

Rooty Hill Station Precinct – Accessibility and Commuter Carpark Upgrade

Statement of Heritage Impact

Prepared for Transport for NSW

November 2017



Artefact Heritage
ABN 73 144 973 526
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009
Australia

+61 2 9518 8411
office@artefact.net.au

Document history and status

Revision	Date issued	Reviewed by	Approved by	Date approved	Revision type
1	24 October 2017	Josh Symons	Josh Symons	24 October 2017	First Draft
2	22 November 2017	Josh Symons	Josh Symons	22 November 2017	Final
3					

Printed:

Last saved:

File name:

170354 Rooty Hill Station Precinct – Accessibility and Commuter Carpark Upgrade SoHI

Author:

Josh Symons and Charlotte Simons

Project manager:

Josh Symons

Name of organisation:

Artefact Heritage

Name of project:

Rooty Hill Station Precinct – Accessibility and Commuter Carpark Upgrade

Name of document:

Statement of Heritage Impact

Document version:

Final

EXECUTIVE SUMMARY

Background

Transport for NSW (TfNSW) propose to undertake accessibility upgrades to the Rooty Hill Station precinct and associated commuter carpark (the Proposal). This forms part of the Transport Access Program (TAP), an initiative that aims to improve the experience of public transport customers by delivering accessible, modern, secure, safe and integrated transport infrastructure where it is needed most. The Proposal aims to provide an accessible station precinct for the disabled, ageing and families, as well as meeting the demands of a growing population.

Artefact Heritage has been engaged by Pitt & Sherry Group, on behalf of TfNSW, to prepare a Statement of Heritage Impact (SoHI) for the Proposal. The aim of this report is to identify heritage items which may be impacted by the proposed works, determine the level of heritage significance of each item, assess the potential impacts to those items, recommend mitigation measures to reduce the level of heritage impact and identify other management or statutory obligations.

The Proposal

To facilitate the accessibility upgrades, modifications at Rooty Hill Station would involve demolition of the existing footbridge, ramps and stairs, and construction of a new station concourse in a new location with associated facilities including four new stairs and lifts, as well as accessible paths. The Proposal would require minor interior works to several station buildings to accommodate a Family Accessible Toilet (FAT) on each platform, and to accommodate changed uses in a number of rooms within the former signal box building on Platform 1/2 and the passenger building on Platform 3/4. Platform works would involve modification of platform furniture, landscaping and lighting including removal of existing seating and shelters and construction of a new canopy on Platform 1/2. The Proposal would also involve upgrades to the northern and southern station interchanges, resulting in reconfiguration of station entry points, and the construction of a multi-storey carpark off Station Street.

Conclusion

The Rooty Hill Station Precinct Accessibility and Commuter Carpark Upgrade project would result in a moderate physical impact and a moderate visual impact to the RailCorp s170 Heritage and Conservation Register listed Rooty Hill Railway Station Group. The Proposal would result in a neutral physical impact and a negligible visual impact to the State Heritage Register listed Imperial Hotel that is in the vicinity of the project area.

Recommendations & mitigation measures

The recommendations set out below will aid in mitigating the impact of the Proposal on the Rooty Hill Railway Station Group and nearby heritage items.

- The external construction and façades of the Rooty Hill Station platform buildings are an element of high heritage significance. The original fabric of these buildings should be retained wherever possible and materials used during modifications should be congruent with the character of the station, including the following recommendations:

- The Proposal should be revised to avoid infilling the curved walkway within the former signal box building on Platform 1/2. The walkway should remain open, with consideration given to use of this architectural feature for interpretive purposes.
- The fitout of the proposed FAT within the passenger building on Platform 3/4 should utilise existing doorways and window openings wherever possible to avoid altering the original design of the station buildings.
- Any new doors or windows added to the platform buildings should be designed with sympathetic materials and colour schemes, and in a form that responds to the original scale and configuration of existing openings.
- Consideration should be given during the detail design phase for the retention and conservation of the metal grate boot scrapers located at the entry steps to the station buildings, which contribute to the integrity and intactness of the station precinct as a whole. In instances where these have been partially covered by intrusive asphalt resurfacing, the metal grate boot scrapers should be exposed and conserved.
- The internal structure and interior fittings of the Rooty Hill Station platform buildings are an element of moderate heritage significance, due to renovations since their original construction which has altered the integrity and overall intactness of the fabric. The original fabric of these interiors should be retained wherever possible and materials used during modifications should be congruent with the character of the station, including the following recommendations:
 - any modification of the internal configuration of the station building, such as repainting, installing new fixtures and service connections inside the buildings should be sympathetic to the historical and aesthetic character of the station and installation should minimise impacts to original fabric.
- The design and materials used for the construction of new access stairs, canopy and lift shafts should be as sympathetic as possible to the existing character of the station with the aim of minimising visual impacts. The design should use unobtrusive, modern, lightweight materials such as glass panelling and slim frame elements, which would reduce the visual bulk of new development. The design for the new access stairs and lifts should also consider the following:
 - the use of 'toffee apple red' tile cladding on the proposed lift structures should be avoided, and consideration should be given to revising this aspect of the Proposal design to select a more appropriate and discreet material and colour that is sympathetic to the colours of the original brick fabric on the station platform
 - anti-throw screens should be constructed of the least obtrusive material possible to reduce visual impacts to Rooty Hill Station and preserve views from the footbridge and stairs over the station and wider Rooty Hill township
 - A heritage conservation architect should provide ongoing heritage advice during the detailed design and construction phases of the Proposal, and should ensure that the above material and design options advice is enacted.
- The detailed design shall consider all relevant heritage design guides, including, but not limited to:

- *Canopy Design Guide for Heritage Stations* (Sydney Trains, 2016)
- *Heritage Technical Note: Installation of New Electrical and Data Services at Heritage Sites* (Sydney Trains, 2017)
- *Managing Heritage in Rail Projects Urban Design Guideline* (TfNSW, 2017)
- The collection of moveable heritage items within the passenger building on Platform 3/4 should be conserved and consideration given to their use for interpretive purposes as part of the proposed upgrade of the station. These items should be kept in a safe and secure location during works. Should the items not be considered for interpretation at the station, options for their safe long term storage should be explored with Sydney Trains Heritage.
- Preliminary archaeological assessment has identified the potential for impacts to archaeological resources of local significance. Further identification of the archaeological resource at Rooty Hill Station, and potential impacts from the proposed works, should be prepared as part of an archaeological research design (ARD), including potential impacts from the proposed sewerage works. The ARD would be submitted to Heritage Division with a Section 140 permit application for archaeological investigation of, and impacts to, areas where archaeological resources of local significance may be impacted by the proposed works. During detailed design, consideration should be given to avoiding ground disturbing impacts to areas of identified archaeological potential, where practicable, noting that the further identification of the extent and significance of the potential archaeological resource at Rooty Hill Station would be outlined in the ARD for the s140 application.
- Prior to commencement of proposed works, a Photographic Archival Recording (PAR) should be prepared, recording areas of Rooty Hill Station to be affected by the Proposal. The PAR should include photographs of the stations buildings and the overall setting of the station, including a record of views that would be modified by the Proposal. The recording should be undertaken in accordance with the guidelines for *Photographic Recording of Heritage Items Using Film or Digital Capture* prepared by the NSW Office of Environment & Heritage. The PAR would be submitted to Blacktown City Council, and copies would be retained as per the standards. Consideration should be given to including a 3D scan of all structures to be removed as part of the archival recording process.
- A heritage induction should be provided to all on-site staff and contractors involved in the project. The induction should clearly describe the heritage constraints of the site and procedures when working on/adjacent to heritage fabric.
- Consideration should be given to the provision of interpretation as part of the Proposal, which would outline the history, associations and significance of the Rooty Hill Railway Group and wider Rooty Hill area. Interpretative measures could involve interpretive signage, panels or displays at entry/exit points to the station, including the proposed stair and lift shaft locations.
- As the Proposal has been assessed as potentially resulting in a moderate physical impact and moderate visual impact to the s170 and locally listed Rooty Hill Railway Station Group, consultation with Blacktown City Council would be required under the ISEPP.

- S170a notification of the OEH Heritage Division will be required 14 days prior to commencement of works as a precautionary approach for the Proposal. TfNSW will need to complete the Sydney Trains s170a notification letter template for Sydney Trains to review and sign as landowner delegate prior to the notification being submitted to Heritage Division.
- A copy of this report must be forwarded to Sydney Trains heritage advisors for review and comment.

Acronyms

Acronym	Definition
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
ISEPP	<i>State Environmental Planning Policy (Infrastructure) 2007</i>
LEP	Local Environmental Plan
LGA	Local Government Area
OEH	Office of Environment and Heritage
REF	Review of Environmental Factors
SHR	State Heritage Register
SoHI	Statement of Heritage Impact
TAP	Transport Access Program
FAT	Family Accessible Toilet

CONTENTS

Background	iii
The Proposal	iii
Conclusion	iii
Recommendations & mitigation measures	iii
1.0 Introduction	1
1.1 Background	1
1.2 The Proposal	1
1.3 Site location	1
1.4 Report methodology	3
1.4.1 Significance grading	3
1.4.2 Impact assessment	3
1.4.3 Sydney Trains Heritage Platforms Conservation Management Strategy	4
1.4.4 Report authorship and acknowledgements	4
2.0 Statutory context	5
2.1 Environment Protection and Biodiversity Conservation Act 1999	5
2.2 Heritage Act 1977	5
2.3 Environmental Planning and Assessment Act 1979	6
2.4 State Environmental Planning Policy (Infrastructure) [ISEPP] 2007	6
2.4.1 Heritage registers	7
2.4.2 Nearby heritage items	7
3.0 Historical context	9
3.1 European exploration, settlement and Government farming	9
3.2 Development and early land grants	9
3.3 The Main Western Railway Line	10
3.4 Consolidated development at Rooty Hill	10
3.5 WWII railway expansion	11
3.6 Rooty Hill Railway Station	11
3.6.1 First Rooty Hill Station (c1862-63)	11
3.6.2 Second Rooty Hill Station (c1943-44)	12
3.6.3 Modern adaptation and alterations	13
4.0 Site inspection	14
4.1 Introduction	14
4.2 Rooty Hill Station	14
4.2.1 Context, setting and landscape	14
4.2.2 Station platforms	14
4.2.3 Footbridge and street ramps	15

4.2.4	Passenger buildings	15
4.2.5	Former signal box building – parcels/booking office	16
5.0	Assessment of significance	24
5.1	Assessment of significance for Rooty Hill Railway Station Group	24
5.2	Statement of significance	25
5.3	Rooty Hill Station components	26
5.4	Imperial Hotel (SHR Item No. 00114)	28
5.4.1	Statement of significance	28
6.0	Archaeological assessment	29
6.1	Land use summary	29
6.2	Previous impacts	45
6.3	Potential remains	45
6.4	Archaeological significance and potential	46
6.4.1	Assessment of significance	46
6.4.2	Summary of archaeological significance and potential	47
6.4.3	Statement of archaeological significance	47
7.0	Heritage impact assessment	50
7.1	Introduction	50
7.2	Proposed works	50
7.2.1	Easy Access Upgrade	50
7.2.2	Multi-story Car Park Construction	51
7.2.3	Sewerage Upgrade	51
7.3	Justification for proposed works	70
7.3.1	Aims of the Proposal	70
7.3.2	Justification for proposed works	70
7.3.3	Options assessment and justifications	71
7.4	Heritage impact to Rooty Hill Railway Station Group	72
7.4.1	Physical impact assessment	72
7.4.2	Visual impact assessment	74
7.5	Impacts to archaeological resources	77
7.6	Cumulative impact assessment	77
7.7	Summary of heritage impacts	77
7.8	Heritage Platform Conservation Management Strategy	78
7.8.1	Recognising and conserving heritage significance	78
7.8.2	Maintaining physical condition and fabric	79
7.8.3	New work	80
7.9	Impacts to Imperial Hotel (SHR No. 00114)	81
8.0	Statement of Heritage Impact	82

9.0	Conclusions and recommendations.....	84
9.1	Conclusion.....	84
9.2	Recommendations & mitigation measures	84
10.0	References.....	87

FIGURES

Figure 1: Context of Rooty Hill Station. (Source: Pitt&Sherry).....	1
Figure 2: Location of Rooty Hill Station showing key features and heritage items. (Source: Pitt&Sherry).....	2
Figure 3: Location of heritage listing curtilages within study area	8
Figure 4: The Imperial Hotel on what is now Rooty Hill Road (North), 1939. (Source: State Library NSW).....	10
Figure 5: Historical photograph of Rooty Hill Station shortly after the station's completion, circa early 1860s. Station Master's Office seen to left and station building seen to right. (Source: State Archives & Records).....	11
Figure 6: Detail of first Rooty Hill Station in 1919 showing configuration of first footbridge established in 1919. Plan orientated south. (Source: State Rail Archives).....	12
Figure 7: Rooty Hill Station c1970s showing footbridge stairs prior to later alterations. (Source: National Library of Australia).....	13
Figure 8: View east to the pedestrian ramp providing access to Rooty Hill Station from North Parade.	16
Figure 9: View south east from the northern pedestrian ramp showing the footbridge and concrete ramps.....	16
Figure 10: View south west from the northern ramp showing the former signal box building and footbridge stair to North Parade.	16
Figure 11: View west from footbridge showing footbridge stair connecting to North Parade.	16
Figure 12: View east from footbridge to Platform 1/2 (left) and Platform 3/4 (right), showing canopies and passenger buildings.....	17
Figure 13: View west from footbridge over modern canopy extending from footbridge to the former signal box building on Platform 1/2.	17
Figure 14: View south west across Platform 1/2 to former signal box building (parcels/booking office) showing vending machines and ticketing booth.	17
Figure 15: Detail shot showing 'floating' join between the steel structure of the modern canopy and the former signal box building on Platform 1/2.	17
Figure 16: View west on Platform 2 to former signal box building, showing gate to walkway and steel grate boot scraper at entry step.....	17
Figure 17: View west across gated walkway within the former signal box building (parcels/booking office) showing mural on wall.	17
Figure 18: Spiral staircase within former signal box building, leading to second level signal area.....	18
Figure 19: Interior shot of storage space within former signal box building, showing modern tile floor covering and two windows.	18
Figure 20: Interior shot of signal room within the former signal box building showing mesh screening in foreground.	18
Figure 21: Shot of access hatch to roof of former signal box building.	18
Figure 22: View south west to Platform 3/4 showing passenger building.	18
Figure 23: View west to east elevation of passenger building on Platform 1/2.....	18

Figure 24: View east across Platform 1/2 showing canopy, platform lighting, signage and timber bench seating.	19
Figure 25: View east across Platform 1/2 showing platform lighting, signage, landscaping and timber bench seating.	19
Figure 26: View west along Platform 1 showing passenger building on Platform 1/2. Door to eastern side of building seen left of image and footbridges in distance.	19
Figure 27: Interior shot of waiting room within passenger building on Platform 1/2 showing grated window openings, timber bench seating and tiled flooring.	19
Figure 28: Interior shot of waiting room within passenger building on Platform 1/2 showing grated window and door openings, timber bench seating and tiled flooring.	19
Figure 29: View south east from footbridge to Platform 3/4 showing modern canopy extending from stairs to passenger building, and distant views to Rooty Hill.	19
Figure 30: View west from footbridge towards former signal box building showing modern canopy and awnings.	20
Figure 31: View east along Platform 3/4 towards passenger building showing modern canopy in foreground.	20
Figure 32: Interior shot of storage area within the passenger building on Platform 3/4 showing grated window and door opening and moveable heritage in foreground.	20
Figure 33: Shot of moveable heritage items located within passenger building on Platform 3/4, showing timber floor.	20
Figure 34: Shot of moveable heritage items located within passenger building on Platform 3/4.	20
Figure 35: Interior shot of waiting room within passenger building on Platform 3/4 showing grated window and door openings, timber bench seating and tiled flooring.	20
Figure 36: Interior shot within passenger building on Platform 3/4 showing window openings and original flooring.	21
Figure 37: Interior shot within passenger building on Platform 3/4 showing window openings and original flooring.	21
Figure 38: Detail shot of metal grate boot scraper located at entry step to the passenger building on Platform 3/4, note asphalt covering.	21
Figure 39: View north west from footbridge ramp over Beames Avenue showing steel construction of 1940s footbridge and commuter carpark to left of image.	21
Figure 40: View north from footbridge showing station platforms in foreground and Station Street carpark in distance.	22
Figure 41: View west down footbridge ramp showing modern curved roof canopy, Beames Avenue commuter carpark seen to right.	22
Figure 42: View east across Beames Avenue commuter carpark showing modern concrete ramp to right and footbridge stairs to left.	22
Figure 43: Detail shot to junction of 1940s steel footbridge with modern concrete ramp.	22
Figure 44: View west along Beames Avenue adjacent to railway line on left, in approximate location of entry to former level crossing.	22
Figure 45: Detail shot of concrete pit associated with the former level crossing boom gate that connected Rooty Hill Road (North) with Rooty Hill Road (South).	22

Figure 46: View west from footbridge over the western end of Platform 3/4 and T1 Western Line.	23
Figure 47: View west from base of northern footbridge ramp to corner of North Parade and Rooty Hill Road (North) showing Imperial Hotel in distance and mature plantings.	23
Figure 48: View west across Station Street commuter carpark located on northern side of Rooty Hill Railway Station, station footbridge ramp over North Parade seen in distance.	23
Figure 49: Shot of open water drain to the north of Rooty Hill Station that runs parallel to the railway line.	23
Figure 50: View of west to Imperial Hotel at corner of North Parade and Rooty Hill Road (North).	28
Figure 51: View of Imperial Hotel from the base of the Rooty Hill Station footbridge ramp to North Parade.	28
Figure 52: First Rooty Hill Station in 1862 looking north east to Station Master's Office (left) and Station building (right). (NSW State Records & Archives).....	30
Figure 53: Detail drawings showing configuration of first footbridge established at Rooty Hill Station in 1919. This footbridge was formerly used at Sydenham Station (Source: State Rail Archives).....	31
Figure 54: Detail of first Rooty Hill Station in 1919 showing configuration of first footbridge established in 1919, plan orientated south.	32
Figure 55: First Rooty Hill Station in 1930 showing broader context, plan orientated south. (Source: State Rail Archives).....	33
Figure 56: Detail of first Rooty Hill Station in 1930, plan orientated south. (Source: State Rail Archives).....	34
Figure 57: Rooty Hill Station in 1941. Plan orientated south. (Source: State Rail Archives)	35
Figure 58: Plans, elevations and sections of the proposed passenger buildings in 1942. (Source: State Rail Archives).....	36
Figure 59: Plans, elevations and sections of the proposed signal box building (parcels/booking office) building in 1942. (Source: State Rail Archives).....	37
Figure 60: Plan of Rooty Hill Station in 1943 showing location of proposed signal box building (parcels/booking office) building.(Source: State Rail Archives)	38
Figure 61: Rooty Hill Station in 1951 showing proposed extension of footbridge to North Parade. (Source: State Rail Archives).....	39
Figure 62: Rooty Hill Station in 1964 showing pedestrian level crossing. (Source: State Rail Archives)	40
Figure 63: Aerial photograph of Rooty Hill Station in 1965, showing pedestrian level crossing and footbridge extension completed. (Source: Lotsearch Pty Ltd).....	41
Figure 64: Plan of Rooty Hill Station in 1980 showing proposed canopy roof coverings/awnings to footbridges. (Source: State Rail Archives).....	42
Figure 65: Aerial photograph of Rooty Hill Station in 1982 (Source: Lotsearch Pty Ltd).....	43
Figure 66: Plan of Rooty Hill Station in 1995 for footbridge balustrade renewal. (Source: State Rail Archives).....	44
Figure 67: Preliminary identification of potential and significance for archaeological remains at Rooty Hill Station	48

Figure 68: Preliminary identification of potential and significance for archaeological remains at Rooty Hill Station. Larger scale overview showing proposed sewer alignment and indicative location of former footbridge associated with former Station Masters residence.....	49
Figure 69: Precinct plan of the proposed Rooty Hill Station Precinct Upgrade	52
Figure 70: Plan of the Rooty Hill Station Accessibility Upgrade showing proposed works at eastern end of station.	53
Figure 71: Plan of the Rooty Hill Station Accessibility Upgrade showing proposed works at western end of station.	54
Figure 72: Plan of the Rooty Hill Station Accessibility Upgrade showing proposed new footbridge. ...	55
Figure 73: Plan of the Rooty Hill Station Precinct Upgrade showing proposed interchange upgrade at Beames Avenue.	56
Figure 74: Plan of the Rooty Hill Station Precinct Upgrade showing proposed interchange upgrade at North Parade.	57
Figure 75: Section drawings of the proposed Rooty Hill Station Accessibility Upgrade.	58
Figure 76: Section drawings of the proposed Rooty Hill Station Accessibility Upgrade.	59
Figure 77: Elevation of the proposed Rooty Hill Station Accessibility Upgrade.	60
Figure 78: Section drawings of the proposed Rooty Hill Station Accessibility Upgrade.	61
Figure 79: Render drawing of the proposed Rooty Hill Station Precinct Upgrade.	62
Figure 80: Render drawing of the proposed Rooty Hill Station Precinct Upgrade.	63
Figure 81: Render view of the proposed Rooty Hill Station Accessibility Upgrade, looking south east from corner of North Parade/Rooty Hill Road North.	64
Figure 82: Render view of the proposed Rooty Hill Station Accessibility Upgrade, looking north east from Beames Avenue.	65
Figure 83: Section drawing of the proposed Rooty Hill Station Accessibility Upgrade and new canopy to passenger buildings.....	66
Figure 84: Plan of the Rooty Hill Station Precinct Upgrade commuter carpark at Station Street.	67
Figure 85: Section and render view of the proposed Station Street commuter carpark.	68
Figure 86: Render aerial view of the Proposal.	69

TABLES

Table 1: Standard grades of significance	3
Table 2: Terminology for assessing the magnitude of heritage impact	4
Table 3: Results of register search for Rooty Hill Station.....	7
Table 4: SHR items located within the study area.	7
Table 5: Assessment of significance for the Rooty Hill Railway Station Group	24
Table 6: Grades of significance for components of the Rooty Hill Railway Station Group	26
Table 7: Historical land use at Rooty Hill Station	29
Table 8: Historical land use at Rooty Hill Station	45
Table 9: Summary of potential and discussion of significance of archaeological remains at Rooty Hill Station	47
Table 10: Summary of explored design options	71
Table 11: Summary of impacts to Rooty Hill Railway Station Group.....	78
Table 12: Statement of heritage impact for the Rooty Hill Railway Station Group.....	82

1.0 INTRODUCTION

1.1 Background

Transport for NSW (TfNSW) propose to undertake accessibility upgrades to the Rooty Hill Station precinct and associated commuter carpark (the Proposal). This forms part of the Transport Access Program (TAP), an initiative that aims to enhance the experience of public transport customers by delivering accessible, modern, secure, safe and integrated transport infrastructure where needed. The Proposal aims to provide an accessible station precinct for the disabled, ageing and families, as well as meeting the demands of a growing population.

Artefact Heritage has been engaged by Pitt & Sherry Group, on behalf of TfNSW, to prepare a Statement of Heritage Impact (SoHI) for the Proposal. The aim of this report is to identify heritage items which may be impacted by the proposed works, determine the level of heritage significance of each item, assess the potential impacts to those items, prepare a preliminary archaeological assessment, recommend mitigation measures to reduce the level of heritage impact, and identify other management or statutory obligations.

1.2 The Proposal

To facilitate the accessibility upgrades, modifications at Rooty Hill Station would involve demolition of the existing footbridge, ramps and stairs, and construction of a new station concourse in a new location with associated facilities including four new stairs and lifts, as well as accessible paths. The Proposal would require minor interior works to several station buildings to accommodate a Family Accessible Toilet (FAT) on each platform, and to accommodate changed uses in a number of rooms within the former signal box building on Platform 1/2 and the passenger building on Platform 3/4. Platform works would involve modification of platform furniture, landscaping and lighting including removal of existing seating and shelters and construction of a new canopy on Platform 1/2, along with upgrades to CCTV facilities. The Proposal would also involve upgrades to the northern and southern station interchanges, resulting in reconfiguration of station entry points, and the construction of a multi-storey carpark off Station Street.

An overview of the Proposal is provided in Section 7.2.

1.3 Site location

Rooty Hill Station is located in the centre of the township of Rooty Hill, in the Blacktown Local Government Area (LGA) (Lot 90 DP 1208183). The station is serviced by the T1 Western Line, which operates on an east to west axis servicing between Emu Plains and Central.

The site is bound by North Parade to the north and Beames Avenue to the south, both of which run perpendicular to Rooty Hill Road (North) and Rooty Hill Road (South). The station precinct includes the railway station, associated interchange facilities and passenger access between those facilities.

The immediate area around the station comprises a combination of commercial and retail development on both the northern and southern sides of the railway line, beyond which is low density residential development. Rooty Hill Public School and Rooty Hill High School are located approximately 500 metres north west of the station, and Blacktown International Sportspark and Western Sydney Parklands are located in the north east region of Rooty Hill.

The regional context of the station is illustrated in Figure 1, and the location of the station is illustrated in Figure 2.

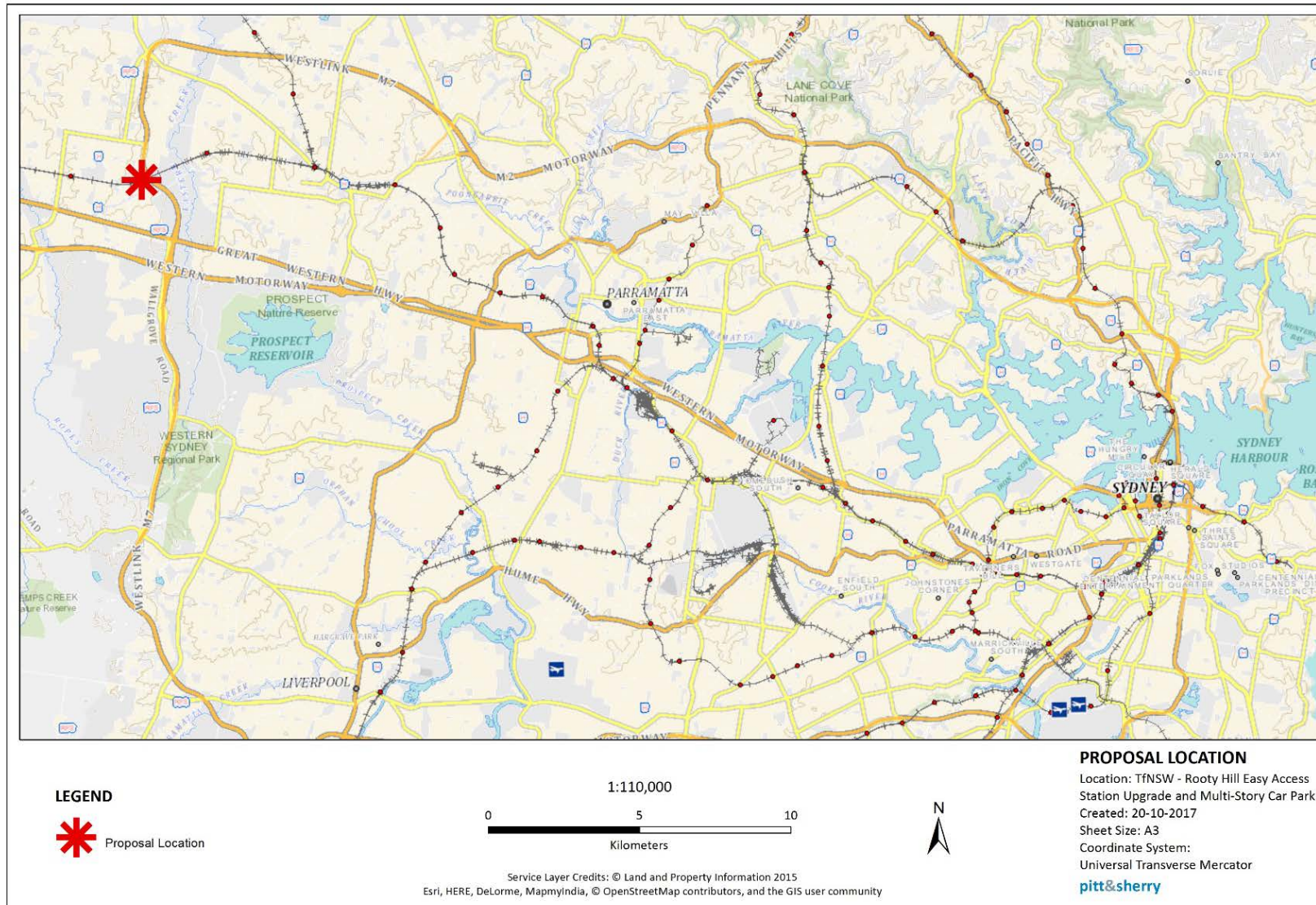


Figure 1: Context of Rooty Hill Station. (Source: Pitt&Sherry)

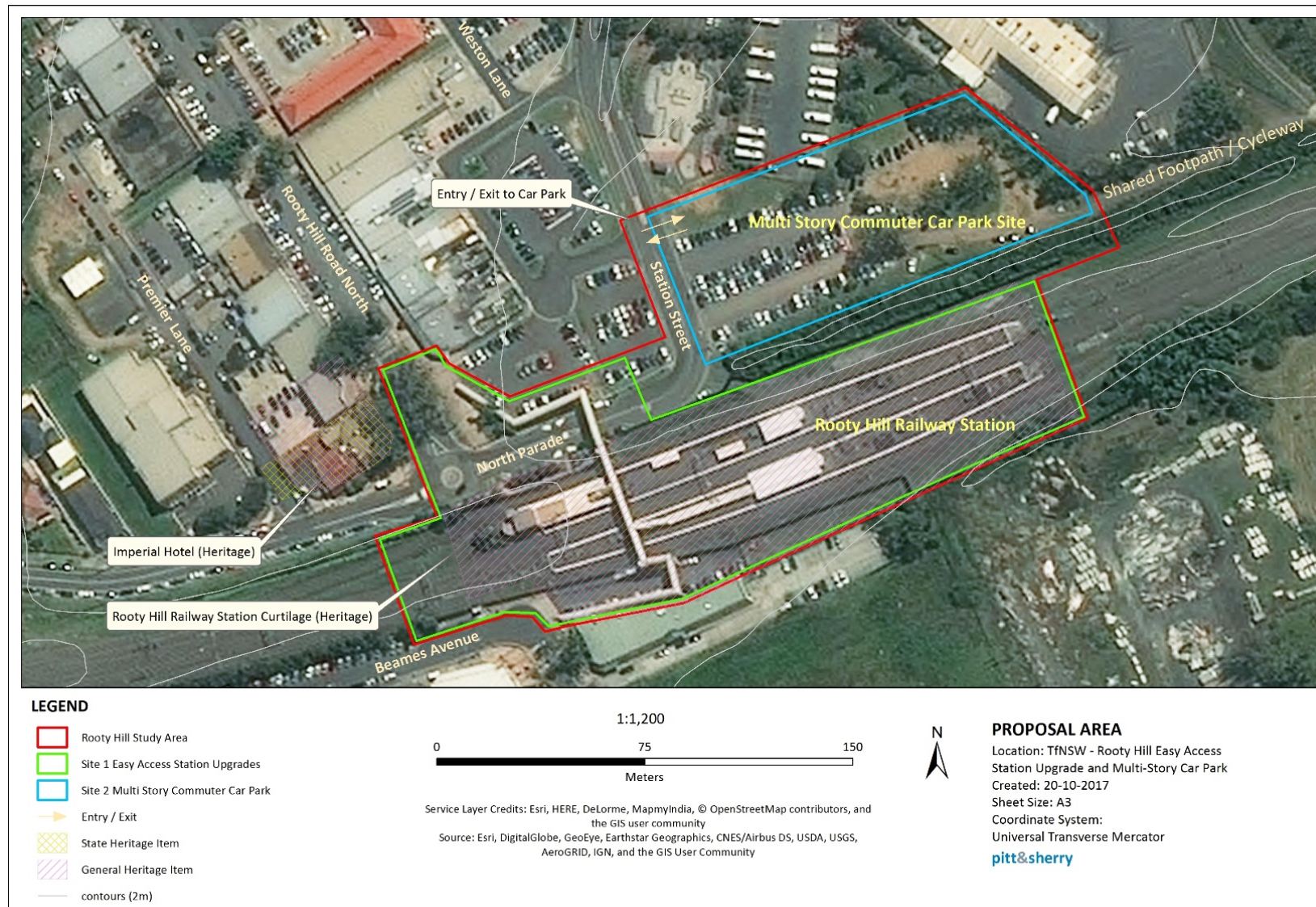


Figure 2: Location of Rooty Hill Station showing key features and heritage items. (Source: Pitt&Sherry)

1.4 Report methodology

This SoHI has been prepared using the document *Statement of Heritage Impact* (2002), prepared by the NSW Heritage Office, contained within the *NSW Heritage Manual*, as a guideline.

1.4.1 Significance grading

This report includes an assessment of the relative contributions of individual components at Rooty Hill Station to its overall heritage value. Components are assessed according to the grading methodology as outlined in Table 1.

Table 1: Standard grades of significance

Grading	Justification	Status
Exceptional (E)	Rare or outstanding element directly contributing to an item's local and state significance.	Fulfils criteria for local or state listing
High (H)	High degree of original fabric. Demonstrates a key element of the item's significance. Alterations do not detract from significance.	Fulfils criteria for local or state listing
Moderate (M)	Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item.	Fulfils criteria for local or state listing
Low (L)	Alterations detract from significance. Difficult to interpret.	Does not fulfil criteria for local or state listing
Intrusive (I)	Damaging to the item's heritage significance.	Does not fulfil criteria for local or state listing

1.4.2 Impact assessment

In order to consistently identify the potential impact of the proposed works, the terminology contained in Table 2 below has been referenced throughout this document.

Table 2: Terminology for assessing the magnitude of heritage impact

Grading	Definition
Major	<p>Actions that would have a long-term and substantial impact on the significance of a heritage item. Actions that would remove key historic building elements, key historic landscape features, or significant archaeological materials, thereby resulting in a change of historic character, or altering of a historical resource.</p> <p>These actions cannot be fully mitigated.</p>
Moderate	<p>Actions involving the modification of a heritage item, including altering the setting of a heritage item or landscape, partially removing archaeological resources, or the alteration of significant elements of fabric from historic structures.</p> <p>The impacts arising from such actions may be able to be partially mitigated.</p>
Minor	<p>Actions that would result in the slight alteration of heritage buildings, archaeological resources, or the setting of an historical item.</p> <p>The impacts arising from such actions can usually be mitigated.</p>
Negligible	<p>Actions that would result in very minor changes to heritage items and no significant alteration of its heritage values.</p>
Neutral	<p>Actions that would have no heritage impact.</p>

1.4.3 Sydney Trains Heritage Platforms Conservation Management Strategy

A conservation management strategy (CMS) for heritage platforms managed and maintained by Sydney Trains was prepared by Australian Museum Consulting on behalf of Sydney Trains in 2015¹. This heritage strategy was produced in order to effectively and consistently manage modifications to heritage significant station platforms throughout NSW. The report provides an overview of historic station platforms, a comparative analysis of station platform materials, and produces strategic recommendations for future works at stations to provide consistent responses to heritage management of those stations.

Specific strategic recommendations pertinent to the proposed works are discussed in Section 9.0 of this report.

1.4.4 Report authorship and acknowledgements

This report has been prepared by Josh Symons (Principal) and Charlotte Simons (Heritage Consultant). Josh Symons (Principal) reviewed the report.

¹ Australian Museum Consulting, 2015. *Heritage Platforms Conservation Management Strategy*. Prepared for Sydney Trains.

2.0 STATUTORY CONTEXT

2.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legislative framework for the protection and management of matters of national environmental significance, that is, flora, fauna, ecological communities and heritage places of national and international importance. Heritage items are protected through their inscription on the World Heritage List, National Heritage List or the Commonwealth Heritage List.

The EPBC Act stipulates that a person who has proposed an action that will, or is likely to have; a significant impact on a World, National or Commonwealth Heritage site must refer the action to the Minister for the Environment (hereafter the Minister). The Minister would then determine if the action requires approval under the EPBC Act. If approval is required, an environmental assessment would need to be prepared. The Minister would approve or decline the action based on this assessment.

Rooty Hill Station is not registered on the World, National or Commonwealth Heritage Lists, the heritage provisions of this act do not apply and project works for the Proposal would not require referral to the Minister.

2.2 Heritage Act 1977

The NSW *Heritage Act 1977* (Heritage Act) is the primary piece of State legislation affording protection to heritage items (natural and cultural) in NSW. Under the Heritage Act, 'items of environmental heritage' include places, buildings, works, relics, moveable objects and precincts identified as significant. Significance is based on historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values. State significant items can be listed on the NSW State Heritage Register (SHR) and are given automatic protection under the Heritage Act against any activities that may damage an item or affect its heritage significance.

Under the Heritage Act, all government agencies are required to identify, conserve and manage heritage items in their ownership or control. Section 170 requires all government agencies to maintain a Heritage and Conservation Register that lists all heritage assets and an assessment of the significance of each asset. They must also ensure that all items inscribed on its list are maintained with due diligence in accordance with State Owned Heritage Management Principles approved by the Government on advice of the NSW Heritage Council. These principles serve to protect and conserve the heritage significance of items and are based on NSW heritage legislation and guidelines.

The Heritage Act also provides protection for 'relics', which includes archaeological material or deposits. Section 4 (1) of the Heritage Act (as amended in 2009) defines a relic as:

"...any deposit, artefact, object or material evidence that:

(a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and

(b) is of State or local heritage significance"

Sections 139 to 145 of the Heritage Act prevent the excavation or disturbance of land known or likely to contain relics, unless under an excavation permit. Section 139 (1) states:

A person must not disturb or excavate any land knowingly or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, damaged or destroyed unless the disturbance is carried out in accordance with an excavation permit.

Excavation permits are issued by the Heritage Council of NSW, or its Delegate, under Section 140 of the Heritage Act for relics not within SHR curtilages, or under Section 60 for significant archaeological remains within SHR curtilages.

S170a notification to Heritage Division is required where the Proposal will involve the following:

- Major impacts that will result in loss of significance and removal of the item from the Sydney Trains s170 register
- Demolition, or partial demolition, of structures.

Where s170a notification is required, the proponent (TfNSW) will need to complete the Sydney Trains s170a notification letter template for Sydney Trains to review and sign as landowner delegate prior to the notification being submitted to Heritage Division. The notification must be submitted to Heritage Division 14 days prior to commencement of works.

2.3 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) establishes the framework for cultural heritage values to be formally assessed in the land use planning and development consent process. The EP&A Act requires that environmental impacts are considered prior to land development; this includes impacts on cultural heritage items and places as well as archaeological sites and deposits. The project is subject to assessment under Part 5 of the EP&A Act.

The EP&A Act also requires that local governments prepare planning instruments (such as LEPs and Development Control Plans [DCPs]) in accordance with the EP&A Act to provide guidance on the level of environmental assessment required. The station falls within the boundaries of the Blacktown City LGA. Schedule 5 of the Blacktown LEP includes a list of items/sites of heritage significance within this LGA.

2.4 State Environmental Planning Policy (Infrastructure) [ISEPP] 2007

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) aims to facilitate the effective delivery of infrastructure across the state. ISEPP clarifies the consent arrangements for certain infrastructure projects.

As the Proposal meets the definitions of 'rail infrastructure facilities' provided for by clause 78, and is being carried out by TfNSW, it is permissible without consent under ISEPP. As a result, it can be assessed under Part 5 of the EP&A Act. Development consent from Blacktown City Council is not required. However, Part 2 of the ISEPP contains provisions for public authorities to consult with local councils and other public authorities before the commencement of certain types of development.

2.4.1 Heritage registers

Rooty Hill Station is listed on several heritage registers, summarised in Table 3 below. The curtilages of these items are illustrated in Figure 3.

Table 3: Results of register search for Rooty Hill Station

Register	Listing
World Heritage List	Rooty Hill Station is not registered on the World Heritage List
National Heritage List	Rooty Hill Station is not registered on the National Heritage List
Commonwealth Heritage List	Rooty Hill Station is not registered on the Commonwealth Heritage List
State Heritage Register	Rooty Hill Station is not registered on the State Heritage Register
Section 170 Registers	Rooty Hill Station is registered on the RailCorp s170 Heritage and Conservation Register as “Rooty Hill Railway Station Group”, SHI Item No. 4801932
Blacktown Local Environmental; Plan 2015	Rooty Hill Station is registered on the Blacktown LEP 2015 as Rooty Hill Railway Station”, LEP Item No. 106

2.4.2 Nearby heritage items

There is **one** heritage item located within the study area (50 metre visual buffer zone). This item is not located inside the project area. This item is shown in Table 4. The curtilages of this item are illustrated in Figure 3.

Table 4: SHR items located within the study area.

Name	Location	Significance	Listing Nos.
Imperial Hotel	1 Rooty Hill Road North, Rooty Hill	State	SHR (Item No. 00114) LEP 2015 (Item No. 1101)



Figure 3: Location of heritage listing curtilages within study area

3.0 HISTORICAL CONTEXT

3.1 European exploration, settlement and Government farming

Exploration to the west of Sydney Cove began soon after first settlement, as it was found that the sandstone soils of coastal Sydney were unsuited to cultivation and it was necessary to find more fertile land.² While the earliest recorded exploration of the area around Rooty Hill was led by Captain Watkin Tench in 1789, it is likely that Governor Phillip traversed the area during his first exploration of Parramatta's western hinterland in April 1788. The origins of the name 'Rooty Hill' are not definitive, with the name having first appeared on a map in 1803.³

Rooty Hill was named by Governor King and was included in one of the four reserves of land assigned for government stock runs. King reserved approximately 38,728 acres of land in the wider Prospect region which included 6,000 acres at Rooty Hill to build up the colony's stock reserves. The area became known as the Rooty Hill Run. During Governor Macquarie's regime at the stockyard between 1810 and 1821, a two-storey brick residence for the superintendent, four paddocks and temporary log huts for workers' accommodation were established.

3.2 Development and early land grants

Between 1788 and 1789, a track leading west from the fledgling settlement at Parramatta to the Nepean River had been developed. In 1815, William Cox led the construction of the Great Western Road from the Nepean River through the Blue Mountains. In December 1817, Cox also completed the construction of the section of the Great Western Road between Emu Plains and Parramatta, which was later named the Great Western Highway. By the early 19th century, the road was a major thoroughfare for the colony.⁴

In 1819, Captain William Minchin received a grant of 1,000 acres at Rooty Hill in the vicinity of the Great Western Road, which resulted in growing settlement of the area and the development of the Minchinbury estate. In 1821, Major Druitt received a grant of approximately 998 acres from the Rooty Hill Government allotment.⁵

An inquiry held in 1822 into the colony's agricultural development criticised the expense of the Government stock farms and resulted in the reduction of the size of the Rooty Hill farm through grants of land on the reserve's perimeter. In 1824, Captain P.P. King, son of Governor King, received a grant of 1,500 acres, which was also part of the Rooty Hill establishment. The Rooty Hill farm was eventually closed in 1828.⁶

In 1859, Dr Charles McKay purchased the Minchinbury estate, which was subdivided in the decades that followed. Other various land grants that were made at Rooty Hill were generally framed by early infrastructure and landscape features in the district including the Great Western Road to the south and Richmond Road to the north, and by Ropes Creek to the west and Eastern Creek to the east, along with the construction of the Main Western Railway Line.

² FORM 2006 in Austral 2011.

³ OEH 2005

⁴ Artefact Heritage, 2014: 24

⁵ OEH 2005

⁶ OEH 2005

3.3 The Main Western Railway Line

During the mid-19th century, the extension of the Sydney railway system westward was viewed as a priority by the Colonial Government in order to capitalise on the rich natural resources of the growing rural districts that supported mining and pastoral industries. In 1848, the Sydney Railway Company announced Proposals to establish a rail line to Bathurst.⁷

In 1855, the first railway in the state was opened between Sydney and present-day Granville. The Main Western Railway Line was extended between Parramatta and Blacktown in 1860. By 1863, the line had reached Penrith, which was the terminus for the next four years. The same year, a station was opened on the single line that passed through Rooty Hill.⁸ In 1886, the single track line through Rooty Hill was duplicated, along with the rest of the Main Western Railway Line.⁹

3.4 Consolidated development at Rooty Hill

Arrival and expansion of the railway prompted consolidated development of the township of Rooty Hill at the turn of the 20th century, which centred around the station. In 1890, the Imperial Hotel was built to the north of Rooty Hill Station by a F.J. Weston. Located in close proximity to the railway, the hotel was intended to cater for the crowds associated with greyhound racing events at Plumpton. In 1891, the Pioneer Memorial Church located on Rooty Hill Road South was established. During the early decades of the 20th century, Rooty Hill was characterised by increasing subdivisions and residential development.



Figure 4: The Imperial Hotel on what is now Rooty Hill Road (North), 1939.
(Source: State Library NSW)

⁷ Wotherspoon 2008

⁸ OEH 2008

⁹ OEH 2008

3.5 WWII railway expansion

The mid-20th century witnessed a period of change in the area around Rooty Hill. During the 1940s, works were underway to increase the tracks along the Main Western Railway Line to four main lines between Lidcombe and St Marys. This extensive scheme was established in order to provide maximum railway capacity for the transportation of ammunition from the American ammunition and general store built at Ropes Creek during World War II (WWII). It took approximately 32 years until all aspects of the quadruplication were completed between Westmead and Blacktown. Quadruplication reached St Marys in 1978, while the Granville to Westmead section was eventually completed in 1986.¹⁰

3.6 Rooty Hill Railway Station

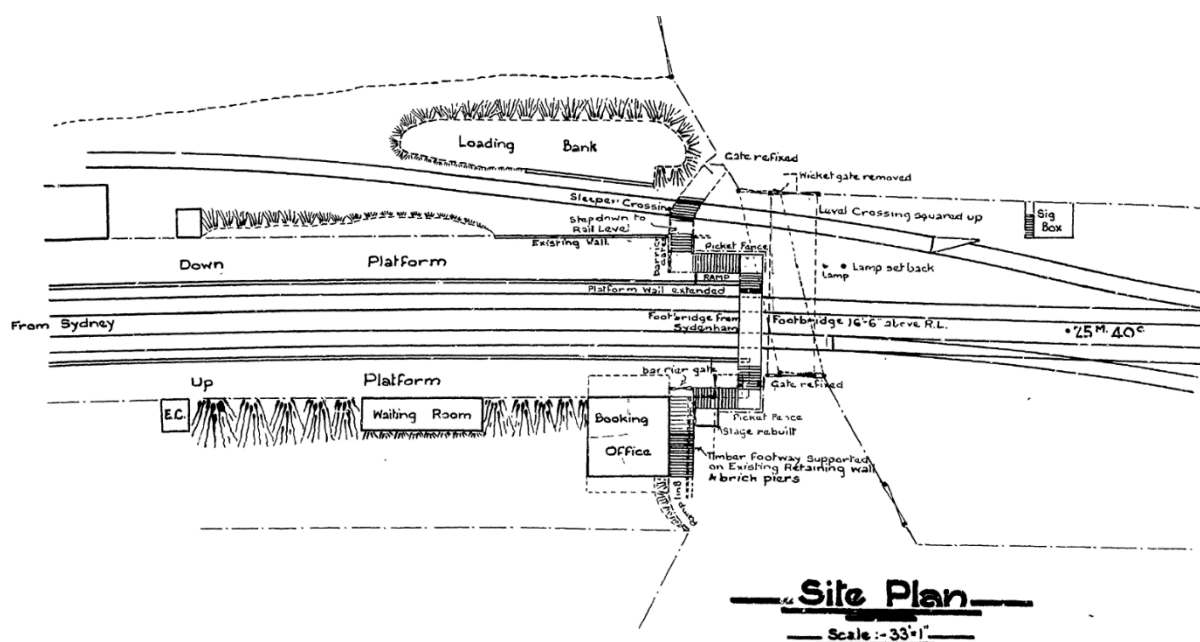
3.6.1 First Rooty Hill Station (c1862-63)

The first Rooty Hill Station was established during the early 1860s, with a station platform completed in 1862 and the first station opened in 1863. An historical photograph dating from around this time shows the original station platform as having featured a small single storey booking of masonry construction with a hipped roof and awning over platform, and a small single storey station building with weatherboard cladding and a simple gable roof that featured timber finials and a hipped awning over platform. The photograph (refer to Figure 5). indicates the original platform coping was of stone construction.



Figure 5: Historical photograph of Rooty Hill Station shortly after the station's completion, circa early 1860s. Station Master's Office seen to left and station building seen to right. (Source: State Archives & Records)

¹⁰ OEH 2008



**Figure 6: Detail of first Rooty Hill Station in 1919 showing configuration of first footbridge established in 1919. Plan orientated south.
(Source: State Rail Archives)**

A plan prepared for the installation of a new pedestrian footbridge at Rooty Hill Station in 1919 demonstrates that by this time the Main Western Line had been duplicated and a second platform established at the station, with the partial outline of a platform building visible (refer to Figure 6). The drawing shows the proposed location of the footbridge over the railway lines to join the two platforms. The first footbridge is noted as having been the old Sydenham footbridge. The riveted steel structure, which comprised four flights of stairs, was located adjacent to the booking office.

A plan showing the station arrangements of Rooty Hill Station in 1930 shows the configuration of the second station building located on the southern platform, which comprised a 'ladies waiting room', toilet facilities and ticket office (refer to Figure 55). Details of the platform landscaping and features of Rooty Hill Station are included on the drawing, including garden beds, signage, station lighting, stage, bubblers and water taps. A goods shed and platform are seen to the south of the railway station along a goods siding.

3.6.2 Second Rooty Hill Station (c1943-44)

A plan prepared in 1941 in preparation for the future quadruplication of the Main Western Railway Line through Rooty Hill Station shows the planned demolition of the existing original station buildings and proposed extension of platforms (refer to Figure 57). The plan also shows the level crossing at Windsor Road (now Rooty Hill Road (North) and Rooty Hill Road (South)), and the indicative location of new station structures including passenger buildings, signal box and new footbridge.

The architectural drawings produced in 1942 by the Department of Railways for the second Rooty Hill Station provide detailed information on the design and construction of the new station buildings (refer to Figure 58 and Figure 59). The single storey passenger buildings are seen to be constructed on concrete footings. The passenger building on what is now Platform 1/2 ('Building B'), is seen to comprise a general waiting room, women's waiting room and lavatory facilities. The passenger building on what is now Platform 3/4 ('Building A'), is seen to comprise the same facilities but additionally featuring a booking office at the western end of the building and a small storage room.

The 1942 drawings prepared for the second Rooty Hill Station show the detailed design and configuration of the former signal box building. Constructed on concrete footings, the ground level of the building was configured with a parcels office, storage room, signal box and a booking office accessed by a curved walkway enclosed with barrier gates. The second storey of the building is seen to comprise a signal relay room, accessed by a spiral staircase. The new platform buildings at Rooty Hill Station were completed in 1943.¹¹

3.6.3 Modern adaptation and alterations

In the years since the construction of the second Rooty Hill Station, several adaptations and modifications have been carried out. The first recorded adaptation of the station appears in a drawing prepared in 1951, which indicates that around this time during the early 1950s, the steel footbridge was extended over a new railway line north of Platform 1/2 (refer to Figure 61).

During the early 1980s, a series of modifications were carried out to the station. This included the introduction of curved roof canopies to the steel footbridge, and construction of associated concrete ramps connecting from the steel footbridges to the North Parade and Beames Avenue. At this time, covered ways connecting from the stairs to the former signal box building on Platform 1/2 and the passenger building on Platform 3/4 were also established. In 1980, the level crossing over the rail corridor linking what is now Rooty Hill Road (South) with Rooty Hill Road (North) was converted for pedestrian use only, before eventually being removed in 1981.¹² Around this time, the commuter carpark area between the rail corridor and council depot off Station Street was established.

In 1995, the signal box was closed, although signal equipment remains in situ. In 2000, refurbishments were undertaken to strengthen the steel footbridge, which involved installation of steel parallel flange channel cross members beneath the footbridge deck. In circa 2001, awnings were placed on all platforms, and two platform canopies were constructed on Platform 1/2.¹³ The platform buildings have undergone substantial internal alterations in recent years, which have removed most of the original interior furnishings and finishings of these buildings, although their overall configuration and layout has been retained.



Figure 7: Rooty Hill Station c1970s showing footbridge stairs prior to later alterations.
(Source: National Library of Australia)

¹¹ OEH 2008

¹² OEH 2008

¹³ OEH 2008

4.0 SITE INSPECTION

4.1 Introduction

A site inspection was conducted on 26 September 2017 by Josh Symons (Principal) and Charlotte Simons (Heritage Consultant) from Artefact Heritage. The aim of the site inspection was to inspect the area of proposed impacts, inform a preliminary assessment of archaeological potential, and to identify heritage items in the vicinity that may be affected by the Proposal. The inspection was undertaken on foot and a photographic record was made.

Elements of the Rooty Hill Railway Station Group that were designated for possible impacts have been inspected and assessed in this report. This includes the station's context and setting, station platforms, passenger buildings, former signal box building, and the station footbridge, stairs and ramps.

Some of the information in the following description has been extracted from the s170 listing for the Rooty Hill Railway Station Group on the State Heritage Inventory database (SHI Item No. 4801932).

4.2 Rooty Hill Station

4.2.1 Context, setting and landscape

Rooty Hill Station is serviced by the T1 Western Line, which runs along an east to west axis between Emu Plains and Central. Located at street level, the station is bound by North Parade and Station Street commuter carpark to the north and Beames Avenue and associated commuter carpark to the south.

The flat topography of the surrounding area, combined with the low rise commercial development along North Parade and absence of large scale development in the vicinity, means that the station is a visually distinctive element in the immediate landscape. The station and existing ramps and overbridges are discernible from numerous vantage points in the surrounding streetscape, including views south from Rooty Hill Road (North), views east and west along North Parade, views east from Beames Avenue, and views north from Rooty Hill Road (South).

On the southern side of the station and adjacent to Beames Avenue, are the remains of the former level crossing that historically connected Windsor Road (now Rooty Hill Road (North) and Rooty Hill Road (South)). This includes two concrete pits that are associated with a boom gate that was installed at the level crossing.

4.2.2 Station platforms

Rooty Hill Station comprises two island platforms that are approximately 185 metres in length, which extend from roughly in line with Rooty Hill Road in the west to a location near the eastern extent of the Station Street carpark to the east. Platform 1/2 is straight along its northern side, and is slightly curved on its southern side. Platform 3/4 is slightly curved on both the northern and southern sides.

Both platforms are faced in concrete, with concrete decks and asphalt finishes, and concrete coping with cantilever profile. The station platforms feature several metal grate boot scrapers, which are located outside the door steps to the passenger buildings and the former signal box building.

Other furniture and landscape features on the station platforms, which are all later additions, include modern aluminium palisade fencing, timber bench seating, signage, platform lighting, small plantings and garbage bins. The edges of the station platforms feature tactile points and safety markings.

4.2.3 Footbridge and street ramps

The current footbridge over Rooty Hill Station consists of steel framing that supports concrete deck panels, treads and landings, and is supported on raised plinths. The steel footbridge has been refurbished over time, with a small extension having been carried out to the north and a number of minor repairs.

While the main structural elements of the steel footbridges appear to be original, the girders have been strengthened via the installation of additional steel parallel flange channels (PFC) cross members beneath the concrete deck of the footbridge. The steelwork appears to be in good condition, with relatively small localised areas of corrosion, paint discolouration and rusting.

The modern ramps connecting to the steel footbridges, which allow pedestrians access from North Parade and Beames Avenue to the Rooty Hill Station platforms, are of concrete construction. The concrete ramps and steel footbridges feature modern curved roof canopies, with steel framework supporting curved colorbond metal sheeting roofing.

4.2.4 Passenger buildings

Platform 1/2 passenger building

The Platform 1/2 passenger building is located at the centre of the platform. The building is constructed of face brick and features a single shallow pitched metal roof extending to an awning on the platform's southern elevation and a canopy on the west end of the building, which is supported on bullnosed brick piers. The east end of the building features a curved bay with a single door opening.

Designed in the Inter-War Railway Functionalist style, the passenger building is simple in design and detail. The regularity of the fenestrations reflects the layout and use of the building's internal spaces, the overall configuration of which have been largely retained. These spaces include a men's toilet, ladies' toilet, ladies' waiting room and general waiting room. Much of the original interior fitout has been removed, and the building has been adapted with updated toilet facilities including a FAT. Modern security grills have been installed on all window and door openings.

Platform 3/4 passenger building

The Platform 3/4 passenger building is located at the centre of the platform. The building is constructed of face brick and features a single shallow pitched metal roof extending to an awning on both platform elevations and a canopy on the west end, which is supported on bullnosed brick piers. The east end of the building features a curved bay that comprises a single door opening. A modern canopy supported on steel beams and columns below the building awning provides continuous shelter between the passenger building and the footbridge stairs.

Designed in the Inter-War Railway Functionalist style, the passenger building is simple in design and detail. The regularity of the fenestrations reflects the layout and use of the building's internal spaces, the overall configuration of which have been largely retained. These spaces include a men's toilet, ladies' toilet, ladies' waiting room, general waiting room and booking office. Much of the original interior fitout has been removed. The original timber flooring has been retained in the former ladies waiting room, which at present is used to store a range of movable heritage items that have been salvaged from the station. Modern security grills have been installed on all window and door openings, several of which have had their original windows, window panes or doors removed.

4.2.5 Former signal box building – parcels/booking office

The former signal box building, which incorporates the parcels and booking offices, is located at the western end of Platform 1/2. Designed in the Inter-War Railway Functionalist style, the building is of face brick construction and features shallow pitched metal roofs of varying heights, the ground floor roof extending to a narrow awning on all four sides of the building and abutting the second section of the building. This comprises a two-storey square structure, elongated tower and single storey elongated semi-circular bay. The curved bay is defined by a series of curved glass windows in steel frames. The first floor of the building is accessed via a spiral stairway that features panels of glass bricks. A gated curved walkway provides access between the platforms, and was formerly the entry point to the station from the north. The curved brick walls of the walkway feature several artistic murals.

Several of the interior spaces of the former signal box building were accessed during the inspection, which indicated a range of intactness within the building's rooms. While some rooms retained original finishings and fittings, others have been adapted for new use. The former signal relay room, although now decommissioned, retains its original fitout including conduiting and equipment. All ground floor openings have been fitted with security grills.



Figure 8: View east to the pedestrian ramp providing access to Rooty Hill Station from North Parade.



Figure 9: View south east from the northern pedestrian ramp showing the footbridge and concrete ramps.



Figure 10: View south west from the northern ramp showing the former signal box building and footbridge stair to North Parade.



Figure 11: View west from footbridge showing footbridge stair connecting to North Parade.



Figure 12: View east from footbridge to Platform 1/2 (left) and Platform 3/4 (right), showing canopies and passenger buildings.



Figure 13: View west from footbridge over modern canopy extending from footbridge to the former signal box building on Platform 1/2.



Figure 14: View south west across Platform 1/2 to former signal box building (parcels/booking office) showing vending machines and ticketing booth.



Figure 15: Detail shot showing 'floating' joint between the steel structure of the modern canopy and the former signal box building on Platform 1/2.



Figure 16: View west on Platform 2 to former signal box building, showing gate to walkway and steel grate boot scraper at entry step.



Figure 17: View west across gated walkway within the former signal box building (parcels/booking office) showing mural on wall.



Figure 19: Interior shot of storage space within former signal box building, showing modern tile floor covering and two windows.



Figure 18: Spiral staircase within former signal box building, leading to second level signal area.

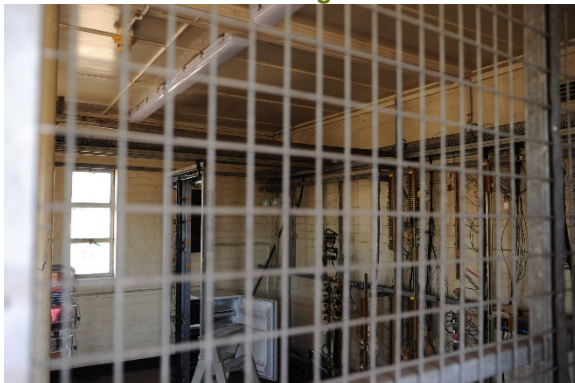


Figure 20: Interior shot of signal room within the former signal box building showing mesh screening in foreground.



Figure 21: Shot of access hatch to roof of former signal box building.



Figure 22: View south west to Platform 3/4 showing passenger building.



Figure 23: View west to east elevation of passenger building on Platform 1/2.



Figure 24: View east across Platform 1/2 showing canopy, platform lighting, signage and timber bench seating.



Figure 25: View east across Platform 1/2 showing platform lighting, signage, landscaping and timber bench seating.



Figure 26: View west along Platform 1 showing passenger building on Platform 1/2. Door to eastern side of building seen left of image and footbridges in distance.



Figure 27: Interior shot of waiting room within passenger building on Platform 1/2 showing grated window openings, timber bench seating and tiled flooring.



Figure 28: Interior shot of waiting room within passenger building on Platform 1/2 showing grated window and door openings, timber bench seating and tiled flooring.



Figure 29: View south east from footbridge to Platform 3/4 showing modern canopy extending from stairs to passenger building, and distant views to Rooty Hill.



Figure 30: View west from footbridge towards former signal box building showing modern canopy and awnings.



Figure 31: View east along Platform 3/4 towards passenger building showing modern canopy in foreground.

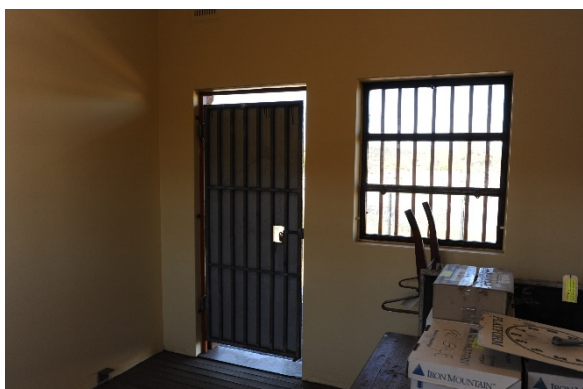


Figure 32: Interior shot of storage area within the passenger building on Platform 3/4 showing grated window and door opening and moveable heritage in foreground.



Figure 33: Shot of moveable heritage items located within passenger building on Platform 3/4, showing timber floor.



Figure 34: Shot of moveable heritage items located within passenger building on Platform 3/4.



Figure 35: Interior shot of waiting room within passenger building on Platform 3/4 showing grated window and door openings, timber bench seating and tiled flooring.



Figure 37: Interior shot within passenger building on Platform 3/4 showing window openings and original flooring.



Figure 36: Interior shot within passenger building on Platform 3/4 showing window openings and original flooring.



Figure 38: Detail shot of metal grate boot scraper located at entry step to the passenger building on Platform 3/4, note asphalt covering.



Figure 39: View north west from footbridge ramp over Beames Avenue showing steel construction of 1940s footbridge and commuter carpark to left of image.



Figure 40: View north from footbridge showing station platforms in foreground and Station Street carpark in distance.



Figure 41: View west down footbridge ramp showing modern curved roof canopy, Beames Avenue commuter carpark seen to right.



Figure 42: View east across Beames Avenue commuter carpark showing modern concrete ramp to right and footbridge stairs to left.



Figure 43: Detail shot to junction of 1940s steel footbridge with modern concrete ramp.



Figure 44: View west along Beames Avenue adjacent to railway line on left, in approximate location of entry to former level crossing.



Figure 45: Detail shot of concrete pit associated with the former level crossing boom gate that connected Rooty Hill Road (North) with Rooty Hill Road (South).



Figure 46: View west from footbridge over the western end of Platform 3/4 and T1 Western Line.



Figure 47: View west from base of northern footbridge ramp to corner of North Parade and Rooty Hill Road (North) showing Imperial Hotel in distance and mature plantings.



Figure 48: View west across Station Street commuter carpark located on northern side of Rooty Hill Railway Station, station footbridge ramp over North Parade seen in distance.



Figure 49: Shot of open water drain to the north of Rooty Hill Station that runs parallel to the railway line.

5.0 ASSESSMENT OF SIGNIFICANCE

5.1 Assessment of significance for Rooty Hill Railway Station Group

The following assessment of significance has been adapted from the RailCorp s170 Heritage and Conservation register entry for the Rooty Hill Railway Station Group on the SHI database.¹⁴

Table 5: Assessment of significance for the Rooty Hill Railway Station Group

Criterion	Explanation
A – Historical Significance	<p>Rooty Hill Railway station is of local historical significance for its role in the region's local defence history. The second Rooty Hill Station was one of several stations constructed as part of the quadruplication of the line from St Marys to Lidcombe in 1944 to provide maximum track capacity for the transport of ammunition during World War II. The site provides physical evidence of the activities and development that occurred in Rooty Hill railway precinct, and marks an important phase in the evolution of railway operations in Sydney's west.</p> <p>The Rooty Hill Railway Station Group is considered locally significant under this criterion.</p>
B – Associative Significance	<p>As a passenger station as opposed to an industrial station, Rooty Hill Station is associated with commuters in the Rooty Hill community from the 1860s onwards. The existing station buildings, constructed in 1943, have been a landmark in the locality since their construction, and are associated with the Department of Railways NSW, who was responsible for their design and construction. The second Rooty Hill Railway Station is associated with the ammunition factories located in the district that were in operation during World War II.</p> <p>The Rooty Hill Railway Station Group is considered locally significant under this criterion.</p>
C – Aesthetic or Technical Significance	<p>The existing 1943 Rooty Hill Station platform buildings are of aesthetic significance as examples of mid-sized Inter-War Railway Functionalist style station buildings, located within an urban setting. The buildings are noted for their use of finely detailed face brickwork, complex geometric massing, single pitch roofs, detailed fenestration and use of glass bricks. The station buildings form a cohesive group of Inter-War Railway Functionalist style station buildings and represent the economic policies of the time.</p> <p>The Rooty Hill Railway Station Group is considered locally significant under this criterion.</p>
D – Social Significance	<p>The place has the potential to contribute to the local community's sense of place, and can provide a connection to the local community's past. The station itself is a distinctive element in the surrounding landscape and is a local landmark.</p> <p>The Rooty Hill Railway Station Group is considered locally significant under this criterion.</p>

¹⁴ SHI Entry for RailCorp s170 item "Rooty Hill Railway Station Group", accessed online 16 October 2017, <http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=4801932>

Criterion	Explanation
E – Research Potential	<p>The Rooty Hill Railway Station Group has research potential at a local level due to its relatively intact complex of buildings that generally maintain their original relationship and layout.</p> <p>The group, which was constructed to accommodate the quadruplication of the Main Western Railway Line, also has the ability to provide information on the railway design for the local WWII ammunition factories as part of the larger rail network.</p> <p>The second Rooty Hill Railway Station has research and technical significance for its ability to demonstrate the design and construction techniques of the mid-20th century railway structures, and the use of Functionalist design elements within a railway setting.</p> <p>As discussed further in Section 6.4, the station has research potential to reveal archaeological remains associated with the original late-19th century station. This includes the original platforms, platform buildings, and goods siding, along with remains associated with the second Rooty Hill Station.</p> <p>The Rooty Hill Railway Station Group is considered locally significant under this criterion.</p>
F – Rarity	<p>Rooty Hill Railway Station platform buildings, incorporating the former signal box building, station buildings, platforms and footbridge, have some rarity value associated with their cohesiveness as a group that remain relatively intact.</p> <p>The Rooty Hill Railway Station Group is considered locally significant under this criterion.</p>
G - Representativeness	<p>Rooty Hill Railway Station is a representative example of a mid-sized, mid-20th century railway station located within an urban context, featuring Inter-War Railway Functionalist style elements in the form of a group of buildings designed and constructed at the same time as a cohesive precinct. There are approximately 21 known examples of similar stations, including Granville, Seven Hills, Toongabbie, Cronulla and Sutherland.</p> <p>The Rooty Hill Railway Station Group is considered locally significant under this criterion.</p>

5.2 Statement of significance

The Rooty Hill Railway Station Group is of local heritage significance.

The following statement of significance has been sourced from the SHI database listing¹⁵ for the Rooty Hill Railway Station Group:

Rooty Hill Station is of local significance as one of the stations built during the quadruplication of the line from St Marys to Lidcombe in 1944 to provide maximum track capacity for the transport of ammunition during World War II. The buildings are excellent examples of mid-sized Railway Stripped Functionalist style station buildings that represent the economic policies of the time. The collection of railway structures including the two platform buildings, signal box, footbridge and brick platform remain highly intact and form a cohesive group in an urban setting.

¹⁵ op. cit.

5.3 Rooty Hill Station components

The following Table 6 summarises the heritage significance of the components of the Rooty Hill Railway Station Group.

Table 6: Grades of significance for components of the Rooty Hill Railway Station Group

Component	Description	Grading
Former signal box building (parcels/booking office) (1943)	<p>The former signal box building (incorporating a parcels office and booking office), is of brick construction with a two-storey tower, and is designed in the Inter-War Railway Functionalist style. At present, the building is primarily used for storage and office facilities.</p> <p>While the building is no longer used for its original function, it remains in good condition, with much of its original fabric intact and having been sympathetically maintained. The building is a distinctive element in the immediate landscape, and is a local landmark.</p>	High
Passenger buildings (1943)	<p>The passenger buildings located on Platform 1/2 and Platform 2/3 are single storey buildings of brick construction, designed in the Inter-War Railway Functionalist style. Simple in design and detail, the buildings remain in good condition and retain their overall layout, although much of the original interior fitouts have been removed and wearing surfaces updated.</p>	High
Steel footbridge and stairs (1944)	<p>The extant steel footbridge and stairs at Rooty Hill Station date to the second Rooty Hill Station. Unlike the Inter-War Railway Functionalist style station buildings, the simple steel framed structures feature little ornamentation, and are relatively prosaic in design and detailing.</p> <p>The bridge remains in fair condition overall, although several minor repairs and localised alterations have been carried out over time. In the 1950s, works were carried out to extend the footbridge over a new railway line north of Platform 1/2. In the early 1980s, intrusive curved roofing canopies were added to the steel footbridge during the construction of the ramps. Strengthening works undertaken in 2000 involved installation of steel parallel flange channel cross members beneath the footbridge deck.</p> <p>Although the footbridge and stairs have been compromised by later modifications and intrusive alterations, they retain a supporting role to the cohesiveness and intactness of the railway station group as a whole.</p>	High-Moderate
Metal grate boot scrapers (1943)	<p>The station platforms feature small metal grate boot scrapers at the entry steps to the former signal box building and passenger buildings. While most of these have been retained, several have been overlaid with asphalt. The boot scrapers are significant fabric relating to the original design of the 1940s station, and contribute to the cohesiveness and intactness of the group complex.</p>	Moderate

Rooty Hill Station Precinct – Accessibility and Commuter Carpark Upgrade

Statement of Heritage Impact

Component	Description	Grading
Rail corridor (1862 until present)	<p>While the rail corridor was originally constructed in the 1860s, the line has undergone modifications since that time as part of the duplication and quadruplication of the Main Western Line.</p> <p>The current rail line is constructed on modern concrete sleepers, with overhead wiring and stanchions dating to the post-electrification period of the railway. The existing fabric of the rail line reflects the evolving historical use of the Main Western Line.</p>	Moderate
Island platform and platform coping (1943)	<p>The original Rooty Hill Station platform was constructed in 1862 and appears to have been of stone construction. The current island platforms, which are of steel rail post construction with concrete panel cast in situ, were constructed in circa 1943 with the construction of the present phase of the station as part of the quadruplication of the Main Western Line.</p> <p>Throughout the station platforms, service pits, and the present asphalt surfaces have all been added. As such, much of the platforms is not considered to be original fabric, and those elements which are original fabric are at a lower elevation (i.e. the original platforms including retaining walls, and earlier platform surfaces which are now concealed below modern concrete).</p>	Moderate
Site of former level crossing (1943)	<p>The level crossing was established in 1943 to provide vehicular and pedestrian connection across Windsor Road (now Rooty Hill Road (South) and Rooty Hill Road (North)). The level crossing was enclosed by boom gates installed on concrete pits at the northern and southern boundaries. The level crossing was converted for pedestrian use only in 1980, and was eventually removed in 1981.</p>	Moderate
Platform landscaping, lighting, signage and furnishings	<p>Landscaping on the platform is minimal, with small landscaped plantings and hedges located at the eastern end of the platforms. Plans indicate the original 1860s Rooty Hill Station featured garden beds, although these have not been retained in the reconfigured and modified 1940s platforms. Station lighting, signage and timber bench seating are all modern.</p>	Low
Footbridge ramps (early-1980s)	<p>The modern footbridge ramps connecting from North Parade and Beames Avenue to the 1944 steel footbridge were added to the station precinct in the early 1980s. The ramps are of concrete construction with modern curved roof canopies with steel framework supporting curved colorbond metal sheet roofing. At the time of the construction of the ramps, covered ways connecting from the stairs to the former signal box building on Platform 1/2 and the passenger building on Platform 3/4 were also established.</p> <p>The ramps are unremarkable and utilitarian in design and relatively large in scale. As such, the ramps are a visually dominant feature at Rooty Hill Station, which detract from views to the platform buildings and diminish legibility of the 1940s railway precinct.</p>	Intrusive
Platform awnings and canopies (2001)	<p>In 2001 awnings were placed on all platforms, and two freestanding canopies were added to Platform 1/2. The awnings obscure views and appreciation of the platform buildings, and are a visually dominant feature at Rooty Hill Station.</p>	Intrusive

5.4 Imperial Hotel (SHR Item No. 00114)

Constructed during the 1890s as part of the consolidation of development around Rooty Hill following the expansion of the railway, the two-storey hotel was designed in the late Victorian filigree style. The hotel is a distinctive visual element in the surrounding streetscape.

The Imperial Hotel is of State heritage significance and is listed on the SHR and Blacktown LEP 2015. The item is recognised as significant for its historical, aesthetic and social heritage values.¹⁶



Figure 50: View of west to Imperial Hotel at corner of North Parade and Rooty Hill Road (North).



Figure 51: View of Imperial Hotel from the base of the Rooty Hill Station footbridge ramp to North Parade.

5.4.1 Statement of significance

The SHI database listing for the Imperial Hotel provides the following statement of significance:

The Imperial Hotel is a good example of a late Victorian filigree style hotel featuring cast iron lacework to the verandah, face brickwork with decorative banding and a pedimented corner. Occupying a corner location near the railway station, it is an important element in the local townscape.

The Imperial Hotel relates to the early development of the Rooty Hill and Plumpton area for orcharding and to the Woodstock Coursing Ground.

The Imperial Hotel has been a meeting point for members of the local community for much of the twentieth century.

¹⁶ SHI entry for the SHR listed "Imperial Hotel", accessed online 18 October 2017, <http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5045322>

6.0 ARCHAEOLOGICAL ASSESSMENT

6.1 Land use summary

A summary of the historical land use of Rooty Hill Station is provided in Table 7.

Table 7: Historical land use at Rooty Hill Station

Phase	Discussion
Phase 1: First Rooty Hill Station (1863 – 1943)	By 1863, the original Rooty Hill Station was established to service the Main Western Railway Line, which was opened through the area as a single line. Historical photographs show that the first Rooty Hill Station was a side platform of stone construction, featuring a single storey booking office and single storey weatherboard station building.
	In 1886, the Main Western Line was duplicated. Historical drawings of the station indicate that following duplication works, a second platform was established, which featured a station building and other platform furniture and landscaping including garden beds, bubblers, water taps and lighting poles. A goods siding, including an associated platform and goods shed, is seen in photographs to have been established to the south of the southern island platform by the early decades of the 20 th century.
	Following the expansion of the railway through Rooty Hill, the area underwent substantial development consolidation in the ensuing decades, involving subdivisions of large early estates and commercial development in the vicinity of the station precinct. In 1919, an early steel pedestrian footbridge was added to the first Rooty Hill Station, which is noted on a construction drawing as having been the old Sydenham footbridge (refer to Figure 53).
	Plans of Rooty Hill Station prepared in 1930 indicate that by this time, drainage channels had been established alongside what is now Rooty Hill Road (North), which featured associated overbridges (Figure 56).
Phase 2: Second Rooty Hill Station (1943 – 1980)	Plans of Rooty Hill Station prepared in 1941 show the planned demolition of existing station buildings and features associated with the first Rooty Hill Station in preparation for the quadruplication of the Main Western Railway Line (Figure 57).
	The current Rooty Hill Station platforms and station buildings were constructed in 1943. This includes two island platforms of concrete and steel post construction, two single storey masonry passenger buildings designed in the Inter-War Railway Functionalist style, and a two-storey masonry former signal box building with tower designed in the Inter-War Railway Functionalist style.
	At this time, a level pedestrian and vehicular level crossing was established across the rail corridor to link Windsor Road (now Rooty Hill Road (North) and Rooty Hill Road (South)). The level crossing featured boom gates, which were installed at the northern and southern entry points to the crossing.
	In 1944, a new steel pedestrian footbridge and stairs were added to the station precinct, allowing access to the station platforms from North Parade and Beames Avenue. This 1944 footbridge replaced the earlier steel footbridge that had been added to the station in 1919, and was located further east than the previous location. Drawings indicate that the 1919 footbridge was removed as part of the suite of works to establish the second Rooty Hill Station.
	Plans of the station and historical aerial photography indicate that by the 1960s, the north-most overbridge associated with the drainage channel alongside what is now Rooty Hill Road (North) had been replaced by culverts, and the drainage channel removed. The south-most overbridge associated with the former drainage channel appears to have been removed between 1970 and 1982.

Phase	Discussion
Phase 3: Modifications and station renovations (1980 – present)	During the 1980s, a series of modifications were carried out at Rooty Hill Station. This included the introduction of curved roof canopies to the steel footbridge and construction of associated concrete ramps, and construction of covered walkways connecting from the footbridge stairs to the former signal box building and passenger building on Platform 3/4.
	In 1980, the level crossing over the rail corridor was converted for pedestrian use only, before being decommissioned in 1981. Around this time, the commuter carpark was established near Station Street. In 1995, the signal box at Rooty Hill Station was closed.
	In 2000, refurbishments were carried out to strengthen the steel pedestrian footbridge, involving reinforcements to the underside of the footbridge deck. In 2001, awnings were placed on all platforms, and two platform canopies were constructed on Platform 1/2 to provide shelter for commuters.
	During this phase, alterations and modifications have been carried out to the interior spaces of the station buildings, the original furnishings and finishings of which have been largely altered or otherwise removed.



Figure 52: First Rooty Hill Station in 1862 looking north east to Station Master's Office (left) and Station building (right). (NSW State Records & Archives)

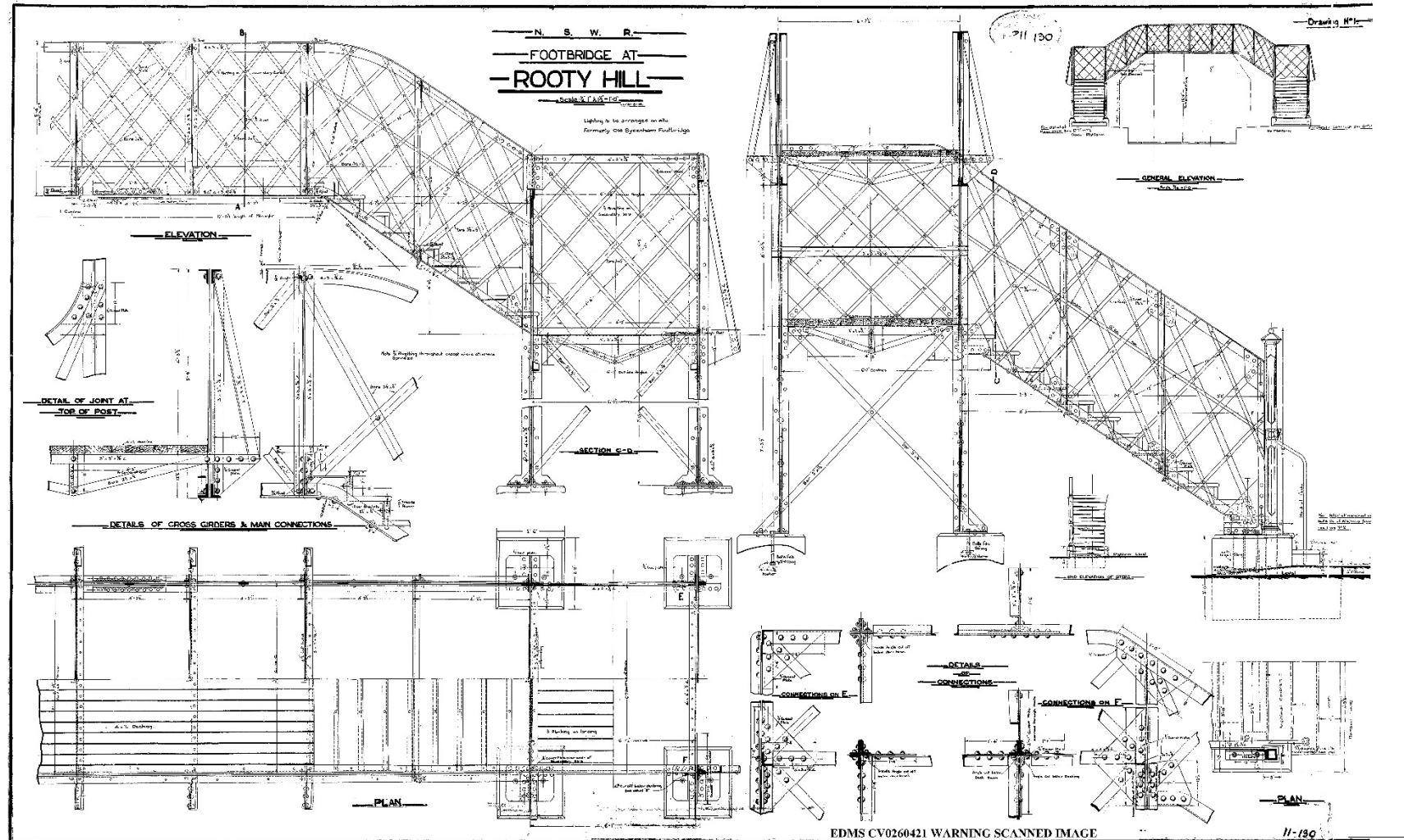


Figure 53: Detail drawings showing configuration of first footbridge established at Rooty Hill Station in 1919. This footbridge was formerly used at Sydenham Station (Source: State Rail Archives)

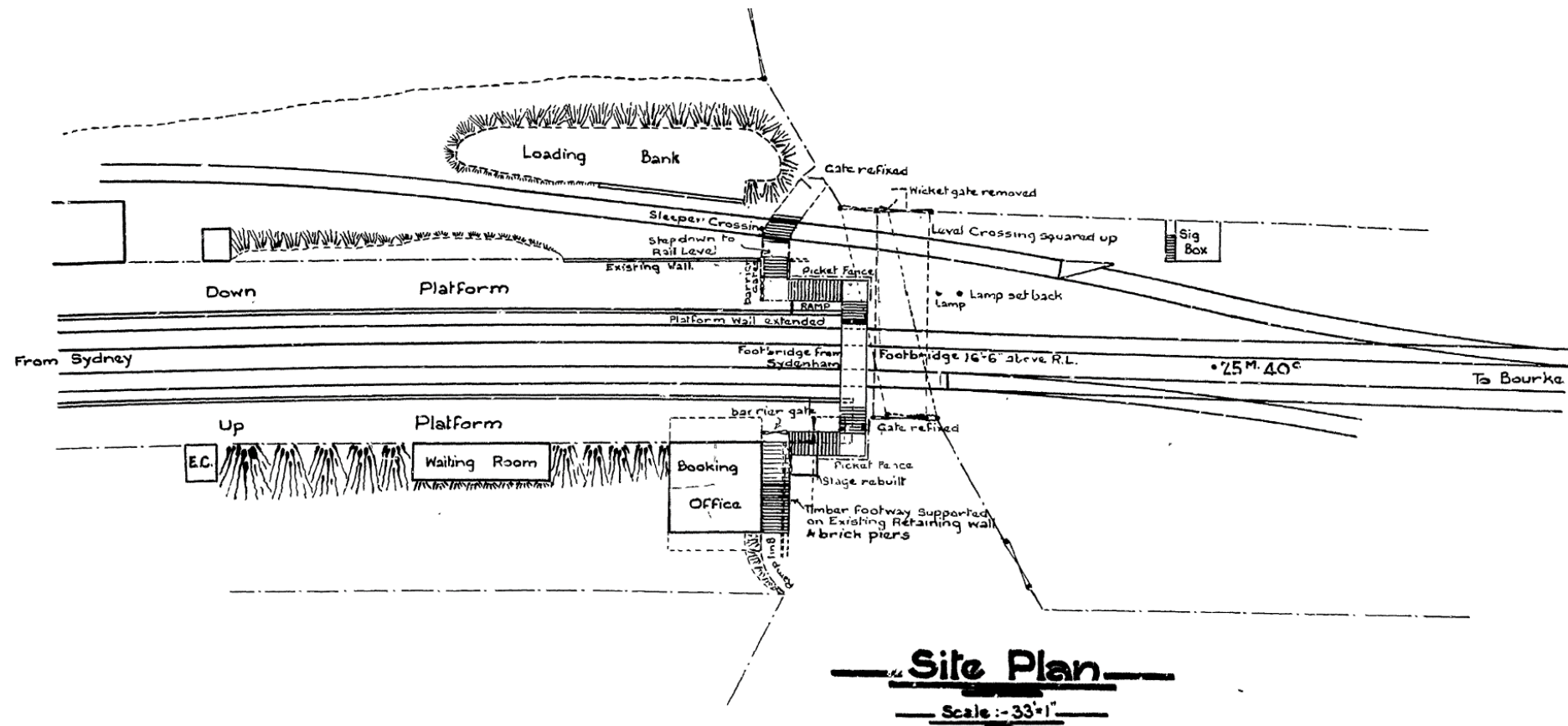


Figure 54: Detail of first Rooty Hill Station in 1919 showing configuration of first footbridge established in 1919, plan orientated south.

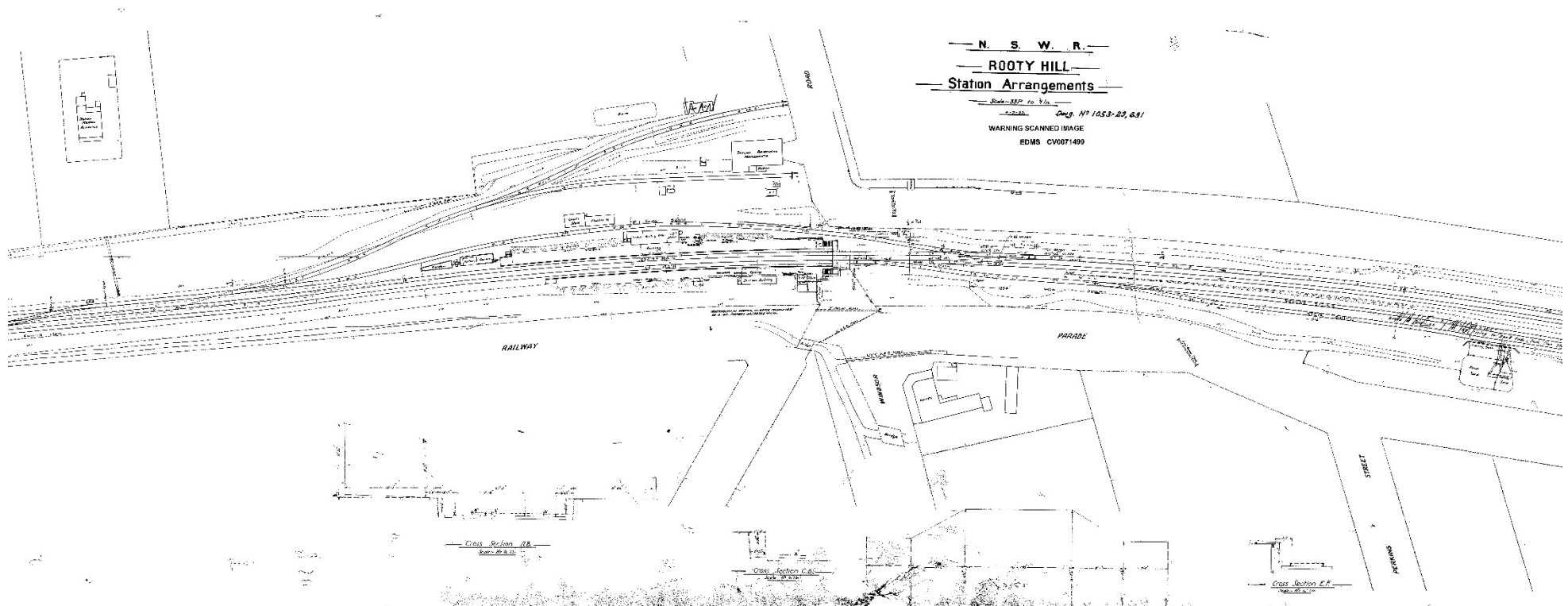


Figure 55: First Rooty Hill Station in 1930 showing broader context, plan orientated south. (Source: State Rail Archives)

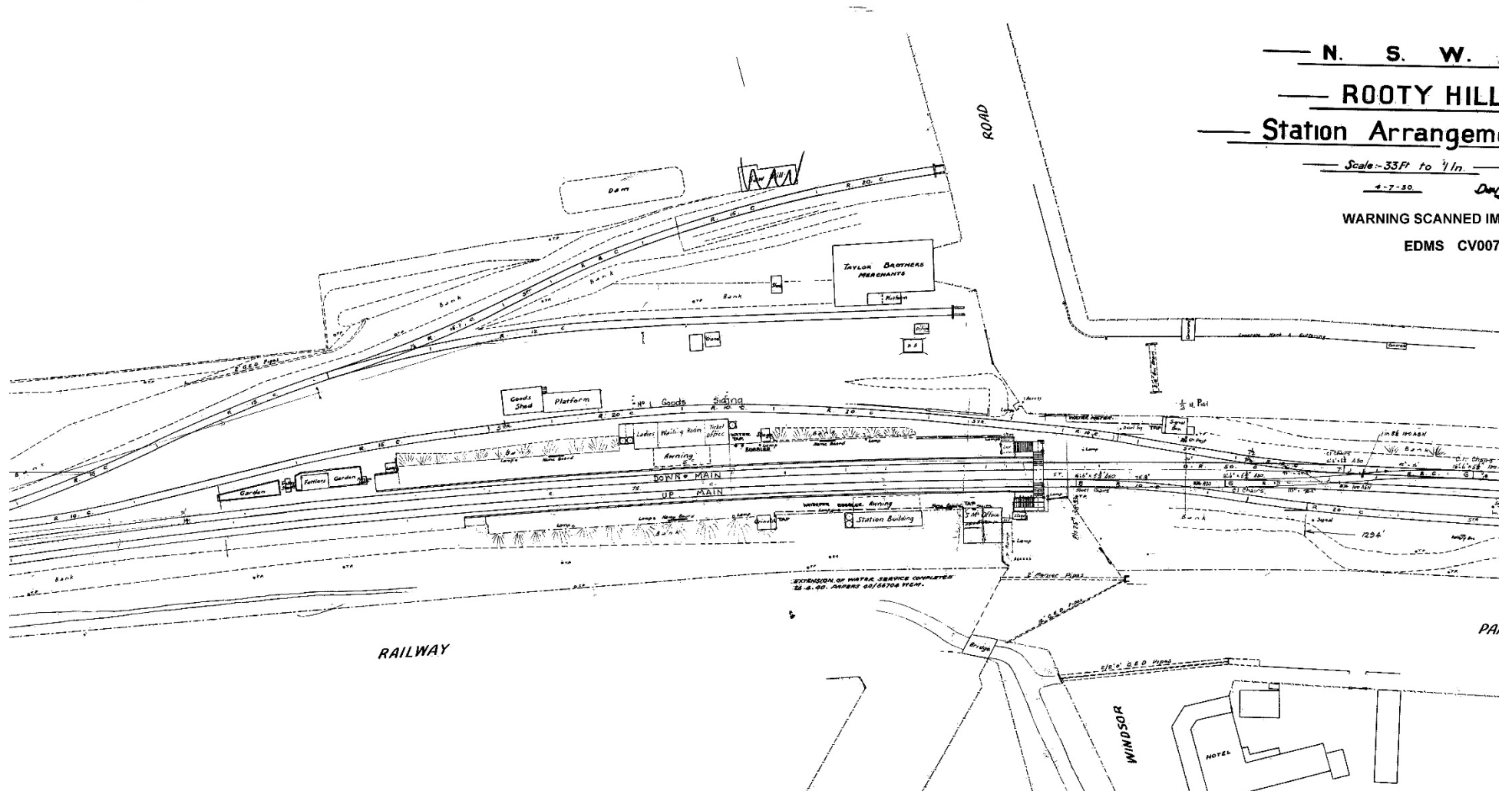


Figure 56: Detail of first Rooty Hill Station in 1930, plan orientated south. (Source: State Rail Archives)

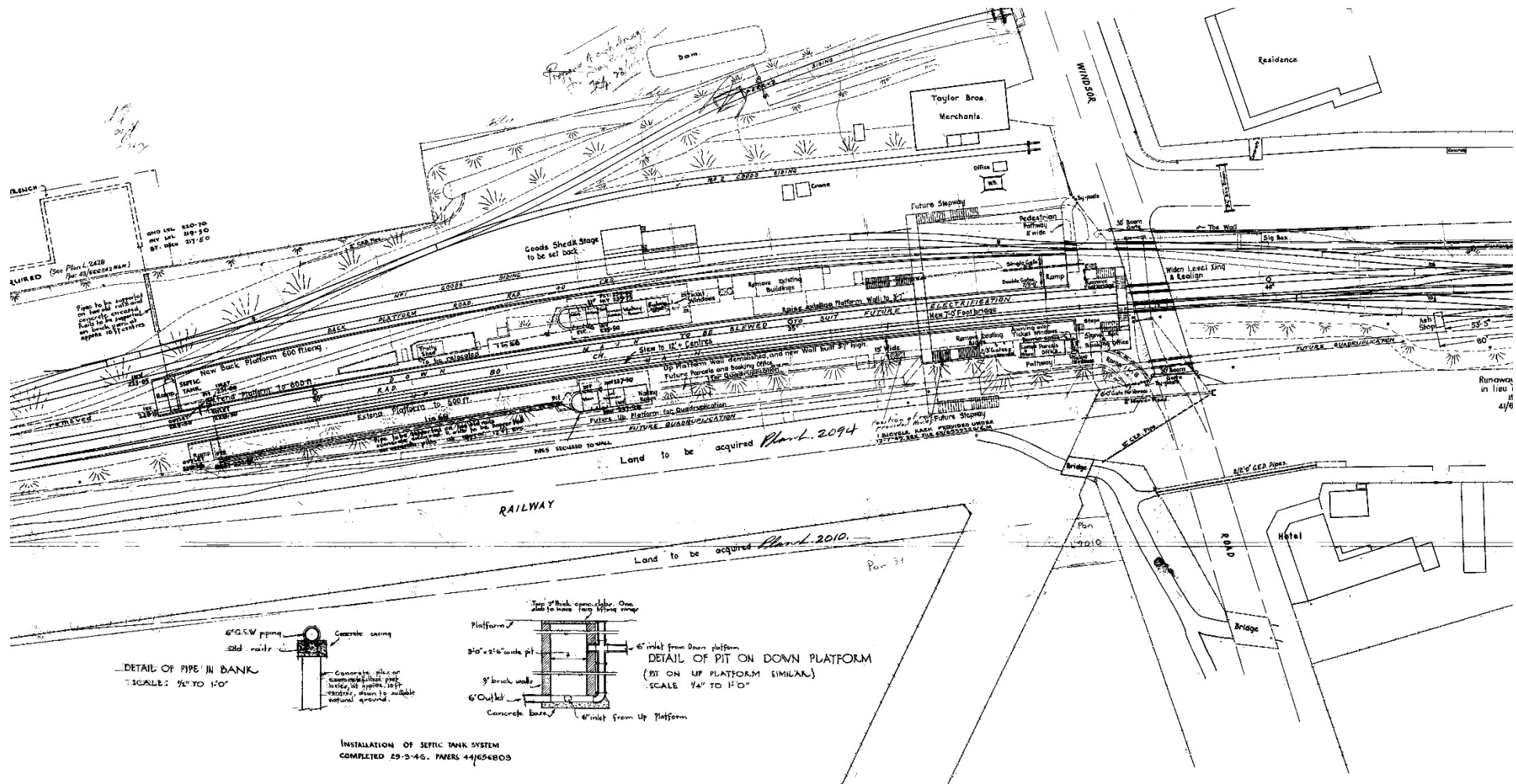


Figure 57: Rooty Hill Station in 1941. Plan orientated south. (Source: State Rail Archives)

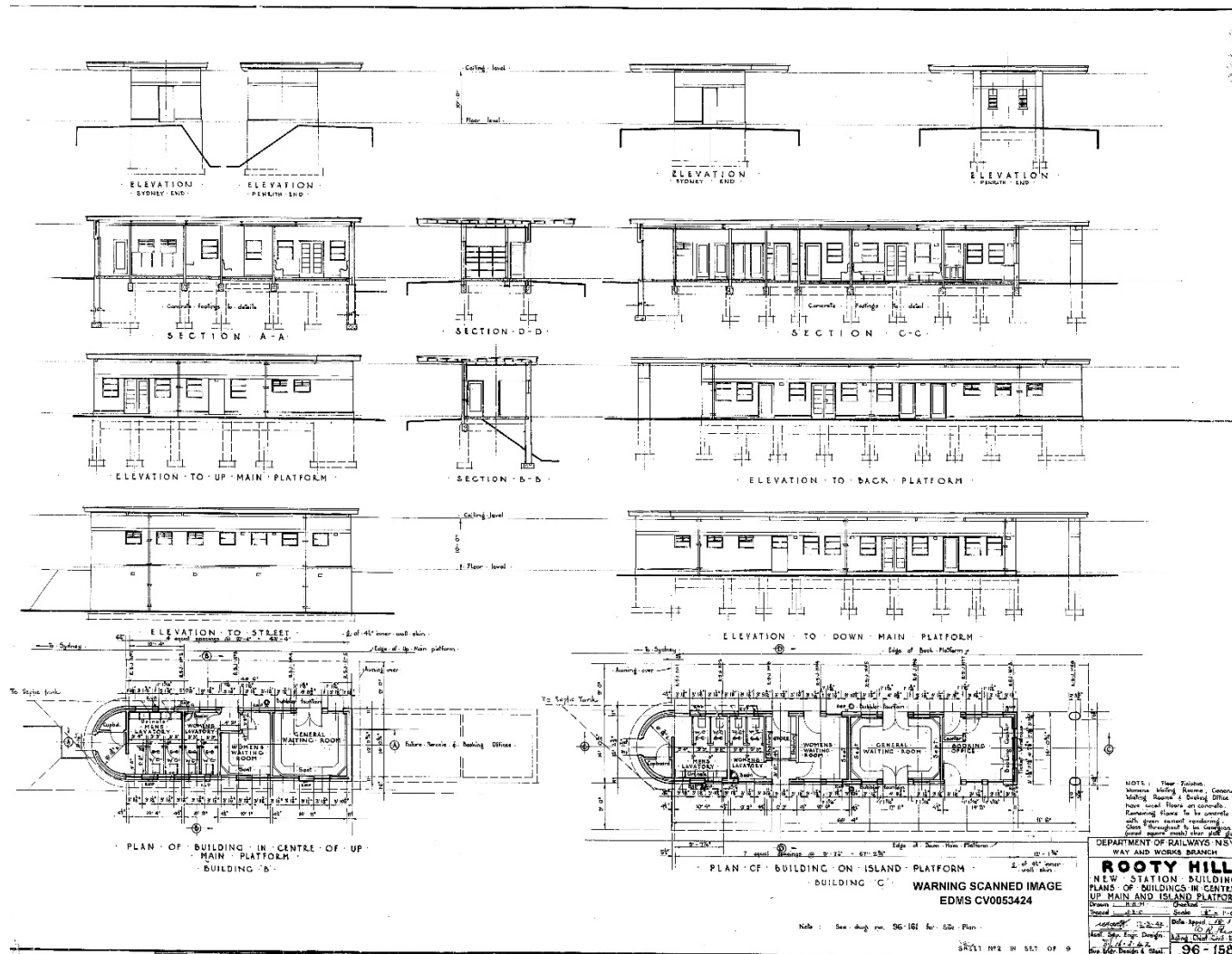


Figure 58: Plans, elevations and sections of the proposed passenger buildings in 1942. (Source: State Rail Archives)

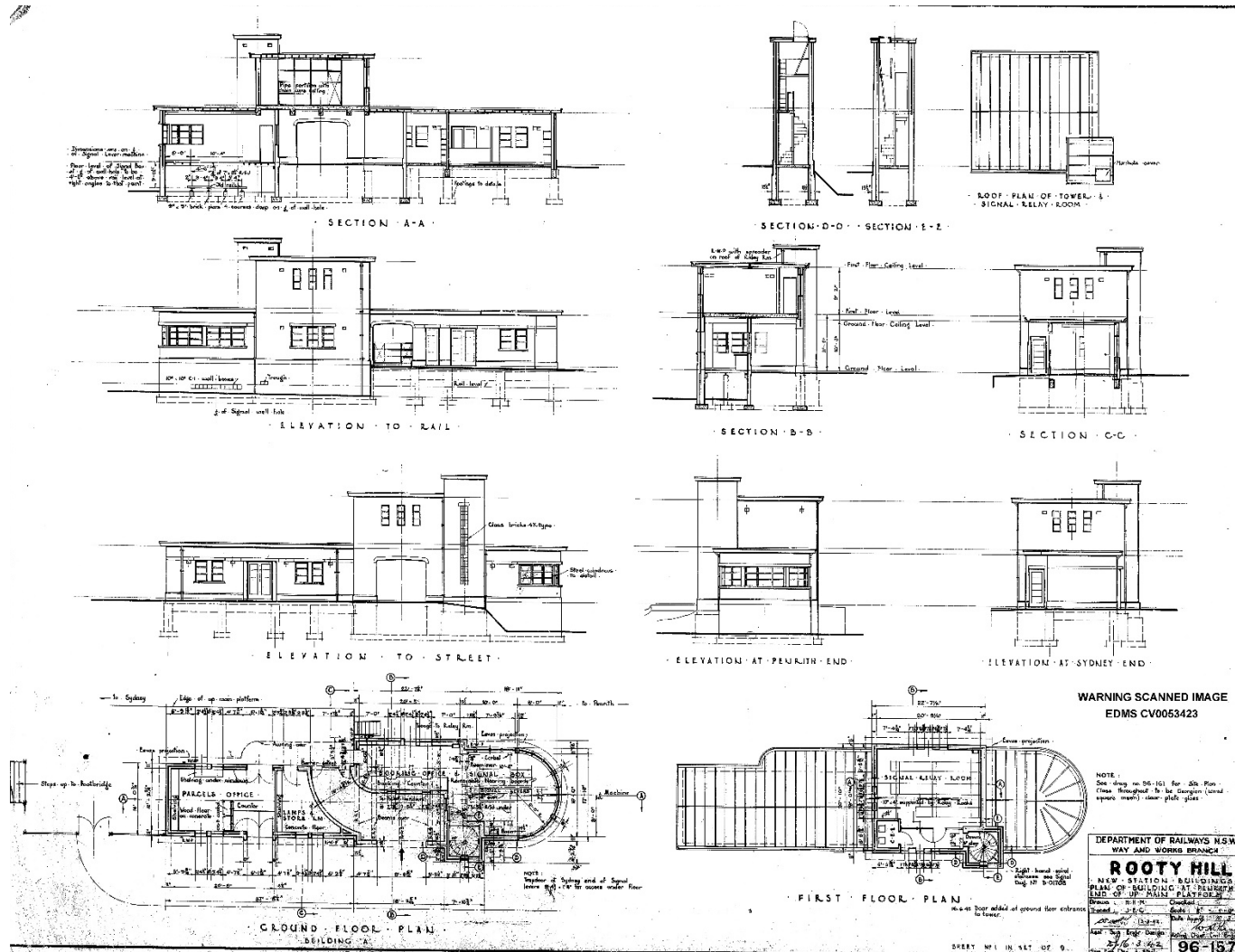


Figure 59: Plans, elevations and sections of the proposed signal box building (parcels/booking office) building in 1942. (Source: State Rail Archives)

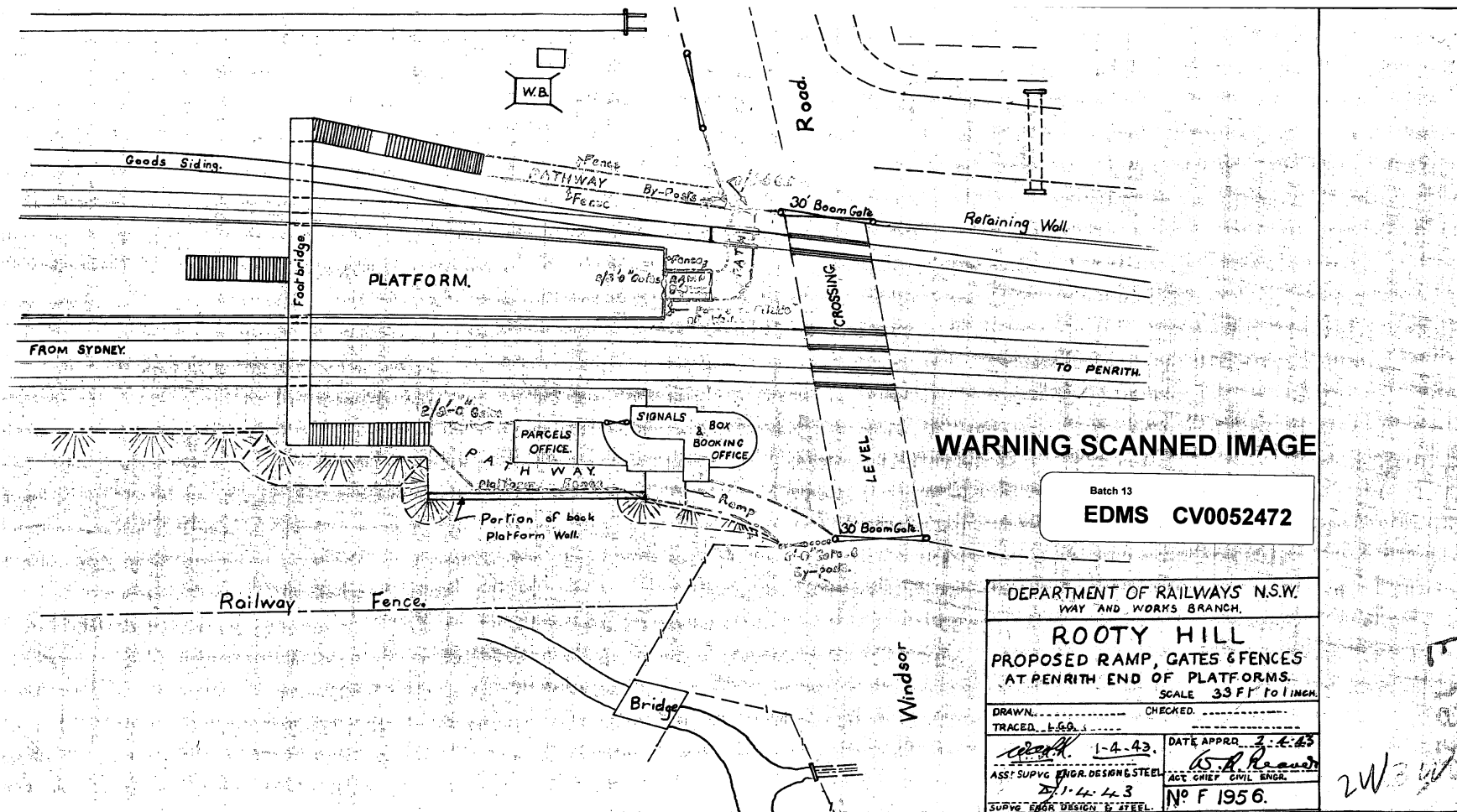


Figure 60: Plan of Rooty Hill Station in 1943 showing location of proposed signal box building (parcels/booking office) building. (Source: State Rail Archives)

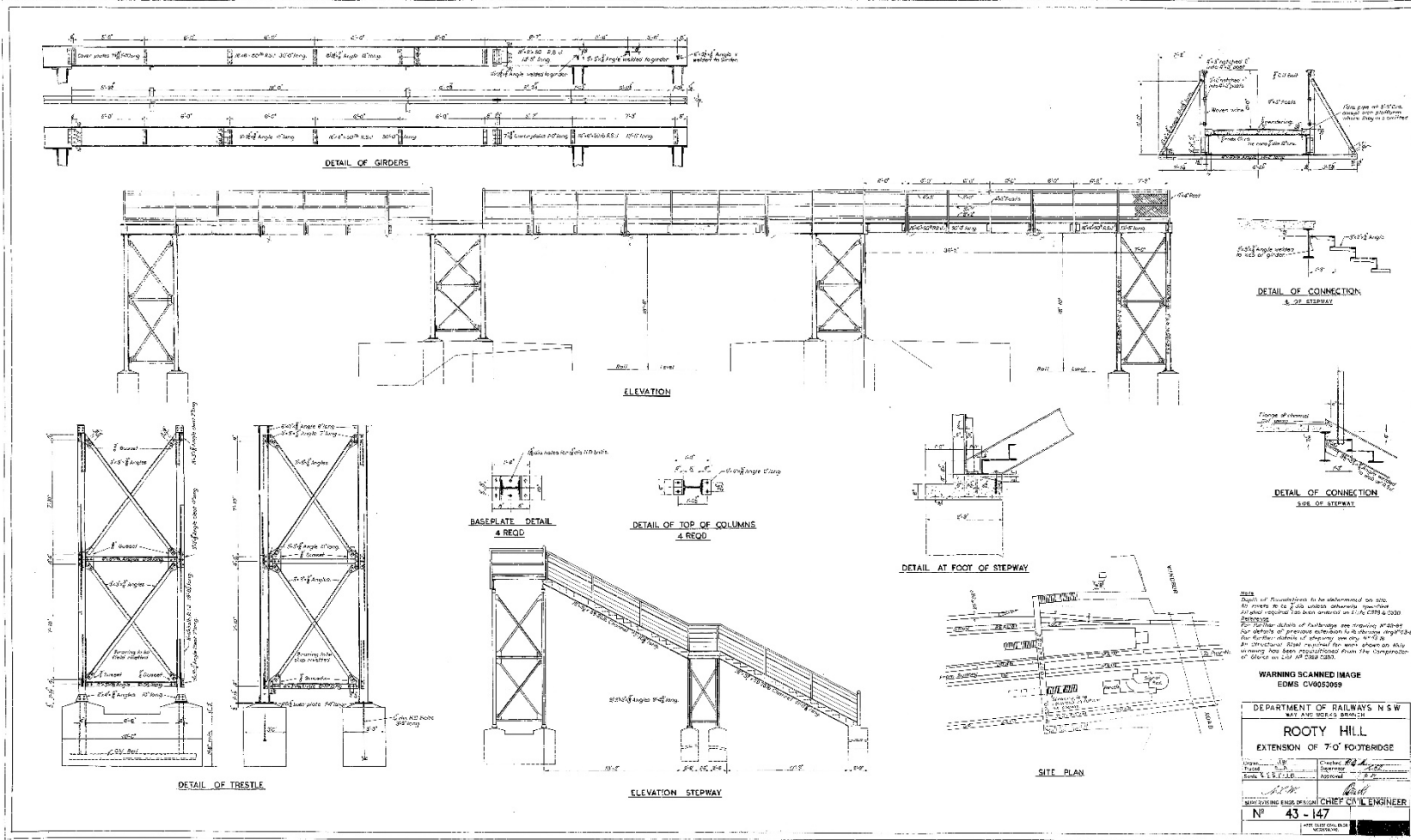


Figure 61: Rooty Hill Station in 1951 showing proposed extension of footbridge to North Parade. (Source: State Rail Archives)

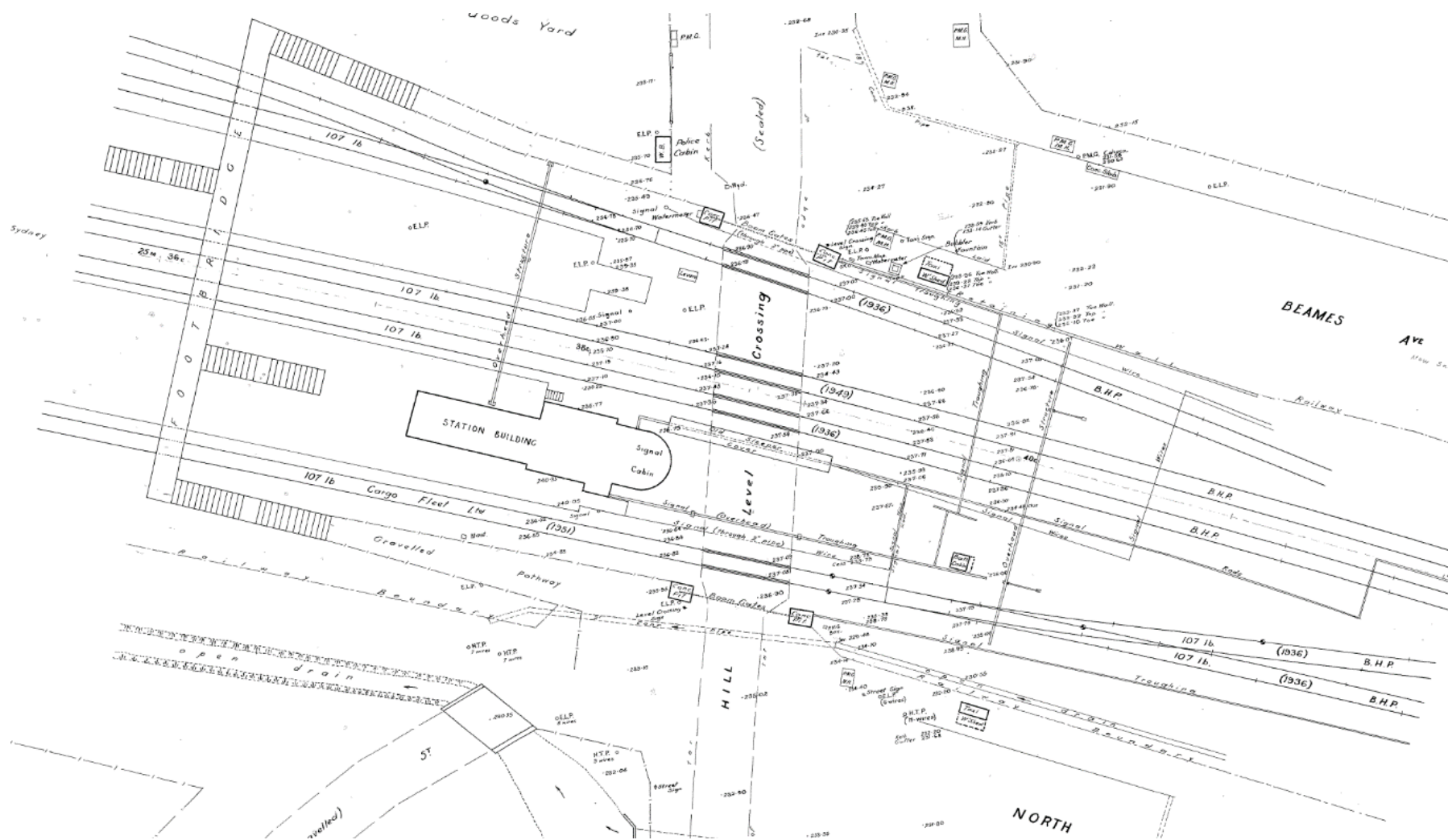


Figure 62: Rooty Hill Station in 1964 showing pedestrian level crossing. (Source: State Rail Archives)

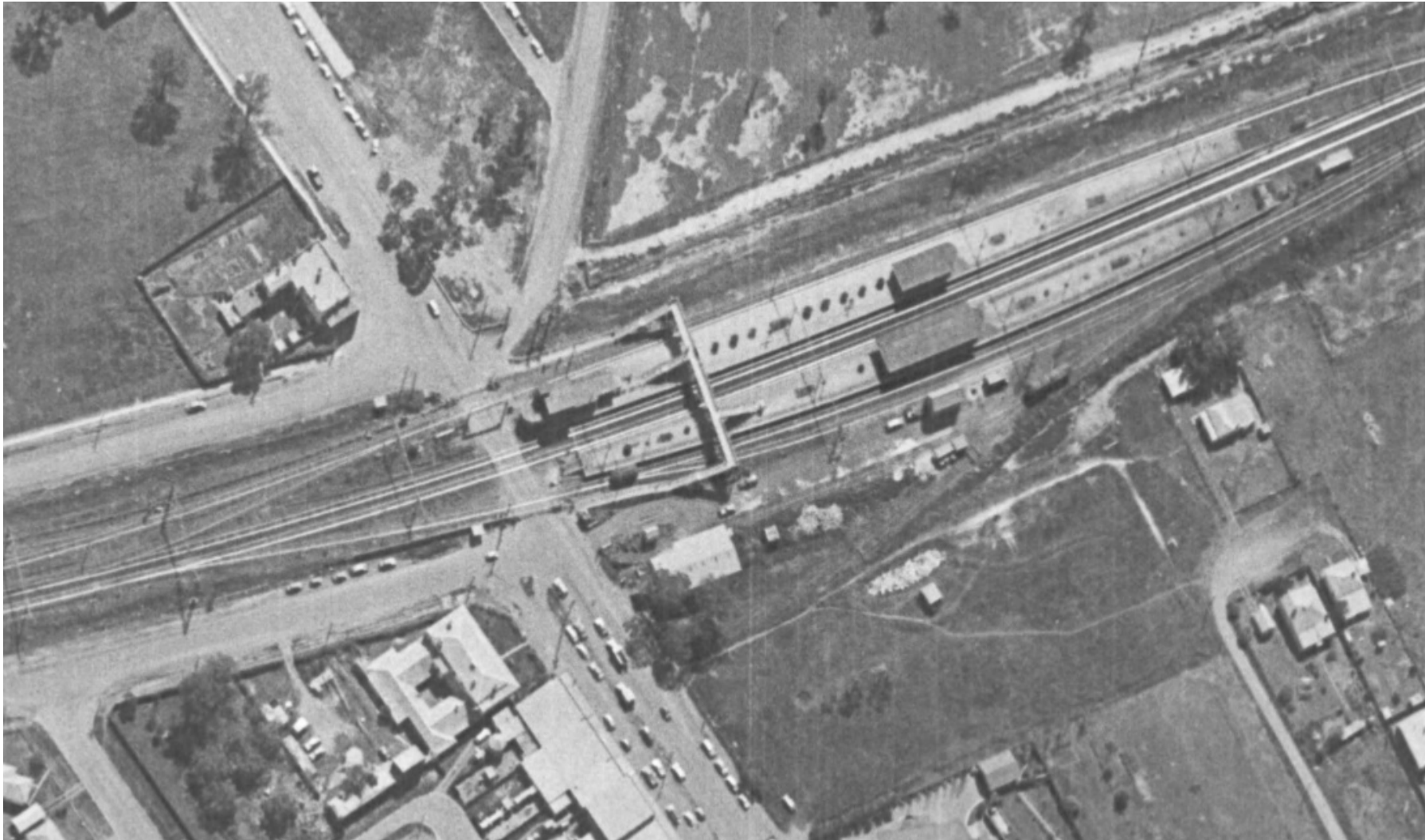


Figure 63: Aerial photograph of Rooty Hill Station in 1965, showing pedestrian level crossing and footbridge extension completed. (Source: Lotsearch Pty Ltd)

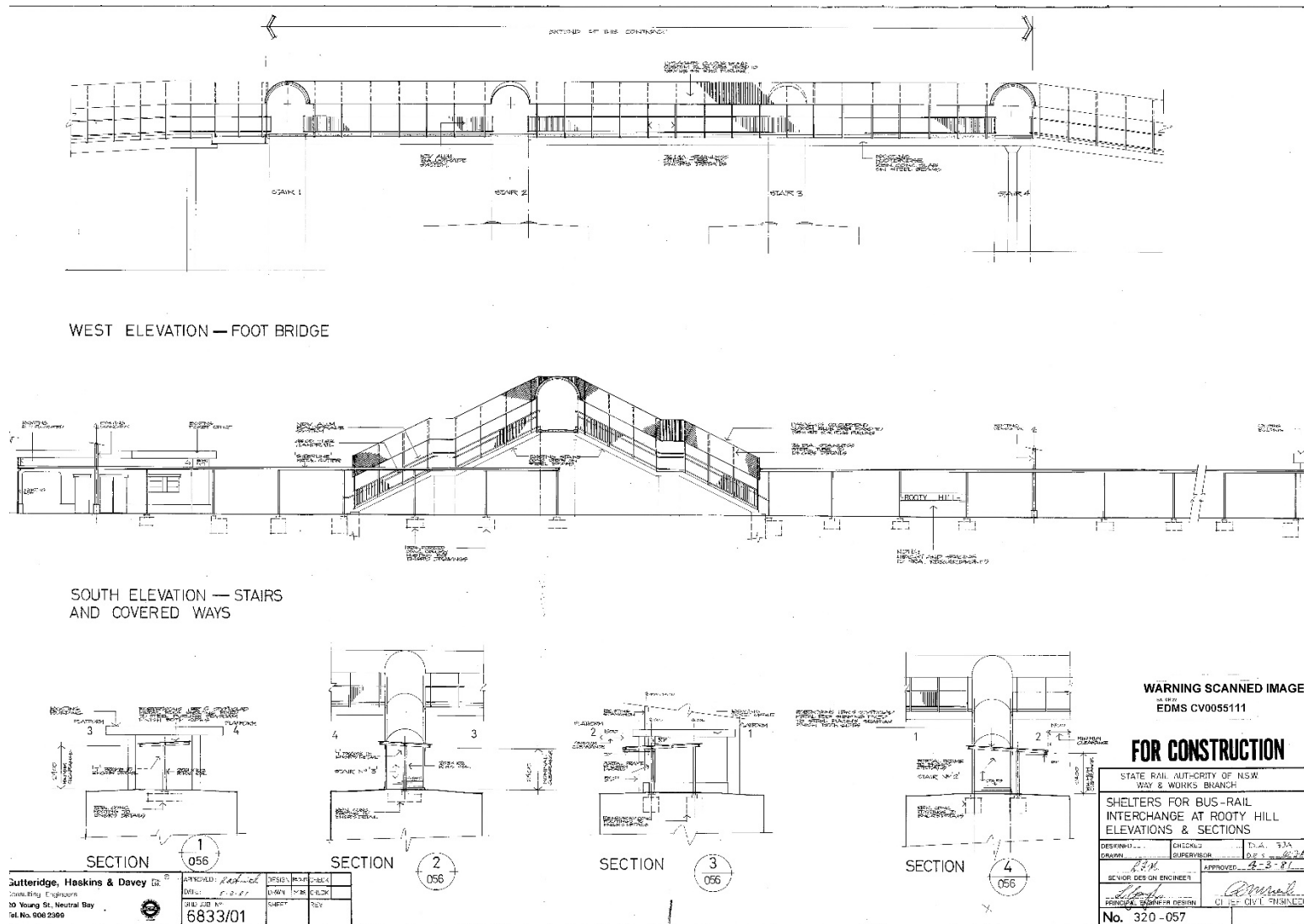


Figure 64: Plan of Rooty Hill Station in 1980 showing proposed canopy roof coverings/awnings to footbridges. (Source: State Rail Archives)



Figure 65: Aerial photograph of Rooty Hill Station in 1982 (Source: Lotsearch Pty Ltd)

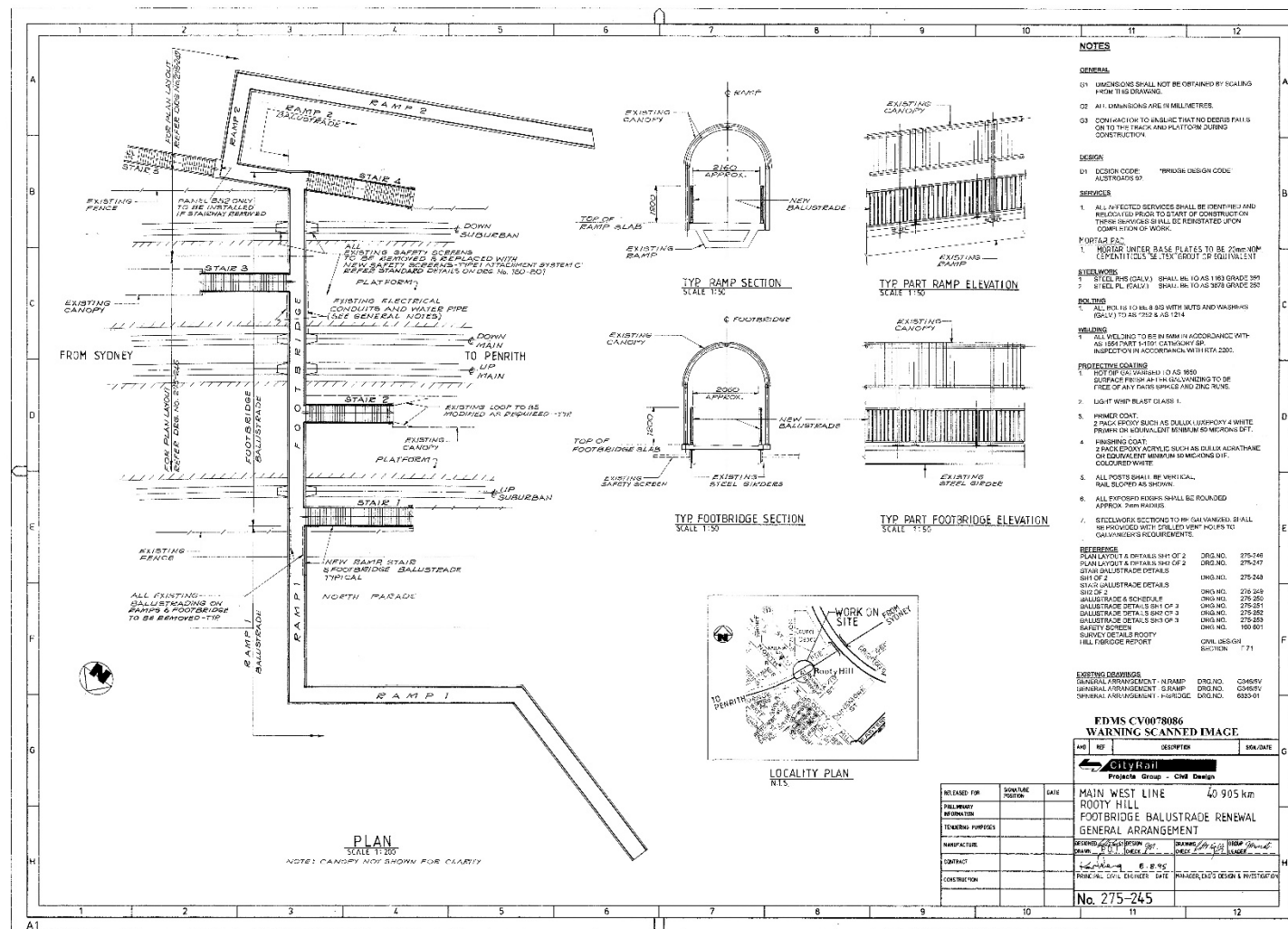


Figure 66: Plan of Rooty Hill Station in 1995 for footbridge balustrade renewal. (Source: State Rail Archives)

6.2 Previous impacts

The Main Western Railway Line has been continually modified for rail use since it was first constructed in the second half of the 19th century. The continual renovation of crossover tracks, signalling alterations, track slewing and provision of overhead wiring structures at Rooty Hill mean that former structures located within the footprint of the current Main Western Railway Line, or directly adjacent to it, may have been impacted by ongoing works.

The station platform and concourses have been remodelled several times throughout the lifespan of the station, as documented in the historical overview within this assessment. The original platforms were likely modified as part of the works to establish the second Rooty Hill Station. Former structures which have been removed include the station buildings of the first Rooty Hill Station, platform landscaping and furnishings from the second Rooty Hill Station, the former goods siding to the south of Platform 3/4, and the former level crossing over the rail corridor.

6.3 Potential remains

A summary of potential remains at Rooty Hill Station is provided in Table 8.

Table 8: Historical land use at Rooty Hill Station

Phase	Discussion
Phase 1 – First Rooty Hill Station (1863 – 1943)	Archaeological remains relating to this first phase of the first Rooty Hill Station would be associated with the original single railway track that ran through the area, the original platform alignments and station buildings, along with associated infrastructure and remains outside the rail corridor.
	Archaeological remains related to the first single railway track would consist of early rail beams, timber sleepers and rail ballast. The railway track has been continuously developed and upgraded in this area since it was first constructed, particularly with the duplication of the Main Western Line in 1886 and eventual quadruplication during Phase 2.
	Remains associated with the first Rooty Hill Station itself would consist of subsurface remains within the current station platforms, including remains of the original stone platforms themselves and also brick and stone footings relating to the station buildings and structures including the original passenger building located on Platform 1/2 between the current footbridge stairs and former signal box building, and an early passenger building located on Platform 3/4 between the current footbridge stairs and extant former passenger building. Other archaeological remains associated with this phase that may be uncovered on the station platforms would include evidence of early landscape features, drainage systems, evidence of garden beds and isolated artefact deposits. The station platforms have been remodelled several times during the evolution of Rooty Hill Station, with numerous changes occurring during Phase 3.
	Archaeological remains associated with the first Rooty Hill Station may exist outside the rail corridor, including evidence of former bridges over the open drain that runs parallel on the northern side of the station, along with evidence of the goods siding that ran parallel on the southern side of the station. Evidence of these features would consist of stone or brick footings, rail beams, timber sleepers and rail ballast. The site of the bridges over the open drain has been impacted by the subsequent development of North Parade and associated road infrastructure. The site of the goods siding is now occupied by the south-most railwayline at Rooty Hill Station.
	The potential for recovering archaeological remains associated with the first Rooty Hill Station platforms and buildings would be low to moderate.

Phase	Discussion
	Archaeological remains relating to the redevelopment of Rooty Hill Station during the 1940s would include deposits associated with structures and platform furnishings that were removed during impacts that occurred as part of Phase 3. Potential remains may include former garden beds, lighting and signage post footings, and isolated artefact deposits.
Phase 2: Second Rooty Hill Station (1943 – 1980)	<p>Archaeological remains associated with the upgrade of Rooty Hill Station would include deposits associated with the former pedestrian and vehicular crossing over the rail corridor, that was established in 1943 to link what is now Rooty Hill Road (South) and Rooty Hill Road (North). Remnants of this feature remain visible at surface level including the two concrete pits located on Beames Avenue, which are associated with the since removed boom gates to the level crossing.</p> <p>The potential for recovering archaeological remains associated with former phases of Rooty Hill Station platforms and buildings would be moderate.</p>
Phase 3: Modifications and station renovations (1980 – present)	Archaeological remains relating to modern upgrades to Rooty Hill Station would include deposits associated with structures and platform furnishings that have since been removed including landscape features, lighting and signage post footings, and isolated artefact deposits.

6.4 Archaeological significance and potential

6.4.1 Assessment of significance

First Rooty Hill Station

There is low to moderate potential that archaeological deposits relating to the first station remain beneath the present station platform surfaces. This station was the primary passenger station for the early township of Rooty Hill. As a passenger station rather than an industrial station, archaeological remains would provide evidence of past lifeways for rail workers and commuters in the Rooty Hill area, which became an important agricultural district within wider Sydney. Intact and legible archaeological remains relating to the first Rooty Hill Station would be of local heritage significance.

Former level crossing

The former pedestrian and vehicular level crossing over the rail corridor at Rooty Hill Station, which connected Windsor Road (what is now Rooty Hill Road (South) with Rooty Hill Road (North)), was removed in 1981, when pedestrian access was provided by the Rooty Hill Station footbridge ramps. While evidence of the level crossing is likely to have been removed within the rail corridor itself, visible remnants of this feature remain at ground level. This includes the two concrete pits located adjacent to Beames Avenue, which were associated with the boom gate to the former level crossing.

The former level crossing would have been a distinctive element of the township of Rooty Hill for commuters and residents from the 1940s to 1980s. Archaeological remains relating to the former level crossing would be of local heritage significance.

Former goods siding to the south of Platform 3/4.

Evidence of the former goods siding and associated platform and goods shed, which was located in the current location of the railway line to the south of Platform 3/4, would provide information that is corroborated in other sources, and would represent relatively standard twentieth century era rail infrastructure, which is presently ubiquitous in the wider rail network. Archaeological remains related to this item would not meet the threshold for local heritage significance.

6.4.2 Summary of archaeological significance and potential

A summary of the archaeological potential and significance of archaeological remains at Rooty Hill Station is provided in Table 9. These results are illustrated in Figure 67 and Figure 70.

Table 9: Summary of potential and discussion of significance of archaeological remains at Rooty Hill Station

Phase	Potential remains	Arch. potential	Significance
Phase 1: 1863 – 1943	Original alignment of Main Western Railway Line, single track rail line – rail beams, sleepers and ballast.	Low-Moderate	Local
	First Rooty Hill Station – former platform structures, building footings, underfloor deposits, drainage and lavatory services, evidence of landscape features and garden beds, and isolated artefact deposits.		
	Former goods siding to south of the platform 3/4 – rail buffer stop footings, rail beams, sleepers and rail ballast.		
Phase 2: 1943 – 1980	Deposits associated with platform furnishings and landscaping including garden beds, lighting pole footings, signage post footings, and isolated artefact deposits.	Moderate	Local
	Former pedestrian/vehicular level crossing over rail corridor linking Rooty Hill Road (South) and Rooty Hill Road (North) (formerly Windsor Road).		
Phase 3: 1980 – present	Deposits associated with platform furnishings, lighting pole footings, signage post footings, and isolated artefact deposits.	Moderate-High	Would not reach the threshold for local significance

6.4.3 Statement of archaeological significance

Rooty Hill Station has potential for remains relating to the evolution of Rooty Hill Station, which would reflect the architectural configuration of the original station and associated rail infrastructure that was developed during the late-19th century and early-20th century.

Archaeological remains relating to the first Rooty Hill Station would demonstrate the development and consolidation of the broader Rooty Hill district as part of the western agricultural expansion of the colony, and the overall evolution of railway technologies that took place at this time. The station platforms may potentially contain sub-ground relics relating to the former station including stone and brick footings of early buildings and structures, drainage systems, landscape features associated with garden beds, footings of signage and lighting posts, and evidence of the earlier alignments of the platforms themselves. Archaeological remains relating to the first Rooty Hill Railway station would be of local heritage significance.

The archaeological remains relating to the second Rooty Hill Station, which was constructed as part of the quadruplication of the Main Western Railway Line to service the munitions factories in the area, would demonstrate the military associations of the local district during WWII. Deposits associated with this phase, which are likely to include the remains of platform furnishings and landscaping, along with evidence of the former level crossing, would be of local heritage significance.

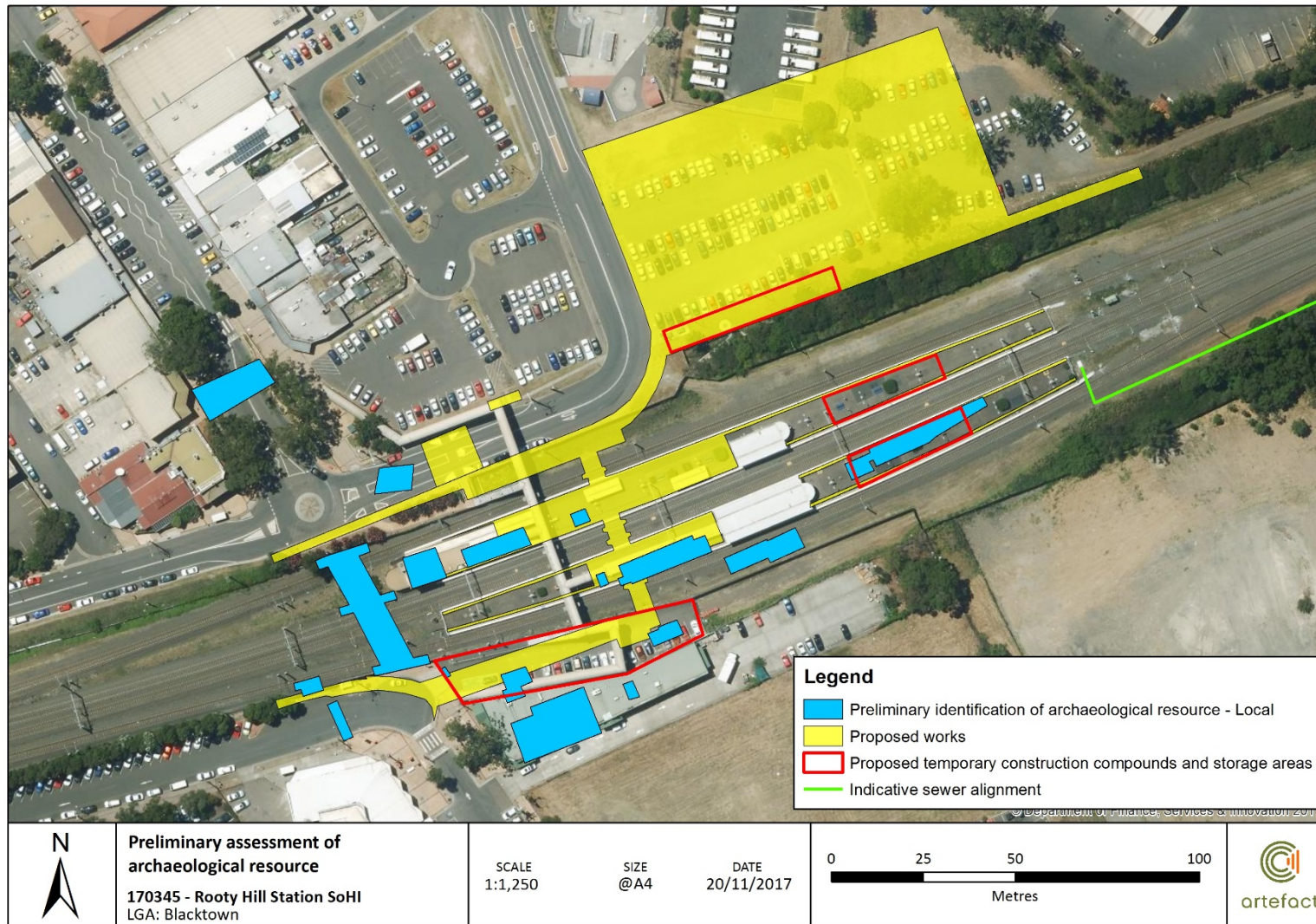


Figure 67: Preliminary identification of potential and significance for archaeological remains at Rooty Hill Station

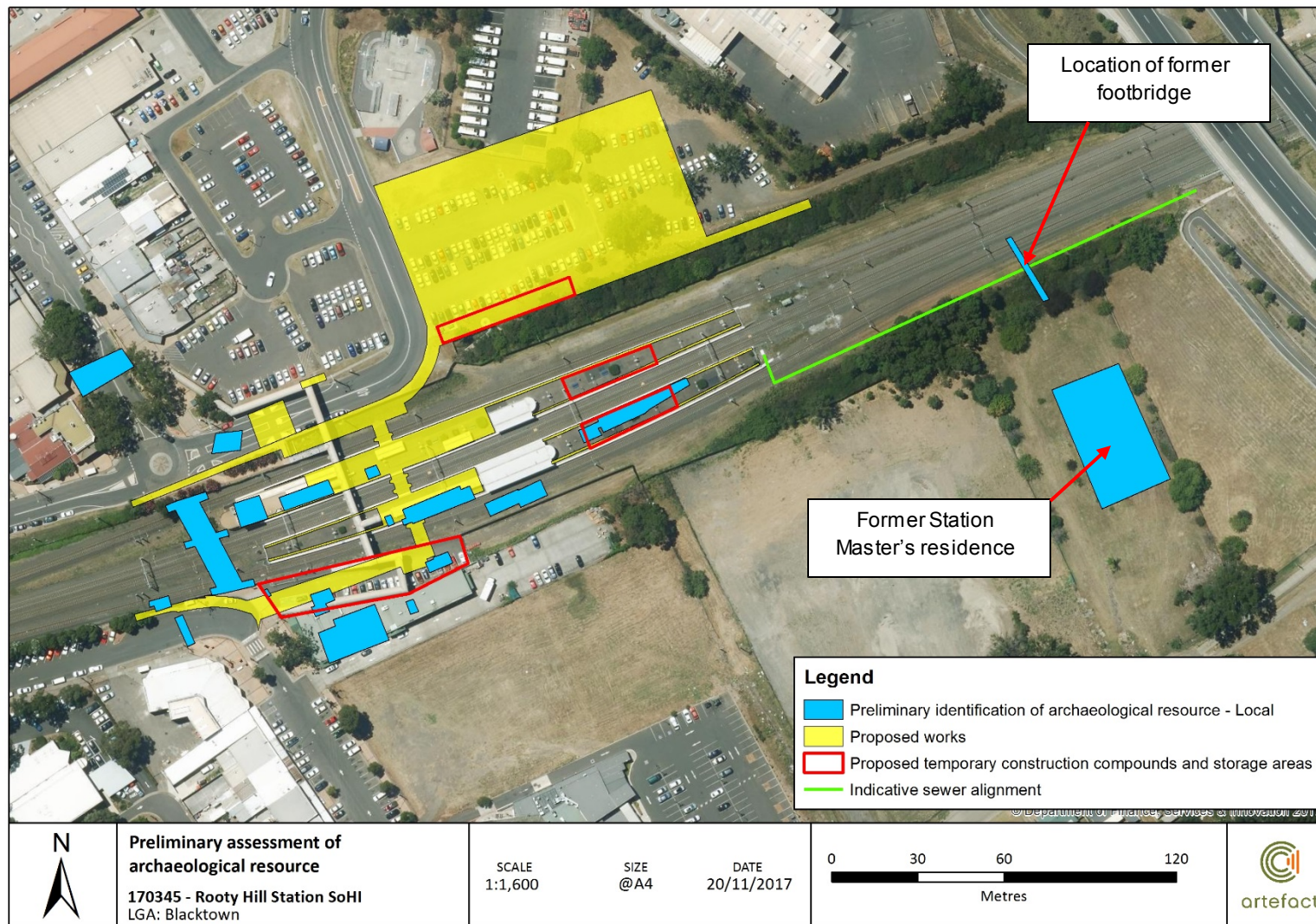


Figure 68: Preliminary identification of potential and significance for archaeological remains at Rooty Hill Station. Larger scale overview showing proposed sewer alignment and indicative location of former footbridge associated with former Station Masters residence

7.0 HERITAGE IMPACT ASSESSMENT

7.1 Introduction

This section will assess heritage impacts to the listed items within and adjacent to the study area. It will first discuss the Proposal, provide a justification for the proposed works, then provide an assessment of the impacts to identified heritage items.

7.2 Proposed works

The Proposal consists of a number of proposed works that are detailed in the discussion that follows. An overview is provided in design document TAP-0073-AR-0001, with key drawings included below. It is noted these concept drawings will be subject to detailed design.

The Proposal involves upgrades to the station facilities including the northern and southern interchange facilities and construction of a commuter car park on the northern side of the station between the rail corridor and the Council depot.

The key features of the Proposal are summarised as follows:

7.2.1 Easy Access Upgrade

The Proposal includes:

- construction of a new footbridge and station concourse (new location) with ticketing and passenger information facilities
- construction of four new sets of stairs and lifts at both station entrances and platforms
- removal of existing seating and shelter on Platform 1/2
- new canopy coverage from stairs to station buildings on Platform 1/2 and Platform 3/4. Note: modern awning to former signal building box building on Platform 1/2 retained.
- accessible paths to station entrance lifts from Beames Avenue (southern side) and North Parade (northern side)
- accessible paths between the station entrances, surrounding streets / interchange facilities and Platform 1/2 and Platform 3/4
- provision of an accessible ticket window on Platform 3/4 within the western end of the existing platform building
- new Family Accessible Toilets (FAT) and ambulant cubicles in male and female toilets within the existing passenger building on Platform 3/4
- installation of additional signage to improve wayfinding
- provision of 10 undercover bicycle racks near the northern station entrance
- provision of additional kiss and ride spaces for commuters at the northern and southern station entrances
- new pedestrian crossing across North Parade

- removal of garden beds at northern interchange to create wider footpaths, and the existing garden bed on the eastern side of Rooty Hill Road (North) to allow set-down of bus passengers
- ancillary works, including services diversion and/or relocation, minor drainage works, adjustments to lighting, installation of handrails and balustrades, improvements to station communication systems with new infrastructure (including additional CCTV cameras).
- installation of new soft landscaping.

7.2.2 Multi-story Car Park Construction

The Proposal includes:

- provision of 4 level, multi storey commuter car parking spaces which would be serviced by new accessible paths, lifts and stairs between the commuter car park and northern interchange of the station
- provision of 10 undercover bicycle racks near the northern station entrance
- ancillary works, including services diversion and/or relocation, minor drainage works, installation of lighting, installation of handrails and balustrades, with new infrastructure (including CCTV cameras)
- installation of new landscaping along Station Street.

7.2.3 Sewerage Upgrade

A septic system is utilised at Rooty Hill Station for managing waste from platform toilets. As part of the Proposal, a connecting sewer pipe will be installed from the existing septic system to an existing sewer main approximately 160 metres from the Sydney end of Rooty Hill Station. The plans are indicative at this stage, with approximate alignment shown in Figure 3 and Figure 67.

Rooty Hill Station Precinct – Accessibility and Commuter Carpark Upgrade Statement of Heritage Impact

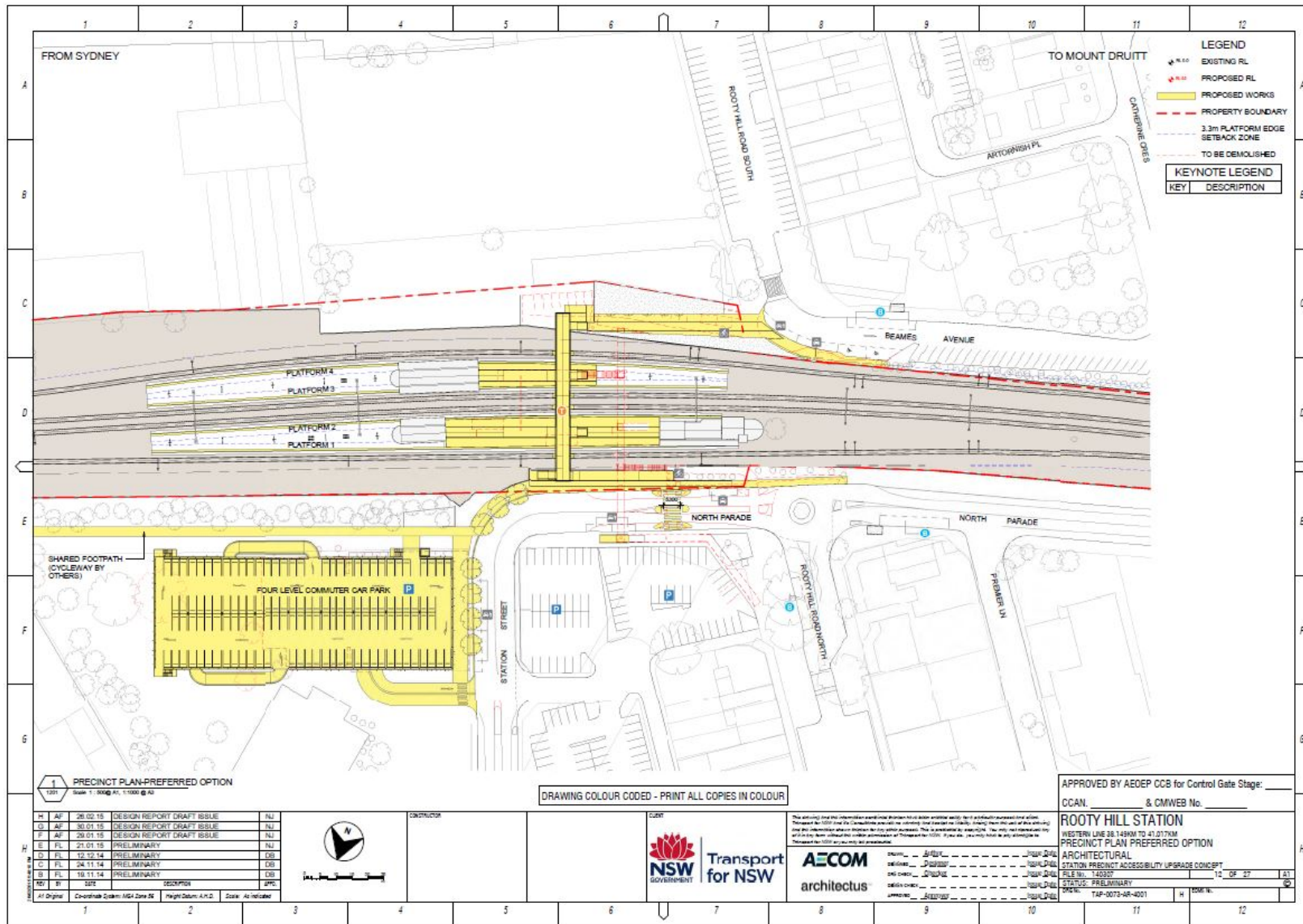


Figure 69: Precinct plan of the proposed Rooty Hill Station Precinct Upgrade

Rooty Hill Station Precinct – Accessibility and Commuter Carpark Upgrade Statement of Heritage Impact

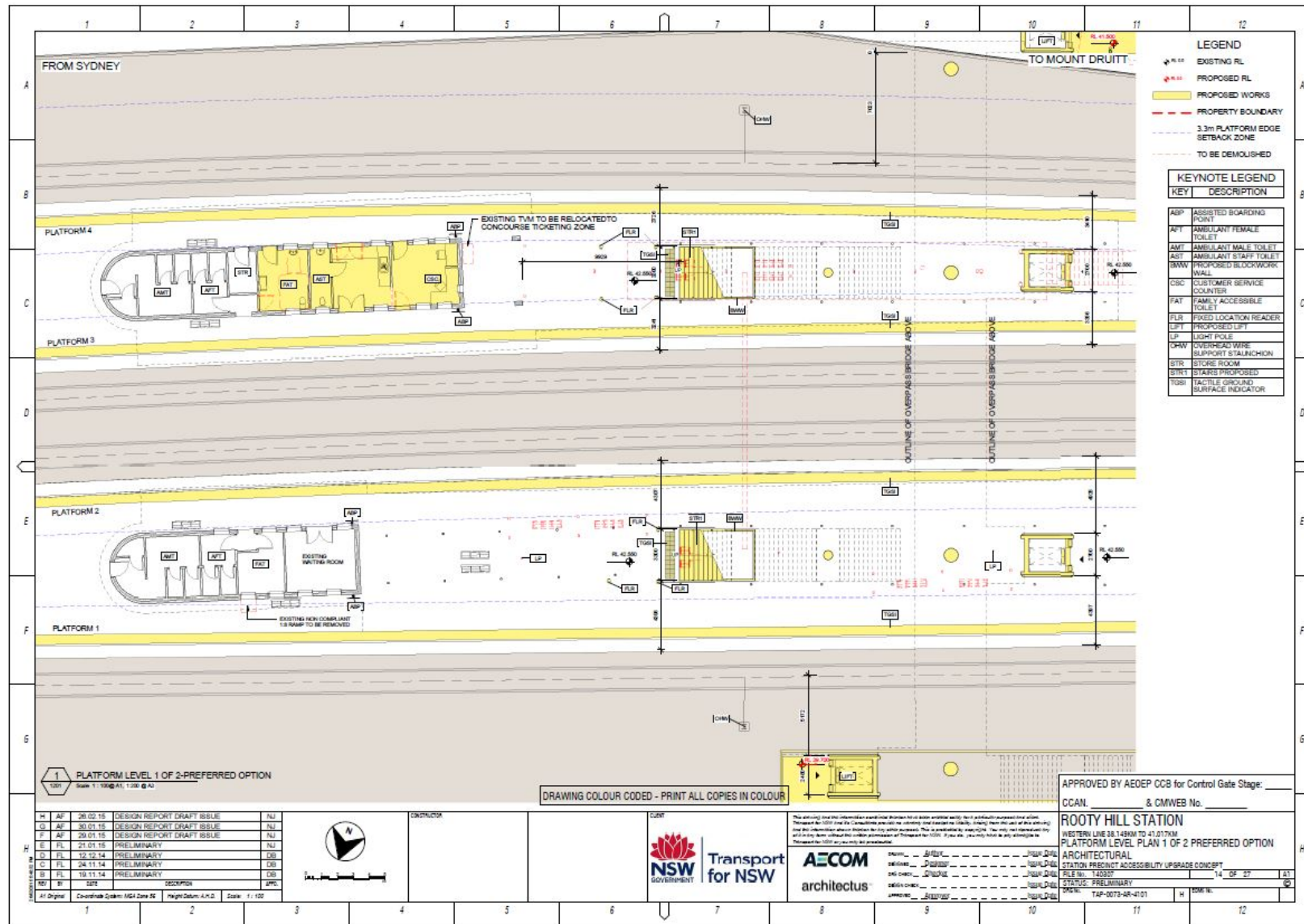


Figure 70: Plan of the Rooty Hill Station Accessibility Upgrade showing proposed works at eastern end of station.

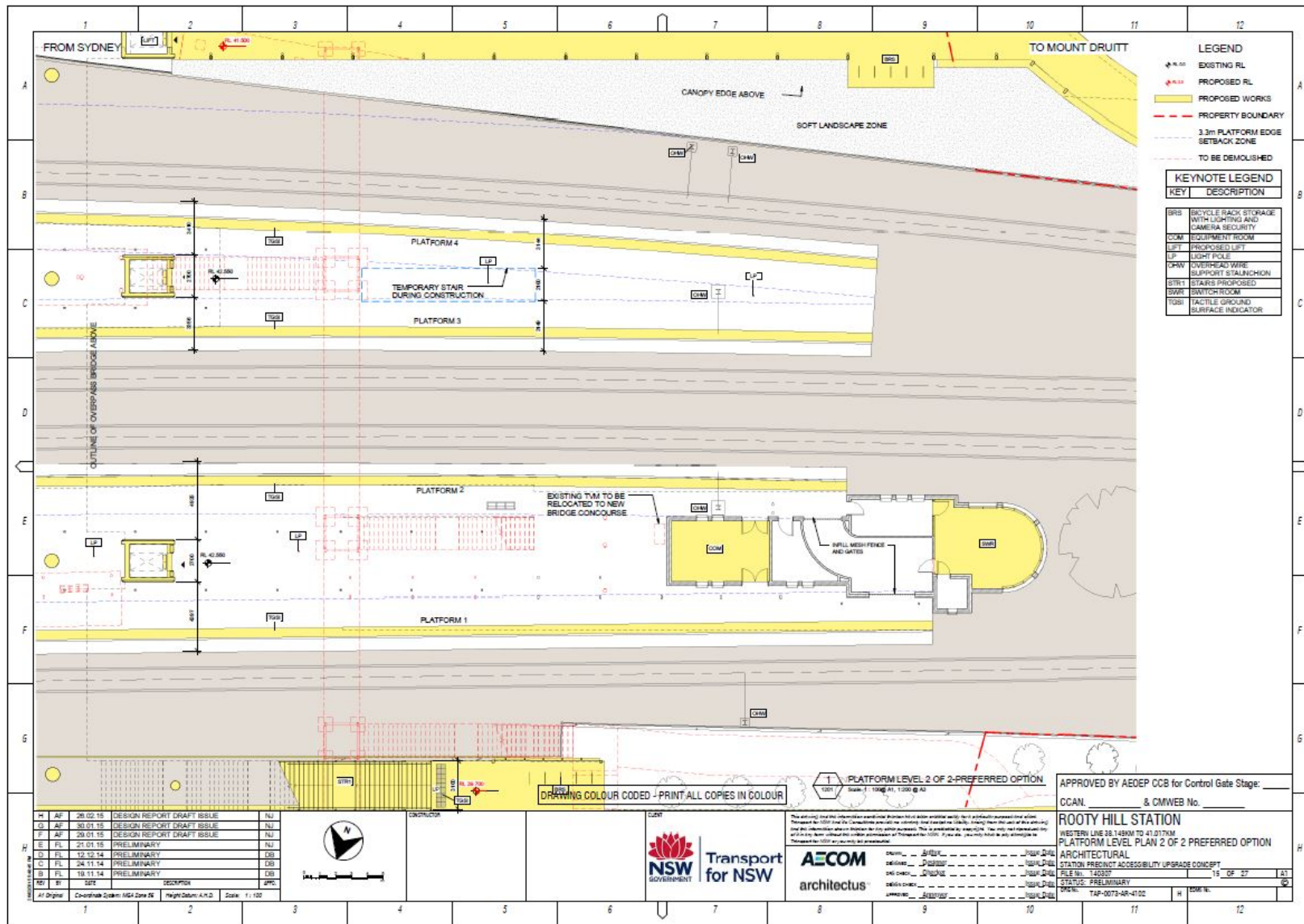


Figure 71: Plan of the Rooty Hill Station Accessibility Upgrade showing proposed works at western end of station.

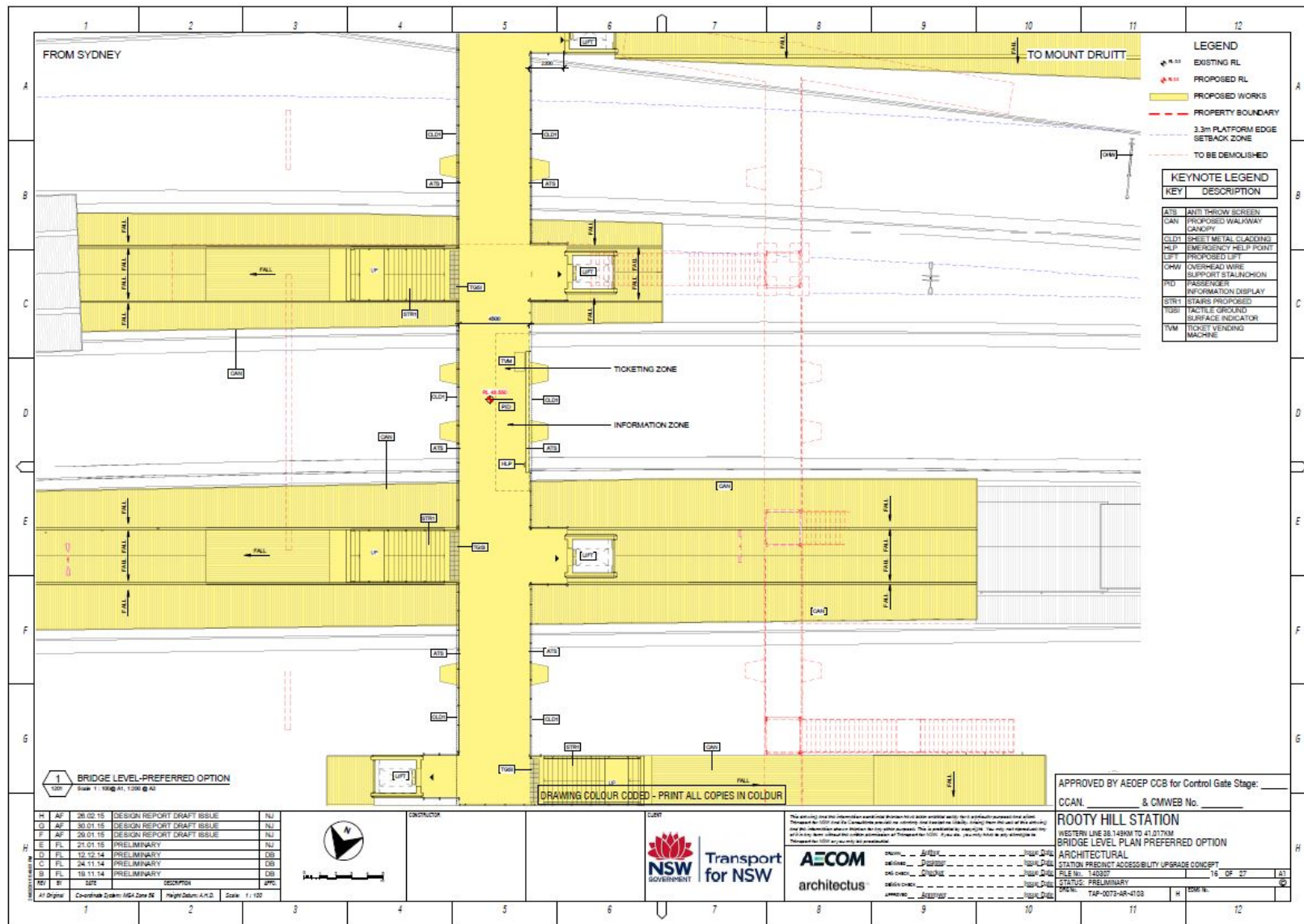


Figure 72: Plan of the Rooty Hill Station Accessibility Upgrade showing proposed new footbridge.

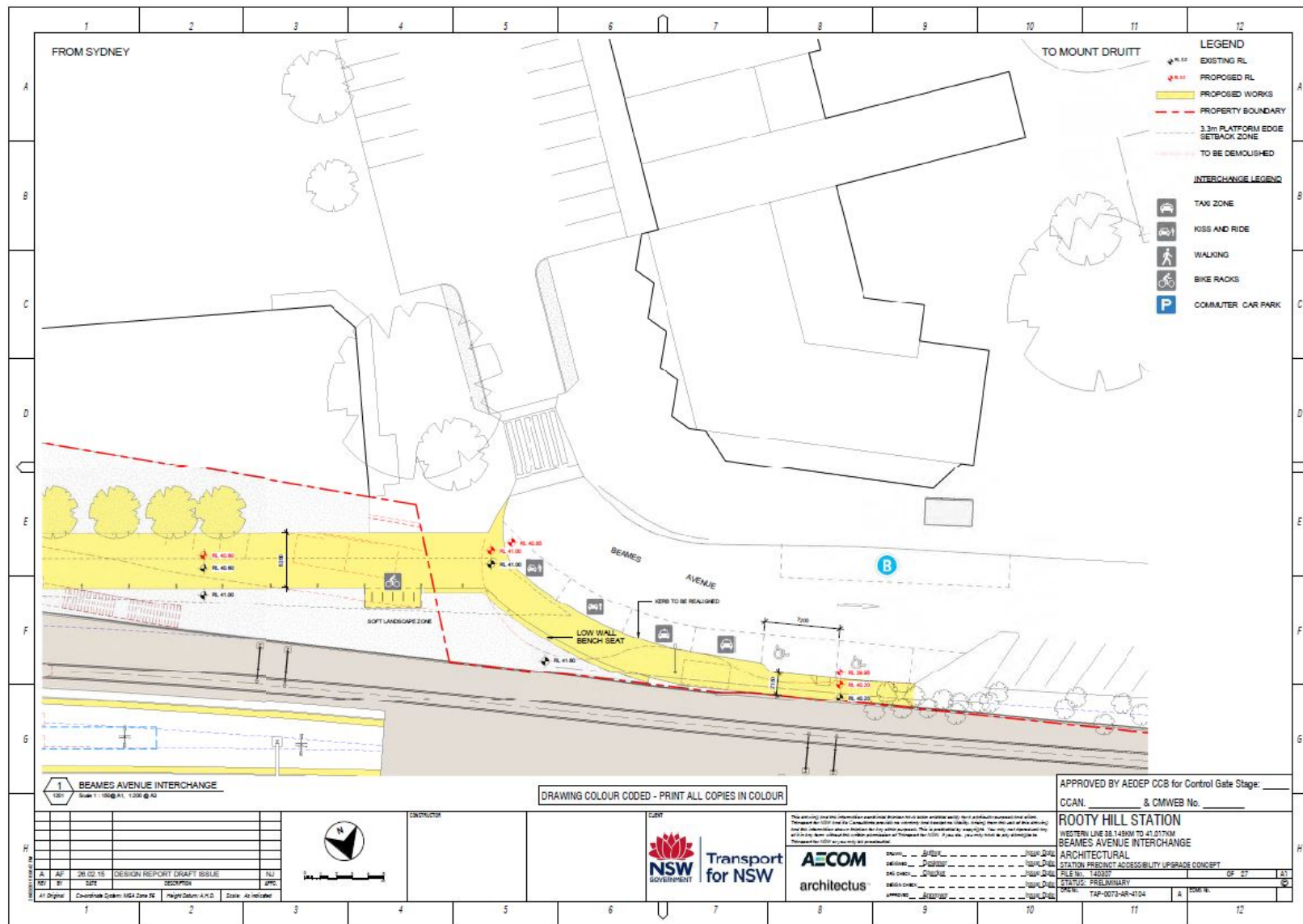


Figure 73: Plan of the Rooty Hill Station Precinct Upgrade showing proposed interchange upgrade at Beames Avenue.

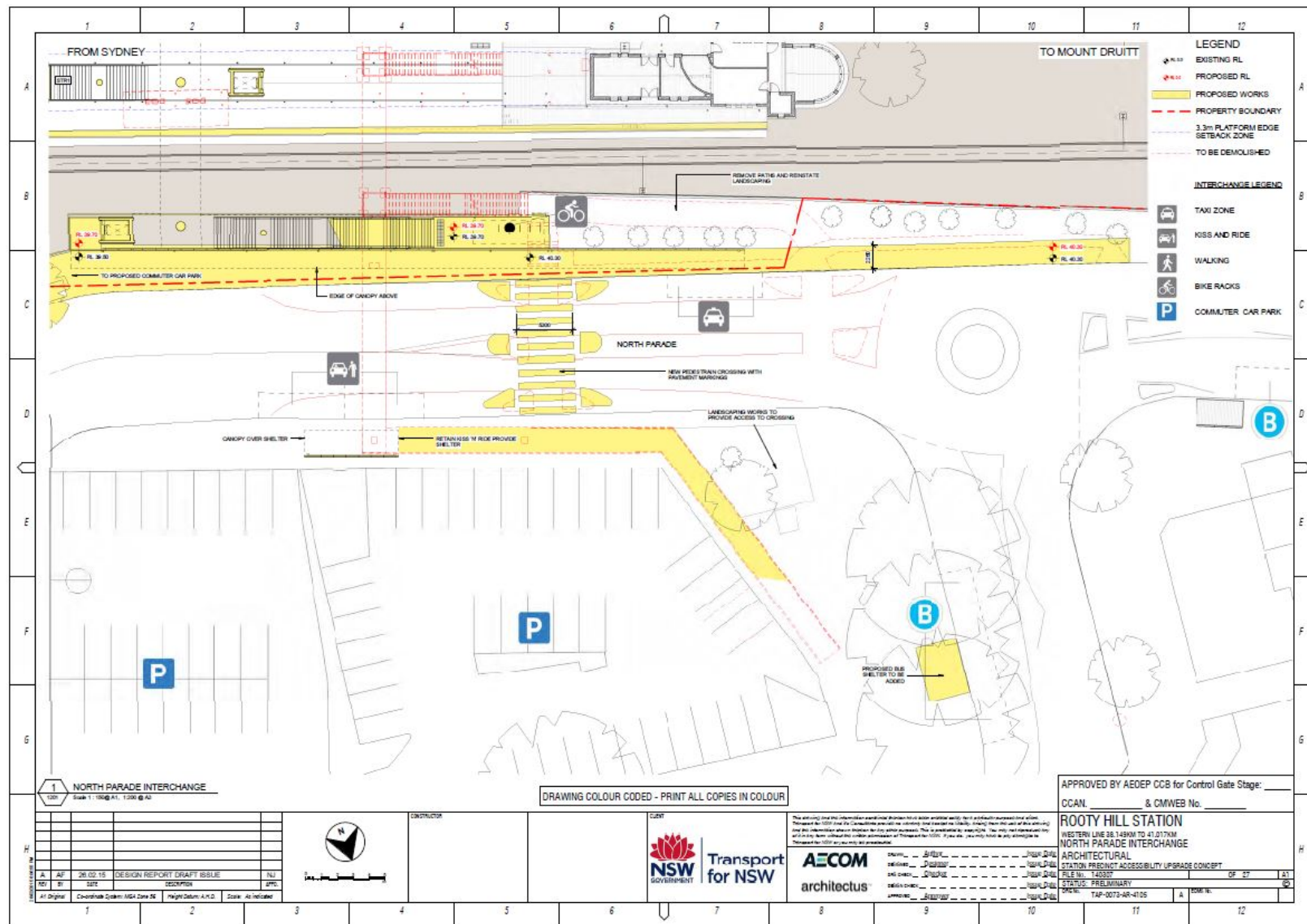


Figure 74: Plan of the Rooty Hill Station Precinct Upgrade showing proposed interchange upgrade at North Parade.

Rooty Hill Station Precinct – Accessibility and Commuter Carpark Upgrade Statement of Heritage Impact

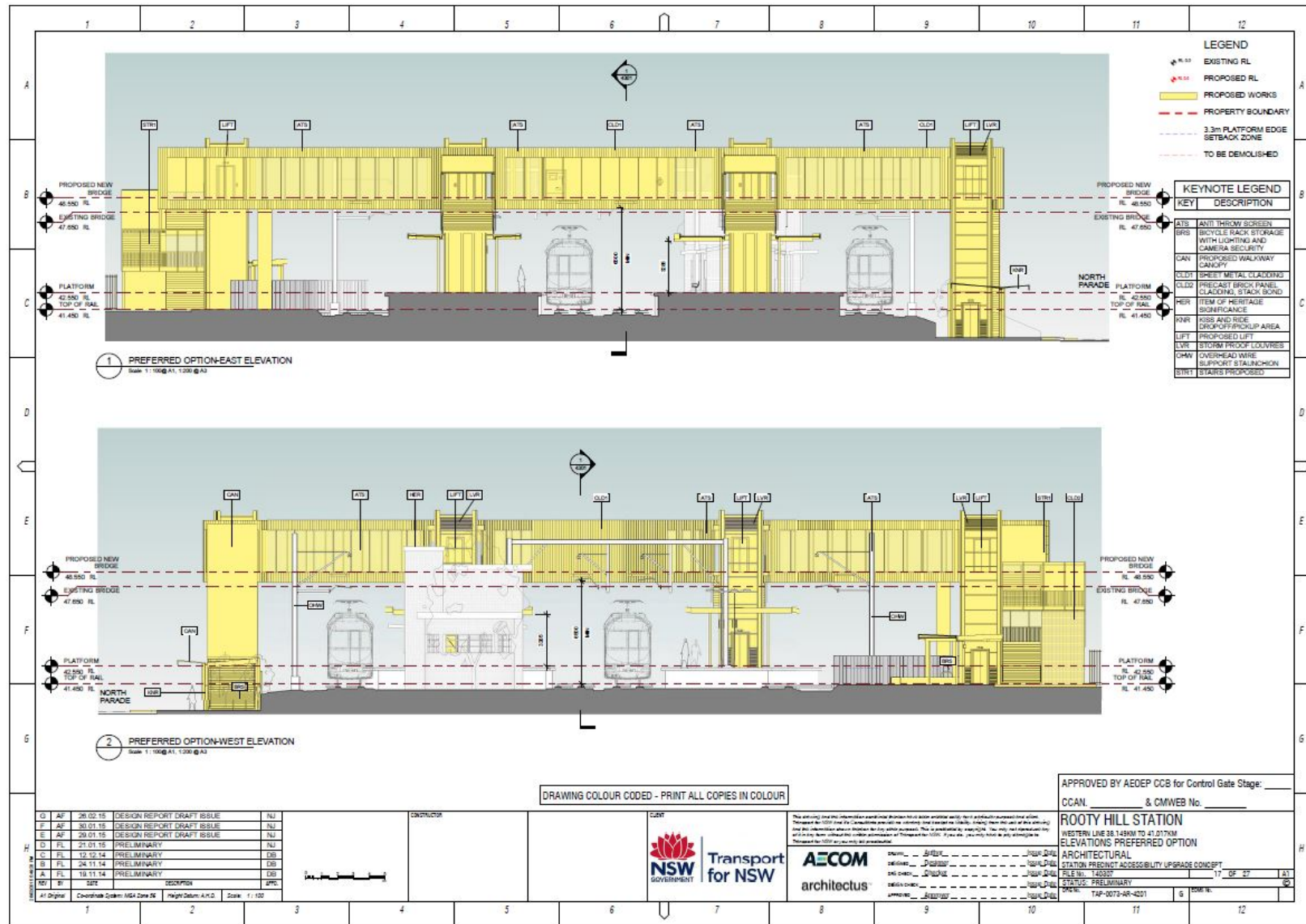


Figure 75: Section drawings of the proposed Rooty Hill Station Accessibility Upgrade.

Rooty Hill Station Precinct – Accessibility and Commuter Carpark Upgrade Statement of Heritage Impact

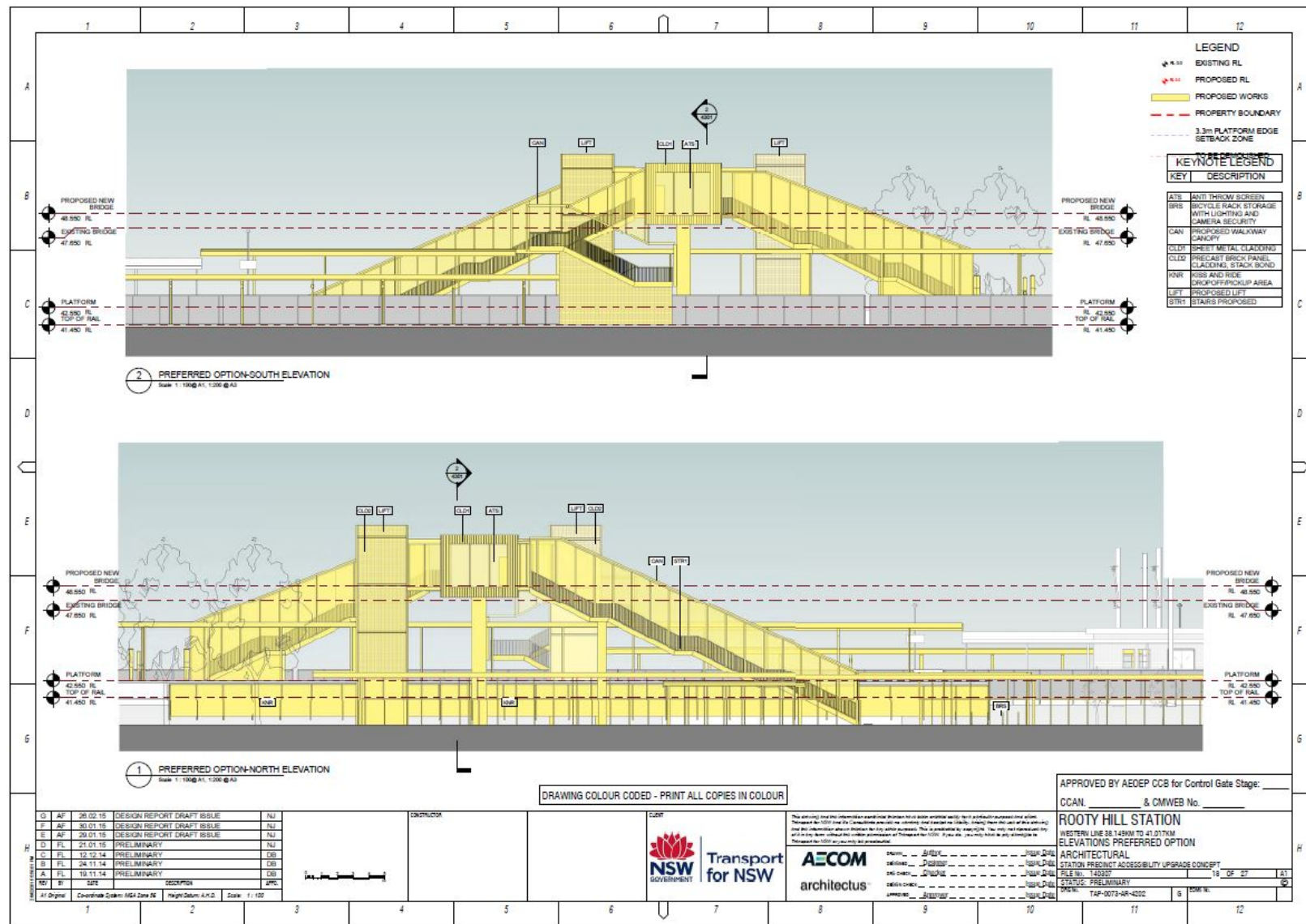


Figure 76: Section drawings of the proposed Rooty Hill Station Accessibility Upgrade.

Rooty Hill Station Precinct – Accessibility and Commuter Carpark Upgrade Statement of Heritage Impact

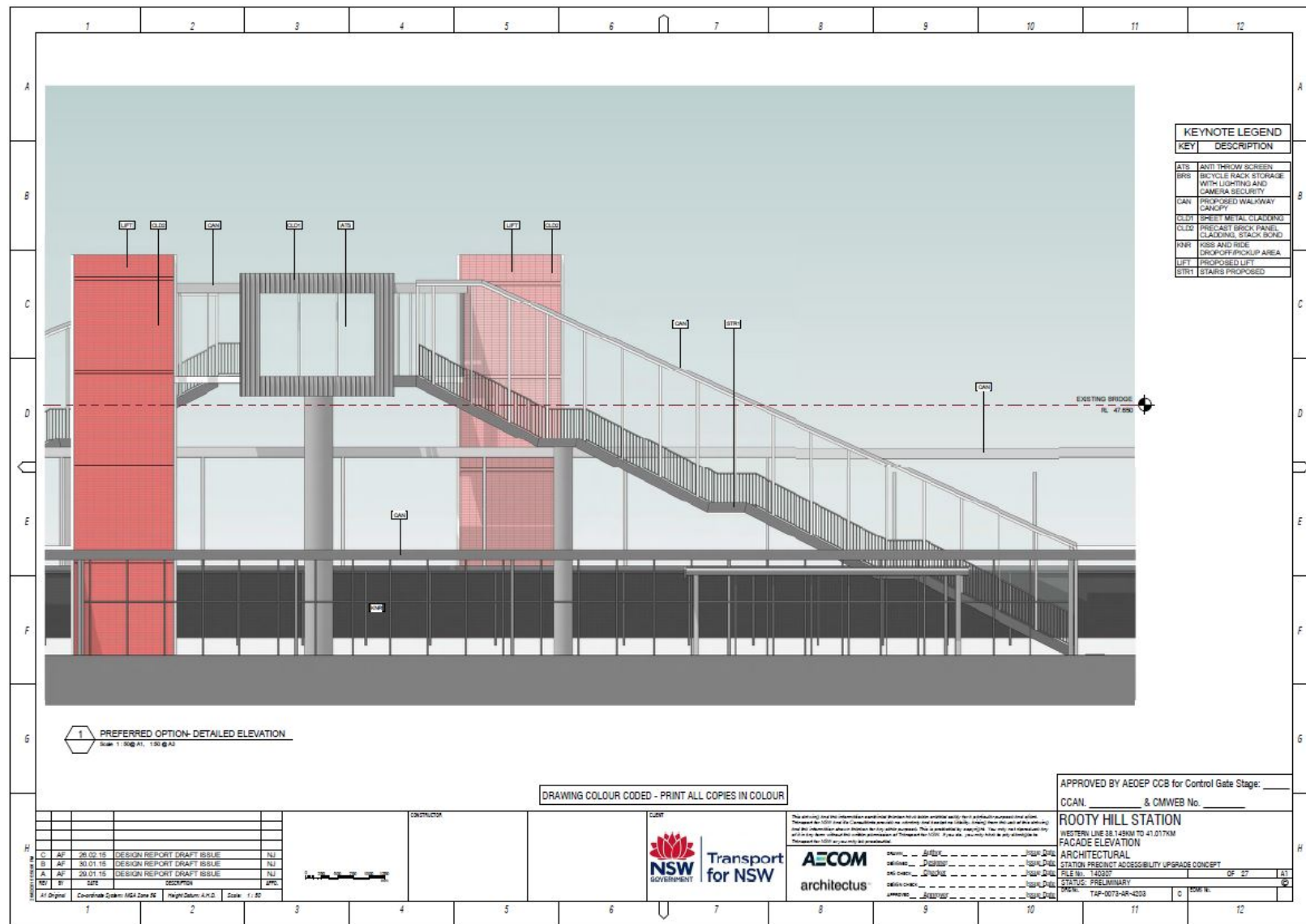


Figure 77: Elevation of the proposed Rooty Hill Station Accessibility Upgrade.

Rooty Hill Station Precinct – Accessibility and Commuter Carpark Upgrade Statement of Heritage Impact

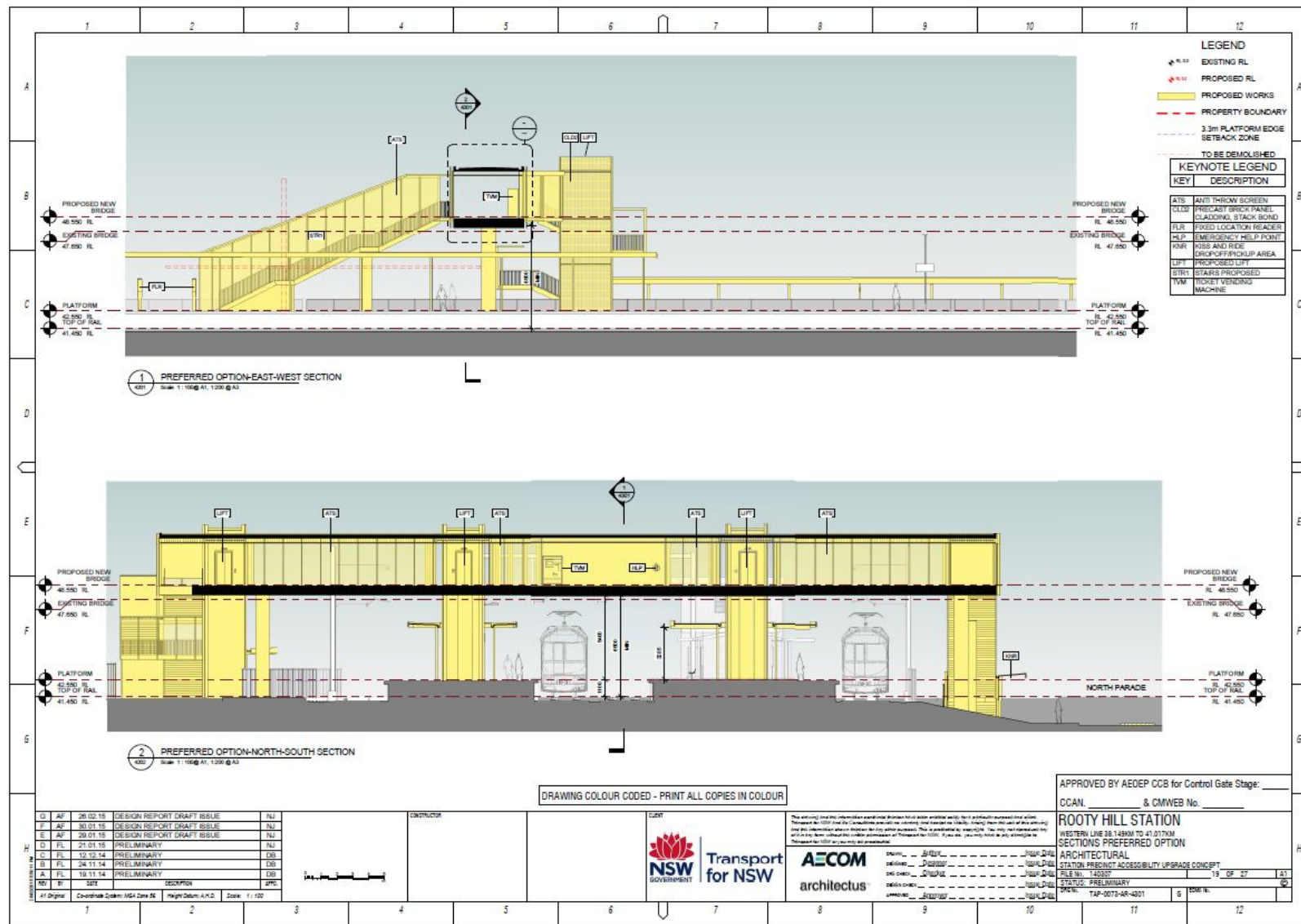


Figure 78: Section drawings of the proposed Rooty Hill Station Accessibility Upgrade.

Rooty Hill Station Precinct – Accessibility and Commuter Carpark Upgrade Statement of Heritage Impact

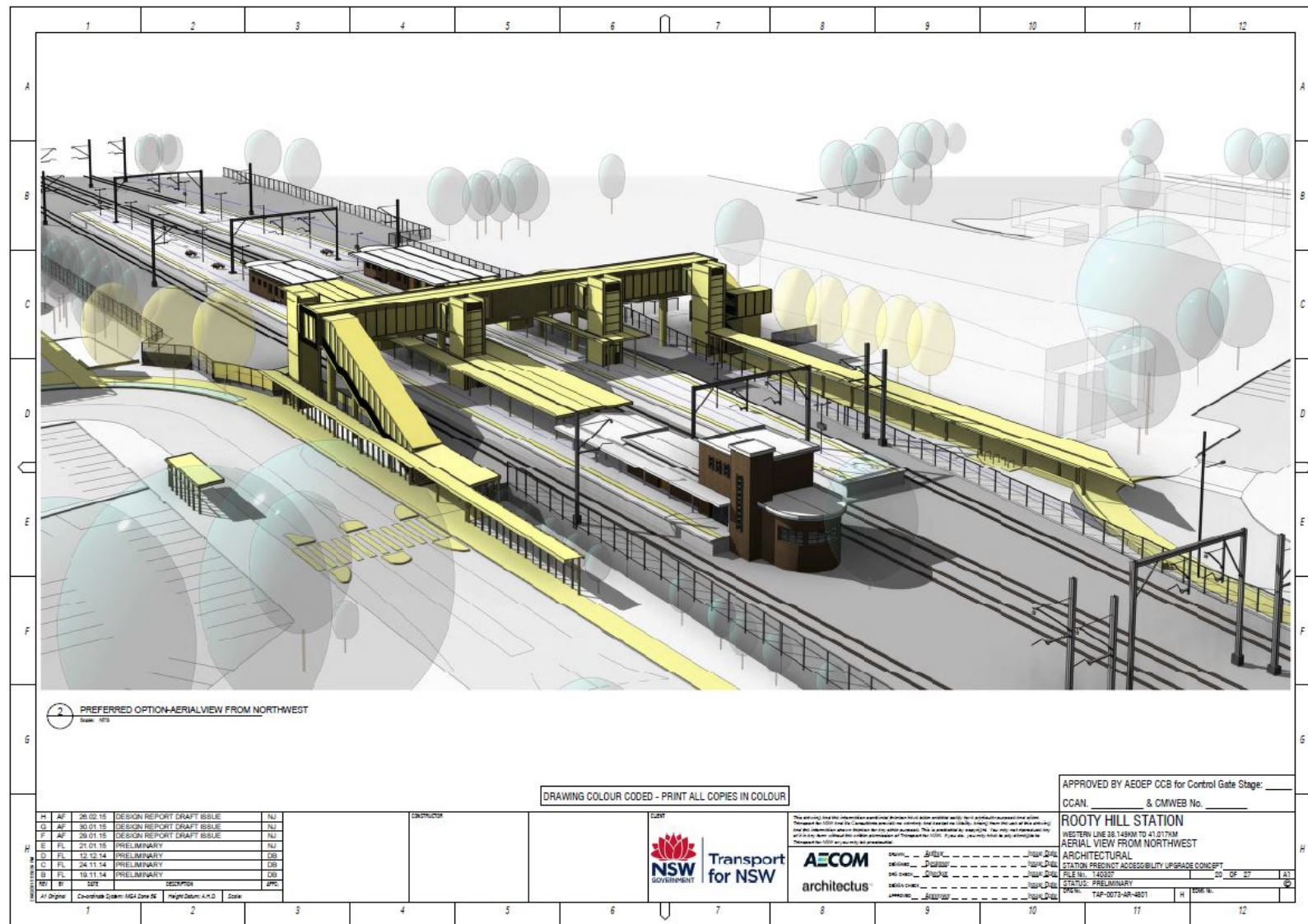


Figure 79: Render drawing of the proposed Rooty Hill Station Precinct Upgrade.

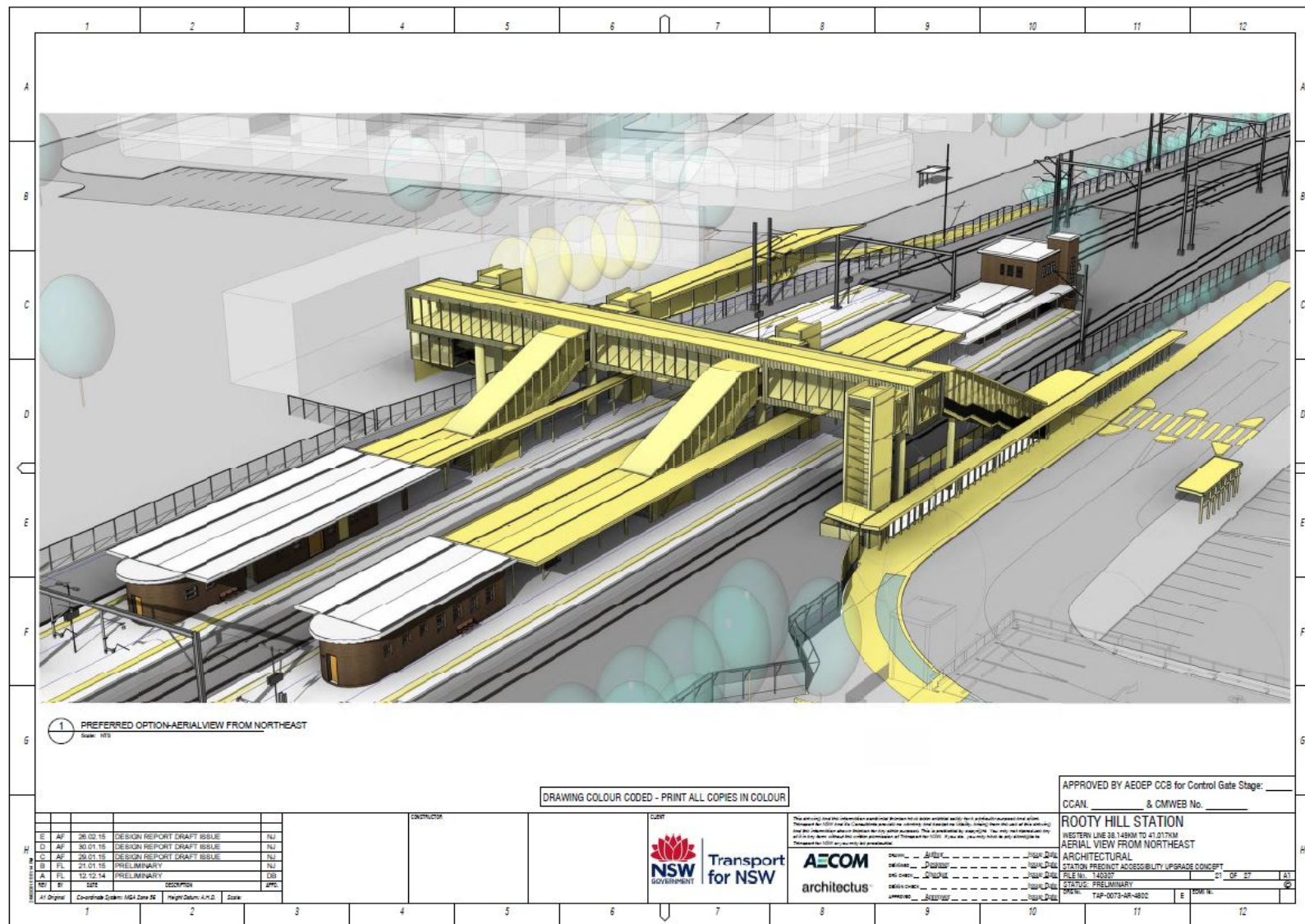


Figure 80: Render drawing of the proposed Rooty Hill Station Precinct Upgrade.



Figure 81: Render view of the proposed Rooty Hill Station Accessibility Upgrade, looking south east from corner of North Parade/Rooty Hill Road North.



Figure 82: Render view of the proposed Rooty Hill Station Accessibility Upgrade, looking north east from Beames Avenue.

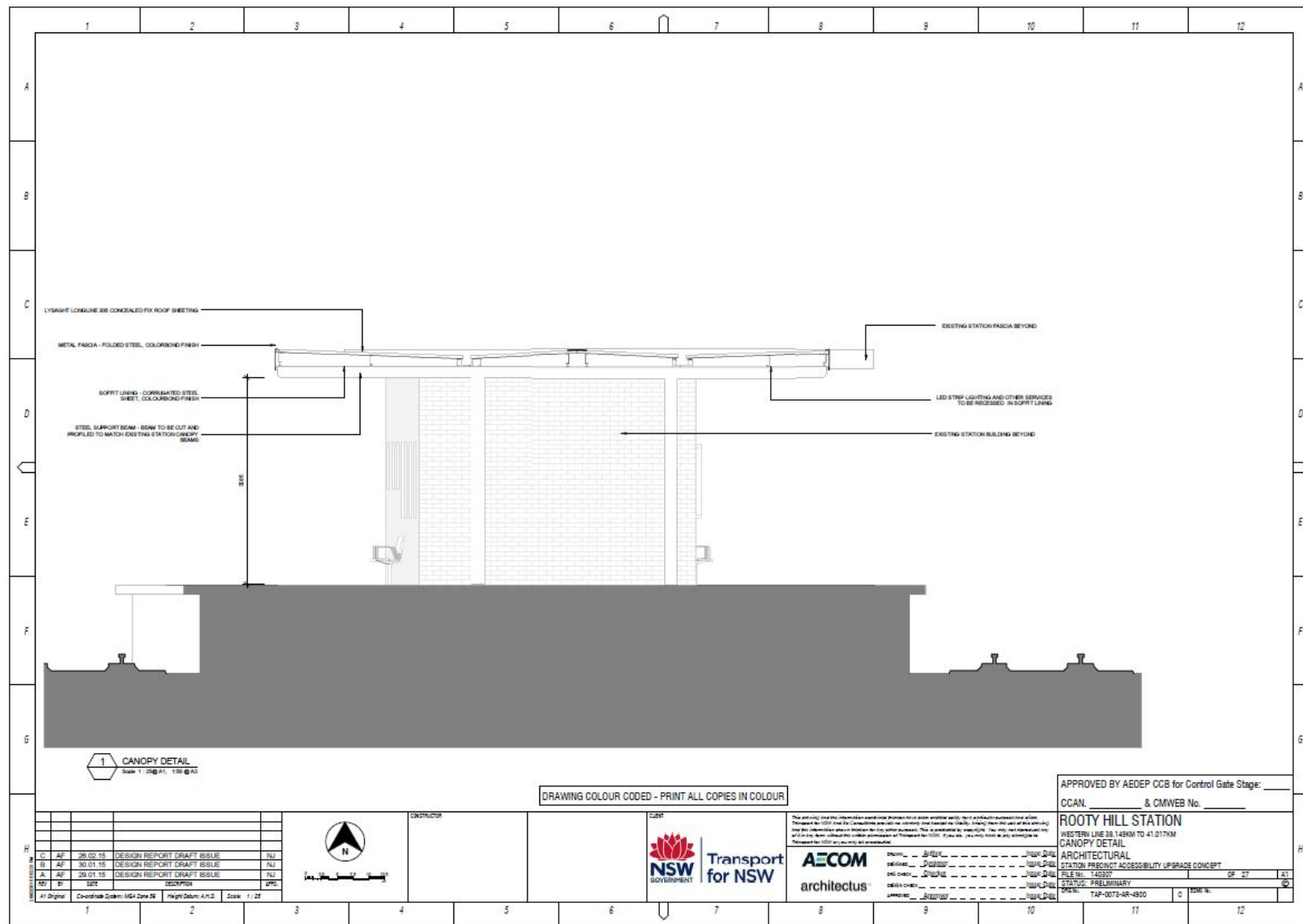


Figure 83: Section drawing of the proposed Rooty Hill Station Accessibility Upgrade and new canopy to passenger buildings.

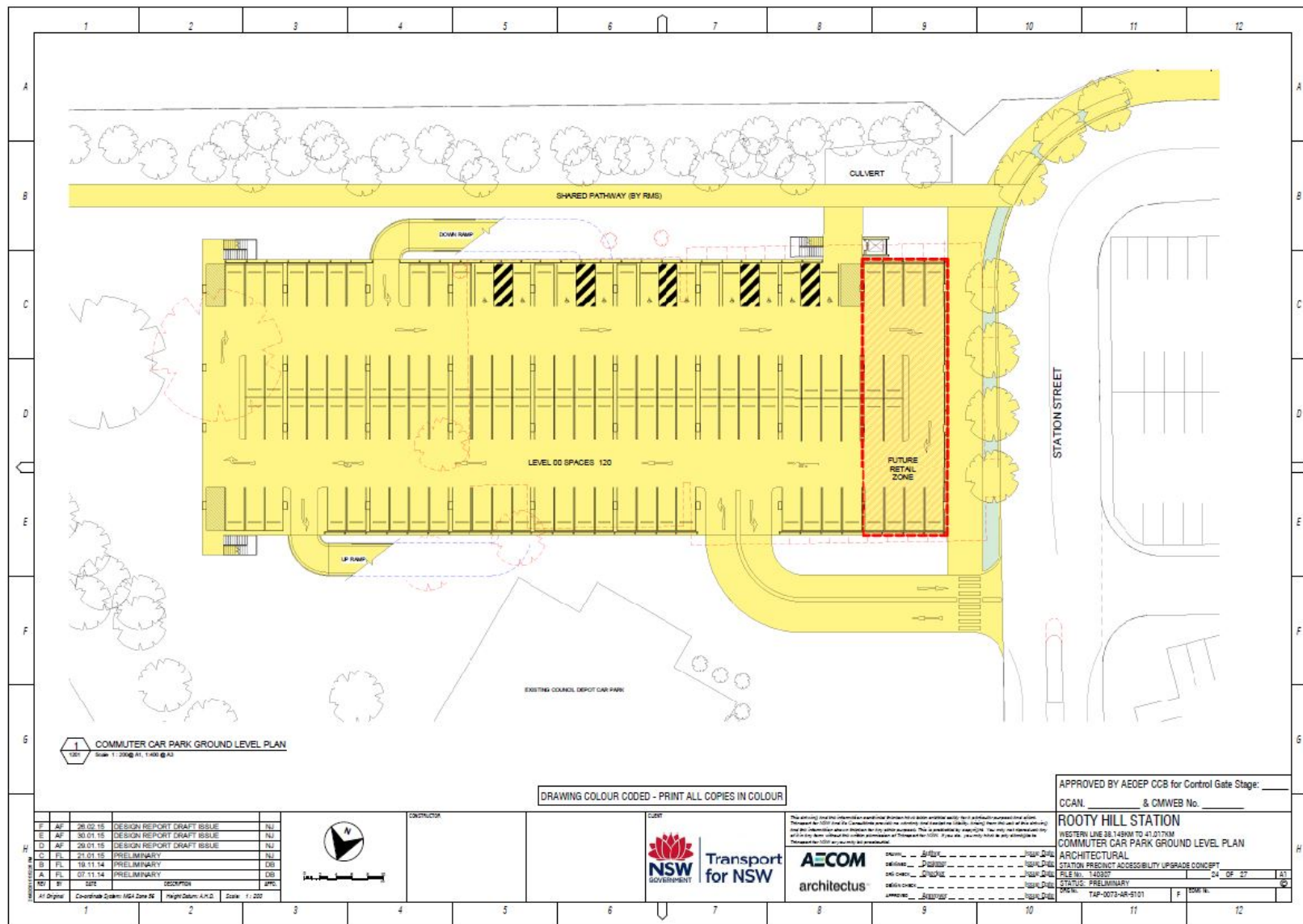


Figure 84: Plan of the Rooty Hill Station Precinct Upgrade commuter carpark at Station Street.

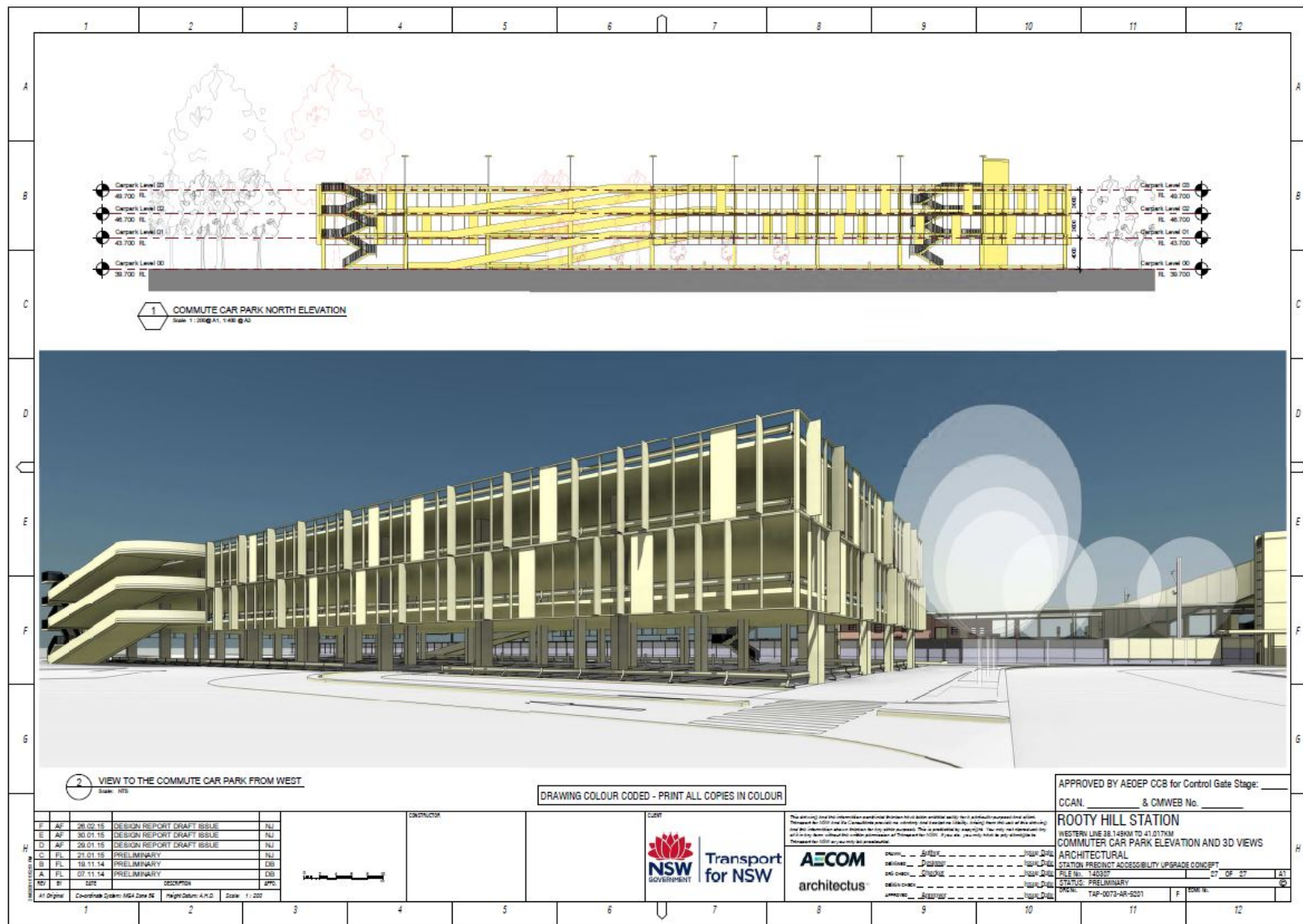


Figure 85: Section and render view of the proposed Station Street commuter carpark.



Figure 86: Render aerial view of the Proposal.

7.3 Justification for proposed works

7.3.1 Aims of the Proposal

The proposed works are required to improve accessibility in accordance with the TAP, *Disability Discrimination Act* (DDA 1992) and *Disability Standards for Accessible Public Transport* (DSAPT) and to upgrade the station and interchange facilities and equipment to current standards. The TAP is a government initiative designed to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure where it is needed most. Objectives of the program include the following:

- provide a station that is accessible to those with a disability, the ageing and parents/carers with prams
- improve customer safety and enhance pedestrian network links by upgrading entrances, footpaths and pedestrian crossings
- improve customer experience and amenity through improved facilities including canopies for weather protection, new service windows, family accessible toilets, lifts and ramps, new ticketing and passenger information facilities and new wayfinding around the station
- improve transport interchange facilities with new accessible parking, kiss and ride facilities, relocation of bus stops and new bicycle parking facilities

7.3.2 Justification for proposed works

The following discussion will outline justifications for proposed impacts to items of heritage significance within the proposed project area.

Modifications to station buildings

The upgrading of several interior spaces within the former signal box building and passenger building on Platform 3/4 is required to allow for provision of toilet facilities that are accessible to all customers. The current public toilets on Platform 3/4 are non-accessible to customers with a disability. The removal of interior fixtures and applied finishes, and reconfiguration of existing window and door openings, is necessary to accommodate this upgrade. The current ticket window at the passenger building on Platform 3/4 is non-accessible to customers with a disability. The lowering of the window would allow for all customers to be able to communicate with staff with ease.

Construction of new footbridge, stairs and station concourse

The current concrete ramps at the station entrances from North Parade and Beames Avenue are non-accessible and non-compliant. The removal of the ramps and the installation of a new footbridge, stairs and station concourse would allow for station access from these locations for all customers. The installation of four new lifts as part of the new footbridge is a necessary addition to the site, as it would allow for an accessible path of travel to the station and permit for seamless and safe commuter transfers to and from the station for all customers.

Interchange upgrades

The upgrade works to the northern and southern approaches are necessary to allow for easier and safer access to and from the station for customers. The interchange upgrades would improve

wayfinding and access for customers, and would enhance the overall presentation of the affected streetscapes.

Platform landscaping and furnishing modifications

The proposed works to platform landscaping and furnishings, involving alterations and upgrades to the existing landscaping, modern fencing, furnishings, signage, lighting and CCTV cameras on the station platforms, are required to improve the accessibility and safety of the station precinct. Additional signage and lighting, along with platform surface treatment i.e. tactiles, would improve customer wayfinding, and enhance operability and accessibility.

7.3.3 Options assessment and justifications

Three design options were developed during the concept plan phase for the project, following a succession of workshops with the TfNSW, relevant stakeholders and the AECOM project team. The design options that were developed focused on meeting future station demand and future interchange requirements for all modes of access including rail, bus, taxi kiss and ride, cycle and key customer desire lines.

The options were further developed to provide a range of design approaches to meet the future requirements of the station. The options covered a range of design solutions to include a variety of construction works, costs, customer experience, compliance and intervention levels.

Overview of design options

TfNSW assessed three options during the development of the Proposal. These options are provided in Table 10 below.

Table 10: Summary of explored design options

Option	Design overview	Options discussion
Option A	Retention of existing footbridge, ramps and stairs, and widening of a section of the footbridge to provide ticketing and passenger information facilities.	Option A would result in the lowest impact to the heritage fabric of Rooty Hill Station, by way of retaining the existing footbridge, stairs and ramps. The addition of four new lift shafts and widening works, however, would result in major changes to the significant steel footbridge.
	The upgrade also included provision of four new lifts with accessible paths, a multi-storey commuter carpark and upgraded interchange facilities.	Option A was assessed as not meeting the objectives of the Proposal to achieve accessibility compliant standards, and was therefore discounted.
Option B	Construction of new footbridge and overhead station concourse in current location of existing footbridge, and demolition of existing footbridge ramps and stairs.	Option B would result in a greater impact to the heritage fabric of Rooty Hill Station, by way of demolishing the existing footbridge, stairs and ramps.
	The upgrade also included provision of four new lifts with accessible paths, a multi-storey commuter carpark and upgraded interchange facilities.	It is understood Option B was assessed as not meeting the objectives of the Proposal to achieve accessibility compliant standards, and was therefore discounted.

Option	Design overview	Options discussion
Option C (the Proposal)	Construction of new footbridge and overhead station concourse in a new location, and demolition of existing footbridge ramps and stairs.	Option C would result in the highest impact to the heritage fabric of Rooty Hill Station, by way of demolishing the existing footbridge, stairs and ramps and relocating the new replacing elements further east, which would dominate the passenger buildings.
	The upgrade also included provision of four new lifts with accessible paths, a multi-storey commuter carpark and improvements to interchange facilities.	Based on the outcome of multi-criteria analysis, including accessibility and BCA compliance, safety, pedestrian circulation analysis, risk and security, structural analysis, utilities, environmental considerations and heritage, the option was deemed most to meet the objectives of the Proposal and was therefore selected as the preferred option. Design measures will be incorporated to minimise heritage impacts as far as practicable.
	(detailed description of works in Section 7.0)	

7.4 Heritage impact to Rooty Hill Railway Station Group

7.4.1 Physical impact assessment

Construction of new footbridge, stairs and station concourse

The proposed construction of a new footbridge, stairs and station concourse would require demolition of the existing 1944 steel footbridge and stairs. This would result in the removal of fabric that is of moderate to high heritage significance to the station. While the footbridge and stairs in themselves are simple and somewhat prosaic structures, they play an important role in supporting the cohesiveness and intactness of the Rooty Hill Railway Station Group as a whole. The removal of these elements would result in a major localised impact, and a moderate physical impact to the station precinct.

The potential impact of the proposed removal of the existing steel footbridge and stairs would be balanced by the removal of intrusive elements within the station precinct. This includes the 1980s concrete ramps to North Parade and Beames Avenue and associated curved roof canopies, as well as the platform awnings and canopies constructed in the early 2000s. These later additions, which are unremarkable and utilitarian in design, obscure understanding and appreciation of the station group, and are a dominant and detracting element within the local landscape. The total removal of the existing intrusive concrete ramps and canopies would result in a positive physical impact to the station precinct. While the two modern shelters on Platform 1/2 would be removed, it is understood the existing modern awning to the former signal box building on Platform 1/2 would be retained.

Construction of a new footbridge, stairs and station concourse at Rooty Hill Station would involve excavation into the concrete and asphalt paving surfaces of the platforms. This is particularly the case for installation of the new lifts, to be located to the east of the existing footbridge. Three of the lifts would be located within the rail corridor, and the lift to North Parade would be located outside the rail corridor. Having been remodelled and the surface regraded and covered multiple times over the course of the station's history, the platforms have been assessed as being of moderate significance. The excavation would generally impact localised areas within relatively small areas of the overall platform. The excavation into the modern concrete and asphalt paving surfaces of the platforms would result in a minor physical impact to the station precinct.

Overall, the removal of the existing footbridge, and construction of a new footbridge, stairs and station concourse would result in a moderate physical impact to the Rooty Hill Railway Station Group.

Platform landscaping and furnishing modifications

The Proposal would involve alterations and upgrades to the existing landscaping, modern fencing, furnishings, signage and lighting on the station platforms. The existing landscape and furniture elements on the station platforms, none of which appear to date to the original construction of the station, have been assessed as being of low significance. This aspect of the Proposal, as such, would not remove any heritage significant fabric.

The provision of additional signage and lighting poles, along with modifications to the furnishings on the station platforms would require excavation into the modern concrete and asphalt paving surfaces of the platforms, which have been assessed as being of moderate significance. The platforms have been remodelled over time, and the surface regraded and covered multiple times over the course of the station's history. The excavation would generally impact localised areas within relatively small areas of the overall platform.

The proposed modification to platform furniture, provision of additional signage and lighting, and modifications to existing plantings would result in a minor physical impact to the Rooty Hill Railway Station Group.

Modifications to station buildings

The Proposal would result in modifications and reconfiguration works to the passenger buildings and former signal box building at Rooty Hill Station. This includes reconfiguration of openings and minor interior works to the former signal box building, reconfiguration of the passenger building on Platform 3/4 including minor modifications, provision of a FAT and a new customer service window, along with minor works to the passenger building on Platform 1/2.

The proposed modification works to the former signal box building on Platform 1/2 would involve infill of the gated curved walkway to the former booking office. This walkway, which was the original northern entry point to the station from Windsor Road (now Rooty Hill Road (North)), is a distinctive element of the building and remains a tangible reminder of the building's previous function. The walkway provides evidence of the evolution of the overall station complex, and remains in a relatively unaltered condition. The Proposal would also require minor internal reconfigurations within the former signal box building, including infill of several window openings and one door opening to the signal box located on the ground floor. The former parcels office would be adapted as a communications room, involving infill to all windows and adding a new lowered gyproc ceiling to achieve fire rating. It is understood the upstairs signal relay room would be retained as is, including all conduiting. The proposed modifications to the former signal box building would result in a moderate physical impact to this element, and an overall minor physical impact to the station precinct.

The proposed modification works to the passenger building on Platform 3/4 would affect several interior spaces. This includes modifications to the existing waiting room to establish a staff kitchen and staff toilet facility. The waiting room does not retain a high degree of intactness, with nearly all finishes and furnishings having been replaced in recent years, and original windows and gates removed. The interior modifications to the waiting room, therefore, would not result in the loss of any significant fabric. The existing customer service room would be modified with an infilled door opening, partial demolition of the wall from the waiting room, and insertion of a new customer service window to enable wheelchair access. The wall of the waiting room is part of the original configuration of the building, and this part of the Proposal would result in the removal of significant fabric. An existing customer service window is located on the western elevation of the passenger building. This appears to have been recently modified, and an original second opening on this elevation covered over. The

removal of brickwork, as required to facilitate the customer service window, would be restricted to relatively small areas. The proposed reconfiguration of the former ladies waiting room, which is now used as a storage room, as a FAT would require infill of one door opening, and alterations to original finishes including removal of the original timber flooring. It is understood the Proposal would not require widening works to the existing doorway to the FAT located on the southern side of the passenger building on Platform 3/4. The proposed modifications to the passenger building on Platform 3/4 would result in a moderate physical impact to this element, and an overall moderate physical impact to the station precinct.

A FAT was recently installed within the passenger building on Platform 1/2 and, as such, the Proposal would not require any substantial modifications to this building.

Overall, the proposed modifications and interior reconfigurations to the station buildings would result in a moderate physical impact to the Rooty Hill Railway Station Group.

Interchange upgrades

The proposed upgrade works to the northern and southern interchanges of Rooty Hill Station would be outside the rail corridor and would not directly affect any heritage significant fabric of the station. The garden beds and refuge islands located at the northern interchange along North Parade and Rooty Hill Road (North), are considered to be of little heritage significance. The removal of these features to create wider footpaths and allow set-down of bus passengers would result in a negligible physical impact to the station precinct. The remaining upgrade works to the interchanges, which involve provision of new facilities ranging from zebra crossings, kiss & ride zones and shelters, undercover bicycle racks, shared paths and a multi-storey carpark on Station Street, are not within the rail corridor, and are not considered to affect any heritage significant fabric.

Overall, the proposed interchange upgrades would result in a negligible physical impact to the Rooty Hill Railway Station Group.

Temporary construction compound

The location of the temporary site compounds includes a main construction compound and site offices within the area of the existing Beames Avenue commuter carpark, two smaller construction compounds and storage areas on the eastern ends of the station platforms, and a construction compound and storage area adjacent to the Station Street carpark site between the carpark and rail corridor. Given the temporary nature of the compounds and their location away from the station elements, it is not anticipated this aspect of the Proposal would involve any direct physical impacts to items of significant heritage fabric. Further assessment would be required where it is determined that the temporary construction compound would involve ground-penetrating impacts.

7.4.2 Visual impact assessment

Construction of new footbridge, stairs and station concourse

The construction of a new footbridge, stairs and station concourse would necessitate demolition of the existing steel footbridge and stairs. While these elements have undergone alterations over time, including the addition of visually intrusive canopies and adjoining concrete ramps, they have remained over time as a familiar feature of the station precinct for commuters. Although the steel footbridge in itself is not a visually outstanding element, it plays an important role in supporting the overall visual cohesiveness of the station precinct. The removal of the steel footbridges and stairs would result in a major localised impact, and a moderate visual impact to the overall station group.

As discussed above, the potential impact of the proposed demolition of the existing significant steel footbridges and stairs would be balanced by the removal of the concrete ramps and canopies, along with the awnings and canopies on the station platforms, which have been assessed as intrusive. These modern elements, which are unsympathetic in design and aesthetically incompatible with the refined and geometric form of the Inter-War Railway Functionalist style platform buildings, detract from the clarity and overall appreciation of the station precinct. The concrete ramps and canopies are visually dominant features not only within the station itself but also within the broader local landscape. The concrete ramps are visible from numerous vantage points in the surrounding streetscape, and obstruct most views of the station platform buildings. The removal of intrusive features would be a positive visual impact on the Rooty Hill Railway Station Group.

Construction of a new footbridge, stairs and station concourse at Rooty Hill Station would introduce new visual elements within the station precinct and surrounding local context. The new footbridge would be located approximately 15 metres east from the existing steel footbridge. This increased setback from the former signal box building, which is considered the visual focal point of the station, would respect and potentially enhance the prominence of this significant element within the station precinct. The design of the new footbridge, stairs and station concourse has been developed so as to not exceed the height of the former signal box building, and is simple in design and geometry. The new footbridge stairs would be shorter and less obstructive than existing, which would assist in improving sightlines towards the station and platform buildings, and improve the visual heritage value of the station.

The prominence of the station buildings, however, would potentially be undermined by the introduction of four new lift shafts. While it is understood the lift shafts and footbridge would not exceed the height of the former signal box building, the proposed use of 'toffee apple red' tile cladding on the lift shafts would be visually distracting, and would potentially detract from the existing aesthetic quality of the brick Inter-War Railway Functionalist style station buildings. Anti-throw screens would be installed on the outside of the stairs, which would reduce sightlines from the streetscape. The establishment of continuous awnings from the staircases to the station buildings would diminish views at platform level towards these significant structures. These aspects of the Proposal would diminish the aesthetic character of the station, and would result in a moderate visual impact to the station precinct.

Overall, the construction of a new footbridge, stairs and station concourse would result in a moderate visual impact to the Rooty Hill Railway Station Group.

Platform landscaping and furnishing modifications

The proposed alterations and upgrades to existing landscaping, fencing, furnishings, signage and lighting on the station platforms would involve installation of new elements on the station platforms. These elements are considered as part of the ongoing visual character of a railway station. It is understood the material choices for lighting poles, security cameras, furniture and signage would replicate those already present on the station platform. Due to the use of similar materials and localised affected areas for the new structures, these works would result in a negligible visual impact.

The proposed landscaping and furnishing modifications would result in a negligible visual impact to the Rooty Hill Railway Station Group.

Modifications to station buildings

The proposed modification works to the former signal box building and the passenger building on Platform 3/4, including reconfiguration of window and door openings and minor interior works, would result in visual changes to these buildings. The aesthetic significance of the station buildings is

associated with the character of their Inter-War Railway Functionalist style design, including the robust quality of the brick design, complex geometric massing and restrained use of ornamentation.

The proposed modification works to the former signal box building on Platform 1/2 includes infill of the gated curved walkway to the former booking office. The walkway is a distinctive visual element of the building, and its unusual design and configuration substantially enhances the spatial quality and appearance of the former signal box building. The infill of the curved walkway would diminish the functional design of the building, as well as removing public spaces for artwork and notifications.

The proposed infill of windows to the former parcels office would also diminish the original configuration and presentation of the building, although it is acknowledged the addition of security grills in recent years to all of the openings on the ground floor level of the building have obscured the building's original design. The proposed modifications to the former signal box building would result in a moderate visual impact to this element, and an overall minor visual impact to the station precinct.

The proposed modification works to the passenger building on Platform 3/4, including reconfiguration of the existing waiting room to establish a staff kitchen and staff toilet facility, provision of a FAT within the former ladies waiting room, and minor interior changes to the customer service room, would result in minor visual changes within this building. While the building retains its original layout and overall configuration, most of the original furnishings and finishes have been removed. While the proposed infill of several windows would diminish the original configuration and presentation of the building, it is acknowledged the addition of security grills in recent years have obscured the building's original design, and the original windows and doors in the waiting room have been replaced. The proposed modification to the existing, and previously altered, customer service window, would have a negligible impact given the original configuration of this elevation has been compromised by later works.

As discussed previously, a FAT was recently installed within the passenger building on Platform 1/2 and, as such, the Proposal would not require any substantial modifications to this building.

Overall, the proposed modifications and interior reconfigurations to the station buildings would result in a minor visual impact to the Rooty Hill Railway Station Group.

Interchange upgrades

The proposed upgrade works to the northern and southern interchanges of Rooty Hill Station, although resulting in changes to the surrounding streetscape and local context, would not diminish views to and from the station. The construction of a multi-storey carpark in the existing carpark between the rail corridor and council depot, while changing views out from the platforms for commuters and altering the surrounding context of the station, is not anticipated to reduce or diminish the visual heritage value of the station and platform buildings.

Overall, the proposed interchange upgrades would result in a negligible visual impact to the Rooty Hill Railway Station Group.

Temporary construction compound

The establishment of the temporary site compounds and construction offices would involve setting up demountable buildings and stockpiling of machine plant and material. These facilities would be removed following the completion of the construction phase of the proposed works. As discussed, this includes a main construction compound and site offices within the area of the existing Beames Avenue commuter carpark, two smaller construction compounds and storage areas on the eastern ends of the station platforms, and a construction compound and storage area adjacent to the Station Street carpark site between the carpark and rail corridor.

Located in the adjacent setting and on the platforms themselves, the establishment of several site compounds and construction offices would potentially impinge on sight lines to Rooty Hill Station from the surrounding streetscape and within the station precinct. It is noted, however, that these visual impacts would be temporary in nature. The construction compounds located on eastern end of each platform would temporarily interrupt key views to the curved eastern elevations of the passenger buildings. The main construction compound and site offices, located in the Beames Avenue commuter carpark, would be within an area that is adjacent to existing development and visual clutter and located at a lower level to the station platforms and buildings.

Overall, the temporary construction compounds would result in a temporary moderate visual impact to the heritage significance of Rooty Hill Station.

7.5 Impacts to archaeological resources

Preliminary archaeological assessment at Rooty Hill Station has identified low to moderate archaeological potential for remains of local heritage significance. The Proposal would involve ground disturbing works for the demolition of the existing footbridge, stairs and ramps and platform canopies, and the excavation of footings as required for the construction of new elements on the station including a new footbridge, station concourse, stairs and lift shafts. Former station structures were located within these areas of the proposed project footprint, and may be impacted by the proposed works. Additional minor impacts may be encountered within areas of disturbance beyond the rail corridor as part of the proposed interchange upgrades, including areas on Beames Avenue and North Parade during street kerbing works and associated landscaping. As the Proposal does not involve any track works, no impacts to archaeological remains located within the rail corridor itself, i.e. the original alignment of the Main Western Railway Line and former goods siding and associated platform and goods shed, would occur.

Overall, the Proposal would potentially result in minor impacts to locally significant archaeological remains.

7.6 Cumulative impact assessment

The platform buildings have been modified internally over time to accommodate new uses and changes in station technology. The passenger building on Platform 1/2 has recently been modified internally for accessibility upgrade works to the toilet facilities, which has introduced modern tiled surfaces and finishes. Window and door openings have been modified over time. These alterations, combined with the Proposal, have diminished the intactness of the original finishings and furnishings of the station buildings, although their original layout and overall configuration has been retained.

7.7 Summary of heritage impacts

A summary of the heritage impacts to the Rooty Hill Railway Station Group is provided in Table 11. A discussion of potential heritage impacts to the Imperial Hotel, which is located in the vicinity of the project, is found in the follow section.

Table 11: Summary of impacts to Rooty Hill Railway Station Group

Proposed work	Impact to fabric	Visual impact	Impact to archaeological remains
Construction of new footbridge, stairs and station concourse	Moderate	Moderate	Minor
Platform landscaping and furnishing modifications	Minor	Minor	Minor
Modifications to station buildings	Moderate	Minor	Neutral
Interchange upgrades	Negligible	Negligible	Minor
Temporary construction compound	Neutral	Moderate (temporary)	Neutral
Overall impact	Moderate	Moderate	Minor

7.8 Heritage Platform Conservation Management Strategy

The Heritage Platform CMS identified nine relatively common platform design types and seven rare platform design types of stations in NSW. The present Rooty Hill Station, constructed in 1943, was built as two island platforms with steel rail post and concrete panel cast in situ construction with a vertical profile. The CMS identifies this type of platform design as a “relatively common” heritage platform design¹⁷.

This section addresses relevant strategies provided in the Heritage Platform CMS in relation to the Accessibility and Commuter Carpark Upgrade project at Rooty Hill Station.

7.8.1 Recognising and conserving heritage significance

Strategy 1: *Manage and operate heritage platforms in a way that recognises the heritage values of each place. This includes the heritage value of each platform, its associated elements, and the overall heritage value of its station or place.*

Explanatory notes for this strategy include the following provision:

Future decisions about operational requirements of stations with significant heritage platforms, including upgrades to fabric and services, should aim to retain significant fabric in use wherever possible.

The Proposal has been developed to retain, as far as possible, the elements of Rooty Hill Station that were deemed as being of ‘high’ significance. This includes the former signal box building and the passenger buildings. Direct impacts to these elements have been minimised wherever possible.

¹⁷ AM Consulting 2015, p. iv.

7.8.2 Maintaining physical condition and fabric

Strategy 5: *Conserve and manage the fabric of heritage platforms in accordance with statutory requirements and heritage best practice*

Explanatory notes for this strategy include the following provision:

Structural repairs and other platform maintenance, refurbishments, or renewal works should maximise protection and retention of significant platform fabric and detailing, particularly where these contribute to the overall integrity and aesthetic character of the station precinct. This could include, but not be limited to retention and protection of the following historic or traditional platform features:

- *evidence of original copings, ramps, and entranceways,*
- *steps and ladders,*
- *signage and survey marks,*
- *signal bays, and associated fixtures and fittings,*
- *drains and drainage grates,*
- *culverts,*
- *asphalt, gravel, tile, or other unusual surfacing materials,*
- *fencing,*
- *lighting,*
- *garden beds, edging material and plantings,*
- *platform furniture,*
- *bubblers,*
- *door steps and boot scrapers, and*
- *weighing scales.*

It could also include other built heritage fabric that is closely associated with the platform surface and platform drainage patterns, such as:

- *underfloor vents of platform buildings;*
 - *verandah posts; and*
 - *foundations of platform buildings.*
-

The Proposal has been developed to minimise direct impact to heritage significant fabric, although several significant items will be affected by the proposed works. This includes the significant steel footbridge and stairs that are to be demolished in order to allow for the construction of a new compliant and accessible footbridge and station concourse.

The Proposal would result in the infill of the gated curved walkway within the former signal box building. This was the original entry point to Rooty Hill Station from the north, and is a tangible reminder of the building's former use as a booking office. The infill of this feature would result in the

loss of a supporting element of significance, and there should be consideration through ongoing design for retention of this feature of the signal box building.

It is unclear whether the remaining metal grate boot scrapers at the doorsteps to the station buildings would be retained during the proposed works. These traditional platform features, which contribute to the intactness and integrity of the overall station precinct, should be retained and conserved wherever possible.

An assessment of archaeological potential has revealed the possibility of there being foundations of the first Rooty Hill Station buildings and landscape features beneath the current platform surfaces. This includes footings and remains associated with former passenger buildings, garden beds, water taps, bubblers, lamps, as well as the earlier alignments and fabric of the original platforms themselves.

7.8.3 New work

Strategy 10: *Where other new structures are required to improve platform access, the new fabric should be sympathetic to the existing heritage character of the place, but still be readily identifiable as new work*

Explanatory notes for this strategy includes a number of relevant provisions which are addressed individually:

Accessibility upgrades to significant platforms should support their ongoing use, without obscuring or damaging significant built heritage fabric or the integrity of original designs.

The material palette for new works, as developed in the finishes schedule for the project, incorporates materials that contrast with and complement the robust character and quality of the existing masonry station buildings. This includes selection of materials such as steel and concrete, combined with the use of glass glazing. These materials, while not competing with or diminishing the prominence of the existing masonry buildings, would allow for the construction of elements that are an identifiably modern addition to the station and are relatively lightweight in appearance.

The Proposal would involve cladding the lift shaft walls with stack bond glazed brick precast panels in 'toffee apple red' colour. This aspect of the Proposal is considered less sympathetic, and would potentially detract from the prominence and legibility of the existing station buildings. Consideration should be given to revising this component of the design, and select a material that is less conspicuous in appearance and sympathetic to the significant station buildings.

New ramps, pathways, or access infrastructure in the immediate vicinity of heritage platforms should not overwhelm the heritage fabric of the platform or associated features, either in scale, mass, or colour, and should complement the character of the station precinct. They should also blend into the broader landscape setting of the station.

The Proposal has been developed to minimise, where possible, impact to the significant platform buildings at Rooty Hill Station. The new location of the proposed footbridge, while potentially overwhelming or visually dominating the adjacent passenger buildings, would allow for an increased setback from the former signal box building, which is considered the visual focus of the station

precinct. The footbridge and associated lift shafts have been designed so as to not exceed the height of the former signal box building, and would result in the construction of a footbridge that is less visually detracting than the existing intrusive concrete ramps and curved canopies over North Parade and Beames Avenue. This aspect of the Proposal is considered to result in a positive visual impact.

The proposed use of ‘toffee apple red’ coloured stack bond glazed bricks on the wall cladding of the lift shafts would not complement the character of the station precinct, and would potentially overwhelm or detract from the adjacent masonry platform buildings. Consideration should be given to revising this aspect of the design to select a more appropriate material and visually sympathetic colour scheme, which would be explored during the detailed design phase of the project.

Strategy 12: *Make a record of existing structural designs, fabric, and uses before changes are made*

Archival recording of the existing platforms and station buildings prior to impacts is recommended, and all design information for the platform modifications should be preserved with TfNSW and Sydney Trains as part of their records. A copy of the archival recording should be provided to the local Blacktown City Council.

7.9 Impacts to Imperial Hotel (SHR No. 00114)

The proposed works are within the vicinity of the SHR listed Imperial Hotel, which is located on the corner of North Parade and Rooty Hill Road (North). The Proposal would not involve any direct works to the Imperial Hotel, and would therefore result in a neutral physical impact. While much of the Proposal is located at platform and rail track level within Rooty Hill Station, the proposed construction of a new footbridge and station concourse, and upgrades to the northern interchange, would potentially result in visual impacts to the setting and context of the historic hotel. It is noted that sightlines of the proposed works would be partially blocked by the existing plantings on the west and east kerbs of Rooty Hill Road (North), including several mature trees.

The construction of a new footbridge, stairs and station concourse would result in the demolition of the existing concrete ramp over North Parade. At present, this ramp is a dominant and bulky element within the streetscape, and partially obscures views to Imperial Hotel from the station, as well as views out from the Imperial Hotel. The Proposal, having been designed without ramps and instead providing access via lifts and stairs, would result in the construction of shorter and less dominant features within the surrounding landscape. The Proposal would also involve landscaping works and adjustments to the entry paths that would improve the overall presentation of the area and surrounding streetscape. The removal of the existing concrete ramps and replacement with a new footbridge, therefore, would result in a positive visual impact for the Imperial Hotel.

8.0 STATEMENT OF HERITAGE IMPACT

A statement of heritage impact for the Rooty Hill Railway Station Group is provided in Table 12.

Table 12: Statement of heritage impact for the Rooty Hill Railway Station Group

Development	Discussion
What aspects of the Proposal respect or enhance the heritage significance of the study area?	The Proposal, by making Rooty Hill Station compliant with the <i>Disability Standards for Accessible Public Transport 2002</i> and the <i>Commonwealth Disability Discrimination Act 1992</i> (DDA), would allow the station to continue its significant historic use as well as allowing for increased public access to the station and its amenities. This would potentially enhance public engagement with the historic station and its associated values.
	The proposed demolition of the existing modern concrete access ramps would remove intrusive fabric and result in enhanced heritage views of the station buildings from the surrounding streetscape, in particular the former signal box building, which is considered the visual focus of the station precinct. The proposed new and relocated footbridge would be more sympathetic in design to the existing concrete ramps, and would potentially strengthen the visual prominence of the former signal box building.
	The proposed demolition of the existing concrete access ramps and curved canopies would remove elements that visually dominate and clutter the streetscape surrounding the SHR listed Imperial Hotel. The removal of these visually intrusive elements, and replacement with a relatively short and sympathetic footbridge and stairs would result in a positive visual impact for the Imperial Hotel.
What aspects of the Proposal could have a detrimental impact on the heritage significance of the study area?	The proposed construction of a new footbridge, stairs and lifts would result in the demolition of significant fabric by way of removing the steel footbridge, which is contemporaneous with the station buildings and platforms. The steel footbridge, while not remarkable in itself, supports the cohesiveness and intactness of the station group as a whole, and its removal would result in a negative physical impact. It is noted, however, that this impact would be balanced by the removal of the intrusive concrete ramps, curved canopies and awnings.
	A number of features of the new footbridge and station concourse would potentially have a detrimental impact. The construction of the new lifts would result in the introduction of visually prominent structures within the station precinct and surrounding streetscape. Although it is understood the lift shafts would not exceed the height of the former signal box building, the proposed use of 'toffee apple red' stack bond glazed brick precast panels for the cladding of the lift shaft walls would not be sympathetic to the adjacent station buildings and would have a moderate visual impact to Rooty Hill Station. The installation of anti-throw screens on the proposed footbridge and stairs would marginally reduce views out to the station from the footbridge and towards the wider area.
	The renovations to the station buildings would include reconfiguration of several window and door openings. While in most cases the original windows and window panes and doors have been previously modified, the alteration of window openings would involve removal of brickwork. Alterations to the passenger building on Platform 3/4 would result in the removal of the original timber floorboards. The Proposal would also involve infill of the significant

Development	Discussion
	<p>curved walkway within the former signal box building. The removal and alteration of this fabric, which contributes to the significance of the station, would result in moderate to major localised impacts, and a moderate overall physical impact within the station precinct.</p> <p>This assessment has assessed several areas of archaeological potential that could be impacted by the Proposal. These areas, which are associated with the first Rooty Hill Station and since demolished elements of the second Rooty Hill Station, are of local heritage significance. The Proposal would potentially result in a minor impact to these archaeological remains.</p>
<p>Have more sympathetic options been considered and discounted?</p>	<p>The Proposal examined three concept designs, of which two (B and C) involved demolition of heritage significant fabric (existing footbridge and all ramps, stairs and canopies).</p> <p>Option A would result in the lowest impact to the heritage fabric of Rooty Hill Station, by way of retaining the existing footbridge, stairs and ramps. The addition of four new lift shafts and widening works, however, would result in major changes to the significant steel footbridge. Option A was assessed as not meeting the objectives of the Proposal to achieve accessibility compliant standards, and was therefore discounted.</p> <p>Option B would result in an increased impact to the heritage fabric of Rooty Hill Station, by way of demolishing the existing footbridge, stairs and ramps. The new footbridge would be constructed in the location of the existing. It is understood Option B was assessed as not meeting the objectives of the Proposal to achieve accessibility compliant standards, and was therefore discounted.</p> <p>Option C would result in the highest impact to the heritage fabric of Rooty Hill Station, by way of demolishing the existing footbridge, stairs and ramps and relocating the new replacing elements further east, which would dominate the passenger buildings. Based on the outcome of multi-criteria analysis, including accessibility and BCA compliance, safety, pedestrian circulation analysis, risk and security, structural analysis, utilities, environmental considerations and heritage, the option was deemed most to meet the objectives of the Proposal and was therefore selected as the preferred option. Mitigation measures would be used to minimise these heritage impacts as far as practicable.</p>

9.0 CONCLUSIONS AND RECOMMENDATIONS

9.1 Conclusion

The Rooty Hill Station Precinct Accessibility and Commuter Carpark Upgrade project would result in a moderate physical impact and a moderate visual impact to the RailCorp s170 Heritage and Conservation register listed Rooty Hill Railway Station Group. The Proposal would result in a neutral physical impact and a negligible visual impact to the SHR listed Imperial Hotel that is in the vicinity of the project area.

9.2 Recommendations & mitigation measures

The recommendations set out below will aid in mitigating the impact of the Proposal on the Rooty Hill Railway Station Group and nearby heritage items.

- The external construction and façades of the Rooty Hill Station platform buildings are an element of high heritage significance. The original fabric of these buildings should be retained wherever possible and materials used during modifications should be congruent with the character of the station, including the following recommendations:
 - The Proposal should be revised to avoid infilling the curved walkway within the former signal box building on Platform 1/2. The walkway should remain open, with consideration given to use of this architectural feature for interpretive purposes.
 - The fitout of the proposed FAT within the passenger building on Platform 3/4 should utilise existing doorways and window openings wherever possible to avoid altering the original design of the station buildings.
 - Any new doors or windows added to the platform buildings should be designed with sympathetic materials and colour schemes, and in a form that responds to the original scale and configuration of existing openings.
 - Consideration should be given during the detail design phase for the retention and conservation of the metal grate boot scrapers located at the entry steps to the station buildings, which contribute to the integrity and intactness of the station precinct as a whole. In instances where these have been partially covered by intrusive asphalt resurfacing, the metal grate boot scrapers should be exposed and conserved.
- The internal structure and interior fittings of the Rooty Hill Station platform buildings are an element of moderate heritage significance, due to renovations since their original construction which has altered the integrity and overall intactness of the fabric. The original fabric of these interiors should be retained wherever possible and materials used during modifications should be congruent with the character of the station, including the following recommendations:
 - any modification of the internal configuration of the station building, such as repainting, installing new fixtures and service connections inside the buildings should be sympathetic to the historical and aesthetic character of the station and installation should minimise impacts to original fabric.

- The design and materials used for the construction of new access stairs, canopy and lift shafts should be as sympathetic as possible to the existing character of the station with the aim of minimising visual impacts. The design should use unobtrusive, modern, lightweight materials such as glass panelling and slim frame elements, which would reduce the visual bulk of new development. The design for the new access stairs and lifts should also consider the following:
 - the use of ‘toffee apple red’ tile cladding on the proposed lift structures should be avoided, and consideration should be given to revising this aspect of the Proposal design to select a more appropriate and discreet material and colour that is sympathetic to the colours of the original brick fabric on the station platform
 - anti-throw screens should be constructed of the least obtrusive material possible to reduce visual impacts to Rooty Hill Station and preserve views from the footbridge and stairs over the station and wider Rooty Hill township
 - A heritage conservation architect should provide ongoing heritage advice during the detailed design and construction phases of the Proposal, and should ensure that the above material and design options advice is enacted.
- The detailed design shall consider all relevant heritage design guides, including, but not limited to:
 - *Canopy Design Guide for Heritage Stations* (Sydney Trains, 2016)
 - *Heritage Technical Note: Installation of New Electrical and Data Services at Heritage Sites* (Sydney Trains, 2017)
 - *Managing Heritage in Rail Projects Urban Design Guideline* (TfNSW, 2017)
- The collection of moveable heritage items within the passenger building on Platform 3/4 should be conserved and consideration given to their use for interpretive purposes as part of the proposed upgrade of the station. These items should be kept in a safe and secure location during works. Should the items not be considered for interpretation at the station, options for their safe long term storage should be explored with Sydney Trains Heritage.
- Preliminary archaeological assessment has identified the potential for impacts to archaeological resources of local significance. Further identification of the archaeological resource at Rooty Hill Station, and potential impacts from the proposed works, should be prepared as part of an archaeological research design (ARD), including potential impacts from the proposed sewerage works. The ARD would be submitted to Heritage Division with a Section 140 permit application for archaeological investigation of, and impacts to, areas where archaeological resources of local significance may be impacted by the proposed works. During detailed design, consideration should be given to avoiding ground disturbing impacts to areas of identified archaeological potential, where practicable, noting that the further identification of the extent and significance of the potential archaeological resource at Rooty Hill Station would be outlined in the ARD for the s140 application.
- Prior to commencement of proposed works, a Photographic Archival Recording (PAR) should be prepared, recording areas of Rooty Hill Station to be affected by the Proposal. The PAR should include photographs of the stations buildings and the overall setting of the station,

including a record of views that would be modified by the Proposal. The recording should be undertaken in accordance with the guidelines for *Photographic Recording of Heritage Items Using Film or Digital Capture* prepared by the NSW Office of Environment & Heritage. The PAR would be submitted to Blacktown City Council, and copies would be retained as per the standards. Consideration should be given to including a 3D scan of all structures to be removed as part of the archival recording process.

- A heritage induction should be provided to all on-site staff and contractors involved in the project. The induction should clearly describe the heritage constraints of the site and procedures when working on/adjacent to heritage fabric.
- Consideration should be given to the provision of interpretation as part of the Proposal, which would outline the history, associations and significance of the Rooty Hill Railway Group and wider Rooty Hill area. Interpretative measures could involve interpretive signage, panels or displays at entry/exit points to the station, including the proposed stair and lift shaft locations.
- As the Proposal has been assessed as potentially resulting in a moderate physical impact and moderate visual impact to the s170 and locally listed Rooty Hill Railway Station Group, consultation with Blacktown City Council would be required under the ISEPP.
- S170a notification of the OEH Heritage Division will be required 14 days prior to commencement of works as a precautionary approach for the Proposal. TfNSW will need to complete the Sydney Trains s170a notification letter template for Sydney Trains to review and sign as landowner delegate prior to the notification being submitted to Heritage Division.
- A copy of this report must be forwarded to Sydney Trains heritage advisors for review and comment.

10.0 REFERENCES

- Lewis, Robert, and Gurry, Tim 2012, *Myths and Mysteries of the Crossing of the Blue Mountains*, National Museum of Australia
- National Museum of Australia, 'Blue Mountains Crossing'.
Accessed online at:
http://www.nma.gov.au/online_features/defining_moments/featured/blue_mountains
(25/09/2017).
- New South Wales Government Railways and Tramways, 1886. *The Railway guide of New South Wales: for the use of tourists, excursionists, and others : a convenient volume of reference to railway routes, stations, and places of interest on the lines of railway : containing various maps and numerous illustrations.*
Accessed online at: <http://nla.gov.au/nla.obj-286375440> (25/09/2017).
- Office of Environment and Heritage (OEH) 2008: "Rooty Hill Railway Station Group".
Accessed online at:
<http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=4801932>
(17/09/2017).
- Office of Environment and Heritage (OEH) 2015: "Rooty Hill Railway Station".
Accessed online at:
<http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=1140288>
(17/09/2017).
- Office of Environment and Heritage (OEH) 2009: "Imperial Hotel"
Accessed online at:
<http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5045322>
(26/09/2017).
- Office of Environment and Heritage (OEH) 2005: "Rooty Hill, The"
Accessed online at:
<http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5054842>
(16/09/2017).
- Wotherspoon, Garry, 2008. 'Transport' Dictionary of Sydney. Accessed online at:
<https://dictionaryofsydney.org/entry/transport>
(26/09/2017).



artefact

Artefact Heritage
ABN 73 144 973 526
Level 4, Building B
35 Saunders Street
Pymont NSW 2009
Australia
+61 2 9518 8411
office@artefact.net.au
www.artefact.net.au