significance of those potential archaeological remains is then assessed using a framework based on the NSW heritage criteria.

This historical archaeological assessment is based on the following:

- review of heritage and archaeological site listings
- analysis of historical background and maps
- understanding of previous impacts
- assessment of archaeological significance.

7.1 .Marrickville Station Catchment

7.1.1 .Land use summary

The historical development of the Marrickville Station Catchment and surrounds can be divided into the following phases of activity:

- Phase 1 (1788 – 1850s) early land grants: land clearance, timber getting, farming, dairying, market gardens
- Phase 2 (1850s – 1890s) subdivision and industry: subdivision for country estates, Marrickville village and later residential development, market gardens and dairying give way to small-scale brickmaking businesses and other industry
- Phase 3 (1890s – 1920s) railway station: construction of railway station in 1894-5 with standard design, upgrades including Metropolitan Goods line in 1917, electrification in the 1920s
- Phase 4 (1930s – present) railway station: upgrades and continued use

Construction of the railway station and rail line in the late nineteenth century would have included a considerable amount of ground disturbance and excavation. Rail and station upgrades throughout the twentieth century would have resulted in high levels of ground impacts throughout the station catchment.

7.1.2 .Archaeological potential

The Marrickville Station CMP (David Scobie 2016) identified the following potential archaeological remains.

Table 85: Archaeological potential identified in CMP 2016

Station Element	Potential Archaeological Remains
Platform 1	<ul style="list-style-type: none"> The remnants of the original stone copings on Platform 1 remain beneath the western end, as revealed in the 2015 excavations – confirmed relics and works with significance Earlier alignment of the north side of the eastern end of the platform The footscrapers at the door thresholds and buried services within the platforms concealed by later re-surfacing – a high potential for relics with significance; Identified within the vicinity of the new lift and stairs are likely to be remnants of the original lever set. The manual set of levers for activating the points was demolished when the system was automated - a high potential for relics of significance in relation to signalling The current concrete staircase replaced earlier stairs to the Illawarra Road bridge from Platform 1 – a high potential for works with low significance The original bull nose canopies at the eastern and western ends of the Platform 1 building were replaced with extended skillion roofed canopies – a medium potential for works with low significance Remnants of brick dwarf walls as part of the alignment of the eastern ends of the platforms running both north south and east west beneath the Platform 1 surfaces were revealed in the 2015 excavations for services – a high potential for works with low significance. The Illawarra Road bridge replaced the original level crossing – a low potential for relics
Platform 2	<ul style="list-style-type: none"> Potential for early works and relics at the western end The Illawarra Road bridge replaced the original level crossing – a low potential for relics The footscrapers at the door thresholds and buried services within the platforms concealed by later re-surfacing – a high potential for relics with significance
Platform 1 building	<ul style="list-style-type: none"> One ceiling space has revealed an early water tank utilised to provide a head of pressure for the original toilets. Other ceiling and roof void spaces have the potential to reveal similar artefacts such as water tanks and redundant services; and Areas within the building which have been subject to less substantial change have the potential to reveal early fabric and details which may have been concealed by later works such as fireplaces and chimney breasts.
Platform 2 booking office	<ul style="list-style-type: none"> Archived drawings indicated that the building had been relocated and extended in 1945 to the current location at the western end of Platform 2. Simple brick footings and services connections were revealed at the last location. Similar footings with a concrete foundation were constructed in the new location.

Based on the history of the site and disturbance that has occurred in the area, archaeological remains are likely to consist of post-railway structures and services.

Table 86: Assessment of archaeological potential for Marrickville Station Catchment

Phase	Likely archaeological remains	Potential
1 (1788-1850s)	<ul style="list-style-type: none"> No documentary evidence of specific activities or development with the site. Archaeological features associated with land clearance such as tree boles, evidence of dairy farming and market gardening including fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters. 	Nil-low

Phase	Likely archaeological remains	Potential
2 (1850s – 1890s)	<ul style="list-style-type: none"> No documentary evidence of specific activities such as brickmaking or residential development within the site. Archaeological features associated with farming such as fence or shed postholes, field drains and isolated artefacts, drains or culverts associated with the former creek 	Nil-low
3 (1890s – 1920s)	<ul style="list-style-type: none"> Archaeological remains associated with the early phase of railway infrastructure such as ceramic service pits, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. Identified remains of original stone copings, earlier alignment of platforms, footscrapers, buried services, original lever set, footings of former platform stairs, platform brick dwarf walls, and building footings. Moderate potential for footings of former platform canopies Low potential for former level crossing at the current Illawarra Road overbridge It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades. 	Moderate-high
4 (1930s – present)	<ul style="list-style-type: none"> Archaeological remains associated with upgrades such as utilities and drainage 	Moderate-high

7.1.3 Archaeological significance

The following assessment of significance is based on the guidelines discussed in Section 2.3 of this report.

Table 87: Assessment of archaeological significance for Marrickville Station Catchment

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> It is highly unlikely that archaeological remains associated with Phase 1 and Phase 2 would be present within the site. Any remains would be highly truncated and would not have research potential. Potential archaeological remains associated with Phase 3 former rail infrastructure would be able to contribute additional information not available from other historical resources.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The potential archaeological remains are not associated with any particular individual of historical importance. The development of the rail network facilitated economic development and suburban growth in Sydney in the latter half of the nineteenth and early twentieth centuries. Marrickville Station was built as part of the Bankstown Line between (1895-1939). The potential Phase 3 archaeological remains are associated with the historical development of Bankstown rail line and Marrickville Station.
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains are not likely to have aesthetic value. Remains of former rail infrastructure may demonstrate changes in technology and rail engineering over time. However, they are not expected to demonstrate technical significance.
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> The potential archaeological remains have potential to illustrate the early development of the railway station.

Criteria	Discussion
Statement of Significance	<ul style="list-style-type: none"> • Nil to low potential for archaeological remains associated with nineteenth century farming. Any remains unlikely to have research value. • Moderate to high potential for archaeological ‘works’. • The potential Phase 3 and 4 archaeological remains are associated with the historical development of the Bankstown rail line and the Marrickville Station, although they are likely to be truncated. • Potential to reach the threshold for local heritage significance. Note that most potential remains identified by the CMP would be classified as works not relics.

7.1.4 .Impact assessment

Proposed impacts within the Marrickville Station Catchment would include the construction of station platforms along the rail corridor, gas pipeline and CSR utility installation and trenching, the installation of drainage pipes, single grate drainage pits, gas pipelines and CSR utilities, the removal and replacement of the Illawarra Road overbridge, and the construction of a proposed noise wall along the southern boundary of the station between Riverdale Avenue and Charlotte Avenue overbridge. The majority of these works would involve trenching and subsurface ground disturbance within the existing rail and road corridor.

There are likely to be impacts to potentially significant archaeology as a result of these works.

7.1.5 .Mitigation and management measures

The area within the Marrickville Station Catchment has been assessed as having low potential to contain archaeological remains associated with Phase 1 and 2 and moderate to high potential to contain archaeological remains associated with Phase 3 and 4 occupation of the site. The majority of potential archaeological remains are not considered likely to reach the threshold of local significance. However, remains associated with Phase 3 may reach the threshold for local significance if intact or substantial remains are found to exist within the project area.

The Marrickville Railway Station CMP (2016) identified a number of visible and potential remains that were discussed in terms of archaeology. While the majority of identified remains would be classified as works and would be managed archaeologically, a number such as the water tank in the ceiling cavity would be managed under the significant fabric salvage strategy (Section 10), as they would not be considered archaeological under the definition provided in the Heritage Act.

As there is potential for remains associated with Phase 3 occupation of the site to have local significance, it is recommended that an Archaeological Research Design be prepared to manage and mitigate impacts to the potential archaeological resource. Any items to be managed under the salvage strategy would be identified in an Archaeological Research Design prepared and implemented to identify the need for archaeological testing or monitoring.

Archaeological mitigation measures recommended in the archaeological research design would be carried out in accordance with Heritage Council guidelines, and where identified in the archaeological research design, would be supervised by a suitably qualified Excavation Director with experience in managing locally significant archaeology.

Where an archaeological research design is required, it would be prepared based on research information included in this report and would be supplemented by additional detailed historical research of each site with reference to the project design and proposed construction methods at each site. Based on the detailed literature review, the archaeological research designs would identify the need for and provide a detailed methodology for undertaking:

- Archaeological monitoring

- Investigation and recording archaeological remains identified in the CMP

7.2 Dulwich Hill Station Catchment

7.2.1 Land use summary

The historical development of the Dulwich Hill Station Catchment and surrounds can be divided into the following phases of activity:

- Phase 1 (1788 – 1840s) early land grants and the Petersham Estate: land clearance, timber getting, grazing, farming activity, deer hunting
- Phase 2 (1840s – 1890s) market gardening and subdivision: development of market gardening and orcharding, small scale industry such as brickmaking and potteries, and suburban subdivision
- Phase 3 (1890s – 1930s) railway station: construction of railway station in 1895, demolition of initial timber station buildings and construction of brick buildings, electrical and other upgrades in 1930s
- Phase 4 (1940s – present) railway station: upgrades and continued use

Construction of the railway station and rail line in the late nineteenth century would have included a considerable amount of ground disturbance and excavation. Rail and station upgrades throughout the twentieth century would have resulted in high levels of ground impacts throughout the station catchment.

7.2.2 Archaeological potential

Based on the history of the site and disturbance that has occurred in the area, archaeological remains are likely to consist of post-railway structures and services.

Table 88: Assessment of archaeological potential for Dulwich Hill Station Catchment

Phase	Likely archaeological remains	Potential
1 (1788-1850s)	<ul style="list-style-type: none"> • No documentary evidence of specific activities or development with the site. • Archaeological features associated with land clearance such as tree boles, evidence of estate farming activities such as fence line postholes, former shed postholes, field drains, isolated artefact scatters. 	Nil-low
2 (1850s – 1890s)	<ul style="list-style-type: none"> • No documentary evidence of specific activities such as brickmaking or residential development within the site. • Archaeological features associated with farming and market gardening such as fence or shed postholes, field drains and isolated artefacts, drains or culverts. 	Nil-low
3 (1890s – 1930s)	<ul style="list-style-type: none"> • Archaeological remains associated with the early phase of railway timber buildings such as postholes, drains and former surfaces, and early infrastructure such as ceramic service pits, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. • Evidence of former platforms that may remain within existing remodelled platforms. • It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades. 	Low-moderate

Phase	Likely archaeological remains	Potential
4 (1940s – present)	<ul style="list-style-type: none"> Archaeological remains associated with upgrades such as utilities and drainage 	Moderate

7.2.3 Archaeological significance

The following assessment of significance is based on the guidelines discussed in Section 2.3 of this report.

Table 89: Assessment of archaeological significance for Dulwich Hill Station Catchment

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> It is highly unlikely that archaeological remains associated with Phase 1 and Phase 2 would be present within the site. Any remains would be highly truncated and would not have research potential. Potential archaeological remains associated with Phase 3 former timber station buildings, former platforms and rail infrastructure would unlikely contribute additional information not available from other historical resources. It is unlikely that artefact-bearing deposits associated with the early timber station buildings accumulated or survived subsequent brick station building development.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The potential archaeological remains are not associated with any particular individual of historical importance. The development of the rail network facilitated economic development and suburban growth in Sydney in the latter half of the nineteenth and early twentieth centuries. Dulwich Hill Station was built in 1895 as part of the Bankstown Line. The potential Phase 3 archaeological remains are associated with the historical development of Bankstown rail line and Dulwich Hill Station.
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains are not likely to have aesthetic value. Extensive and intact remains of former timber station buildings are not expected to be present. Former rail infrastructure may demonstrate changes in technology and rail engineering over time. However, they are not expected to demonstrate technical significance.
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> The potential archaeological remains are not considered to have the ability to illustrate the historical development of Dulwich Hill or the early development of the railway station.
Statement of Significance	<ul style="list-style-type: none"> Nil to low potential for archaeological remains associated with nineteenth century farming. Any remains unlikely to have research value. Low to moderate potential for archaeological remains of former 'works' including former platforms. Though the potential Phase 3 and 4 archaeological remains are associated with the historical development of the Bankstown rail line and the Dulwich Hill Station, they are likely to be truncated and not contribute further information regarding these development phases. Unlikely to reach the threshold for local heritage significance.

7.2.4 Impact assessment

Proposed impacts within the Dulwich Hill Station Catchment would include the construction of a station service building, retaining wall along the southern boundary of the station and abutments of the Dudley Street overbridge, construction of new station platforms along the rail corridor, addition of Metro South West running tracks (MSWs), installation of drainage pipes, single grate drainage pits, gas pipelines and CSR utilities and the construction of a proposed segregation fence along the northern boundary of the station. The majority of these works would involve trenching and subsurface ground disturbance within the existing rail and road corridor.

There are unlikely to be impacts to significant archaeology as a result of these works.

7.2.5 Mitigation and management measures

The area within the Dulwich Hill Station Catchment has been assessed as having nil to low potential to contain archaeological remains associated with Phase 1 and 2 and low to moderate potential to contain archaeological remains of Phase 3 and 4 occupation of the site. Potential remains are not considered likely to reach the threshold of local or State significance.

However, there is potential for unexpected archaeological remains of structures and activities associated with earlier phases to exist within the area. Therefore, it is recommended that an Unexpected Finds Policy be implemented during the proposed development to manage and mitigate potential impacts to the potential archaeological resource.

7.3 Hurlstone Park Station Catchment

7.3.1 Land use summary

The historical development of the Hurlstone Park Station Catchment and surrounds can be divided into the following phases of activity:

- Phase 1 (1788 – 1860s) early land grants: land clearance, timber getting, grazing, farming activity associated with the Campbell estate
- Phase 2 (1860s – 1890s) subdivision, farming and brickmaking: subdivision for smaller farms, agricultural industry such as dairy farming and small-scale brickmaking businesses
- Phase 3 (1890s – 1920s) railway station: construction of railway station in 1894, construction of the Metropolitan Goods line and platform in 1911, demolition of initial timber station buildings and construction of brick buildings in 1915, electrical and other upgrades in c1920s
- Phase 4 (1930s – present) railway station: upgrades and continued use

Construction of the railway station and rail line in the late nineteenth century would have included a considerable amount of ground disturbance and excavation. Rail and station upgrades throughout the twentieth century would have resulted in high levels of ground impacts throughout the station catchment.

7.3.2 Archaeological potential

Based on the history of the site and disturbance that has occurred in the area, archaeological remains are likely to consist of post-railway structures and services.

Table 90: Assessment of archaeological potential for Hurlstone Park Station Catchment

Phase	Likely archaeological remains	Potential
1 (1788-1860s)	<ul style="list-style-type: none"> • No documentary evidence of specific activities or development with the site. • Archaeological features associated with land clearance such as tree boles, evidence of estate farming activities such as fence line postholes, former shed postholes, field drains, isolated artefact scatters. 	Nil-low

Phase	Likely archaeological remains	Potential
2 (1860s – 1890s)	<ul style="list-style-type: none"> No documentary evidence of specific activities such as brickmaking or dairying within the site. Archaeological evidence of dairying or farming includes fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters. 	Nil-low
3 (1890s – 1920s)	<ul style="list-style-type: none"> Archaeological remains associated with the early phase of railway timber buildings such as postholes, former floor surfaces, and early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades. 	Low-moderate
4 (1930s – present)	<ul style="list-style-type: none"> Archaeological remains associated with upgrades such as utilities and drainage 	Moderate

7.3.3 Archaeological significance

The following assessment of significance is based on the guidelines discussed in Section 2.3 of this report.

Table 91: Assessment of archaeological significance for Hurlstone Park Station Catchment

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> It is highly unlikely that archaeological remains associated with Phase 1 and Phase 2 would be present within the site. Any remains would be highly truncated and would not have research potential. Potential archaeological remains associated with Phase 3 former timber station buildings and rail infrastructure would unlikely contribute additional information not available from other historical resources. It is unlikely that artefact-bearing deposits associated with the early timber station buildings accumulated or survived subsequent brick station building development.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The potential archaeological remains are not associated with any particular individual of historical importance. The development of the rail network facilitated economic development and suburban growth in Sydney in the latter half of the nineteenth and twentieth centuries. Hurlstone Park Station (originally called Fernhill Station) was built in 1895 as part of the Bankstown Line. The potential Phase 3 archaeological remains are associated with the historical development of Bankstown rail line and Hurlstone Park Station.
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains are not likely to have aesthetic value. Extensive and intact remains of former timber station buildings are not expected to be present. Former rail infrastructure may demonstrate changes in technology and rail engineering over time. However, they are not expected to demonstrate technical significance.
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> The potential archaeological remains are not considered to have the ability to illustrate the historical development of Hurlstone Park or the early development of the railway station.

Criteria	Discussion
Statement of Significance	<ul style="list-style-type: none"> • Nil to low potential for archaeological remains associated with nineteenth century farming. Any remains unlikely to have research value. • Low to moderate potential for archaeological remains of former 'works'. Though the potential Phase 3 and 4 archaeological remains are associated with the historical development of the Bankstown rail line and the Hurlstone Park Station, they are likely to be truncated and not contribute further information regarding these development phases. • Unlikely to reach the threshold for local heritage significance.

7.3.4 Impact assessment

Proposed impacts within the Hurlstone Park Station Catchment would involve the construction of new station platforms along the rail corridor, construction of a retaining wall along the southern boundary of the station and rail corridor, addition of Metro South West running tracks (MSWs), installation of drainage pipes, single grate drainage pits, gas pipelines and CSR utilities and the construction of a proposed segregation fence along the northeast boundary of the rail corridor east of the Floss Street Overbridge. The majority of these works would involve trenching and subsurface ground disturbance within the existing rail and road corridor.

There are unlikely to be impacts to significant archaeology as a result of these works.

7.3.5 Mitigation and management measures

The area within the Hurlstone Park Station Catchment has been assessed as having low potential to contain archaeological remains associated with Phase 1 and 2 and low to moderate potential to contain archaeological remains associated with Phase 3 and 4 occupation of the site. Potential archaeological remains are unlikely to reach the threshold of local significance.

However, there is potential for unexpected archaeological remains of structures and activities associated with earlier phases to exist within the area. Therefore, it is recommended that an Unexpected Finds Policy be implemented during the proposed development to manage and mitigate potential impacts to the potential archaeological resource.

7.4 Canterbury Station Catchment

7.4.1 Land use summary

The historical development of the Canterbury Station Catchment and surrounds can be divided into the following phases of activity:

- Phase 1 (1788 – 1841): Early land grants: Land clearance, timber getting, grazing, farming activity associated with the Canterbury Farm;
- Phase 2 (1841 – 1855) Establishment of Canterbury and the Australasian Sugar Company works: Subdivision for smaller farms, development of country estates, small scale industry such as timber cutting, wool washing and mining, establishment of the Australasian Sugar Company works and construction of associated structures and outbuildings (some within study area) and small scale residential settlement in form of cottages;
- Phase 3 (1855 – 1895): Urban development and closure of the Australasian Sugar Company works: Sugar works closed and site remains unoccupied, post office, public school and race course opened, further subdivisions;

- Phase 4 (1895-1943): Canterbury Station, resumptions and development: Land resumed for railway, including residential buildings, construction of railway station in 1895, expansion and construction of the Metropolitan Goods line in 1916, electrification upgrades in 1926 and track realignment in 1927, mill site used for Canterbury Bacon Factory and later 'Hutton's Bacon Factory', possible removal of earlier outbuildings west of the Old Sugarmill site;
- Phase 4 (1943 – present): Suburban and urban development: Railway station upgrades and continued use, industrial, commercial and residential development west of Canterbury Road and within grassed park bounded by Close Street and the railway line.

7.4.2 Impacts to archaeological resources

Construction of the railway station and rail line in the late nineteenth century would have included a considerable amount of ground disturbance and excavation, especially within the rail corridor. Track realignment, station upgrades and road construction throughout the twentieth century would have resulted in high levels of ground impacts throughout the station catchment.

Contemporary redevelopment to the south of Canterbury Station would have removed archaeological remains of the former Goods siding, platform, shed and weighbridge. In addition, contemporary redevelopment associated with the construction of a building fronting onto Close Street may have impacted potential archaeological resources.

7.4.3 Archaeological potential

Based on the history of the site and disturbance that has occurred in the area, archaeological remains are likely to consist of post-railway structures and services.

Table 92: Assessment of archaeological potential for Canterbury Station Catchment

Phase	Likely archaeological remains	Potential
1 (1788-1841)	<ul style="list-style-type: none"> • No documentary evidence of specific activities or development with the site; • Archaeological features associated with land clearance such as tree boles, evidence of estate farming activities such as fence line postholes, former shed postholes, field drains, isolated artefact scatters. 	Nil-low
2 (1841 – 1855)	<ul style="list-style-type: none"> • Archaeological remains of outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Australasian Sugar Company works; • Evidence of small scale mining activities; • Archaeological evidence of farming includes fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters; • Archaeological remains of early residential cottages including wells, cisterns and refuse pits. 	Moderate to High
3 (1855 – 1895)	<ul style="list-style-type: none"> • Archaeological remains of early residential cottages including wells, cisterns and refuse pits; • Archaeological remains of outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Blckett and Co Canterbury Engineering Works; 	Moderate to High

Phase	Likely archaeological remains	Potential
4 (1895-1943)	<ul style="list-style-type: none"> Archaeological remains and evidence of early railway construction including rails, refuse pits, drains and timber sleepers. Archaeological remains associated with the early phase of minor railway buildings (such as toilets) prior to track realignment such as postholes, brick footings, former floor surfaces, and early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades. 	Moderate

7.4.4 Archaeological significance

The following assessment of significance is based on the guidelines discussed in Section 2.3 of this report.

Table 93: Assessment of archaeological significance for Canterbury Station Catchment

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> It is highly unlikely that archaeological remains associated with Phase 1 would be present within the site. Any remains would be highly truncated or ephemeral and would not have research potential. Potential archaeological remains associated with Phase 2 residential and industrial structures and activities (sugar works and mining) would have high research significance as they would yield information relating to the one of the earliest phases of development in Canterbury. Remains of the Old Sugarmill outbuildings could provide information relating to activities that took place around the mill, and the domestic lives of workers, if they were residing at the site. Remains of mining activities would provide insights into early small scale mining practices in the area. If intact remains associated with Phase 3 residences and industrial activities (iron works) were located within the study area, they would have moderate research potential. They could yield information relating to domestic living conditions in Canterbury during the mid to late nineteenth century as well as providing insights into early iron works activities and the potential use of outbuildings or the surrounding landscape. Potential archaeological remains associated with Phase 4 former structures and rail infrastructure would unlikely contribute additional information not available from other historical resources. It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The potential archaeological remains of Phase 2 occupation of the site are associated with the State significant 'Canterbury Sugar Company works' or 'Old Sugarmill'. This site was associated with Robert Campbell, a prominent Sydney merchant. The establishment of the Old Sugarmill was highly influential on the subsequent development of Canterbury as a township in the early nineteenth century. The development of the rail network facilitated economic development and suburban growth in Sydney in the latter half of the nineteenth and twentieth centuries. Canterbury Station was built in 1895 as part of the Bankstown Line. The potential Phase 3 archaeological remains are associated with the historical development of Bankstown rail line and Canterbury Station.

Criteria	Discussion
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains are not likely to hold aesthetic value, although exposed <i>in situ</i> archaeological remains may have distinctive/attractive visual qualities. Extensive and intact remains of former station structures are not expected to be present. Intact remains associated with the Canterbury Sugar Company works and/ Blackett and Co Canterbury Engineering Works have the potential to hold technical significance, as they would represent early technological advances and structures associated with their respective industries. Former rail infrastructure may demonstrate changes in technology and rail engineering over time. However, they are not expected to demonstrate technical significance.
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> The potential archaeological remains associated with the Canterbury Sugar Company works and Phase 2 and 3 cottages may illustrate the historical development of Canterbury. If intact or substantial remains are found to exist within the project area, they have the potential to reach the threshold for State significance.
Statement of Significance	<ul style="list-style-type: none"> Nil to low potential for archaeological remains associated with nineteenth century farming. Any remains unlikely to have research value. Moderate to high potential for remains of structures associated with the Canterbury Sugar Company works and outbuildings. These would have high research value and associative and historical significance at a local or State level depending on nature and intactness. Moderate to high potential for remains of Phase 3 residential and industrial structures that once occupied land within the rail line. If intact remains were found, they would have moderate research potential and reach the threshold for local significance. Low to moderate potential for archaeological remains of former 'works' associated with the railway. Though the potential Phase 4 archaeological remains are associated with the historical development of the Bankstown rail line and the Canterbury Station, they are likely to be truncated and not contribute further information regarding these development phases. Remains associated with Phase 4 are unlikely to reach the threshold for local heritage significance.

7.4.5 Impact assessment

Proposed impacts within the Canterbury Station Catchment would involve the construction of new station platforms along the rail corridor, construction of a station service building, construction of a retaining wall along the southern boundary of the station and rail corridor, addition of Metro South West running tracks (MSWs), installation of drainage pipes, single grate drainage pits, gas pipelines and CSR utilities and the construction of a proposed segregation fence along the northwest boundary of the rail corridor. These works would involve trenching and subsurface ground disturbance.

Although the location of the Canterbury Sugar Company works mill and former associated structures is outside of the study area, there is potential that remains of outbuildings and mining activities may exist within the rail corridor and compound site. These have the potential to reach the threshold for State significance, if intact or substantial remains are found to exist within the study area. There is also potential that remains associated with the Canterbury township Phases 2 and 3 (as shown in Figure 29 and Figure 30) may be present.

There is potential for impacts to occur to local and State significant archaeology within the Canterbury Station Catchment footprint and compound site.

7.4.6 Mitigation and management measures

The area within the Canterbury Station Catchment has been assessed as having nil to low potential to contain archaeological remains associated with Phase 1 and moderate to high potential to contain archaeological remains associated with Phase 2 and 3 occupation of the site. Potential archaeological remains associated with Phase 2 occupation may have State heritage significance due to their association with the Canterbury township and SHR listed Old Sugarmill. Potential remains associated with Phase 3 may have potential to have local heritage significance. Potential remains associated with Phase 1 and 4 are not considered likely to reach the threshold of local or State significance.

As there is potential for remains of Phase 2 occupation of the site to have State heritage significance, and Phase 3 remains to have local significance, it is recommended that an Archaeological Research Design be prepared to manage and mitigate impacts to the potential archaeological resource.

An archaeological research design would be prepared and implemented to identify the need for archaeological testing or monitoring. Archaeological mitigation measures recommended in the archaeological research design would be carried out in accordance with Heritage Council guidelines, and where identified in the archaeological research design, would be supervised by a suitably qualified Excavation Director with experience in managing State or locally significant archaeology where relevant.

Where an archaeological research design is required, it would be prepared based on research information included in this report and would be supplemented by additional detailed historical research of each site with reference to the project design and proposed construction methods at each site. Based on the detailed literature review, the archaeological research designs would identify the need for and provide a detailed methodology for undertaking:

- Archaeological test excavation or test and salvage excavation
- Archaeological monitoring

7.5 Campsie Station Catchment

7.5.1 Land use summary

The historical development of the Campsie Station Catchment and surrounds can be divided into the following phases of activity:

- Phase 1 (1788 – 1890s) land grants and farming: land clearance, grazing and farming activity associated with the Campsie Farm
- Phase 2 (1890s – 1920s) railway station: construction of railway station and Goods line between 1895-1915, electrification upgrades in 1920s
- Phase 3 (1930s – present) railway station: upgrades and continued use

Construction of the rail line and railway station in the late nineteenth century and early twentieth century would have included a considerable amount of ground disturbance and excavation. Station upgrades throughout the twentieth century would have resulted in high levels of ground impacts throughout the station catchment.

7.5.2 Archaeological potential

Based on the history of the site and disturbance that has occurred in the area, archaeological remains are likely to consist of post-railway structures and services.

Table 94: Assessment of archaeological potential for Campsie Station Catchment

Phase	Likely archaeological remains	Potential
1 (1788-1890s)	<ul style="list-style-type: none">No documentary evidence of specific activities or development with the site.Archaeological features associated with land clearance such as tree boles, evidence of estate farming activities such as fence line postholes, former shed postholes, field drains, isolated artefact scatters.	Nil-low
2 (1890s – 1920s)	<ul style="list-style-type: none">Archaeological remains associated with the early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track.It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades.	Low-moderate
3 (1930s – present)	<ul style="list-style-type: none">Archaeological remains associated with upgrades such as utilities and drainage	Moderate

7.5.3 Archaeological significance

The following assessment of significance is based on the guidelines discussed in Section 2.3 of this report.

Table 95: Assessment of archaeological significance for Campsie Station Catchment

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> It is highly unlikely that archaeological remains associated with Phase 1 would be present within the site. Any remains would be highly truncated or ephemeral and would not have research potential. Potential archaeological remains associated with Phase 2 rail infrastructure would unlikely contribute additional information not available from other historical resources. It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The potential archaeological remains are not associated with any particular individual of historical importance. The development of the rail network facilitated economic development and suburban growth in Sydney in the latter half of the nineteenth and twentieth centuries. Campsie Station was built between 1895 and 1915. The potential Phase 2 archaeological remains are associated with the historical development of Bankstown rail line and Campsie Station.
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains are not likely to hold aesthetic value. Former rail infrastructure may demonstrate changes in technology and rail engineering over time. However, they are not expected to demonstrate technical significance.
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> The potential archaeological remains are not considered to have the ability to illustrate the historical development of Campsie or the early development of the railway station.
Statement of Significance	<ul style="list-style-type: none"> Nil to low potential for archaeological remains associated with nineteenth century farming. Any remains unlikely to have research value. Low to moderate potential for archaeological remains of former 'works'. Though the potential Phase 2 and 3 archaeological remains are associated with the historical development of the Bankstown rail line and the Campsie Station, they are likely to be truncated and not contribute further information regarding these development phases. Unlikely to reach the threshold for local heritage significance.

7.5.4 Impact assessment

Proposed impacts within the Campsie Station Catchment would include the construction of an attenuation basin along the southern boundary of the station, north of Lillian Street, construction of new station platforms along the rail corridor, construction of a station service building, construction of a retaining wall along the southern boundary of the station and rail corridor, addition of Metro South West running tracks (MSWs), installation of drainage pipes, single grate drainage pits, gas pipelines and CSR utilities and the construction of a proposed segregation fence along the northwest boundary of the rail corridor. The majority of these works would involve trenching and subsurface ground disturbance within the existing rail and road corridor.

There are unlikely to be impacts to significant archaeology as a result of these works.

7.5.5 Mitigation and management measures

The area within the Campsie Station Catchment has been assessed as having nil to low potential to contain archaeological remains associated with Phase 1 and 2 and low to moderate potential to contain archaeological remains associated with Phase 3 occupation of the site. Potential archaeological remains are not considered likely to reach the threshold for local significance.

However, there is potential for unexpected archaeological remains of structures and activities associated with earlier phases to exist within the area. Therefore, it is recommended that an

Unexpected Finds Policy be implemented during the proposed development to manage and mitigate potential impacts to the potential archaeological resource.

7.6 Belmore Station Catchment

7.6.1 Land use summary

The historical development of the Belmore Station Catchment and surrounds can be divided into the following phases of activity:

- Phase 1 (1788 – 1880) early land grants: land clearance, timber getting, grazing and farming activity
- Phase 2 (1880 – 1920s) subdivision and railway station: larger estates subdivided from 1880 into suburban blocks, limited in immediate vicinity of station, accelerated with the construction of railway station in 1895, extended to Bankstown in 1909, sidings extended in 1920s, substation and platform extension in 1925-26
- Phase 3 (1930s – present) railway station: upgrades and continued use

Construction of the railway station and rail line in the late nineteenth and early twentieth century would have included a considerable amount of ground disturbance and excavation. Rail and station upgrades throughout the twentieth century would have resulted in high levels of ground impacts throughout the station catchment.

7.6.2 Archaeological potential

Based on the history of the site and disturbance that has occurred in the area, archaeological remains are likely to consist of post-railway structures and services.

Table 96: Assessment of archaeological potential for Belmore Station Catchment

Phase	Likely archaeological remains	Potential
1 (1788-1880s)	<ul style="list-style-type: none"> • No documentary evidence of specific activities or development with the site. • Archaeological features associated with low intensity land use such as grazing and farming include tree boles, fence line postholes, field drains and isolated artefact scatters. 	Nil-low
2 (1880 – 1920s)	<ul style="list-style-type: none"> • No documentary evidence of specific activities such as residential development within the site. • Archaeological features associated with continued grazing and farming include fence line and shed postholes, field drains, isolated artefact scatters and drains or culverts • Archaeological remains associated with the railway station goods shed occupying land to the near today's Wortley Avenue and a goods platform to the south near Bridge Road. 	Low -moderate
3 (1930s – present)	<ul style="list-style-type: none"> • Archaeological remains associated with upgrades such as utilities and drainage 	Moderate

7.6.3 Archaeological significance

The following assessment of significance is based on the guidelines discussed in Section 2.3 of this report.

Table 97: Assessment of archaeological significance for Belmore Station Catchment

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> It is highly unlikely that archaeological remains associated with Phase 1 and the beginning of Phase 2 would be present within the site. Any remains would likely be highly truncated and would not have research potential. Potential archaeological remains associated with Phase 2 and 3 former rail infrastructure such as services and sidings would be unlikely to contribute additional information not available from other historical resources. Potential remains associated with the goods shed has the potential to yield information regarding early railway storage practices and construction methods related to utilitarian structures.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The potential archaeological remains are not associated with any particular individual of historical importance. The development of the rail network facilitated economic development and suburban growth in Sydney in the latter half of the nineteenth and early twentieth centuries. Belmore Station was built as the first part of the Bankstown Line in 1895 which was extended to accommodate the remainder of the Bankstown Line between (1909-1939). The potential Phase 2 archaeological remains are associated with the historical development of the Bankstown rail lines.
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains are not likely to hold aesthetic value. Remains of former rail infrastructure may demonstrate changes in technology and rail engineering over time. However, they are not expected to demonstrate technical significance.
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> The potential archaeological remains have the ability to illustrate the early development of the railway station particularly activities surrounding the goods shed and sidings.
Statement of Significance	<ul style="list-style-type: none"> Nil to low potential for archaeological remains associated with nineteenth century farming. Any remains unlikely to have research value. Low to moderate potential for archaeological remains of former 'works' such as sidings, drains, rails and sleepers. Though the potential Phase 2 and 3 archaeological remains are associated with the historical development of the Bankstown rail line and Belmore Station, they are likely to be truncated and not contribute further information regarding these development phases. Low to moderate potential for the remains of a former goods shed to exist within the area. If intact and substantial remains of the goods shed were found, they would provide information relating to late 19th century railway building construction methods and activities surrounding the goods line. If intact remains associated with later Phase 2 development associated with the goods shed were uncovered, they would have the potential to reach the threshold for local heritage significance. Potential archaeological remains associated with Phase 2 and 3 may reach the threshold for local significance.

7.6.4 Impact assessment

Proposed impacts within the Belmore Station Catchment would include the construction of a new island platform within the rail corridor, construction of a station service building, construction of a retaining walls along the southern and northern boundary of the station and rail corridor, addition of Metro South West running tracks (MSWs), installation of drainage pipes, single grate drainage pits, gas pipelines and CSR utilities and the construction of a proposed segregation fence along the northwest boundary of the rail corridor. The majority of these works would involve trenching and subsurface ground disturbance within the existing rail and road corridor.

There is potential that locally significant remains associated with the former goods shed may be impacted by the proposal.

7.6.5 Mitigation and management measures

The area within the Belmore Station Catchment has been assessed as having nil to low potential to contain archaeological remains associated with Phase 1 and low to moderate potential to contain archaeological remains associated with Phase 2 and 3. The majority of potential archaeological remains are not considered likely to reach the threshold of local significance. However, remains associated with the goods shed may reach the threshold for local significance if intact or substantial deposits are found to exist within the project area.

As there is potential for remains associated with Phase 2 occupation of the site (former goods shed) to have local significance, it is recommended that an Archaeological Research Design be prepared to manage and mitigate impacts to the potential archaeological resource.

An archaeological research design would be prepared and implemented to identify the need for archaeological testing or monitoring. Archaeological mitigation measures recommended in the archaeological research design would be carried out in accordance with Heritage Council guidelines, and where identified in the archaeological research design, would be supervised by a suitably qualified Excavation Director with experience in managing locally significant archaeology.

Where an archaeological research design is required, it would be prepared based on research information included in this report and would be supplemented by additional detailed historical research of each site with reference to the project design and proposed construction methods at each site. Based on the detailed literature review, the archaeological research designs would identify the need for and provide a detailed methodology for undertaking:

- Archaeological test excavation or test and salvage excavation
- Archaeological monitoring

7.7 Lakemba Station Catchment

7.7.1 Land use summary

The historical development of the Lakemba Station Catchment and surrounds can be divided into the following phases of activity:

- Phase 1 (1788 – 1880s) early land grants: land clearance, grazing and farming activity
- Phase 2 (1880s – 1909) pioneer settlement: farming activity, homesteading, stables, tanneries, commercial nurseries, poultry farms and piggery
- Phase 3 (1909 – 1919) railway station and development: railway station constructed in 1909, suburban and commercial development follows
- Phase 4 (1919 – present) railway station upgrades: new brick station building replaces original timber structure, electrification of the line in 1926 and addition of footbridge and overhead booking office, continued use of railway.

Construction of the railway station and rail line in the twentieth century would have included a considerable amount of ground disturbance and excavation. Rail and station upgrades throughout the second half of the twentieth century would have resulted in high levels of ground impacts throughout the station catchment.

7.7.2 Archaeological potential

Based on the history of the site and disturbance that has occurred in the area, archaeological remains are likely to consist of post-railway structures and services, although potential remains of outbuildings associated with Lakemba may exist in the area.

Table 98: Assessment of archaeological potential for Wiley Park Station Catchment

Phase	Likely archaeological remains	Potential
1 (1788-1880s)	<ul style="list-style-type: none"> Initial land owners associated with moderately sized grants used for agricultural and pastoral purposes Archaeological features associated with low intensity land use such as timber getting, grazing and farming include tree boles, fence line postholes, field drains and isolated artefact scatters. 	Nil-low
2 (1880s – 1909)	<ul style="list-style-type: none"> Establishment of the Taylor House (Lakemba), stables and potential outbuildings Archaeological features associated with farming activities, domestic and agricultural structures, refuse pits and drains or culverts 	Low
3 (1909 – 1919)	<ul style="list-style-type: none"> Archaeological remains associated with the first timber island platform and initial railway infrastructure such as brick drainage pits, electrical conduits and pits, stanchion bases, timber footings and postholes, sleepers and rail track. 	Low to moderate
4 (1919 – present)	<ul style="list-style-type: none"> Archaeological remains associated with station and rail corridor upgrades such as utilities and drainage 	Moderate

7.7.3 Archaeological significance

The following assessment of significance is based on the guidelines discussed in Section 2.3 of this report.

Table 99: Assessment of archaeological significance for Lakemba Station Catchment

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> It is unlikely that archaeological remains associated with Phase 1 and Phase 2 would be present within the site. Any remains would be highly truncated and would not have research potential. However, if intact or substantial remains associated with 'Lakemba' were found to exist, they may have the ability to yield information regarding early residential occupation in the area. Potential archaeological remains associated with Phase 3 former rail infrastructure would unlikely contribute additional information not available from other historical resources.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The potential archaeological remains of 'Lakemba' are associated with Ben Taylor and his second wife Lucy Annie Johnston. Ben Taylor was a prominent local political figure, who was employed as an alderman, mayor and town clerk for the locality.
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains are not likely to hold aesthetic value although exposed in situ archaeological remains may have distinctive/attractive visual qualities.

Criteria	Discussion
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> • The potential archaeological remains associated with structures or remains of 'Lakemba' have the ability to illustrate the historical development of the suburb of Lakemba. • The potential archaeological remains of the 1909 Lakemba Station platform have the ability to demonstrate past development phases associated with Lakemba Railway Station and changes to the suburb over time.
Statement of Significance	<ul style="list-style-type: none"> • Nil to low potential for archaeological remains associated with nineteenth century farming. Potential remains of structures or deposits associated with • Remains associated with 'Lakemba' may have research and associative value. • Low to moderate potential for archaeological remains of former 'works'. Though the potential Phase 3 archaeological remains are associated with the historical development of the Bankstown rail line. • Remains associated with former rail infrastructure are unlikely to reach the threshold for local heritage significance. • Remains associated with the 1919 Lakemba Station timber island platform have the potential to demonstrate early development phases within the suburb of Lakemba. • Potential remains associated with 'Lakemba' and the Lakemba 1909 timber island platform may have local heritage significance.

7.7.4 Impact assessment

Proposed impacts within the Lakemba Station Catchment would involve the construction of a new island platform within the rail corridor, construction of a station service building to the south of the rail corridor, construction of a retaining wall along the southern and northern boundary of the station, installation drainage pipes, single grate drainage pits, cess drain, gas pipelines and CSR utilities, addition of Metro South West running tracks (MSWs) and the construction of a security fence along the southern boundary of the rail corridor. These works would involve earthworks, trenching and subsurface ground disturbance.

There is a low potential for the potentially locally significant remains associated with 'Lakemba' to exist within the study area and be impacted by the proposal, and low to moderate potential for the potentially locally significant remains of the 1919 Lakemba island platform to be impacted.

7.7.5 Mitigation and management measures

The area within the Lakemba Station Catchment has been assessed as having nil to low potential to contain archaeological remains associated with Phase 1, low potential to contain archaeological remains of Phase 2 and low to moderate potential to contain archaeological remains associated with Phase 3 and 4 occupation of the site. Potential archaeological remains associated with Phase 1, 2 and 3 may reach the threshold for local significance. Potential archaeological remains associated with Phase 4 are unlikely to reach the threshold for local significance.

As there is potential for remains associated with Phase 2 and 3 occupation of the site to have local significance, it is recommended that an Archaeological Research Design be prepared to manage and mitigate impacts to the potential archaeological resource.

An archaeological research design would be prepared and implemented to identify the need for archaeological testing or monitoring. Archaeological mitigation measures recommended in the archaeological research design would be carried out in accordance with Heritage Council guidelines, and where identified in the archaeological research design, would be supervised by a suitably qualified Excavation Director with experience in managing locally significant archaeology.

Where an archaeological research design is required, it would be prepared based on research information included in this report and would be supplemented by additional detailed historical research of each site with reference to the project design and proposed construction methods at each site. Based on the detailed literature review, the archaeological research designs would identify the need for and provide a detailed methodology for undertaking:

- Archaeological test excavation or test and salvage excavation
- Archaeological monitoring

7.8 Wiley Park Station Catchment

7.8.1 Land use summary

The historical development of the Wiley Park Station Catchment and surrounds can be divided into the following phases of activity:

- Phase 1 (1788 – 1860s) early land grants: land clearance, timber getting, clay pipe manufacturing, grazing and farming activity
- Phase 2 (1860s – 1930s) pioneer settlement: more woodcutters moved to the area, slab houses formed nucleus of settlement
- Phase 3 (1930s – 1940s) railway station: suburban development in the 1930s, railway station constructed in 1938
- Phase 4 (1940s – present) railway station: upgrades and continued use of railway

Construction of the railway station and rail line in the twentieth century would have included a considerable amount of ground disturbance and excavation. Rail and station upgrades throughout the second half of the twentieth century would have resulted in high levels of ground impacts throughout the station catchment.

7.8.2 Archaeological potential

Based on the history of the site and disturbance that has occurred in the area, archaeological remains are likely to consist of post-railway structures and services.

Table 100: Assessment of archaeological potential for Wiley Park Station Catchment

Phase	Likely archaeological remains	Potential
1 (1788-1860s)	<ul style="list-style-type: none"> • Initial land owners produced clay pipes, but no documentary evidence of this activity occurring specifically in the site. • Archaeological features associated with low intensity land use such as timber getting, grazing and farming include tree boles, fence line postholes, field drains and isolated artefact scatters. 	Nil-low
2 (1860s – 1930s)	<ul style="list-style-type: none"> • No documentary evidence of specific developments such as residential development within the site. • Archaeological features associated with farming or timber getting such as fence or shed postholes, field drains, isolated artefact scatters, drains or culverts and unrecorded slab house remains 	Nil-low

Phase	Likely archaeological remains	Potential
3 (1930s – 1940s)	<ul style="list-style-type: none"> Little in the way of archaeological remains due to the stations more modern construction. Archaeological remains associated with the initial railway infrastructure such as brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. 	Nil-low
4 (1940s – present)	<ul style="list-style-type: none"> Archaeological remains associated with upgrades such as utilities and drainage 	Moderate

7.8.3 Archaeological significance

The following assessment of significance is based on the guidelines discussed in Section 2.3 of this report.

Table 101: Assessment of archaeological significance for Wiley Park Station Catchment

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> It is highly unlikely that archaeological remains associated with Phase 1 and Phase 2 would be present within the site. Any remains would be highly truncated and would not have research potential. Potential archaeological remains associated with Phase 3 former rail infrastructure would be unlikely to contribute additional information not available from other historical resources.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The potential archaeological remains are not associated with any particular individual of historical importance. Wiley Park Station was the last station built of the Bankstown Line in 1938 and is associated with the development of the Bankstown Line. However, because of its later construction date the archaeological remains are unlikely to have heritage significance.
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains are not likely to hold aesthetic value.
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> The potential archaeological remains are not considered to have the ability to illustrate the historical development of Wiley Park or the development of the railway station.
Statement of Significance	<ul style="list-style-type: none"> Nil to low potential for archaeological remains associated with nineteenth century farming. Any remains unlikely to have research value. Low to moderate potential for archaeological remains of former 'works'. Though the potential Phase 3 archaeological remains are associated with the historical development of the Bankstown rail line, their more recent date means there is likely to be little archaeological material as most of the original fabric is still extent today. Unlikely to reach the threshold for local heritage significance.

7.8.4 Impact assessment

Proposed impacts within the Wiley Park Station Catchment would include the construction of new platforms along the rail corridor, construction of a station service building, construction of retaining walls along the southern and northern boundary of the station, installation gas pipelines and CSR utilities and the construction of a noise wall along the northern boundary of the rail corridor. The majority of these works would involve trenching and subsurface ground disturbance within the existing rail and road corridor.

There are unlikely to be impacts to significant archaeology as a result of these works.

7.8.5 Mitigation and management measures

The area within the Wiley Park Station Catchment has been assessed as having nil to low potential to contain archaeological remains associated with Phase 1, 2 and 3 and moderate potential to archaeological remains associated with Phase 4 occupation of the site. Potential archaeological remains are not likely to reach the threshold of local significance.

However, there is potential for unexpected archaeological remains of structures and activities associated with earlier phases to exist within the area. Therefore, it is recommended that an Unexpected Finds Policy be implemented during the proposed development to manage and mitigate potential impacts to the potential archaeological resource.

7.9 Punchbowl Station Catchment

7.9.1 Land use summary

The historical development of the Punchbowl Station Catchment and surrounds can be divided into the following phases of activity:

- Phase 1 (1788 – 1870s) early land grants: land clearance, timber getting, grazing and farming activity
- Phase 2 (1870s – 1909) farming and subdivision: continued farming and grazing
- Phase 3 (1909 – 1920s) railway station: station and line extension opened in 1909, station building awning added in 1924, electric train depot opened nearby and Bankstown Line electrified in 1926, in 1929 an overhead booking office was built, the platforms lengthened and the stairway to the overbridge was removed
- Phase 4 (1930s – present) railway station: upgrades and continued use

Construction of the railway station and rail line in the twentieth century would have included a considerable amount of ground disturbance and excavation. Rail and station upgrades throughout the twentieth century would have resulted in high levels of ground impacts throughout the station catchment.

7.9.2 Archaeological potential

Based on the history of the site and disturbance that has occurred in the area, archaeological remains are likely to consist of post-railway structures and services.

Table 102: Assessment of archaeological potential for Punchbowl Station Catchment

Phase	Likely archaeological remains	Potential
1 (1788-1870s)	<ul style="list-style-type: none"> • No documentary evidence of specific activities or development with the site. • Archaeological features associated with low intensity land use such as grazing and farming include tree boles, fence line postholes, field drains, isolated artefact scatters and former road surfaces. 	Nil-low

Phase	Likely archaeological remains	Potential
2 (1870s – 1909)	<ul style="list-style-type: none"> No documentary evidence of specific activities or development with the site. Archaeological features associated with continued farming and grazing such as fence or shed postholes, field drains, isolated artefact scatters and drains or culverts 	Nil-low
3 (1909 – 1920s)	<ul style="list-style-type: none"> Less potential for archaeological remains due to twentieth century construction. Archaeological remains associated with the initial railway infrastructure such as brick drainage pits, electrical conduits and pits, stanchion bases, sleepers, rail track and overbridge stairway. 	Low
4 (1930s – present)	<ul style="list-style-type: none"> Archaeological remains associated with upgrades such as utilities and drainage 	Moderate

7.9.3 Archaeological significance

The following assessment of significance is based on the guidelines discussed in Section 2.3 of this report.

Table 103: Assessment of archaeological significance for Punchbowl Station Catchment

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> It is highly unlikely that archaeological remains associated with Phase 1 and Phase 2 would be present within the site. Any remains would be highly truncated and would not have research potential. Potential archaeological remains associated with Phase 3 former rail infrastructure would be unlikely to contribute additional information not available from other historical resources.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The potential archaeological remains are not associated with any particular individual of historical importance. Punchbowl Station was built in 1909 as part of the Bankstown Line. The potential Phase 3 archaeological remains are associated with the historical development of Bankstown rail line and Punchbowl Station.
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains are not likely to hold aesthetic value.
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> The potential archaeological remains are not considered to have the ability to illustrate the historical development of Punchbowl or the development of the railway station.
Statement of Significance	<ul style="list-style-type: none"> Nil to low potential for archaeological remains associated with nineteenth century farming. Any remains unlikely to have research value. Low to moderate potential for archaeological remains of former 'works'. Though the potential Phase 3 and 4 archaeological remains are associated with the historical development of the Bankstown rail line and the Punchbowl Station, they are likely to be truncated and not contribute further information regarding these development phases. Unlikely to reach the threshold for local heritage significance.

7.9.4 Impact assessment

Proposed impacts within the Punchbowl Station Catchment would include the construction of new platforms along the rail corridor, construction of a station service building, construction of a retaining wall along the southern and northern boundary of the station and rail corridor, installation of a

concrete lined channel along the southern boundary of the rail corridor, installation of gas pipelines and CSR utilities and the addition of Up and Down MSWs within the rail corridor. The majority of these works would involve trenching and subsurface ground disturbance within the existing rail and road corridor.

There are unlikely to be impacts to significant archaeology as a result of these works.

7.9.5 Mitigation and management measures

The area within the Punchbowl Station Catchment has been assessed as having nil to low potential to contain archaeological remains associated with Phase 1, 2 and 3 and moderate potential to contain archaeological remains associated with Phase 4 occupation of the site. Potential archaeological remains are not likely to reach the threshold of local or State significance.

However, there is potential for unexpected archaeological remains of structures and activities associated with earlier phases to exist within the area. Therefore, it is recommended that an Unexpected Finds Policy be implemented during the proposed development to manage and mitigate potential impacts to the potential archaeological resource.

7.10 Bankstown Station Catchment

7.10.1 Land use summary

The historical development of the Bankstown Station Catchment and surrounds can be divided into the following phases of activity:

- Phase 1 (1788 – 1900s) early land grants: land clearance, timber getting, saw milling, brick and pottery making, grazing and farming activity
- Phase 2 (1909 – 1920s) railway station: station opened and line opened in 1909, water tank erected in 1910 (removed in 1970s), pillar water tank and ash pit provided in 1920s, parcels office opened in 1915 (replaced in 1925), platform extended when line electrified in 1926
- Phase 3 (1930s – present) railway station: upgrades and continued use

Construction of the railway station and rail line in the twentieth century would have included a considerable amount of ground disturbance and excavation. Rail and station upgrades throughout the twentieth century would have resulted in high levels of ground impacts throughout the station catchment.

7.10.2 Archaeological potential

Based on the history of the site and disturbance that has occurred in the area, archaeological remains are likely to consist of post-railway structures and services.

Table 104: Assessment of archaeological potential for Bankstown Station Catchment

Phase	Likely archaeological remains	Potential
1 (1788-1900s)	<ul style="list-style-type: none"> • No documentary evidence of specific activities such as brickmaking or residential development within the site. • Archaeological features associated with low intensity land use such as grazing and farming include tree boles, fence line postholes, field drains, isolated artefact scatters. 	Nil-low

Phase	Likely archaeological remains	Potential
2 (1900s – 1920)	<ul style="list-style-type: none"> No documentary evidence of specific activities or development with the site. Archaeological features associated with continued farming and grazing such as fence or shed postholes, field drains, isolated artefact scatters and drains or culverts 	Nil-low
3 (1909 – 1920s)	<ul style="list-style-type: none"> Less potential for archaeological remains due to twentieth century construction. Archaeological remains associated with the initial railway infrastructure such as brick drainage pits, electrical conduits and pits, stanchion bases, sleepers, rail track and overbridge stairway. 	Low
4 (1930s – present)	<ul style="list-style-type: none"> Archaeological remains associated with upgrades such as utilities and drainage 	Moderate

7.10.3 Archaeological significance

The following assessment of significance is based on the guidelines discussed in Section 2.3 of this report.

Table 105: Assessment of archaeological significance for Bankstown Station Catchment

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> It is highly unlikely that archaeological remains associated with Phase 1 would be present within the site. Any remains would be highly truncated and would not have research potential. Potential archaeological remains associated with Phase 2 former rail infrastructure would be unlikely to contribute additional information not available from other historical resources.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The potential archaeological remains are not associated with any particular individual of historical importance. Bankstown Station was built in 1909 as part of the Bankstown Line. The potential Phase 2 archaeological remains are associated with the historical development of Bankstown rail line and Bankstown Station.
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains are not likely to hold aesthetic value.
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> The potential archaeological remains are not considered to have the ability to illustrate the historical development of Bankstown or the development of the railway station.
Statement of Significance	<ul style="list-style-type: none"> Nil to low potential for archaeological remains associated with nineteenth century farming. Any remains unlikely to have research value. Low to moderate potential for archaeological remains of former 'works'. Though the potential Phase 2 and 3 archaeological remains are associated with the historical development of the Bankstown rail line and the Bankstown Station, they are likely to be truncated and not contribute further information regarding these development phases. Unlikely to reach the threshold for local heritage significance.

7.10.4 Impact assessment

Proposed impacts within the Bankstown Station Catchment would include the construction of a new island platform along the rail corridor, construction of a station service building, construction of a retaining wall along the southern and northern boundary of the station and rail corridor, installation of

a concrete lined channel along the northern boundary of the rail corridor, installation of drainage channels, single grate drainage pits, gas pipelines and CSR utilities and the addition of tracks and Up and Down MSWs within the rail corridor. The majority of these works would involve trenching and subsurface ground disturbance within the existing rail and road corridor.

There are unlikely to be impacts to significant archaeology as a result of these works.

7.10.5 Mitigation and management measures

The area within the Bankstown Station Catchment has been assessed as having nil to low potential to contain archaeological remains associated with Phase 1, 2 and 3 and moderate potential to contain archaeological remains associated with Phase 4 occupation of the site. Potential archaeological remains are not likely to reach the threshold of local or State significance.

However, there is potential for unexpected archaeological remains of structures and activities associated with earlier phases to exist within the area. Therefore, it is recommended that an Unexpected Finds Policy be implemented during the proposed development to manage and mitigate potential impacts to the potential archaeological resource.

7.11 Rail corridor: Ancillary work and construction sites

7.11.1 Overview

The Bankstown Line was constructed in three stages between 1892 and 1939. Sydenham to Belmore was completed in 1895. The section to Bankstown was complete by 1909. The rail corridor cut through undeveloped country estate and farm land. Earthworks would have included areas of cut and fill with ballast to lay the track. Culverts and drainage channels were built where the rail line crossed over creeks. The line was electrified in 1926.

This section assessed archaeological potential and significance for the project area outside of the station catchments. The exception is the compound site located near the Canterbury Station Catchment. This area was assessed as part of the Canterbury Station Catchment.

Overall there was no particular areas of archaeological potential identified in the compound areas and worksites within and outside the rail corridor, or within the rail corridor itself, except where specified in the station catchment assessments.

7.11.2 Archaeological potential

Based on the history of the site and disturbance that has occurred in the area, archaeological remains are likely to consist of post- railway structures and services.

Table 106: Assessment of archaeological potential for the rail corridor

Phase	Likely archaeological remains	Potential
1 (1788-1890s)	<ul style="list-style-type: none"> General background historical review and analysis of select historic maps indicates the rail corridor was constructed through undeveloped farm land. Archaeological features associated with land clearance such as tree boles, and farming activities such as fence line postholes, former shed postholes, field drains, isolated artefact scatters. 	Nil
2 (1890s – present)	<ul style="list-style-type: none"> Archaeological remains associated with the early infrastructure such as culverts and drains (brick, stone or concrete), ceramic service pipes, brick drainage pits, electrical conduits and pits, sleepers and rail track. No 	Low

Phase	Likely archaeological remains	Potential
	documentary evidence was found for former structures in additional compound sites and worksites.	

7.11.3 Archaeological significance

The following assessment of significance is based on the guidelines discussed in Section 2.3 of this report.

Table 107: Assessment of archaeological significance for the rail corridor

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> Archaeological remains associated with Phase 1 would not be present within the rail corridor considering the level of land modification to construct the track. Potential archaeological remains associated with Phase 2 rail infrastructure would unlikely contribute additional information not available from other historical resources.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The potential archaeological remains are not associated with any particular individual of historical importance. The development of the rail network facilitated economic development and suburban growth in Sydney in the latter half of the nineteenth and twentieth centuries. The potential Phase 2 archaeological remains are associated with the historical development of Bankstown rail line.
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains are not likely to have aesthetic value. Former rail infrastructure may demonstrate changes in technology and rail engineering over time. However, they are not expected to demonstrate technical significance.
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> The potential archaeological remains are not considered to have the ability to illustrate the historical development of the rail line.
Statement of Significance	<ul style="list-style-type: none"> Nil to low potential for archaeological remains associated with nineteenth century farming. Any remains unlikely to have research value. Some potential for archaeological 'works'. Though the potential Phase 2 archaeological remains are associated with the historical development of the Bankstown rail line, they are not likely to contribute further information regarding this development Unlikely to reach the threshold for local heritage significance.

7.11.4 Impact assessment

Proposed impacts within the rail corridor would involve the addition of tracks, Down and Up MSWs, CSR utilities, gas pipelines, drainage pipes, single and multi-grate drainage pits, retaining walls, noise walls and security and segregation fences along the rail corridor boundary. The construction of retaining walls would involve the removal of up to 1.2 m of top soil and detritus. Works associated with utilities and fencing would involve trenching and associated subsurface impacts.

Attenuation basins are proposed to be constructed near Marrickville, Dulwich Hill, Hurlstone Park and Campsie Stations, along the southern boundary of the rail corridor. The construction of these basins would involve excavations.

Traction substations are proposed to be constructed along the rail corridor at Dulwich Hill, Canterbury, Campsie, Lakemba and Punchbowl, also along the southern boundary of the rail corridor which would require excavation.

A number of construction sites are also proposed both within the rail corridor and outside it.

Depending on the depth of excavation for utilities and drainage, location of impacts within the construction sites (particularly the worksite area adjacent to the Old Sugarmill at Canterbury), ancillary works may have an impact on locally or State significant archaeological remains within the Canterbury Station Catchment locally or State significant archaeological remains within the Belmore and Lakemba Station Catchments. The Archaeological Research Design document would specify management zones in these station catchments that would be implemented dependant on the nature and depth of excavation works. Management of utilities within the corridor and beyond would be governed by mitigation measures contained in a Utilities Management Strategy for the project. An outline for the utilities management strategy is included in Chapter 9 Project description – construction, of the Environmental Impact Statement.

7.11.5 Mitigation and management measures

The area within the Bankstown Rail corridor has been assessed as having nil to low potential to contain archaeological remains associated with Phases 1 and 2. Potential archaeological remains are not considered likely to reach the threshold of local significance.

However, there is potential for unexpected archaeological remains of structures and activities associated with earlier phases to exist within the area. It is therefore recommended that an Unexpected Finds Policy be implemented during the proposed development to manage and mitigate potential impacts to the potential archaeological resource.

8. CONSTRUCTION COMPOUND ASSESSMENT

The section below provides a description of the proposed construction compounds that would be used during the construction phase of the project. A general description is provided followed by descriptions and impact assessments to heritage items within each individual station catchment. Mitigation and management measures are also provided which relate specifically to construction site impacts. It is assumed the entire project area is a worksite for the purposes of the heritage assessment. Worksites have not been assessed separately as any impacts to built heritage would be temporary and related to construction activities described in this impact assessment. Archaeological impacts to construction sites are discussed in Section 7.0 and not repeated in this section.

8.1 General description

The project area includes all areas required to construct the project. The majority of construction would be located within the rail corridor between east of Marrickville and west of Bankstown.

Within the project area, a number of construction compounds would be required to support construction activities, at stations, and at other key locations where civil works are required.

In addition to construction compounds, a number of worksites would be required outside the rail corridor to facilitate construction of certain project elements. For the purposes of the Environmental Impact Statement, it is assumed that construction activities would occur along the entire length of rail corridor within the project area.

Construction compounds would be required at each station to support construction activities and other associated works at the stations. A summary of each compound is provided in Table 108.

Construction compounds would generally include site offices, worker amenities (such as toilets, change rooms, meal rooms, shower facilities and first aid facilities), workshops, material storage and lay down areas (including dangerous goods storage), plant and vehicle parking, and spoil lay down, loading and removal areas, and site security facilities.

Compounds would generally be located on RailCorp owned land, mainly located in the existing rail corridor. Some compounds would need to be located on land outside of the rail corridor on public land (i.e. owned by a government agency such as a local council).

Table 108: Construction compounds

Reference	Location	Existing use	Duration of use
C1	Victoria Road, Marrickville	Rail corridor	Long term
C2	Station Street, Marrickville	Retail	Long-term
C3	Ewart Lane, Dulwich Hill	Rail corridor, parking	Long-term
C4	Floss Street, Hurlstone Park	Roads reserve	Long-term
C5	Broughton Street, Canterbury	Rail corridor and rail uses, open space	Long-term
C6	Charles Street, Canterbury	Rail corridor, parking	Long-term

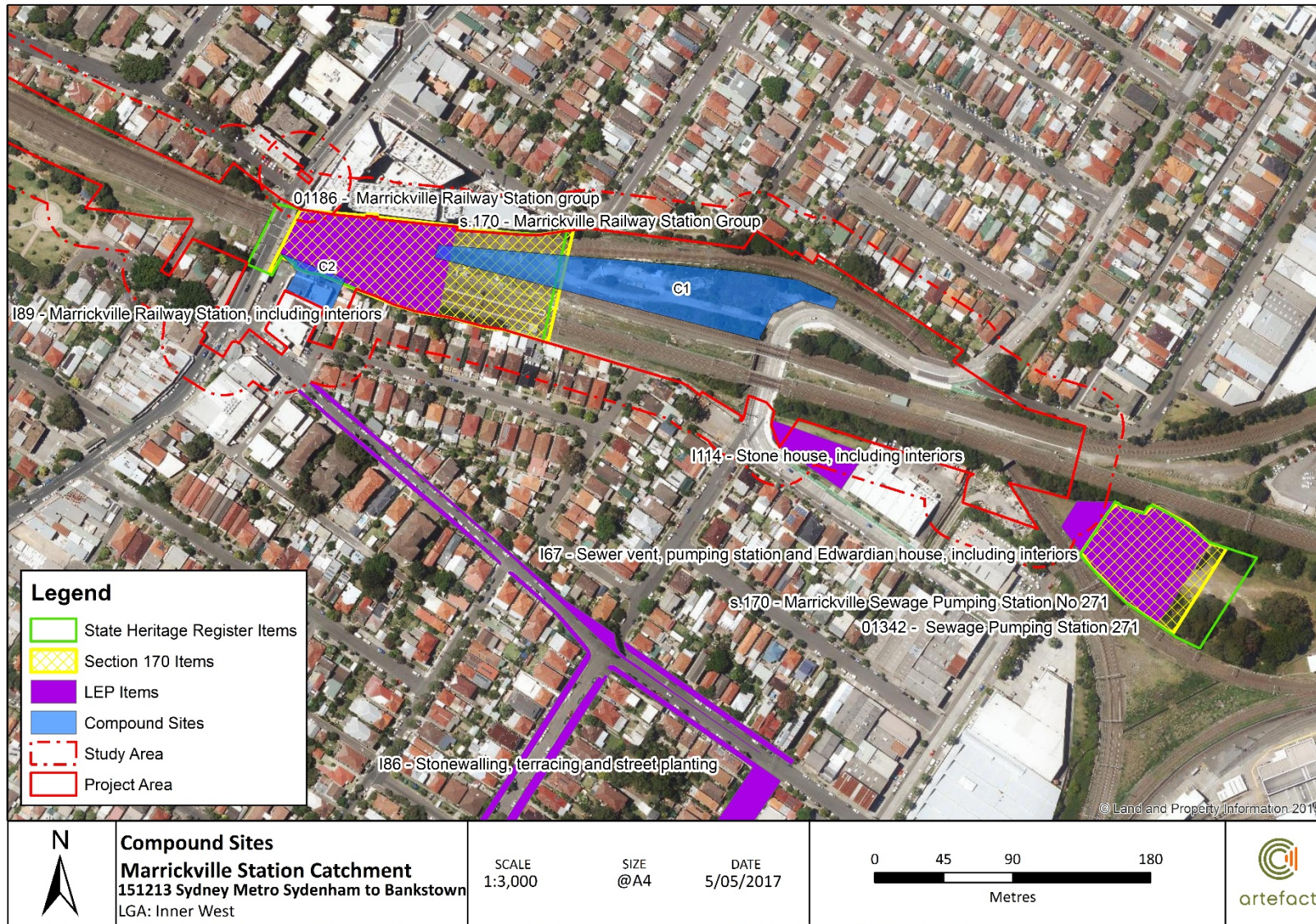
Reference	Location	Existing use	Duration of use
C7	South Parade, Campsie	Rail corridor	Long-term
C8	North Parade/Wilfred Avenue, Campsie	Rail corridor, road reserve with parking	Long-term
C9	Lilian Street, Campsie	Rail corridor, parking	Long-term
C10	Tobruk Avenue, Belmore	Rail corridor, open space	Long-term
C11	Redman Parade, Belmore	Parking	Long-term
C12	Railway Parade, Belmore	Rail corridor, open space	Long-term
C13	Bridge Road, Belmore	Sydney Trains maintenance facility	Long-term
C14	The Boulevarde, Lakemba	Rail corridor, parking	Short-term
C15	Railway Parade, Lakemba	Rail corridor, parking	Short-term
C16	The Boulevarde, Lakemba	Rail corridor, parking	Short-term
C17	The Boulevarde, Wiley Park	Rail corridor, road verge	Long-term
C18	Urunga Parade, Wiley Park	Rail corridor, road verge	Long-term
C19	Urunga Parade, Punchbowl	Rail corridor	Long-term
C20	Urunga Parade, Punchbowl	Rail corridor, road reserve	Long-term
C21	The Boulevarde, Punchbowl	Parking	Long-term
C22	Bruest Place, Punchbowl	Rail corridor, school	Long-term
C23	South Terrace, Bankstown	Rail corridor	Long-term
C24	North Terrace, Bankstown	Rail corridor, road reserve	Long-term

Note 1: short-term: area is to be used for up to about 18 months, long-term: area is to be used for over 18 months and potentially for the entire construction period.

8.2 Site locations

The maps below show the location of construction sites for the project. Where construction compounds are located away from listed items (generally outside the station catchments) they have not been mapped and assessed in this section.

Figure 293: Construction compounds within study area: Marrickville Station Catchment



File Path: C:\Users\GIS\Desktop\GIS\GIS_Mapping\151213_Sydney_Metro_Bankstown_Sydenham\MXD\Heritage_Detail_Marrickville

Figure 294: Construction compounds within study area: Dulwich Hill Station Catchment



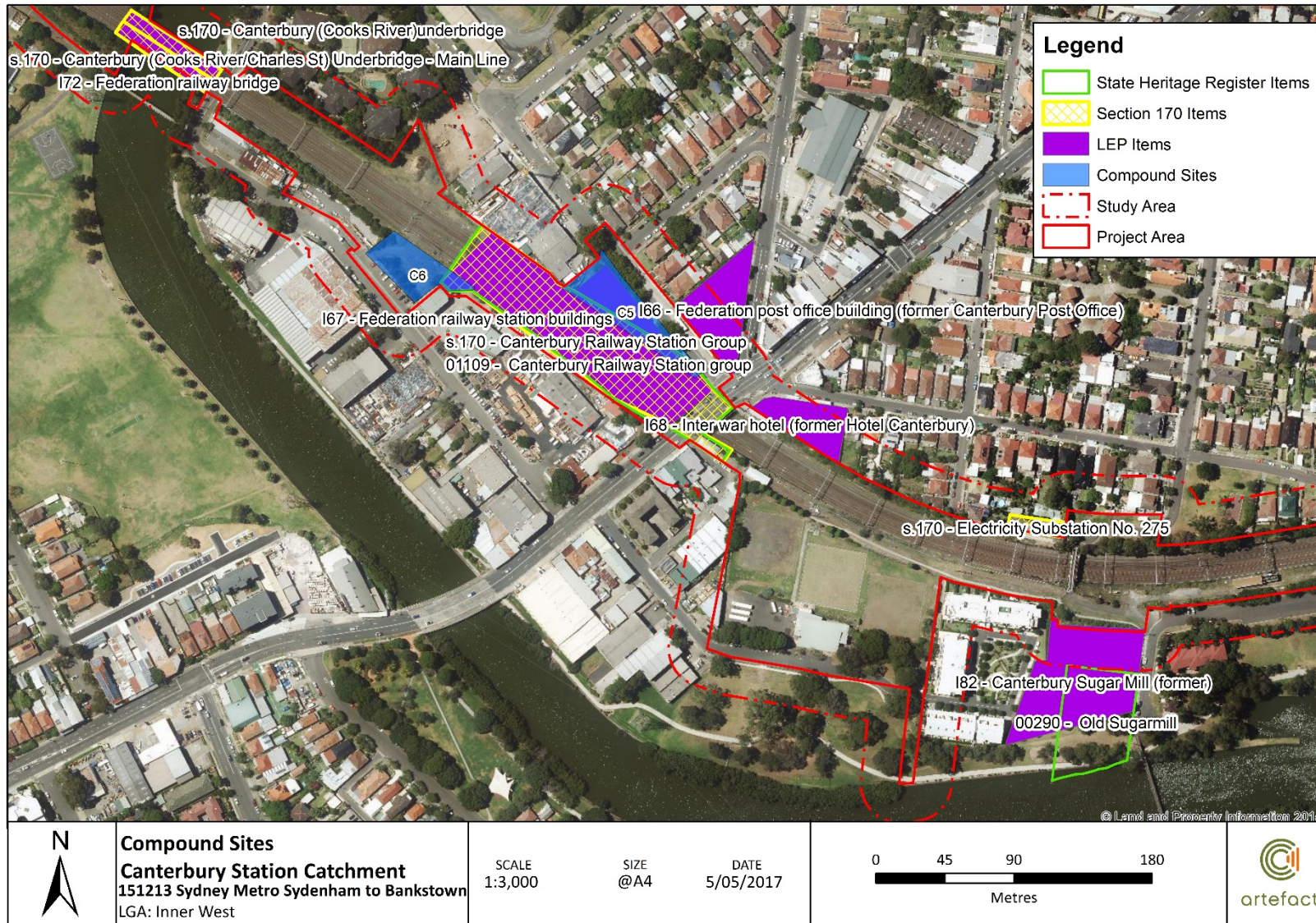
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Figure 295: Construction compounds within study area: Hurlstone Park Station Catchment



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Figure 296: Construction compounds within study area: Canterbury Station Catchment



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Figure 297: Construction compounds within study area: Campsie Station Catchment

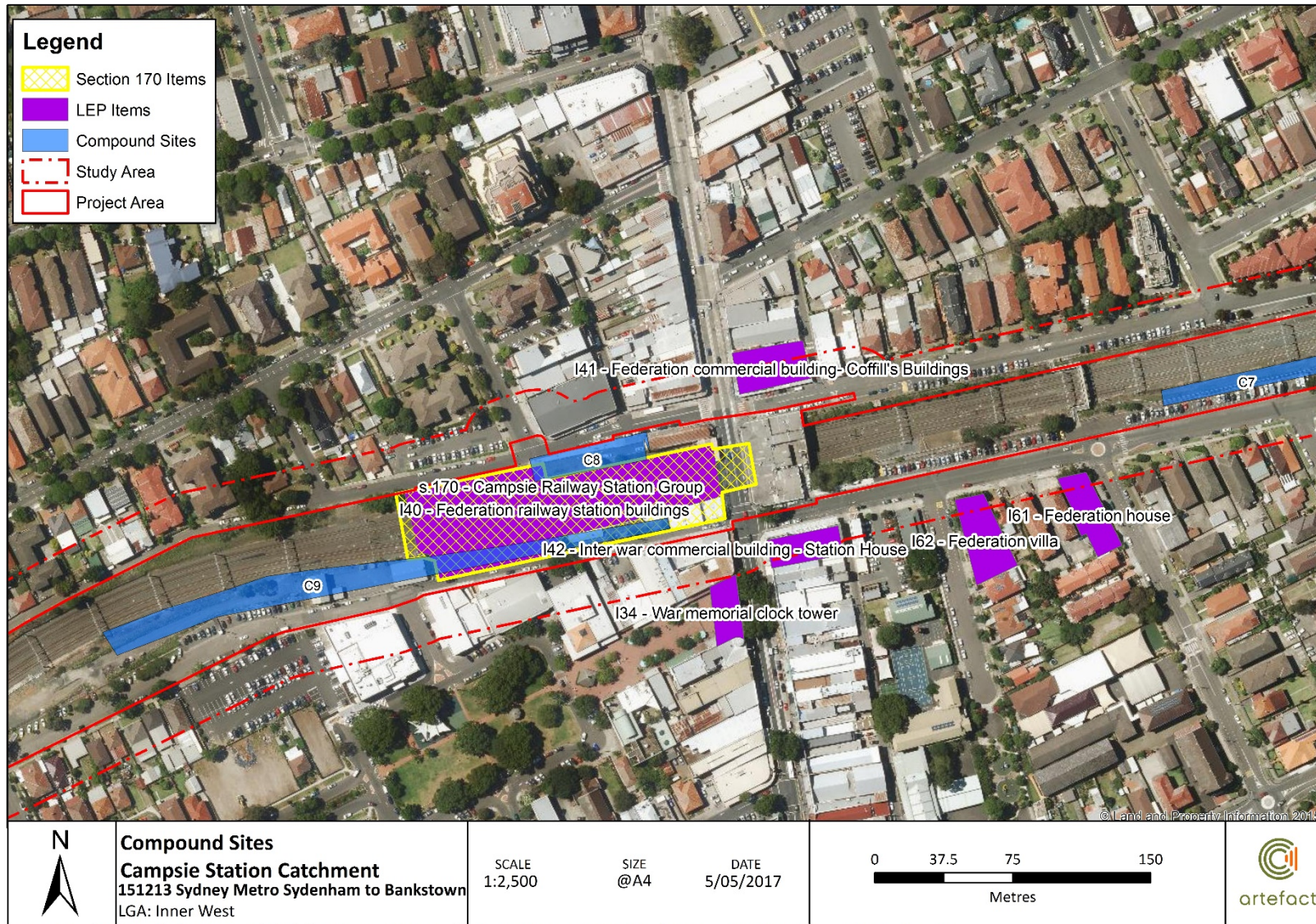


Figure 298: Construction compounds within study area: Belmore Station Catchment

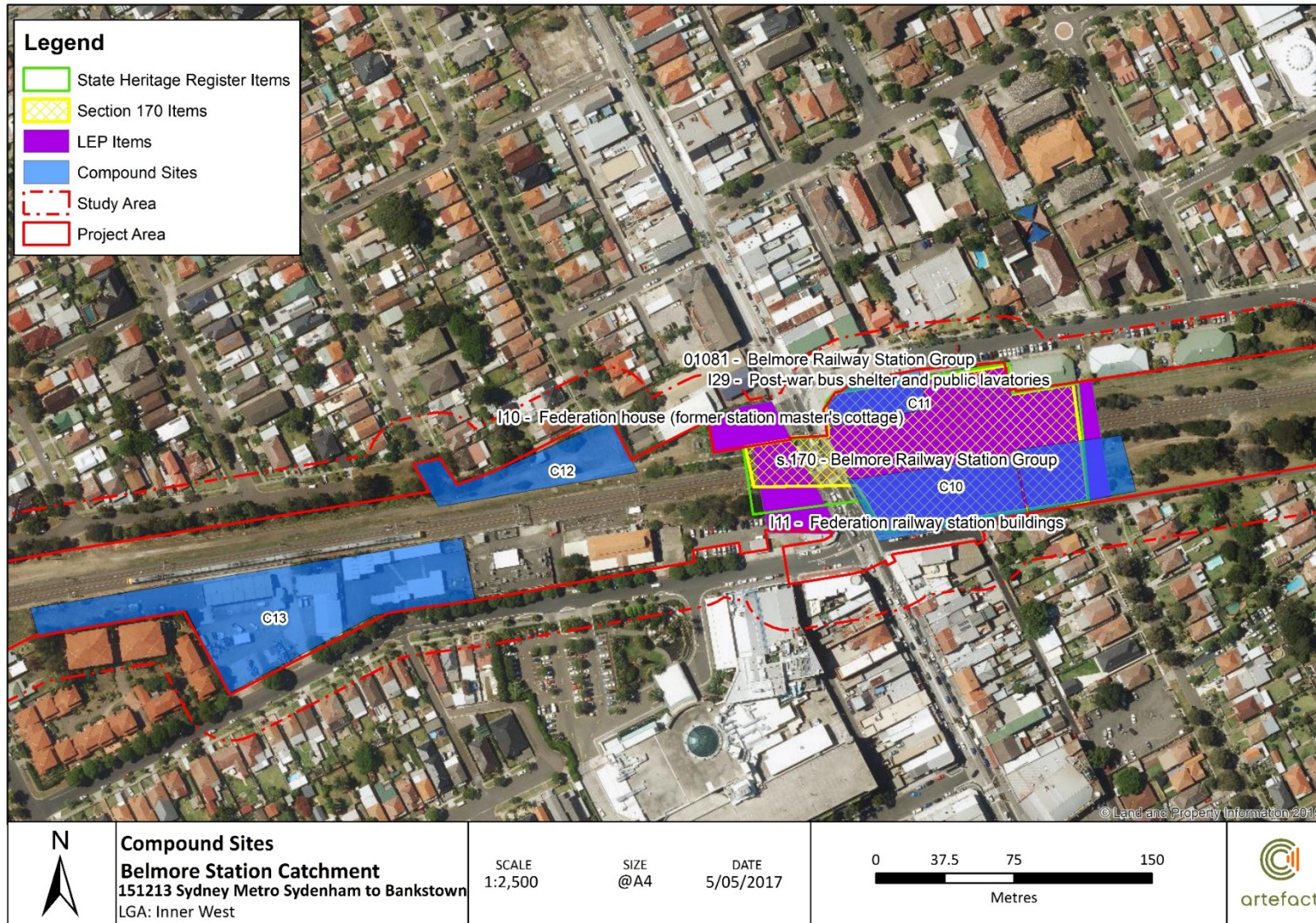


Figure 299: Construction compounds within study area: Lakemba Station Catchment

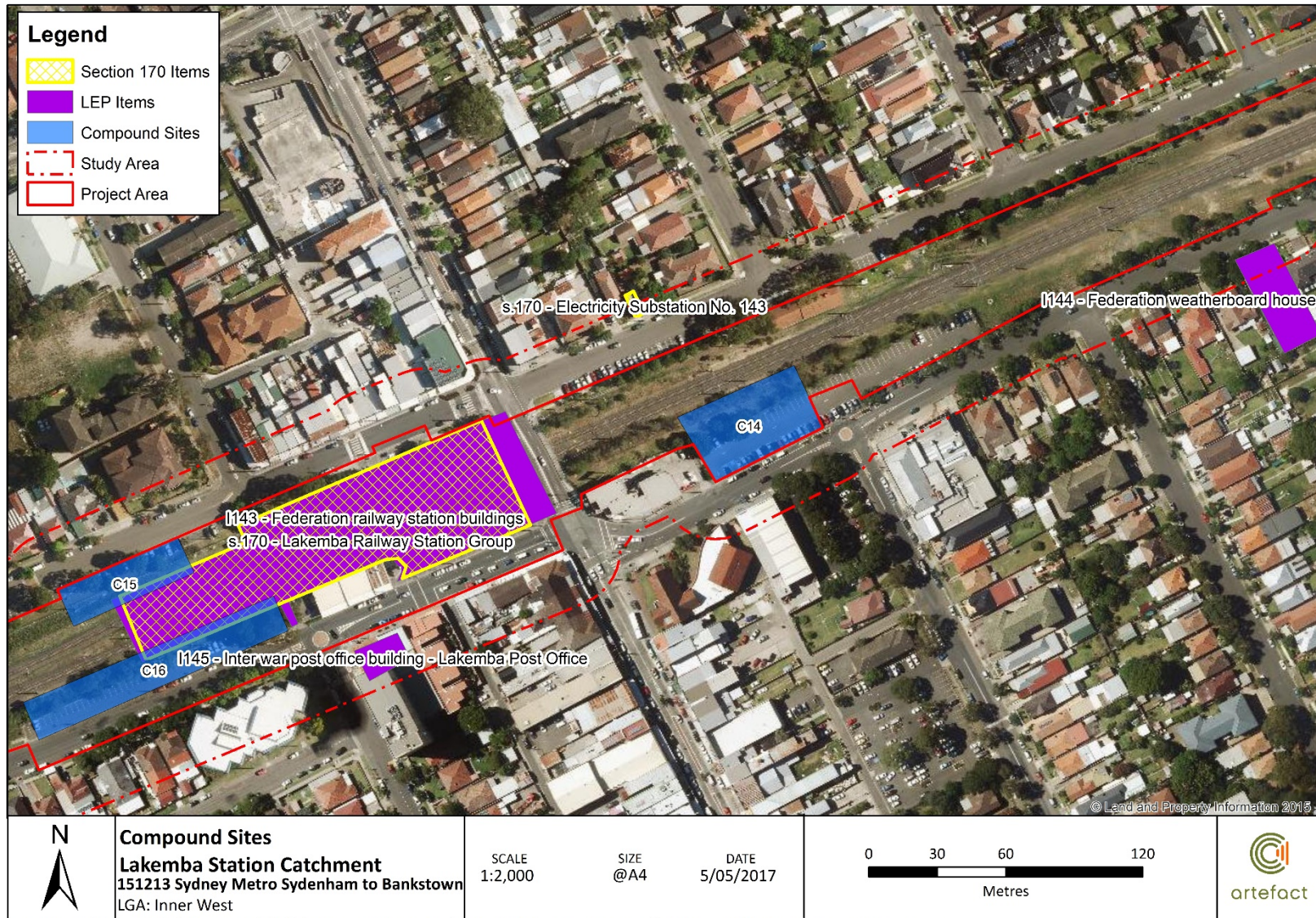
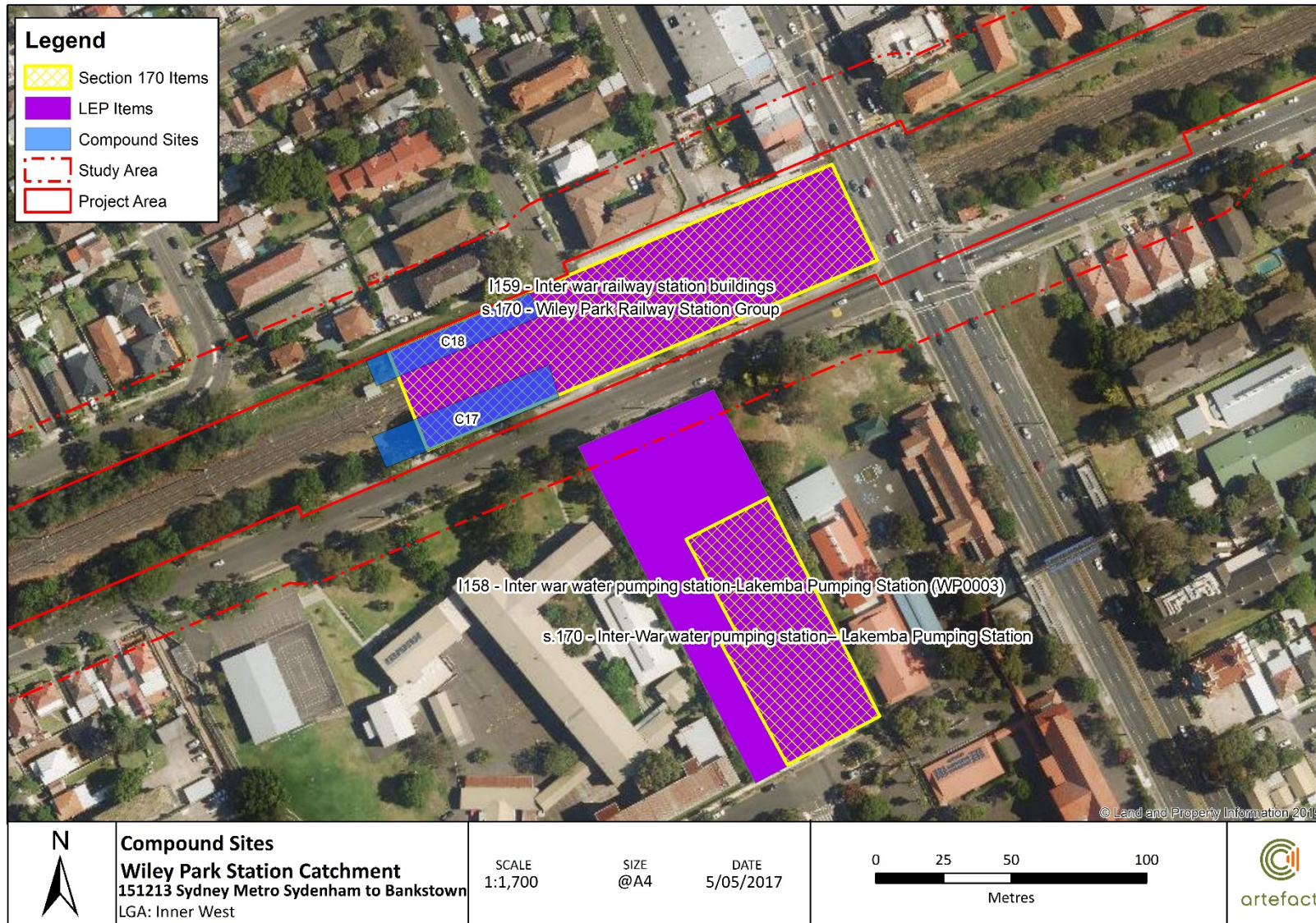


Figure 300: Construction compounds within study area: Wiley Park Station Catchment



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Figure 301: Construction compounds within study area: Punchbowl Station Catchment

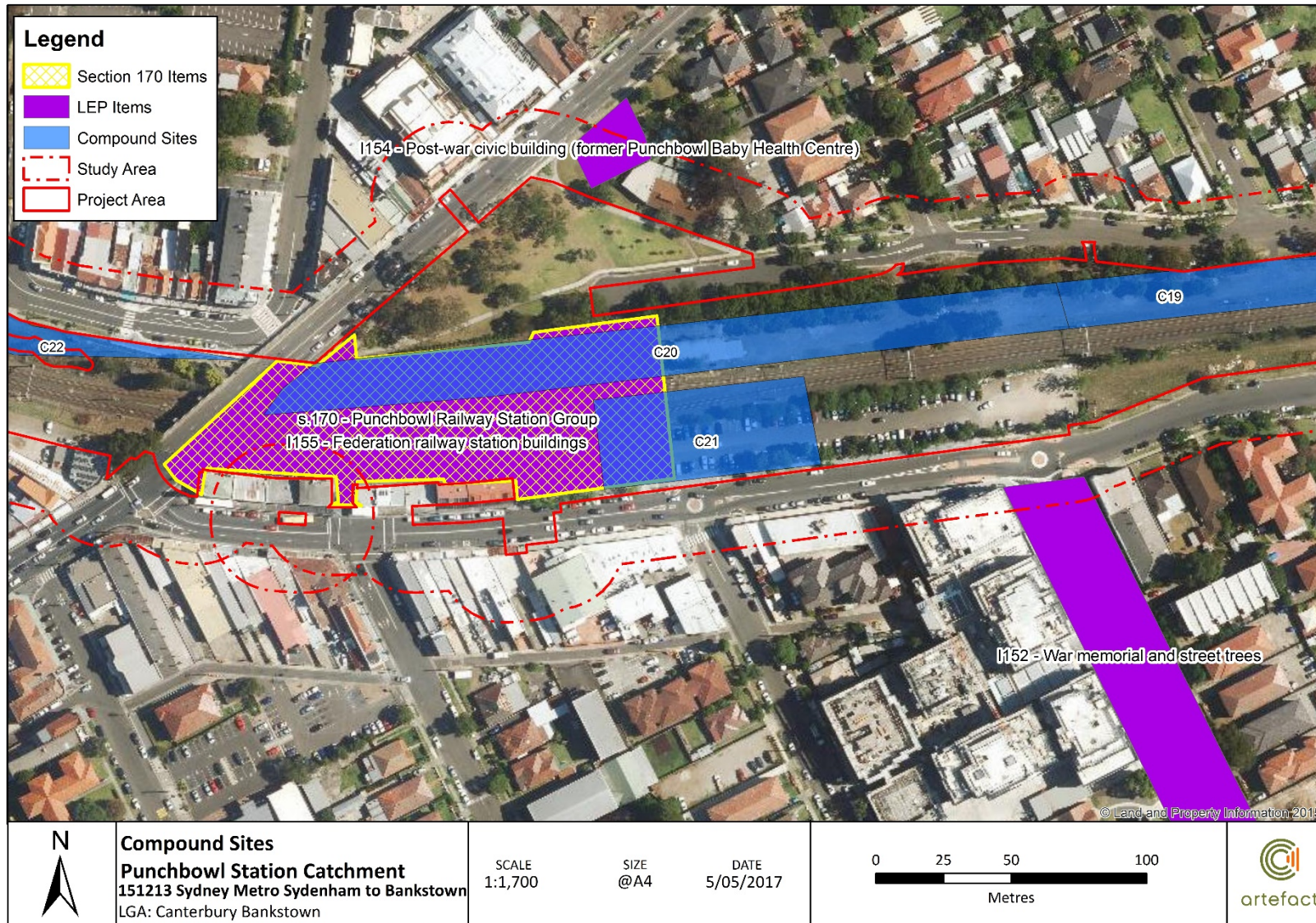
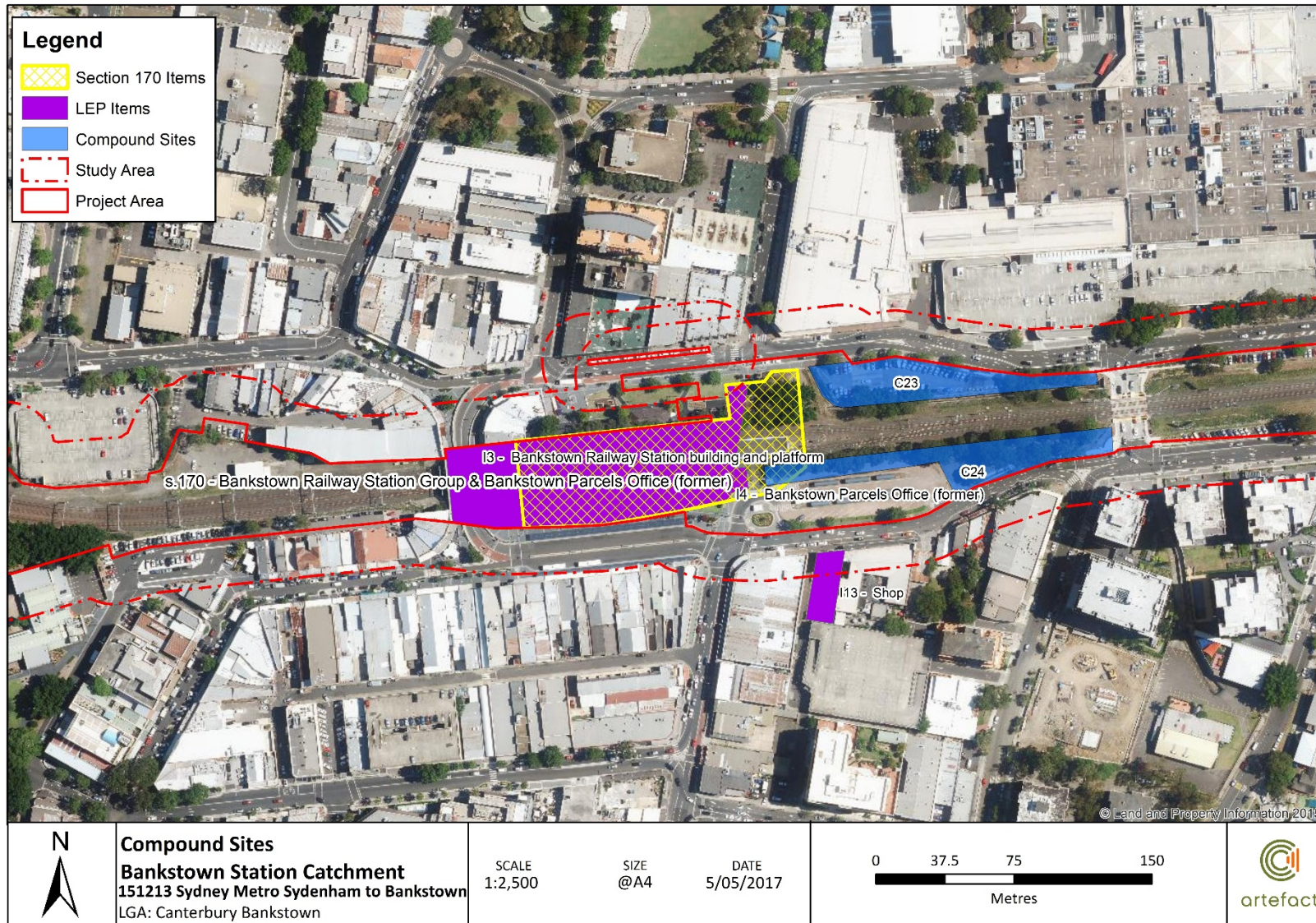


Figure 302: Construction compounds within study area: Bankstown Station Catchment



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8.3 Built heritage impact assessment

8.3.1 Marrickville Station Catchment

Description

The entire rail corridor within Marrickville Station Catchment would be used as a worksite. Construction compound 1 (C1) would be located to the north-east of Marrickville Station and would result in a minor encroachment upon Marrickville Station curtilage. Construction compound 2 (C2) would also extend into the station curtilage.

The proposed construction sites maps relevant to the station catchment are provided in Figure 293.

Impact assessment

The following table provides an impact assessment in relation to construction compounds for each heritage item located within the station catchment.

Table 109: Construction compounds assessment for Marrickville Station Catchment

Item	Significance	Construction compounds impacts
Marrickville Railway Station Group	State	<p>C1 would be partly located within the heritage curtilage of the item to the north-east of the existing island platform. The impact area is an unkempt grass area and does not contain elements of significance. The direct impacts of the site on the item would remain minor. There would be temporary moderate visual impacts on the item as a result of the construction and use of C1.</p> <p>C2 is located along the southern boundary of the rail corridor and would result in a minor encroachment on the heritage curtilage of the item. The direct impacts on the item would remain negligible. The site would include part of Station Street and involve the removal of existing properties to the south of the item. There are no significant views to and from the item and the properties to be removed. This would result in a neutral impact on the item. Provided that the site is remediated to minimise visual impacts on the item post-construction, this site would result in a temporary minor impact on the item.</p> <p>Impacts of construction compounds on the item would be minor.</p>
Sewage Pumping Station 271	State	<p>There are no construction compounds in the vicinity of this item therefore no impacts are expected</p>
Stone house, including interiors	Local	<p>There are no construction compounds in the vicinity of this item therefore no impacts are expected</p>
Stonewalling, terracing and street planting	Local	<p>There are no construction compounds in the vicinity of this item therefore no impacts are expected</p>

8.3.2 Dulwich Hill Station Catchment

Description

The entire rail corridor within Dulwich Hill Station Catchment would be used as a worksite. Construction compound 3 (C3) would be partly established within the curtilage of Dulwich Railway Station along the rail corridor on the southern side of the heritage item.

The proposed construction sites map relevant to the station catchment is provided in Figure 294.

Impact assessment

The following table provides an impact assessment in relation to construction compounds for each heritage item located within the station catchment.

Table 110: Construction compounds assessment for Dulwich Hill Station Catchment

Item	Significance	Construction compounds impacts
Dulwich Hill Railway Station Group	Local	C3 would be partly established within the curtilage of Dulwich Hill Station along the rail corridor on the southern side. It would be located in areas of little significance on the edge of the heritage curtilage. The site would not impact significant fabric of the item. Provided that the impact area is remediated post-construction, the direct impacts of the site on the item would be minor. It would result in a temporary moderate visual impact on the item. Impacts of construction compounds on the item would be minor.
South Dulwich Hill Heritage Conservation Area	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.
Inter-War Heritage Conservation Area Group	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.
Gladstone Hall, including interiors	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.

8.3.3 Hurlstone Park Station Catchment

Description

The entire rail corridor within Hurlstone Park Station Catchment would be used as a worksite. Outside the rail corridor, construction compound 4 (C4) would be located along the northern boundary of Hurlstone Park Station on the eastern side outside its heritage curtilage within the existing car park.

The proposed construction sites map relevant to the station catchment is provided in Figure 295.

Impact assessment

The following table provides an impact assessment in relation to construction compounds for each heritage item located within the station catchment.

Table 111: Construction compounds assessment for Hurlstone Park Station Catchment

Item	Significance	Construction compounds impacts
Hurlstone Park Railway Station Group	Local	C4 would be located along the northern boundary of the heritage item on the eastern side outside its heritage curtilage. There would be some views onto the site from the heritage item. This would result in a temporary minor visual impact on the item.
Hurlstone Park Railway Underbridge	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected

8.3.4 Canterbury Station Catchment

Description

The entire rail corridor within Canterbury Station Catchment would be used as a worksite. Outside the rail corridor, construction compound 5 (C5) would be located along the northern boundary of Canterbury Station opposite the existing platform. This site would encroach slightly on the northern boundary of the heritage curtilage. Construction compound 6 (C6) would be located directly to the west of the station and would extend slightly into its curtilage. A worksite would be located between Canterbury Station and the Old Sugarmill within an existing park. The area would primarily be used for laydown.

The proposed Construction compounds map relevant to the station catchment is provided in Figure 296.

Impact assessment

The following table provides an impact assessment in relation to construction compounds for each heritage item located within the station catchment.

Table 112: Construction compounds assessment for Canterbury Station Catchment

Item	Significance	Construction compounds impacts
Canterbury Railway Station Group	State	<p>C5 would be located along the northern boundary of the heritage item and encroach slightly on the northern boundary of its curtilage. The site would be located within a grassed area and would not impact significant fabric of the heritage item. Provided that the impact area is remediated post-construction, the direct impacts of the site would remain negligible. There would be views onto the site from the heritage item. This would result in a temporary moderate visual impact on the item.</p> <p>C6 would extend slightly into the western curtilage of the item.</p> <p>Impacts of construction compounds on the item would be minor.</p>
Canterbury (Cooks River) underbridge	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected
Canterbury (Cooks River/Charles St) Underbridge - Main Line	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected
Old Sugarmill	State	<p>A worksite (primarily for laydown) would be located in the vicinity of the heritage item, to the west. There would be some views onto the site from the item. This would result in a temporary minor visual impact on the item. Limited views onto the sites would result in a temporary negligible visual impact on the item. Views onto the sites would be obstructed by existing development to the north and west of the item.</p> <p>Impacts of worksite on the item would be minor.</p>
Inter-War Hotel (former Hotel Canterbury)	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.
Federation Post Office Building (former	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.

Item	Significance	Construction compounds impacts
Canterbury Post Office)		
Electricity substation no. 275	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.

8.3.5 Campsie Station Catchment

Description

The entire rail corridor within Campsie Station Catchment would be used as a worksite. Outside the rail corridor, construction compound 8 and 9 (C8 and C9) would be located partially within the curtilage of Campsie Railway Station along the northern and southern boundaries.

The proposed construction sites map relevant to the station catchment is provided in Figure 297.

Impact assessment

The following table provides an impact assessment in relation to construction compounds for each heritage item located within the station catchment.

Table 113: Construction compounds assessment for Campsie Station Catchment

Item	Significance	Construction compounds impacts
Campsie Railway Station Group	Local	C8 and C9 would be located partially within the curtilage of the heritage item on the northern and southern boundaries. The sites would be located within grass and car parking areas along the boundaries of the station and would not impact any significant fabric of the heritage item. Provided that the impact areas are remediated post-construction, the direct impacts of the sites would remain negligible. There would be views onto the sites from the heritage item. This would result in a temporary moderate visual impact on the item. Impacts of construction compounds on the item would be minor.
Federation commercial building– Coffill's Buildings	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.
Inter-War Commercial Building– Station House	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.
Inter-War Court House (former) Campsie Court House	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.
War Memorial Clock Tower	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.
Federation house	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.

Item	Significance	Construction compounds impacts
Federation villa	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.

8.3.6 Belmore Station Catchment

Description

The entire rail corridor within Belmore Station Catchment would be used as a worksite. Outside the rail corridor, construction compounds 10 and 11 (C10 and C11) would be located partially within the curtilage of Belmore Railway Station along the northern and southern boundaries. Construction compounds 12 and 13 (C12 and C13) would be located to the west of Belmore Railway Station.

The proposed construction sites map relevant to the station catchment is provided in Figure 298.

Impact assessment

The following table provides an impact assessment in relation to construction compounds for each heritage item located within the station catchment.

Table 114: Construction compounds assessment for Belmore Station Catchment

Item	Significance	Construction compounds impacts
Belmore Railway Station Group	State	<p>C10 and C11 would be located partially within the curtilage of the heritage item along the northern and southern boundaries, and would make a minor encroachment on the northern boundary of the heritage item. The sites would be located within grass and car parking areas along the edges of the station and would not impact any significant fabric of the heritage item. Provided that the impact areas are remediated post-construction, the direct impacts of the sites would remain negligible. There would be views onto the sites from the heritage item. This would result in a temporary moderate visual impact on the item.</p> <p>C12 and C13 would be located in the broader vicinity of the item along the rail corridor to the west. There would be limited views onto the site from the heritage item. This would result in a temporary negligible visual impact on the item.</p> <p>Impacts of construction compounds on the item would be minor.</p>
Post-war bus shelter and public lavatories	Local	<p>C11 would be located within the curtilage of the heritage item. The site would utilise the existing car parking area in the eastern portion of the item. The Post-war bus shelter and public lavatories are located in the western portion of the heritage item outside the proposed site location. No significant fabric of the heritage item would be affected by the site. Provided that the impact areas are remediated post-construction, the direct impacts of the site would be negligible. There would be views onto the site from the heritage item. This would result in a temporary moderate visual impact on the item.</p> <p>C10 would also be located in the vicinity of the item across the rail corridor to the south. Views would be partly obstructed by existing development within the station catchment. This would result in a temporary minor visual impact on the item.</p> <p>Impacts of construction compounds on the item would be minor.</p>
Federation House (former station master's cottage)	Local	<p>C12 and C13 would be located in the vicinity of the heritage item opposite Burwood Road and across the rail corridor. There would be some views onto the sites from the item. This would result in a temporary minor visual impact on the item.</p> <p>Impacts of construction compounds on the item would be minor.</p>

8.3.7 Lakemba Station Catchment

Description

The entire rail corridor within Lakemba Station Catchment would be used as a worksite. Outside the rail corridor, construction compounds 15 and 16 (C15 and C16) would be located partially within the curtilage of Lakemba Station. C15 would be located along the rail corridor in the northern portion of the item and extend into the northern curtilage, and C16 would make a minor encroachment along the southern boundary of the heritage curtilage of the station. Construction compound 14 (C14) would be located along the rail corridor on the other side of Haledon Street overbridge.

The proposed construction sites map relevant to the station catchment is provided in Figure 299.

Impact assessment

The following table provides an impact assessment in relation to construction compounds for each heritage item located within the station catchment.

Table 115: Construction compounds assessment for Lakemba Station Catchment

Item	Significance	Construction compounds impacts
Lakemba Railway Station Group	Local	<p>C15 and C16 would be located partially within the curtilage of Lakemba Railway Station. C15 would be located along the rail corridor in the northern portion of the item and would extend into the northern section of the curtilage, C16 would make a minor encroachment along the southern boundary of the heritage curtilage of the station. The sites would be located on grass areas and would not impact any significant fabric of the heritage item. Provided that the impact areas are remediated post-construction, the direct impacts of the sites would remain negligible. There would be views onto the site from the heritage item. This would result in a temporary moderate visual impact on the item.</p> <p>C14 would be located on the other side of the Haledon Street overbridge to the east. There would be limited views onto the sites from the heritage item. This would result in a temporary minor visual impact on the item.</p> <p>Impacts of construction compounds on the item would be minor.</p>
Federation weatherboard house	Local	<p>There are no construction compounds in the vicinity of this item therefore no impacts are expected.</p>
Inter-War post office building - Lakemba Post Office	Local	<p>C16 would be located in the vicinity of the heritage item opposite The Boulevarde. There would be some views onto the sites from the item. This would result in a temporary minor visual impact on the item.</p> <p>Impacts of construction compounds on the item would be minor.</p>
Electricity Substation no. 143	Local	<p>C14 would be located opposite the heritage item opposite the rail corridor. There would be views onto the sites from the item. This would result in a temporary minor visual impact on the item.</p> <p>Impacts of construction compounds on the item would be minor.</p>

8.3.8 Wiley Park Station Catchment

Description

The entire rail corridor within Wiley Park Station Catchment would be used as a worksite. Outside the rail corridor, construction compounds 17 and 18 (C17 and C18) would be located within the curtilage of Wiley Park Railway Station along the rail corridor on grassed areas.

The proposed construction sites map relevant to the station catchment is provided in Figure 300.

Impact assessment

The following table provides an impact assessment in relation to construction compounds for each heritage item located within the station catchment.

Table 116: Construction compounds assessment for Wiley Park Station Catchment

Item	Significance	Construction compounds impacts
Wiley Park Railway Station Group	Local	C17 and C18 would be located within the curtilage of Wiley Park Railway Station along the rail corridor. The sites would be located on grassed areas and would not impact any existing significant fabric of the heritage item. Provided that the impact areas are remediated post-construction, the direct impacts of the sites would remain negligible. There would be views onto the sites from the heritage item. This would result in a temporary moderate visual impact on the item. Impacts of construction compounds on the item would be minor
Inter-War water pumping station– Lakemba Pumping Station (WP0003)	Local	C17 would be located opposite the heritage item across The Boulevard on the southern side of the rail corridor. There would be views onto the compound from the item. This would result in a temporary minor visual impact on the item.

8.3.9 Punchbowl Station Catchment

Description

The entire rail corridor within Punchbowl Station Catchment would be used as a worksite. Outside the rail corridor, construction compounds 20 and 21 (C20 and C21) would be partially located within the curtilage of Punchbowl Station along the rail corridor on grass and car parking areas. Construction compound 22 (C22) would be located along the rail corridor on the western side of the Punchbowl Road overbridge.

The proposed construction sites map relevant to the station catchment is provided in Figure 301.

Impact assessment

The following table provides an impact assessment in relation to construction compounds for each heritage item located within the station catchment.

Table 117: Construction compounds assessment for Punchbowl Station Catchment

Item	Significance	Construction compounds impacts
Punchbowl Railway Station Group	Local	C20 and C21 would be located within the curtilage of Punchbowl Railway Station along the rail corridor. The sites would be located on grass and car parking areas and would not impact any existing significant fabric of the heritage item. Provided that impact areas are remediated post-construction, the direct impacts of the site would remain negligible. There would be views onto the sites from the heritage item. This would result in a temporary moderate visual impact on the item. C22 would also be located along the rail corridor on the other side of the Punchbowl Road overbridge. There would be limited views onto the site from the heritage item. This would result in a temporary minor visual impact on the item. Impacts of the construction compounds on the item would be minor.
War Memorial and street trees	Local	C19 and C20 would be located opposite the heritage item across The Boulevard on the northern side of the rail corridor. There would be some views onto the sites from the edge of the heritage curtilage of the item to the north. However, the War Memorial and street trees would be located outside the visual catchment of the site. This would result in a temporary negligible visual impact on the item.

Item	Significance	Construction compounds impacts
		The impacts of C20 and C19 on the item would be negligible.
Post-war Civic Building (former Punchbowl Baby Health Centre)	Local	There are no construction compounds in the vicinity of this item therefore no impacts are expected.

8.3.10 Bankstown Station Catchment

Description

The entire rail corridor within Bankstown Station Catchment would be used as a worksite. Construction compounds 23 and 24 (C23 and C24) would be located in close vicinity of Bankstown Station along the rail corridor on grass and car parking areas, with C24 making a minor encroachment on the heritage curtilage of the station to the south-east.

The proposed construction sites map relevant to the station catchment is provided in Figure 302.

Impact assessment

The following table provides an impact assessment in relation to construction compounds for each heritage item located within the station catchment.

Table 118: Construction compounds assessment for Bankstown Station Catchment

Item	Significance	Construction compounds impacts
Bankstown Railway Station Group	Local	C23 and C24 would be located in close proximity of Bankstown Railway Station along both sides of the rail corridor. C24 would make a minor encroachment on the heritage curtilage in the south-east corner. The sites would be located on grass and car park areas and would not impact any significant fabric of the heritage item. Provided that the impact areas are remediated post-construction, the direct impacts of the site would remain negligible. There would be views onto the sites from the heritage item. This would result in a temporary moderate visual impact on the item. Impacts of construction compounds on the item would be minor.
Bankstown Parcels Office (former)	Local	C23 would also be located opposite the heritage item across the rail corridor to the north. There would be some views onto the site from the item. This would result in a temporary minor visual impact on the item. C24 would be located in close proximity of the heritage item to the east along the rail corridor. There would be views onto the site from the heritage item. This would result in a temporary moderate visual impact on the item. Impacts of construction compounds on the item would be minor.
Shop	Local	C23 and C24 would be located opposite the heritage item across Bankstown City Plaza and North Terrace, being located opposite the rail corridor. There would be some views onto the sites from the heritage item. This would result in a temporary minor visual impact on the item. Impacts of construction sites on the item would be minor.

8.4 Mitigation and management measures

Site remediation

Site remediation measures related to construction sites would be incorporated within the Urban Design and Landscape Plan for the project. The objective of the scheme would be to minimize long-term impacts on the visual amenity of the items by recreating a sympathetic environment. In particular, a landscape scheme would be prepared for the Old Sugarmill to re-instate planting within the curtilage and in proximity of the curtilage of the item. The scheme would consider appropriate period plants and trees. Any boundary wall treatment would be designed in consultation with a heritage architect.

Construction Environmental Management Plan (CEMP)

Methodologies would be developed to minimise unforeseen impacts as a result of works in proximity of heritage items. A Construction Environmental Management Plan (CEMP) would provide specific management measures for heritage items in proximity of construction sites and for compound areas which extend outside the rail corridor.

9. CUMULATIVE IMPACT ASSESSMENT

9.1 The Bankstown Line

9.1.1 Overview of Impacts

A summary table of direct, visual, potential direct and archaeological impacts is provided below for each railway heritage item located on the Bankstown Line within the project area. An assessment is provided of whether the overall significance level of the heritage item is retained following the impacts (would it still meet the threshold for local or State significance). All items are listed on the RailCorp S.170 Heritage and Conservation Register. There are no RailCorp S.170 items listed within the buffer zone of the project area.

Table 119: Summary of Heritage Impacts for the Bankstown Line

Item	Significance level	Direct	Visual	Potential direct	Construction sites	Significance level retained?
Marrickville Railway Station Group	State	Major	Moderate	Minor	Minor	Yes
Dulwich Hill Railway Station Group	Local	Major	Major	Minor	Minor	Yes
Hurlstone Park Railway Station Group	Local	Major	Major	Minor	Minor	Yes
Hurlstone Park Railway Underbridge	Local	Negligible	Negligible	Negligible	Neutral	Yes
Canterbury Railway Station Group	State	Moderate	Moderate	Minor	Minor	Yes
Canterbury (Cooks River) underbridge	Local	Moderate	Minor	Negligible	Neutral	Yes
Canterbury (Cooks River/Charles St) Underbridge - Main Line	Local	Moderate	Minor	Negligible	Neutral	Yes
Campsie Railway Station Group	Local	Moderate	Moderate	Minor	Minor	Yes
Belmore Railway Station Group	State	Moderate	Moderate	Minor	Minor	Yes
Lakemba Railway Station Group	Local	Moderate	Moderate	Minor	Minor	Yes
Wiley Park Railway Station Group	Local	Major	Major	Minor	Minor	No
Punchbowl Railway Station Group	Local	Major	Major	Minor	Minor	No
Bankstown Railway Station Group	Local	Moderate	Moderate	Negligible	Minor	Yes
Bankstown Parcels Office (former)	Local	Neutral	Neutral	Minor	Minor	Yes

9.1.2 Statement of Heritage Impact

Impact summary

The Bankstown Line was constructed in three stages between 1880 and 1939. The Sydenham to Belmore section was first constructed between 1880 and 1895. The second phase of development of the line was between 1896 and 1909, where the rail corridor cut through undeveloped country estate and farm land to Bankstown. The early twentieth century saw the addition of platform buildings, overhead booking offices, footbridges and overbridges at existing railway stations. The line was electrified in 1926, marking a significant change in the railway network system. The third phase of development of the line occurred between 1928 and 1939 when it reached Regents Park via Yagoona and Birrong. Wiley Park opened in 1938 as an infill station on the Sydenham to Bankstown section and Dulwich Hill Station was redeveloped in 1935, both stations representing examples of Inter-War railway architecture. The development of the line can be recognised across the line as a whole, with phases of building, platform and station types. It can also be appreciated within a single station, such as at Dulwich Hill which has retained layers of development.

Each railway station within the project area is listed as a heritage item at a State or local level as well as being listed under the RailCorp Section 170 Heritage & Conservation Register. Marrickville, Canterbury, and Belmore railway stations are listed on the State Heritage Register. Other heritage items listed under the RailCorp s170 register within the project area include underbridges at Hurlstone Park and Canterbury and the parcels office at Bankstown. All railway stations include several elements of significance including wayside or island platforms, platform buildings, overhead booking offices, footbridges and overbridges. A few stations include a parcels office, evidencing the role of rail in transportation. A signal box is located at Canterbury station.

Among the ten heritage railway stations located on the Marrickville to Bankstown section of the Bankstown Line, the project would result in major direct impacts to five stations, one of which is listed on the SHR, Marrickville. There would be moderate direct impacts to five stations, two of which are listed on the SHR: Canterbury and Belmore. Four stations would be subject to major visual impacts. Five stations would be subject to a moderate visual impact, three of which are listed on the SHR: Marrickville, Canterbury and Belmore. Two locally-listed stations, Wiley Park and Punchbowl, would no longer meet the threshold for local significance and would likely be delisted. All SHR stations would continue to meet the threshold for State significance under more than one significance assessment criteria.

Overall, all ten stations would be subject to moderate to major direct and visual impacts. Direct and visual impacts to three railway underbridges would be negligible to moderate. There would be major direct impacts to the Illawarra Road overbridge at Marrickville, which is within the station's SHR curtilage. As there would be impacts to significant elements at all listed stations along the line, conservation management plans (CMPs) for SHR listed stations and Conservation Management Strategies (CMS) for s170 items of local significance would be prepared by the Metro Operator. These documents would address any changes to the item including updated assessment of significance of elements and recommendations on curtilage changes, for example a possible reduction in curtilage at Marrickville Station as a result of impacts to the Illawarra overbridge. The CMP would also provide suggested site specific exemptions or management policies.

Station types

The ten railway stations within the project area could be divided into three main station types: the first layer of development of the Bankstown Line: Marrickville, Dulwich Hill (although fully redeveloped), Hurlstone Park, Campsie, Canterbury and Belmore; the second layer of development of the line: Lakemba, Punchbowl and Bankstown; and the inter-war development phase with the infill station at Wiley Park and the fully redeveloped Dulwich Hill station.

Stations constituting the first layer of development of the line would generally be retained, Dulwich Hill being excluded from this group as it was fully redeveloped in 1935. All platform buildings and general station configurations would be conserved at Marrickville, Hurlstone Park, Campsie, Canterbury and Belmore, but for the Platform 1 building at Hurlstone Park which would be removed.

Stations constituting the second layer of development of the line would mostly be conserved in their existing states. Lakemba and Bankstown's island platform configurations and platform buildings would be retained. Punchbowl Station would be subject to greater impacts as it would be fully redeveloped.

The inter-war layer of the Bankstown Line would be impacted with Wiley Park Station being fully redeveloped, constituting the loss of the only example of Inter-War Railway Domestic station on the line. The inter-war phase of redevelopment of Dulwich Hill station would also be altered with the loss of the overhead booking office and major visual impacts on the station building, although the latter, and the island platform configuration would be conserved.

The most significant stations on the line at Marrickville, Canterbury and Belmore dated from the first phase of development would retain their significant near-identical brick buildings of exceptional significance. The intermediate stations of the first phase of development have more modest brick buildings dated 1915 including Campsie and Hurlstone Park station. Campsie would retain its original configuration and buildings whilst Hurlstone Park would be subject to greater impacts with the more prominent of two platform buildings being removed. The configuration of two stations at Punchbowl and Wiley Park would be fully modified from island platforms to wayside platforms. The configuration of Bankstown Station would be retained and the station extended to the east.

Station elements

The Bankstown Line would conserve examples of each significant platform building type found on the Marrickville to Bankstown portion of the line. Examples of 1895 Type 11 buildings of exceptional significance would be conserved at Marrickville, Canterbury and Belmore stations. Several examples of 1911-1919 Type 11 buildings would be conserved at Marrickville, Hurlstone Park, Canterbury, Campsie, Lakemba and Bankstown to evidence the second historical layer of the line. Evidence of the transitional style of Inter-War railway architecture would be retained at Dulwich Hill, although the Inter-War domestic style buildings at Wiley Park would be lost.

A good example of an overhead booking office would be conserved at Belmore, whilst good to fair examples included in a TfNSW study of overhead booking offices would be removed at Dulwich Hill, Wiley Park and Punchbowl stations.¹⁵² The platform booking office would be retained at Marrickville. A significant portion of original footbridges already impacted would be removed to meet the requirements of the new Metro concourses. A footbridge assessed to be of high significance within the NSW railway collection in a Sydney Trains' footbridge conservation strategy would be removed at Dulwich Hill, as would three footbridges of moderate significance at Hurlstone Park, Canterbury, and Wiley Park.¹⁵³

Original platforms along the line would be removed to meet accessibility and operational requirements for straight platforms, except for the platforms at Bankstown Station which would be mostly retained. This would result in a substantial loss of curved wayside and island platforms, and of brick vertical and battered platform walls along the Bankstown Line. General platform configuration would be

¹⁵² Australian Museum Consulting 2014. Railway Overhead Booking Offices Heritage Conservation Strategy. Prepared for Transport for NSW.

¹⁵³ NSW Government Architect's Office Heritage Group 2016. Railway Footbridges Heritage Conservation Strategy. Prepared for Sydney Trains.

retained apart from at Punchbowl and Wiley Park where original island platform configuration would be changed to two wayside platforms.

Overbridges on the line have generally been impacted over time. The majority of the overbridges would be conserved for upgrade and continued use, with the exception of the Illawarra Road overbridge at Marrickville which would be removed and replaced.

Archaeological impacts

Overall the study area has a nil-low potential to contain significant archaeological remains. There was limited development across the study area prior to development of the rail line. Construction of the railway stations and rail line in the late nineteenth and early twentieth century would have required a considerable amount of ground disturbance and excavation.

There are four locations that have the potential to contain significant archaeological remains, the Marrickville Station Catchment, the Canterbury Station Catchment and worksite, the Lakemba Station Catchment and Belmore Station Catchment. Other locations across the line may contain archaeological 'works' such as remains of culverts, former platforms (within existing remodelled platforms), and infrastructure such as drains.

Marrickville Station Catchment

There is a moderate-high potential for potentially local significant archaeological remains associated with the railway station to be impacted by the proposed works. These remains are generally works and former railway infrastructure as identified in the Marrickville Station draft CMP (Scobie 2016).

Canterbury Station Catchment and construction site

Although the location of the Old Sugarmill and former associated structures is to the east of the station, there is a moderate – high potential that remains associated with this period of occupation may also extend into the station catchment and worksite to the south of the rail line adjacent to the Old Sugarmill SHR item. These remains would have local or State significance depending on their nature and intactness.

The former Canterbury Township is located to the east of Canterbury Station. Any subsurface works within the rail corridor and worksite have a moderate – high potential to impact any associated intact archaeological remains. These remains would have local significance.

Lakemba Station Catchment

There is a low potential for locally significant archaeology associated with the early settlement of Lakemba including structures associated with the Taylor House (Lakemba) such as outbuildings and stables and archaeological features associated with farming activities, domestic and agricultural structures, refuse pits and drains or culverts. Works within the station catchment have the potential to impact any associated intact archaeological remains.

Belmore Station Catchment

There is a low-moderate potential for locally significant archaeological remains associated with the railway station goods shed and goods platform to be impacted by the proposed works.

Construction compounds impact

The construction compounds impact assessment considered impacts of temporary construction compounds on the heritage items located within the project area. Overall, impacts of construction sites would be minor and temporary. Provided that mitigation measures are implemented to remediate the sites following the completion of the project, overall impacts from the construction of the project on the current Bankstown Line would be negligible.

Conclusion

The contrasting contemporary design of the Metro stations would generally be distinguishable from the heritage character of the historic stations and provide enhanced views of significant platform buildings. The new Metro line would be read as the latest phase of development of the Bankstown Line and would enable the line to function in its original use within a modern railway infrastructure context. The continued use of the stations in their historic function, the retention of a majority of platform buildings for re-use and enhanced views of significant buildings would constitute positive heritage impacts in the context of the project and its requirements.

9.2 The Study Area

9.2.1 Overview of impacts

A summary table of direct, visual, potential direct and archaeological impacts is provided below for each heritage item located within the study project area. An assessment is provided of whether the overall significance level of the heritage item is retained following the impacts.

Table 120: Summary of Built Heritage Impacts for the Study Area

Station	Item	Significance	Direct	Visual	Potential direct	Construction sites	Significance level retained?
Marrickville	Marrickville Railway Station Group	State	Major	Moderate	Minor	Minor	Yes
	Sewage Pumping Station 271	State	Neutral	Negligible	Minor	Neutral	Yes
	Stone house, including interiors	Local	Neutral	Negligible	Minor	Neutral	Yes
	Stonewalling, terracing and street planting	Local	Neutral	Negligible	Negligible	Neutral	Yes
Dulwich Hill	Dulwich Hill Railway Station Group	Local	Major	Major	Minor	Minor	Yes
	South Dulwich Hill Heritage Conservation Area	Local	Negligible	Negligible	Minor	Neutral	Yes
	Inter-War Heritage Conservation Area Group	Local	Neutral	Negligible	Minor	Neutral	Yes
	Gladstone Hall, including interiors	Local	Neutral	Neutral	Minor	Neutral	Yes
Hurlstone Park	Hurlstone Park Railway Station Group	Local	Major	Major	Minor	Minor	Yes

Station	Item	Significance	Direct	Visual	Potential direct	Construction sites	Significance level retained?
Canterbury	Hurlstone Park Railway Underbridge	Local	Negligible	Negligible	Negligible	Neutral	Yes
	Canterbury Railway Station Group	State	Moderate	Moderate	Minor	Minor	Yes
	Canterbury (Cooks River) underbridge	Local	Moderate	Minor	Negligible	Neutral	Yes
	Canterbury (Cooks River/Charles St) Underbridge - Main Line	Local	Moderate	Minor	Negligible	Neutral	Yes
	Old Sugarmill	State	Neutral	Negligible	Minor	Minor	Yes
	Inter-War Hotel (former Hotel Canterbury)	Local	Neutral	Neutral	Negligible	Neutral	Yes
	Federation Post Office Building (former Canterbury Post Office)	Local	Neutral	Neutral	Minor	Neutral	Yes
	Electricity substation no. 275	Local	Neutral	Negligible	Negligible	Neutral	Yes
Campsie	Campsie Railway Station Group	Local	Moderate	Moderate	Minor	Minor	Yes
	Federation commercial building—Coffill's Buildings	Local	Neutral	Negligible	Negligible	Neutral	Yes
	Inter-War Commercial Building—Station House	Local	Neutral	Negligible	Minor	Neutral	Yes
	Inter-War Court House (former Campsie Court House)	Local	Neutral	Neutral	Negligible	Neutral	Yes
	War Memorial Clock Tower	Local	Neutral	Neutral	Negligible	Neutral	Yes
	Federation house	Local	Neutral	Negligible	Negligible	Neutral	Yes
	Federation villa	Local	Neutral	Negligible	Negligible	Neutral	Yes

Station	Item	Significance	Direct	Visual	Potential direct	Construction sites	Significance level retained?
Belmore	Belmore Railway Station Group	State	Moderate	Moderate	Minor	Minor	Yes
	Post-war bus shelter and public lavatories	Local	Neutral	Minor	Negligible	Minor	Yes
	Federation House (former station master's cottage)	Local	Neutral	Negligible	Minor	Minor	Yes
Lakemba	Lakemba Railway Station Group	Local	Moderate	Moderate	Minor	Minor	Yes
	Federation weatherboard house	Local	Neutral	Neutral	Negligible	Neutral	Yes
	Inter-War post office building - Lakemba Post Office	Local	Neutral	Negligible	Negligible	Minor	Yes
	Electricity Substation no. 143	Local	Neutral	Neutral	Negligible	Minor	Yes
Wiley Park	Wiley Park Railway Station Group	Local	Major	Major	Minor	Minor	No
	Inter-War water pumping station–Lakemba Pumping Station (WP0003)	Local	Neutral	Negligible	Negligible	Minor	Yes
Punchbowl	Punchbowl Railway Station Group	Local	Major	Major	Minor	Minor	No
	War Memorial and street trees	Local	Neutral	Negligible	Negligible	Negligible	Yes
	Post-war Civic Building (former Punchbowl Baby Health Centre)	Local	Neutral	Negligible	Negligible	Neutral	Yes
Bankstown	Bankstown Railway Station Group	Local	Moderate	Moderate	Negligible	Minor	Yes
	Bankstown Parcels Office (former)	Local	Neutral	Neutral	Minor	Minor	Yes
	Shop	Local	Neutral	Negligible	Negligible	Minor	Yes

9.2.2 Statement of Heritage Impact

Impact summary

Five SHR items, thirty-two items of local significance and two heritage conservation areas are located within the study area. The project area includes three SHR items, thirteen local heritage items and one heritage conservation area. The buffer zone includes two SHR items, nineteen local heritage items and one heritage conservation area.

Assessment of heritage items within the project area considered direct, visual, and potential direct (vibration) impacts. An archaeological assessment and assessment of impact was provided for the entire project area. Assessment for heritage items in the buffer zone considered visual, and potential direct (vibration) impacts. All construction sites are included in the project area.

Among the five SHR items in the study area, it was assessed that the project would result in a major direct impact to one item (Marrickville Railway Station Group), moderate direct impacts to two items (Canterbury Railway Station Group and Belmore Railway Station Group), and neutral direct impacts to two items (Sewage Pumping Station 271 and Old Sugarmill). The project would result in moderate visual impacts to three SHR items (Marrickville Railway Station Group, Canterbury Railway Station Group and Belmore Railway Station Group), and negligible visual impacts to two items (Sewage Pumping Station 271 and Old Sugarmill). All SHR items would continue to meet the threshold for State significance.

Among the thirty-two local items and two heritage conservation areas in the study area, four would have major direct impacts and four major visual impacts. Among the four items of local significance to have major impacts, two would no longer meet the threshold for local significance and would likely be delisted. Among the heritage items and conservation areas located within the buffer zone, impacts would range from neutral to minor with a majority of impacts being neutral or negligible, and temporary as a result of operation of construction sites.

Residual impacts

Heritage impacts caused by the project would be mitigated by implementing management measures such as photographic archival recording, salvage schemes, interpretation and moveable heritage items strategies, archaeological management, Construction Environmental Management Plan (CEMP) and site remediation, as well as sensitive design and re-use/relocation or refurbishment of significant elements where possible. However, impacts assessed as major would not be fully mitigated and there would be some residual impacts.

Residual impacts would include items proposed for removal where the function and condition of the item would not easily enable re-use or interpretation in any meaningful way. More generally, the historic character of the line, a late nineteenth-century to early twentieth century railway line with layers of inter-war development, would be altered by the contemporary Metro infrastructure.

10. MITIGATION AND MANAGEMENT MEASURES

Mitigation measures identified in other technical papers and other chapters of the Environmental Impact Statement that are relevant to the management of potential heritage impacts include:

- Chapter 12 (Construction noise and vibration) and Chapter 13 (Operational noise and vibration) with respect to management of potential vibration impacts (Technical Paper 2 – Noise and vibration assessment)
- Chapter 19 (Landscape character and visual amenity) with respect to management of potential visual impacts during construction and operation (Technical Paper 7 – Landscape and visual assessment).

Mitigation and management measures are provided below and relevant heritage items concerned summarized for easy reference. These would be implemented to address heritage impacts on non-Aboriginal heritage sites and areas of archaeological potential within the study area.

Table 121: Mitigation and management measures

Measure	Guidelines	Would apply to
NAH1	Appropriate heritage interpretation would be incorporated into the design for the project in accordance with the NSW Heritage Manual, the NSW Heritage Office's Interpreting Heritage Places and Items: Guidelines (August 2005), and the NSW Heritage Council's Heritage Interpretation Policy.	<ul style="list-style-type: none"> • Each railway station in the project area • Hurlstone Park Railway Underbridge • Overbridge- Illawarra Road, • Canterbury (Cooks River) Underbridge • Canterbury (Cooks River/Charles St) Underbridge - Main Line • Post-war bus shelter and public lavatories • Bankstown Parcels Office (former)
NAH2	The appropriately qualified and experienced heritage architect who is part of the Sydney Metro City & Southwest Design Review Panel would provide independent review periodically throughout detailed design.	<ul style="list-style-type: none"> • Project area in relation to all heritage items
NAH3	The project design would be sympathetic to impacted items (including retained significant elements) and surrounding heritage items by minimising impacts to sight lines, views and setting. Detailed design would be carried out in accordance with the relevant specific element principles, including the significant fabric strategy, in the Design Guidelines.	<ul style="list-style-type: none"> • Project area in relation to all heritage items
NAH4	Except for heritage significant elements affected by the project, direct impact on other heritage significant items elements would be avoided.	<ul style="list-style-type: none"> • Project area in relation to all heritage items
NAH5	Where heritage significant items or elements are to be retained within the operational area, detailed design would consider appropriate retrofitting and reuse. As part of the design, retrofitting and reuse would be developed in consultation with a heritage architect and the Design Review Panel. Where retrofitting and reuse is not practicable for significant elements, justification would be	<ul style="list-style-type: none"> • Project area in relation to all heritage items

Measure	Guidelines	Would apply to
	provided to the Design Review Panel and for SHR items, to the NSW Heritage Council.	
NAH6	A moveable heritage item strategy would be prepared for the Bankstown Line. The strategy would be prepared by a suitably qualified heritage consultant in consultation with Sydney Trains, and include a comprehensive record of significant railway elements to be impacted. This would include items contained within station and platform buildings as well as of any other significant equipment within the curtilage of the heritage railway stations. The moveable heritage item strategy would form part of a broader interpretation strategy for the Bankstown Line.	<ul style="list-style-type: none"> Bankstown Line: each railway station in the project area apart from Bankstown, and Bankstown Parcels Office (former)
NAH7	Fabric of high and exceptional significance of items proposed for removal would be identified and catalogued according to the significant fabric strategy prior to design development and would be re-used where possible in the design development phase. Where not re-used within the design of the project, the significant fabric strategy would indicate appropriate storage locations as well as appropriate types of buildings and structures where the salvaged elements may be reused in the future. Where large elements are impacted a sample of fabric may be appropriate.	<ul style="list-style-type: none"> Marrickville Railway Station Group: Overbridge- Illawarra Road, Dulwich Hill Railway Station Group: overhead booking office and access stairs Hurlstone Park Railway Station Group: Platform 1 building Campsie Railway Station Group: overhead booking office and Parcels office Wiley Park Railway Station Group: Platform 1 building, Platform 2 building and overhead booking office Punchbowl Railway Station Group: overhead booking office and footbridge
NAH8	Methodologies for the removal of existing structures and construction of new structures and installation of railway infrastructure would be developed to minimise direct and visual impacts to other elements within the curtilages of the heritage items or to heritage items located in the vicinity of works. These methodologies would be included within the overall Construction Environmental Management Plan (CEMP).	<ul style="list-style-type: none"> Project area in relation to all heritage items
NAH9	Site remediation measures related to construction sites would be incorporated within the Urban Design and Landscape Plan. The objective of the remediation would be to minimize long-term impacts on the visual amenity of the items by recreating a sympathetic environment. In particular, a landscape scheme would be prepared for the Old Sugarmill to re-instate planting within the curtilage and in proximity of the curtilage of the item. The scheme would consider appropriate period plants and trees. Any boundary wall treatment would be designed in consultation with a heritage architect.	<ul style="list-style-type: none"> Project area in relation to all heritage items Old Sugarmill

Measure	Guidelines	Would apply to
NAH10	An archaeological research design would be prepared and implemented to identify the need for archaeological testing or monitoring. Archaeological mitigation measures recommended in the archaeological research design would be carried out in accordance with Heritage Council guidelines, and where identified in the archaeological research design, would be supervised by a suitably qualified Excavation Director with experience in managing State significant archaeology. An Unexpected Finds Policy would be implemented during the project to manage and mitigate potential impacts to the potential archaeological resource.	<ul style="list-style-type: none"> Bankstown Line (Management framework for unexpected finds and management of 'works') Marrickville Station Catchment (specific requirements) Canterbury Station Catchment and worksite (specific requirements) Belmore Station Catchment (specific requirements) Lakemba Station Catchment (specific requirements)
NAH11	Ancillary works required by the project related to power supply, drainage facilities, railway tracks, overhead wiring and any other works would be designed and constructed to minimise impacts on heritage items and areas of archeological potential as much as feasible within the context of the project.	<ul style="list-style-type: none"> Project area
NAH12	Photographic Archival Recording and reporting would be carried out in accordance with the NSW Heritage Office's How to Prepare Archival Records of Heritage Items (1998), and Photographic Recording of Heritage Items Using Film or Digital Capture (2006). The record would be prepared by a suitably qualified heritage consultant using archival-quality material. Records for SHR listed items would be held at the NSW Heritage Council and State Library. Records for LEP-listed items would be held by the local Council and local library. A copy of the record would be held by the owner of the asset.	<ul style="list-style-type: none"> Each railway station in the project area Overbridge- Illawarra Road, Hurlstone Park Railway Underbridge Canterbury (Cooks River) Underbridge Canterbury (Cooks River/Charles St) Underbridge - Main Line Post-war bus shelter and public lavatories Bankstown Parcels Office (former)
NAH13	Design and construction within the Marrickville Station State Heritage register curtilage would consider the recommendations of the 2016 Conservation Management Plan and the significant fabric strategy.	<ul style="list-style-type: none"> Marrickville Railway Station Group
NAH14	A Conservation Management Plan (CMP) would be prepared by the Metro Operator for all SHR listed stations in accordance with NSW Heritage Council Guidelines. The CMP would address any changes to the item including updated assessment of significance of elements and recommendations on curtilage changes. The CMP would also provide suggested site specific exemptions and management policies.	<ul style="list-style-type: none"> Marrickville Railway Station Group Canterbury Railway Station Group Belmore Railway Station Group
NAH15	A Conservation Management Strategy (CMS) would be prepared by the Metro Operator for all s170 register listed stations not listed on the SHR in accordance with NSW Heritage Council Guidelines. A CMS would not be required for Wiley Park and Punchbowl stations which would no longer reach the threshold of local significance. The CMS would address any changes to the item including updated assessment of significance of	<ul style="list-style-type: none"> Dulwich Hill Railway Station Group Hurlstone Park Railway Station Group Campsie Railway Station Group

Measure	Guidelines	Would apply to
	<p>elements and recommendations on curtilage changes. The CMP would also provide management policies.</p>	<ul style="list-style-type: none"> • Lakemba Railway Station Group • Bankstown Railway Station Group

11. REFERENCES

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SYDENHAM TO BANKSTOWN

ENVIRONMENTAL IMPACT STATEMENT

> Technical Paper 3 – Non-Aboriginal heritage impact assessment