NSW GOVERNMENT

Transport Access Program

Petersham Station Upgrade

Supporting Studies

Artist's impression of the proposed Petersham Station Upgrade, subject to change during detailed design.

October 2019

PETERSHAM STATION UPGRADE

Statement of Heritage Impact

PR138951-3
Petersham Station
3.0
8 October 2019

rpsgroup.com

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EXECUTIVE SUMMARY

Transport for NSW (TfNSW) commissioned RPS to prepare a Review of Environmental Factors (REF) for the proposed Petersham Station Upgrade (the Proposal) as part of the Transport Access Program (TAP). This Statement of Heritage Impact (SOHI) assesses the impact of the Proposal to the significance of Petersham Station, which is included on the State Heritage Register (SHR) and RailCorp Section 170 Heritage and Conservation Register. It is also identified as an item of State significance on the *Marrickville Local Environmental Plan (LEP) 2011.* This SOHI also recommends measures to avoid or minimise impact, and the approval required under the NSW *Heritage Act 1977*.

The SHR statement of significance for Petersham Railway Station group is:

> *Petersham Railway Station has State significance as the station with its group of largely intact, original structures dating from the 1880s establishment of the station through to the 1891 quadruplication and the 1927 sextuplication of the line, is able to demonstrate the growth and expansion of the railways in the late nineteenth and early twentieth century. The building serves to mark the alignment of the first railway in NSW, that being the 1855 Sydney to Parramatta line.*
>
> *The 1880s former station building is the largest and most elaborate nineteenth century station building constructed for the Sydney suburban rail system and is the only major 'First Class' station building known to have been built in Sydney in the nineteenth century and is therefore unique in the history of the NSW Government Railways. It is a fine example of a late Victorian Italianate station dating from 1885, and although compromised by later alterations and additions is substantially intact and capable of restoration. The building is unusual and of significance by being reached from the street by a grand stair in the classical manner and having a landscaped forecourt to a suburban street and forms a major part of an important historic railway precinct including the bridge and signal box and is a significant landmark in this part of Petersham, which retains much of its nineteenth century-built street character. The station is one of a select number of similar buildings designed by the office of the Engineer for the Existing Lines Branch, George Cowdery, with the 1883 iron pedestrian bridge and steps also designed by Cowdery.*
>
> *The footbridge was identified as an item of exceptional heritage significance in the 2016 'Railway Footbridges Heritage Conservation Strategy'. Although the footbridge has been altered in terms of the recasting of the centre stairs and deck and installation of new handrails and balustrades, the footbridge has a number of 1880s elements including brick piers, cast iron columns, arches, steel trestles, timber stair treads and latticework to the deck support. Overall the bridge retains its aesthetic quality and integrity* (OEH 2019a)

Petersham Station (the Project Area) is located on the Main Suburban Line of the Sydney Trains T2 Inner West and Leppington Line services, about 5.5 kilometres from Central Station. It is bound by Terminus Street to the north and Trafalgar Street to the south. The Project Area also includes ancillary work areas for proposed construction compound, temporary laydown and storage areas (during rail shutdowns) and crane set-up locations.

This SOHI is limited to an assessment of non-Aboriginal heritage. No assessment of Aboriginal heritage is included in this report. This SOHI assesses the concept plan for the Proposal and does not include an assessment of the impact of set down or compound areas.

The Petersham Station Upgrade forms part of the Transport Access Program, which is an initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure. The Proposal would ensure that Petersham Station is accessible to all customers, and aims to respect or enhance the heritage significance of Petersham Station. This would ensure the continued use of the station as an active railway station into the future whilst retaining the State significant heritage elements of the station. The Proposal does not include the demolition or removal of significant fabric, with the exception of the replacement of the door for the family accessible toilet.

Throughout design development, potential adverse impacts to the significance and fabric of the station have been avoided or minimised. There are no archaeological impacts associated with the Proposal. The Proposal includes the addition of new elements, alteration and removal of existing elements from the Petersham Station

Railway Station Group. Direct impacts to components of the Petersham Railway Station Group range from moderate adverse to minor positive.

The assessment of this SOHI has resulted in the following management recommendations:

Recommendation 1: Section 60 application

It is recommended that a Section 60 application is submitted to the Heritage Council of NSW. No works are to be undertaken prior to approval of the Section 60.

Recommendation 2: Heritage architect

A suitably qualified heritage architect is to be engaged in relation to further refinement of design and the delivery of the Proposal. The heritage architect is to be consulted throughout all stages of the Proposal to ensure compliance.

Recommendation 3: Family accessible toilet

Refinement of the truss structure, portal frame, section sizes, guttering, materials and foundations of the family accessible toilet canopy design should be developed in consultation with Sydney Trains and a suitably qualified heritage architect. The final design should be developed with consideration to the Sydney Trains *Canopies and Shelters Design Guide for Heritage Stations* (2016) with attention to the location of any attachments to significant fabric and construction methods. Impact to significant fabric and views and vistas should be minimised through recessive materials and sympathetic design.

All works associated with the proposed family accessible toilet are to be carried out under the direction of a suitably qualified heritage architect. Measures should be put in place to protect significant fabric from accidental impact during construction and installation of the canopy.

Recommendation 4: Protecting significant fabric

a. Any original sections of balustrade removed from the footbridge during lift installation are to be used to replace non-original sections. Any remaining original balustrade fabric is to be retained for future repair works. The salvage and re-use of balustrade must be undertaken in consultation with, and under supervision of, a suitably qualified heritage specialist.

b. The sandstone slabs removed from Stair 4 are to be re-used as paving in the proposed Terminus Street entrance or forecourt area on Trafalgar Street. The salvage and re-use of the sandstone must be undertaken in consultation with, and under supervision of, a suitably qualified heritage specialist.

c. The intact, unmodified female toilet cubicle must be identified and cordoned off in consultation with a suitably qualified heritage specialist prior to any works proceeding in the female toilets. A cubicle whose amenities have been modernised is to be selected for conversion and works supervised by a suitably qualified heritage specialist.

d. Protective measures, as guided by a suitably qualified heritage specialist, must be put in place to protect significant fabric on the platforms during regrading, trenching and construction. The platform surfaces should be reinstated on completion. The addition of tactile surfaces should to be limited to the minimum amount required to meet legislative requirements.

e. Protective measures must be put in place to protect significant fabric of the platform building. Care must be taken when installing fixtures and fittings to the exterior of the building.

The addition of components such as seating, lighting and signage should adhere to the Sydney Trains and NSW TrainLink *Station Component Guide* (2017) and be sympathetic to existing seating, lighting and signage across the station. Reinstatement of original-style footbridge lighting should also be considered.

Recommendation 5: Installation of electrical services

New electrical services should be installed in accordance with the Sydney Trains *Heritage Technical Note: Installation of New Electrical and Data Services at Heritage Sites* (2017). The exact locations of services are not yet confirmed. Installation of services should be planned in consultation with a heritage architect and aim to reduce impact to significant fabric and visual impact. Where possible services should be installed within established conduits to reduce cumulative impact to significant fabric.

Recommendation 6: Installation of customer facilities

The installation or upgrading of customer facilities should installed in accordance with the Office of Rail Heritage's *Conservation Guide: Railway Station Platform Furnishings* (2012). Investigations into the reinstatement of original-style footbridge lighting should be considered in consultation with a suitably qualified heritage architect and Sydney Trains Heritage. Installation of customer facilities should be planned in consultation with a suitable qualified heritage specialist and aim to reduce impact to significant fabric and visual impact.

Recommendation 7: Archival record

It is recommended that a photographic archival record of Petersham Station is prepared prior to, and at the completion of, construction, in accordance with the NSW Heritage Office (former) publication *How to prepare archival records of heritage items* and *Photographic Recording of Heritage Items using Film or Digital Capture*. The photographic archival record should document the condition of Petersham Station prior to, and after, the works, the internal configuration of the platform building and the setting (including the Terminus Street and Trafalgar Street entrances).

Copies of the archival record should be deposited with Heritage, DPC, Sydney Trains Heritage and the local library.

Recommendation 8: Heritage interpretation and public art installations

A heritage interpretation plan for the station is to be formulated and implemented in accordance with the NSW Heritage Office guideline *Interpreting Heritage Places and Items* (2005). The Sydney Trains Draft *Heritage Interpretation Guideline* (July 2018) should also be considered in consultation with Sydney Trains Heritage during preparation and implementation of the heritage interpretation plan.

Public art may be incorporated into the heritage interpretation plan or installed independently.

Any heritage interpretation and public art installations are to be developed and implemented in consultation with Sydney Trains and a suitably qualified heritage specialist. Installations should avoid impacting significant heritage fabric and significant views and vistas of the station complex. Colour schemes and styles should be either sympathetic to their heritage surrounding or a respectful contrast.

Heritage interpretation at the station should communicate the history of Petersham Station to the public and enable customers to engage with the significance of the station.

Recommendation 9: Moveable heritage

All moveable heritage impacted during the proposed works are to be handled in accordance with Sydney Trains' *Moveable Heritage Management Strategy* (2015-2017) and *Moveable Heritage Disposal Policy* (2016).

Recommendation 10: Unexpected archaeological resources

It is unlikely that any archaeological resources would be encountered during construction. However, if unexpected archaeological resources are encountered during construction the TfNSW *Unexpected Heritage Finds Guideline* (2016) must be implemented.

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Abbreviation	Definition
CHL	Commonwealth Heritage List
CMP	Conservation Management Plan
DSAPT	*Disability Standards for Accessible Public Transport*
DUAP	Department of Urban Affairs and Planning (former)
DDA	*Disability Discrimination Act 1992 (Commonwealth)*
DPC	Department of Premier and Cabinet
EP&A	*Environment Planning and Assessment Act 1979*
EPBC	*Environment Protection and Biodiversity Conservation Act 1999*
HCA	Heritage Conservation Area
ICOMOS	International Council on Monuments and Sites
In situ	Latin, meaning “on site” or “in place”
ISCA	Infrastructure Sustainability Council of Australia
LEP	Local Environment Plan
LGA	Local Government Area
MCA	Multi criteria analysis
NHL	National Heritage List
NLA	National Library of Australia
NSWGR	New South Wales Government Railways
OEH	Office of Environment and Heritage (former)
PDP	Public Domain Plan
PNHCA	Petersham North Heritage Conservation Area
REF	Review of Environmental Factors
RNE	Register of the National Estate
SHR	State Heritage Register
SLNSW	State Library of New South Wales
SOHI	Statement of Heritage Impact
TAP	Transport Access Program
TfNSW	Transport for NSW
UDP	Urban Design Plan
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WHL	World Heritage List

1 INTRODUCTION

Transport for NSW (TfNSW) commissioned RPS to prepare a Review of Environmental Factors (REF) for the proposed Petersham Station Upgrade (the Proposal) as part of the Transport Access Program (TAP). This Statement of Heritage Impact (SOHI) assesses the impact of the Proposal to the significance of Petersham Station, which is included on the State Heritage Register (SHR) and RailCorp Section 170 Heritage and Conservation Register. It is also identified as an item of State significance on the *Marrickville Local Environmental Plan (LEP) 2011.*

This SOHI identifies the significance of Petersham Station and assesses the impact of the Proposal, with consideration of the options considered. This SOHI also recommends measures to avoid or minimise impact, and the approval required under the NSW *Heritage Act 1977*.

1.1 Project Area

Petersham Station (the Project Area) is located on the Main Suburban Line of the Sydney Trains T2 Inner West and Leppington Line services, about 5.5 kilometres from Central Station. It is bound by Terminus Street to the north and Trafalgar Street to the south. The Project Area also includes ancillary work areas for proposed construction compound, temporary laydown and storage areas (during rail shutdowns) and crane set-up locations.

Petersham Station consists of a former platform to Terminus Street and station building constructed in 1885 with later additions in 1954. In 1883 a bridge was constructed connecting Terminus Street and Trafalgar Street, and in 1891 an underpass was added to the west of the station connecting Palace Street to Audley Street. The station was expanded in 1926 with the construction of an island platform and platform building and in 1927 with the addition of a signal box.

The Project Area is defined in Figure 1.1 and Figure 1.2. It is confined to the work areas associated with the Proposal. It excludes the former station building (1885) and 1891 pedestrian subway.

1.2 Project background

The Petersham Station Upgrade forms part of the Transport Access Program, which is an initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure. Petersham Station has been identified for an accessibility upgrade as it does not meet key requirements of the *Disability Standards for Accessible Public Transport* (DSAPT) or the *Commonwealth Disability Discrimination Act 1992* (DDA). The non-compliant access points and stairs to the platform do not facilitate access for people with reduced mobility, parents and carers with prams or customers with luggage. There are no lift facilities and inadequate tactile ground surface indicators to stairs, platforms and interchange facilities.

1.3 The Proposal

The Proposal involves an upgrade of Petersham Station as part of the Transport Access Program which would improve accessibility and amenity for customers.

The key features of the Proposal include:

- two new lifts connecting the existing footbridge to Terminus Street station entrance and the station platform
- a new access ramp and stairs from the Trafalgar Street station entrance to the existing footbridge
- upgrade works to the existing footbridge and stairs
- improved amenities such as a new family accessible toilet and a male and female ambulant toilet in the platform building

- an addition of an external canopy to the family accessible toilet
- new Station Services Equipment Room (SSER) within the existing platform building
- new accessible parking space adjacent to the Terminus Street lift
- formalised kiss and ride area on Terminus Street
- new bicycle parking
- platform resurfacing, CCTV and wayfinding signage
- electrical upgrades for new infrastructure.

Subject to planning approval, construction is expected to commence in early 2020 and take around 18 months to complete.

A detailed description of the Proposal is provided in Chapter 6 of this SOHI.

1.4 Purpose of this SOHI and approach

The purpose of this SOHI is to assess the impact of the Proposal on the significance of Petersham Station. This SOHI assesses the concept plan for the Petersham Station Upgrade. The drawings are referenced in this SOHI are the *Petersham Station Easy Access Upgrade Transport Access Program – Package 2A Architectural*, by Design Inc, dated 27 July 2019. The full list of architectural drawings is included in Table 1.1.

Table 1.1: Architectural drawing list

Drawing Number	Drawing Title	Revision Number and Date
100 - GENERAL		
150272-PET-AR-DRG-35100	COVER SHEET & DRAWING LIST	#8 25/09/2019
150272-PET-AR-DRG-35101	PROPOSED SITE PLAN	#8 25/09/2019
150272-PET-AR-DRG-35102	GRID SETOUT PLAN	#8 25/09/2019
150272-PET-AR-DRG-35103	EXISTING & DEMOLITION PLAN	#8 25/09/2019
110 - PLAN SERIES		
150272-PET-AR-DRG-35110	TRAFALGAR ST - PROPOSED STREET LEVEL PLAN	#8 25/09/2019
150272-PET-AR-DRG-35111	TERMINUS ST - PROPOSED STREET LEVEL PLAN	#8 25/09/2019
150272-PET-AR-DRG-35112	PLATFORM LEVEL SHEET 1 - PROPOSED PLATFORM LEVEL PLAN	#8 25/09/2019
150272-PET-AR-DRG-35113	PLATFORM LEVEL SHEET 2 - PROPOSED PLATFORM LEVEL PLAN	#8 25/09/2019
150272-PET-AR-DRG-35114	PLATFORM LEVEL SHEET 3 - PROPOSED PLATFORM LEVEL PLAN	#8 25/09/2019
150272-PET-AR-DRG-35115	FOOTBRIDGE LEVEL PLAN SHEET 1 - PROPOSED FOOTBRIDGE LEVEL PLAN	#8 25/09/2019
150272-PET-AR-DRG-35116	FOOTBRIDGE LEVEL PLAN SHEET 2 - PROPOSED FOOTBRIDGE LEVEL PLAN	#8 25/09/2019
150272-PET-AR-DRG-35117	FOOTBRIDGE & PLATFORM - ROOF PLAN	#8 25/09/2019
150272-PET-AR-DRG-35118	FOOTBRIDGE & TERMINUS ST - ROOF PLAN	#8 25/09/2019
120 - ELEVATION & SECTION SERIES		
150272-PET-AR-DRG-35120	NORTH & SOUTH ELEVATIONS - SHEET 01	#8 25/09/2019

Drawing Number	Drawing Title	Revision Number and Date
150272-PET-AR-DRG-35121	EAST & WEST ELEVATIONS - SHEET 02	#8 25/09/2019
150272-PET-AR-DRG-35125	SECTIONS - SHEET 01	#8 25/09/2019
150272-PET-AR-DRG-35126	SECTIONS - SHEET 02	#8 25/09/2019
140 - STAIRS - DETAIL SERIES		
150272-PET-AR-DRG-35140	TRAFALGAR STAIR 1 - PLANS, SECTIONS & DETAILS	#8 25/09/2019
150272-PET-AR-DRG-35141	PLATFORM STAIR 2 - PLANS, SECTIONS & DETAILS	#8 25/09/2019
150272-PET-AR-DRG-35142	TERMINUS STAIR 3 & 4 - PLANS, SECTIONS & DETAILS	#8 25/09/2019
150 - LIFT DETAIL SERIES		
150272-PET-AR-DRG-35150	LIFT 1 - PLANS & ELEVATIONS	#8 25/09/2019
150272-PET-AR-DRG-35151	LIFT 1 - SECTIONS	#8 25/09/2019
150272-PET-AR-DRG-35152	LIFT 2 - PLANS & ELEVATIONS	#8 25/09/2019
150272-PET-AR-DRG-35153	LIFT 2 - SECTIONS	#8 25/09/2019
160 - CANOPIES - DETAIL SERIES		
150272-PET-AR-DRG-35160	TERMINUS ST CANOPY - PLANS, SECTIONS & DETAILS	#8 25/09/2019
170 - PLATFORM BUILDING SERIES		
150272-PET-AR-DRG-35170	PLATFORM 1/2 & STATION BUILDING - PLANS	#8 25/09/2019
150272-PET-AR-DRG-35171	PLATFORM 1/2 & STATION BUILDING - ELEVATIONS	
150272-PET-AR-DRG-35173	PLATFORM 1/2 & STATION BUILDING - PLAN & INTERNAL ELEVATIONS	#8 25/09/2019
190 – 3D & PERSPECTIVES		
150272-PET-AR-DRG-35190	PERSPECTIVE 1	#8 25/09/2019
150272-PET-AR-DRG-35191	PERSPECTIVE 2	#8 25/09/2019
LANDSCAPE		
150272-PET-LA-DRG-35101	LANDSCAPE	#8 25/09/2019
150272-PET-LA-DRG-35102	LANDSCAPE	#8 25/09/2019

This SOHI has been prepared in accordance with the NSW *Heritage Act 1977* and the *Environmental Planning and Assessment Act 1979*, with reference to *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance* (Burra Charter) (2013) and associated Practice Notes and Heritage, Department of Premier and Cabinet best practice including *Assessing heritage significance* (Heritage Office 2001) and *Statements of Heritage Impact* (Heritage Office and Department of Urban Affairs and Planning (former) 2002).

This SOHI included an inspection of Petersham Station on 5 August 2019. It included an inspection of all proposed areas of work including station entrances at Trafalgar and Terminus Streets, station platform and station building (interior and exterior).

1.5 Limitations

This SOHI is limited to an assessment of non-Aboriginal heritage. No assessment of Aboriginal heritage is included in this report.

This SOHI assesses the concept plan for the Proposal as defined in the drawings identified in Table 1.1 and Figure 1.1 as well as temporary lay down and storage areas, crane set up locations and construction compound areas within the SHR curtilage area identified in Figure 1.2. It does not include an assessment of

the impact of set down or compound areas identified Figure 1.2 and Figure 1.3 located outside the SHR curtilage area.

This SOHI does not assess specific heritage interpretation or public art installation design and placement. The assessment is limited to the concept of heritage interpretation or public art being installed.

1.6 Authorship

RPS Senior Heritage Consultant Sarah van der Linde prepared this SOHI with input from RPS Heritage Consultant Veronica Norman and RPS Senior Heritage Consultant Georgia Wright. RPS Heritage Manager Aly Howard reviewed this SOHI.

Figure 1.1: Project Area
Petersham Station

LOCATION:	PETERSHAM, NSW
PURPOSE:	HERITAGE
Technician:	Veronica.Norman
Date:	11/09/2019
Path:	N:\Projects\Conics_Sydney\PR136951 - TAP3\-3 Cultural Heritage REF\3. Petersham\GIS\Fig1.1_Projectarea.mxd
VERSION (PLAN BY):	
DATUM:	GDA94
PROJECTION:	MGA Zone 56
Data Sources:	RPS Land and Property 2015

CLIENT: TFNSW
JOB REF: 138951-3

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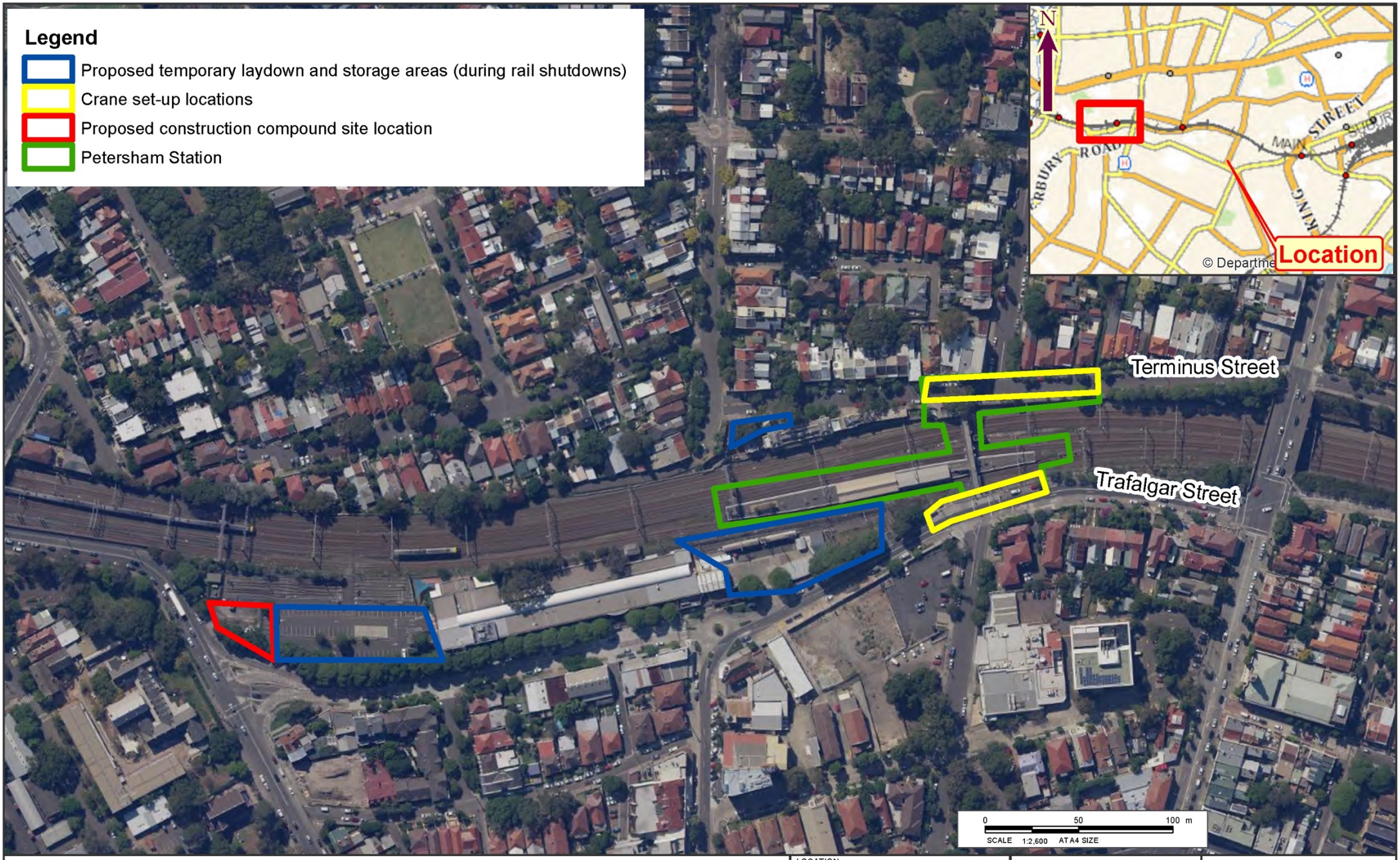

Figure 1.2: Proposed areas of work
Petersham Station

LOCATION: PETERSHAM, NSW	Path: N:\Projects\Conics_Sydney\PR138951 - TAP3\-3 Cultural Heritage REF\3. Petersham\GIS\Fig1.2_Projectareaslanmorev1.mxd	DATUM: GDA94 PROJECTION: MGA Zone 56
PURPOSE: HERITAGE Technician: Veronica.Norman Date: 8/10/2019	VERSION (PLAN BY):	Data Sources: RPS Land and Property 2015

CLIENT: TFNSW
JOB REF: 138951-3

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Figure 1.3: Proposed areas of work
Stanmore Station

LOCATION: PETERSHAM, NSW	Path: N:\Projects\Conics_Sydney\PR138951 - TAP3\-3 Cultural Heritage REF\3_Petersham\GIS\Fig1.1_Projectarea.mxd
PURPOSE: HERITAGE	VERSION (PLAN BY):
Technician: Veronica.Norman Date: 11/09/2019	DATUM: GDA94 PROJECTION: MGA Zone 56
	Data Sources: RPS Land and Property 2015

CLIENT: TFNSW
JOB REF: 138951-3

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2 LEGISLATIVE CONTEXT

In NSW, environmental heritage is protected and managed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), the NSW *Heritage Act 1977* and the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

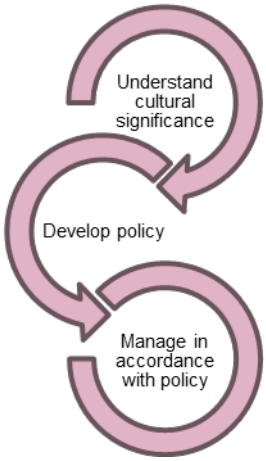
2.1 The Burra Charter

The Australia ICOMOS *Charter for Places of Cultural Significance, The Burra Charter, 2013* (Burra Charter) provides a best practice standard for managing cultural heritage places in Australia. In December 2004, the NSW Heritage Council recognised and endorsed the Burra Charter as a document that underpins the policies for the conservation of environmental heritage in NSW.

The Burra Charter defines the principles for the conservation of places of cultural significance. The conservation principles contained in the Burra Charter include the conservation and management of places of cultural significance, including the retention of an appropriate setting and related places and related objects which contribute to the cultural significance of places.

The Burra Charter Process is a sequence of assessments, decisions and actions, related to the management of places of cultural significance. The Burra Charter Process is illustrated in Graph 2.1.

Graph 2.1 The Burra Charter Process (Australia ICOMOS Burra Charter)



2.2 World Heritage Convention

The General Conference of UNESCO adopted the Convention Concerning the Protection of World Cultural and National Heritage (World Heritage Convention) on 16 November 1972, and it came into force on 17 December 1975. The World Heritage Convention aims to promote international cooperation to protect places of outstanding cultural significance.

2.2.1 World Heritage List

There are **no places** on the World Heritage List within or near the Project Area.

2.3 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the principal environmental Act at a Commonwealth level. It provides for the protection and management of matters of national environmental significance as defined in the Act. Matters of national environmental significance include but

are not limited to flora, fauna, ecological communities and heritage places of national and international importance.

In addition, the EPBC Act applies to actions with a significant impact on the environment where the actions affect, or are taken on, Commonwealth land, or are carried out by a Commonwealth agency (even if that significant impact is not on one of the nine matters of 'national environmental significance').

The EPBC Act requires approval from the Minister for actions with a significant impact on places included on the National Heritage List or Commonwealth Heritage List.

2.3.1 National Heritage List

The National Heritage List was established under the EPBC Act to protect places of outstanding significance to Australia.

There are **no places** on the National Heritage List within or near the Project Area.

2.3.2 Commonwealth Heritage List

The Commonwealth Heritage List was established under the EPBC Act to protect places owned and managed by Commonwealth agencies.

There are **no places** on the Commonwealth Heritage List within or near the Project Area.

2.4 Heritage Act 1977

The NSW *Heritage Act 1977* (the Act) is the principal Act for the management of NSW's environmental heritage. It establishes the SHR and includes provisions for Interim Heritage Orders, Orders to Stop Work and archaeological relics (both on land and underwater within the limits of the State). It also requires government agencies to maintain a Heritage and Conservation Register.

To assist management of the State's environmental heritage, the Act distinguishes between assets of State and local significance:

- State significance refers to significance to the State in relation to the historical, archaeological, architectural, cultural, social, natural or aesthetic value of an item
- local significance refers to significance to an area in relation to the historical, archaeological, architectural, cultural, social, natural or aesthetic value of an item.

Items may be of State and local significance. Items of local significance may or may not be of significance to the State.

2.4.1 State Heritage Register

The SHR identifies places and objects of importance to the whole of NSW.

Petersham Station is included on the SHR (01223) (Figure 2.2).

2.4.2 Section 170 Heritage and Conservation Register

Section 170 of the Act requires government agencies to establish a Heritage and Conservation Register that identifies all assets of environmental heritage that it owns or occupies. Government agencies are required to provide the NSW Heritage Council notice of any intention to remove an asset from a Section 170 Heritage and Conservation Register, transfer ownership of an asset included on a Section 170 Heritage and Conservation Register, cease to occupy an asset on a Section 170 Heritage and Conservation Register or demolish an item included on a Section 170 Heritage and Conservation Register and assets must be maintained with due diligence in accordance with the *State-Owned Heritage Management Principles* and NSW Heritage Council

asset management document. Proposals to alter or demolish assets of State significance must be referred to the NSW Heritage Council.

Petersham Station is included on the RailCorp Section 170 Heritage and Conservation Register (4801094) (Figure 2.2).

2.5 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) regulates land-use planning and assessment for NSW. The Proposal is being assessed through a Review of Environmental Factors (REF) under Division 5.1 of the EP&A Act (i.e. development without consent, to be determined by TfNSW).

2.5.1 Marrickville Local Environmental Plan 2011

The *Marrickville Local Environmental Plan (LEP) 2011* identifies items important to the former Marrickville local government area.

Petersham Station is included on Schedule 5 of the Marrickville LEP (I226) (Figure 2.1).

Petersham Station abuts the Petersham North Heritage Conservation Area (PNHCA), which covers an area north of Terminus Street. The PNHCA is of significance to the township of Petersham as it developed from the 1848 Petersham Estate subdivision, the 1854 Sydenham Estate subdivision and later subdivisions into the twentieth century. The built environment reflects its varied patterns of development and incorporates a number of local heritage items, including the White Cockatoo Hotel (I227) and an indoor mural (I362) at 36 Terminus Street, both located opposite the Terminus Street station entrance. The area represents the principal characteristics of the local area from early Estate to an urban cultural landscape.

2.6 Conservation Management Plans

Two conservation management plans exist for Petersham Station:

- *Main West line 5.46km Petersham Station Upgrading of Footbridge Conservation Management Plan* (Connell Wagner Engineers and Managers 1990)
- *The Former Petersham Railway Station Conservation Plan* (Sheedy 1995).

Note that conservation management plans should be revised regularly in order to meet the changing needs of the heritage place. The existing conservation management plans for the former Petersham Station (Sheedy 1995) and for the footbridge (Connell Wagner Engineers and Managers 1992) are now considered outdated and in need of review as per Australia ICOMOS endorsed *The Conservation Plan* (Kerr 2013).

2.7 Summary

The listings for Petersham Station are summarised in Table 2.1 and Figure 2.1 and Figure 2.1.

Table 2.1: Petersham Station heritage listings

Item	ID	Register	Significance
Petersham Railway Station Group	01223	SHR	State
Petersham Railway Station Group	4801094	Section 170 Heritage and Conservation Register	State
Petersham Railway Station Group, including interiors	I226	Marrickville LEP 2011	State

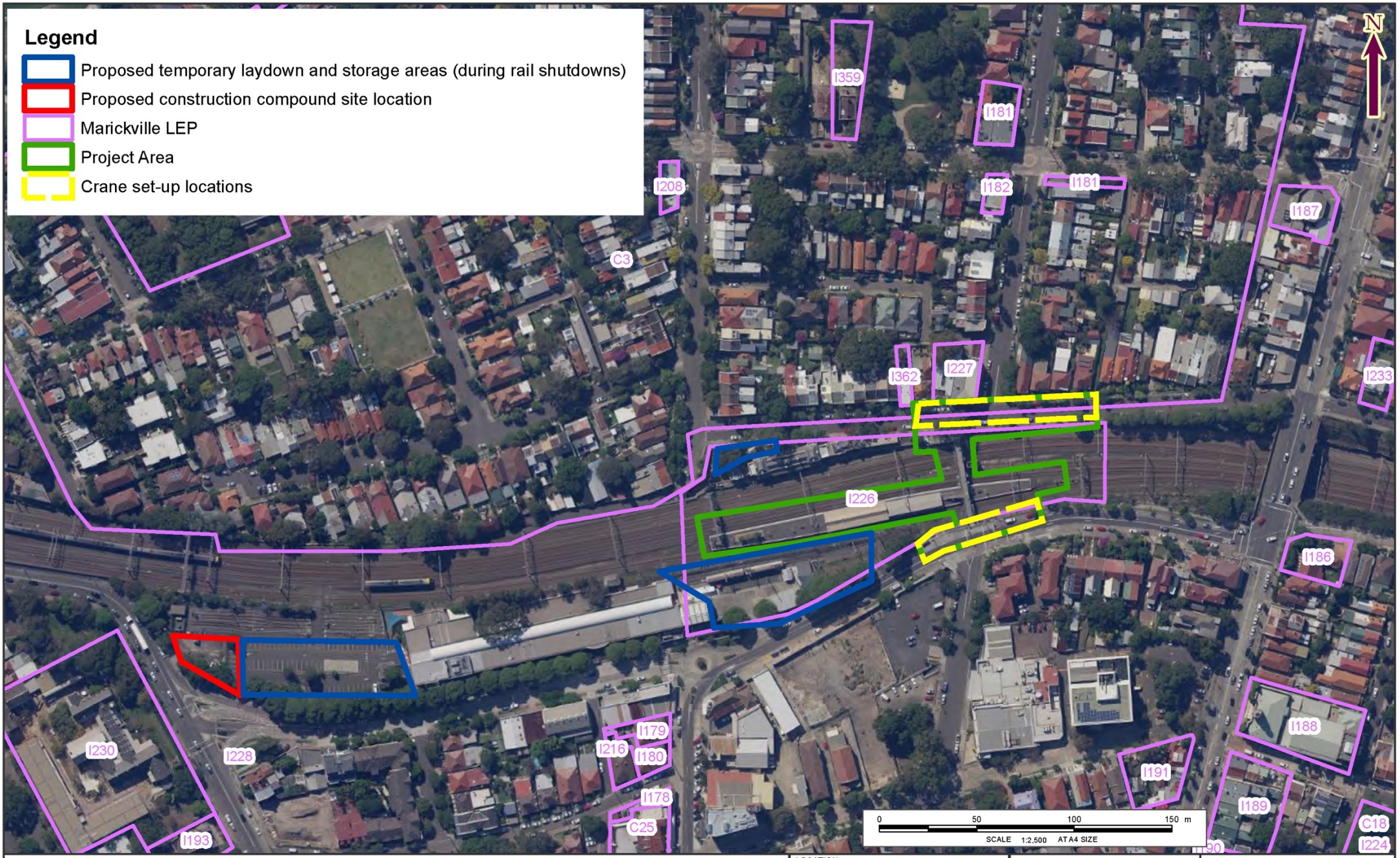


Figure 2.1: Heritage listed items - local
Petersham Station

LOCATION: PETERSHAM, NSW	Path: N:\Projects\Conics_Sydney\PR138951 - TAP3\-3 Cultural Heritage REF\3. Petersham\GIS\Fig2.1_heritageitems.mxd	DATUM: GDA94 PROJECTION: MGA Zone 56
PURPOSE: HERITAGE Technician: Veronica.Norman Date: 8/10/2019	VERSION (PLAN BY):	Data Sources: RPS Land and Property 2015

CLIENT: TFNSW
JOB REF: 138951-3

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
Level 13, 255 Pitt Street Sydney, 2001
T: 02 8270 8300 www.rpsgroup.com.au

MAKING COMPLEX EASY

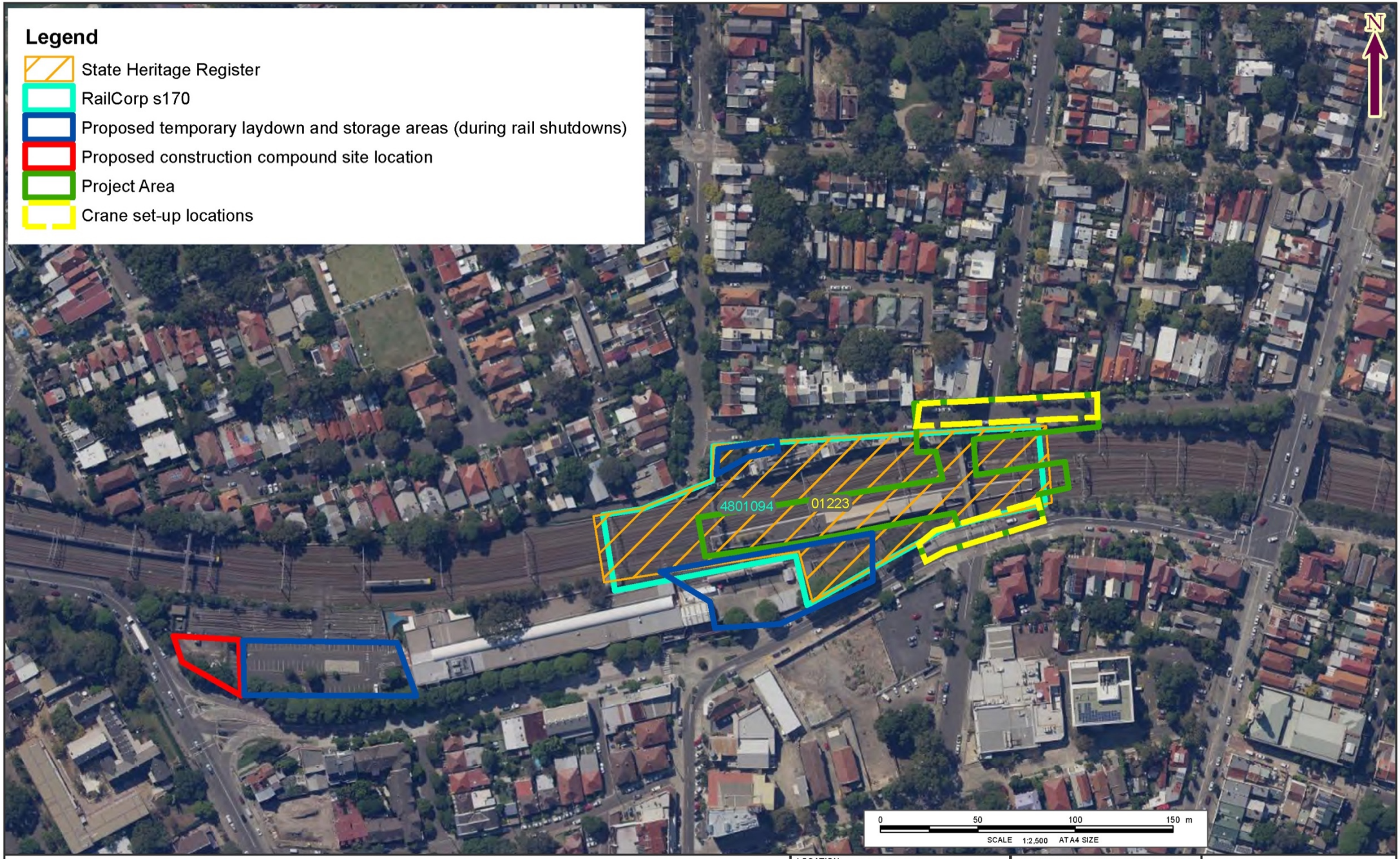


Figure 2.2: Heritage listed items - SHR & S170
Petersham Station

LOCATION: PETERSHAM, NSW	Path: N:\Projects\Conics_Sydney\PR138951 - TAP3\-3 Cultural Heritage REF\3. Petersham\GIS\Fig2.1_heritageitems.mxd	DATUM: GDA94 PROJECTION: MGA Zone 56
PURPOSE: HERITAGE Technician: Veronica.Norman Date: 8/10/2019	VERSION (PLAN BY):	Data Sources: RPS Land and Property 2015

CLIENT: TFNSW
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3 HISTORICAL CONTEXT

3.1 Timeline

An overview of key dates and events relating to Petersham Station is outlined below in Table 3.1.

Table 3.1: Key dates and events

Date	Event
1848	Main Western Line from Sydney to Parramatta first surveyed.
1851	Construction commences on Main Western Line to Parramatta.
1855	Main Western Line completed and opened.
1857	Petersham Station opened on 6 January as a halt (a station with few facilities, where trains stopped on request for passengers to board or alight).
1873	Staggered platforms constructed.
1878	Platforms lengthened. Booking office and timber footbridge built.
1880	New level crossing and toilet block installed.
1882	Goods yard established.
1883-5	Footbridge connecting Trafalgar and Terminus Streets, with stairs down to the island platform constructed. Designed by George Cowdrey (plans dated 1883); built by R. Miller & Sons.
1885	Main station building on Terminus Street constructed. Designed in late Victorian Italianate style by George Cowdrey.
1891	Line through Petersham quadrupled. Island platform constructed to serve the slow tracks. Subway built at western end of station running north south, connecting Terminus Street to Trafalgar Street. Subway contained a booking office and stairs leading up to the platforms.
1896	Footbridge widened and booking office added to footbridge.
1911	Additional land purchased to extend goods yards.
1913	New goods shed built.
1926-7	Line through Petersham sextupled and electrified. New signal box constructed. 1885 station building closed, eventually becoming office of the District Signal Engineer. Footbridge southern end extended, and brick 'wing' walls added at Trafalgar Street entrance. Other platform buildings demolished and replaced by current brick building. Goods yard began to be phased out.
1954	North wing of 1885 building taken over by the Railways and Tramways Hospital Fund and the present eastern wing was added.
c.1988	Subway booking office and access to platform closed.

3.2 Early settlement 1793 - 1848

In 1793 Lieutenant-Governor Major Francis Grose offered four agricultural land grants in the 'district of Petersham Hill', which stretched from Sydney University to the bottom of Taverners Hill. The village of Petersham grew in the vicinity of Taverners Hill with the establishment of the Parramatta Road in 1794 (Whittaker 2006, 83). Thomas Moore, a boatbuilder and landholder, arrived in Australia in 1796. He was granted 1170 acres in Petersham, which he extended to 1920 acres by 1807. In the late 1820s, Dr Robert Wardell purchased Moore's holdings, which was known as Petersham Estate. Following Dr Wardell's death in 1834, Petersham Estate passed to his relatives and was subsequently subdivided in 1848. A portion of the estate was subdivided as Sydenham Estate in anticipation of the Sydney to Parramatta railway (OEH 2019b).

3.3 Main Western Line 1848-1855

The Main Western Line from Sydney to Parramatta was first surveyed in 1848, and Sydenham Estate had access to both Parramatta Road and Petersham Station, which was to be one of four stops scheduled between Sydney and Parramatta (OEH 2019b).

Construction of the Main Western Line commenced in 1851 and was completed in 1855. The line was built as a direct connection to Parramatta Junction for the purpose of connecting Sydney with major rural lines servicing the Blue Mountains and the Southern Highlands. Consequently, there were few stops along the line between Sydney and Parramatta Junction (OEH 2019a).

3.4 Petersham Station 1857-1890s

On 6 January 1857, Petersham Station opened as a halt, with few facilities and only stopping on request when passengers wished to board or alight. A platform wasn't built until 1873. In 1878 the platform was lengthened, and the station was upgraded with the addition of a booking office and timber footbridge. Plate 3.1 shows Petersham Station c.1880.

A goods yard was established in 1882. Due to heavy traffic to the west and south, New South Wales Government Railways (NSWGR) soon made plans to quadruplicate the line, which occurred in 1891. This resulted in major changes for Petersham Station. The main station building was sited 'up' on the platform and a new iron footbridge was constructed across the railway lines in 1883 to connect with a new island platform, where the earlier building was demolished and replaced (Sheedy 1995, 10). The iron footbridge is shown in Plate 3.2.The plans and elevations of the footbridge are shown in Plate 3.3 to Plate 3.7.

The new station building, constructed in 1885, and iron footbridge were designed by George Cowdery. The plan of the station was based on the standard design, however, the station building, and detailing was far more elaborate than station designs used elsewhere (Sheedy 1995, 11-12). The station building can be seen in Plate 3.8 and Plate 3.9. The new footbridge was then widened in 1896 and a booking office was added.

In 1891 the pedestrian subway was built along with another island platform to service the slow track (Sheedy 1995, 10). The subway contained a booking office and offered direct access to the western end of the island platform (OEH 2019a). Historical plans of the subway and booking office are included as Plate 3.10 and Plate 3.11. Petersham Station as it was in the 1890s is shown in Plate 3.12.

Plate 3.1: Petersham Station c.1880. Source: Sheedy 1995, Appendix B.

Plate 3.2: Petersham Station footbridge c.1890s. Source: SLNSW (1-31978)

Plate 3.3: Footbridge at Petersham plan 1883. Source: TfNSW

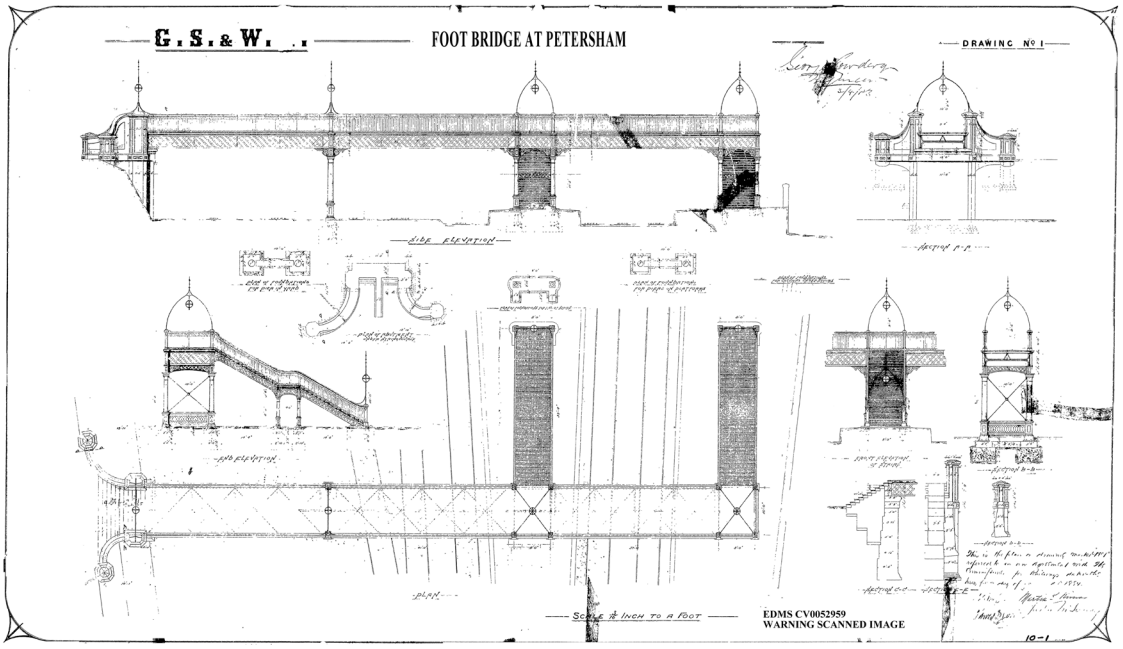


Plate 3.4: Footbridge at Petersham Station plan. Source: TfNSW

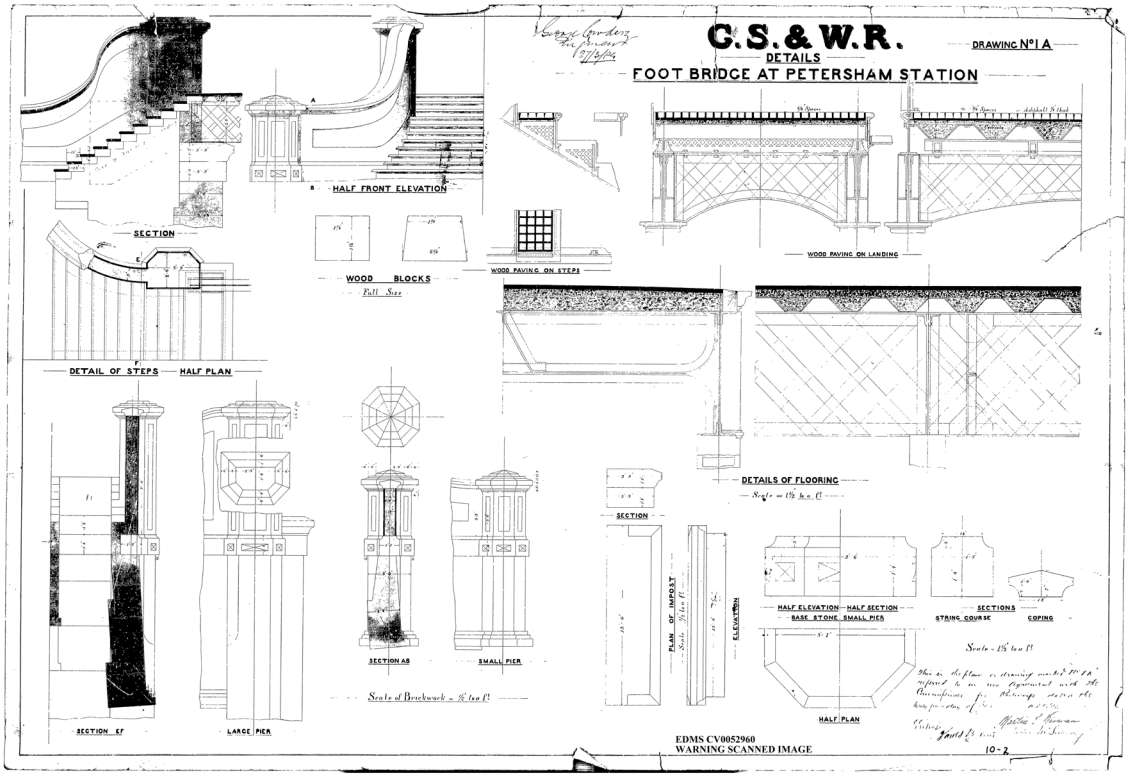


Plate 3.5: Footbridge at Petersham - side elevation plan 1883. Source: TfNSW

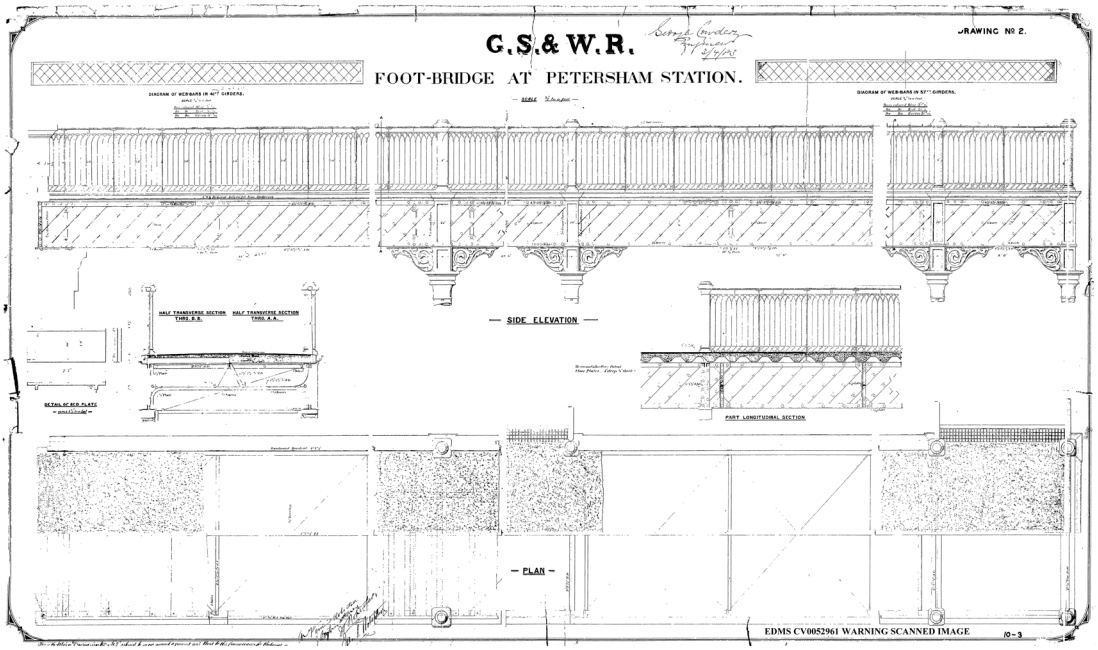


Plate 3.6: Footbridge at Petersham Station plan 1883. Source: TfNSW

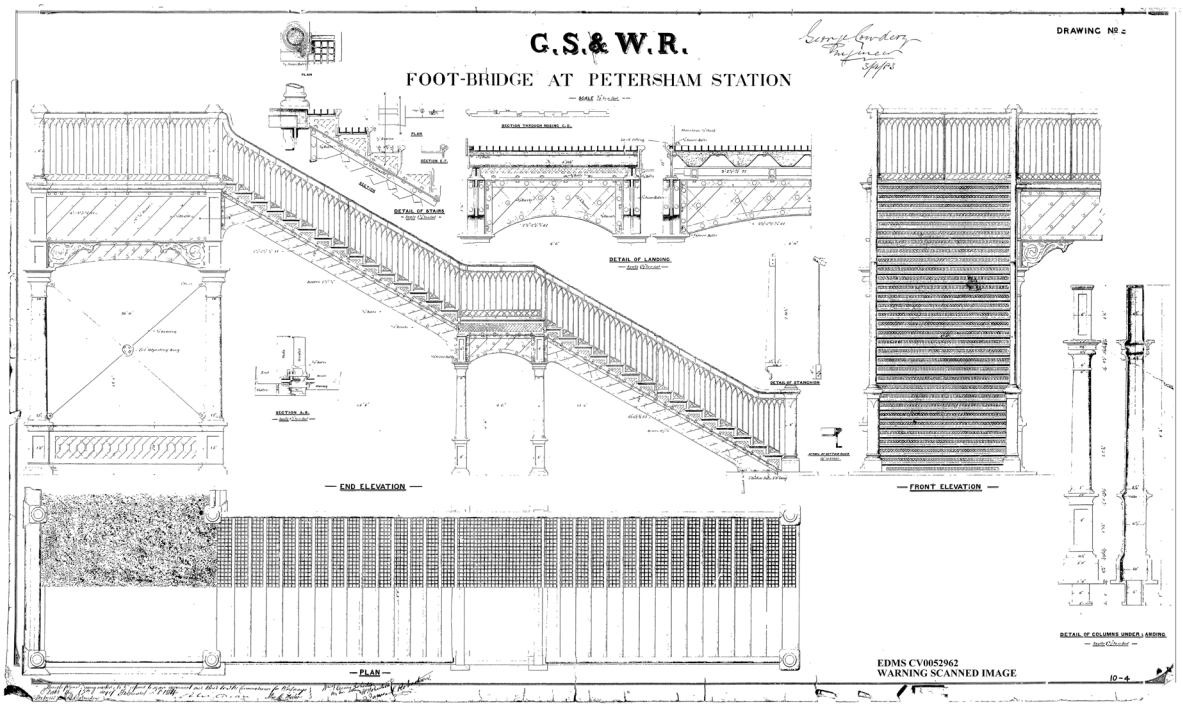


Plate 3.7: Footbridge at Petersham Station plan 1883. Source: TfNSW

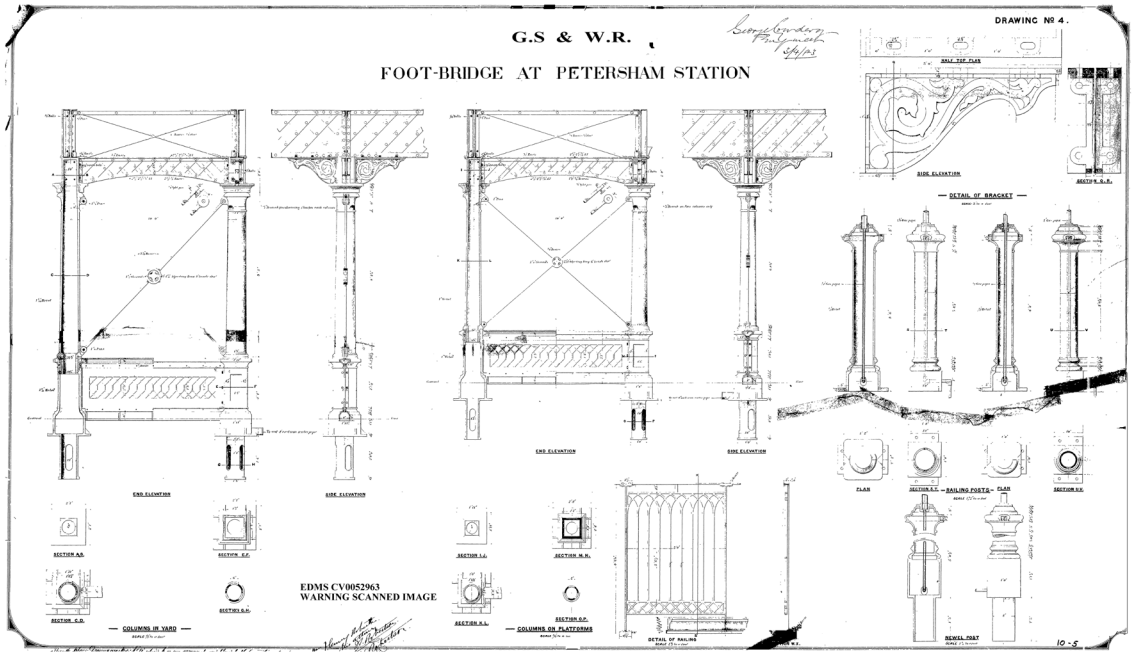


Plate 3.8: Petersham Station Building from Terminus Street. Source: SLNSW (1-06677)

Plate 3.9: Petersham Station Building from platform c.1890s. Source: SLNSW (1-31979)

Plate 3.10: Subway and booking office plans dated October 1892. Source: TfNSW.

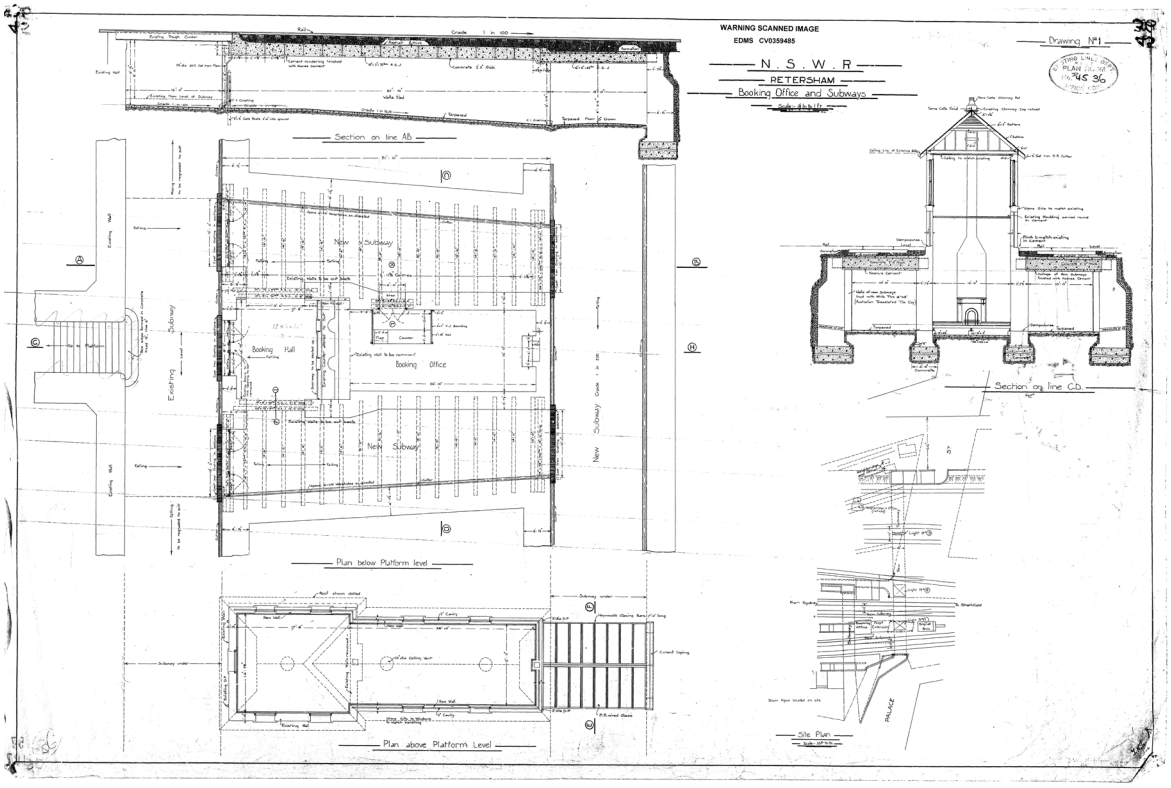


Plate 3.11: Booking office and subway plans dated October 1892. Source: TfNSW.

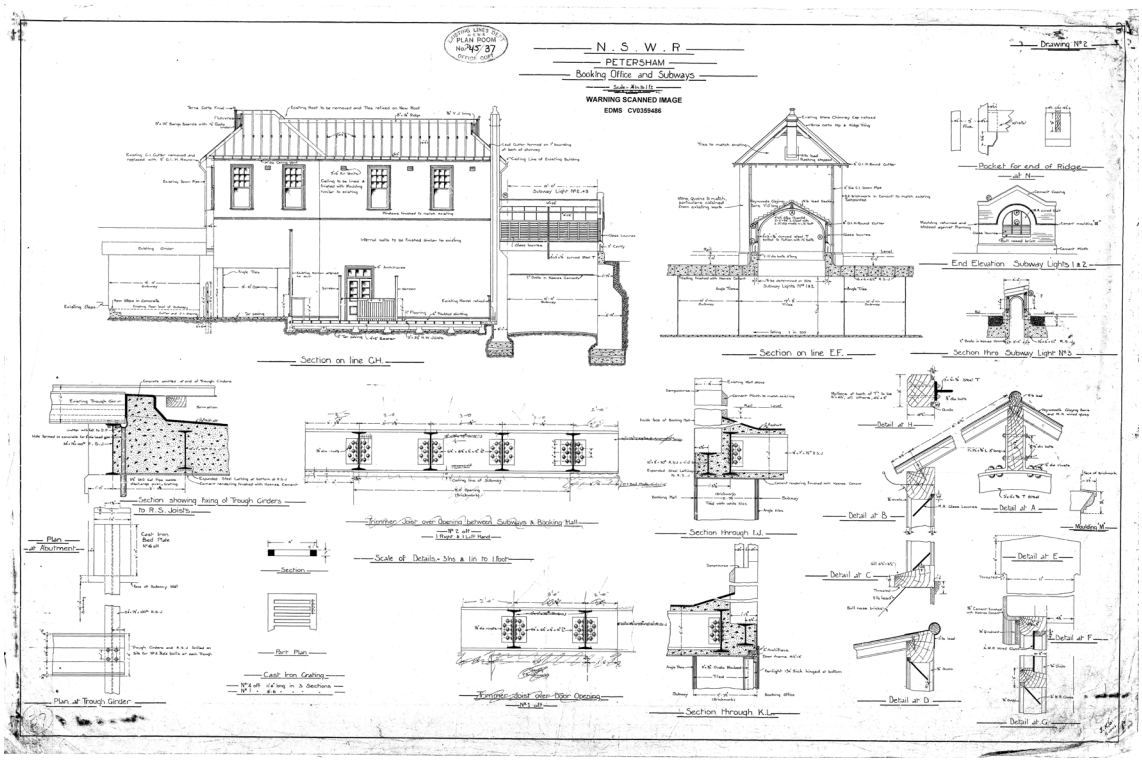


Plate 3.12: Petersham Station from the footbridge c.1890s. Source: SLNSW (1-06676)

3.5 Extension and electrification 1910s-present

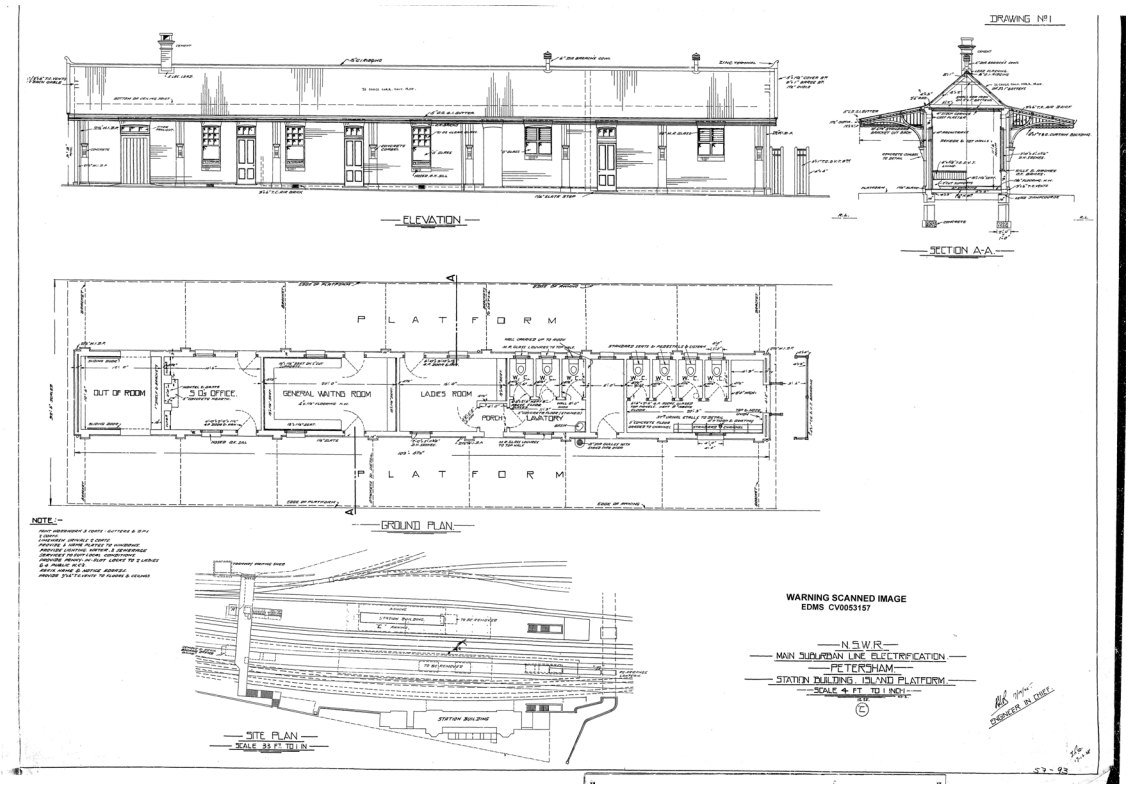
Additional land was purchased in 1911 in order to extend the goods yard. A new goods shed was built in 1913, making Petersham a major suburban station servicing both passenger and freight trains (Sheedy 1995, 10). Plate 3.13 shows a view of Petersham Station c.1920, and Plate 3.14 shows the station building and island platform plans dated December 1925.

It was during the 1920s that the line required further amplification and the line was sextupled and electrified in 1926. This again saw major changes to Petersham Station. The main station building from 1885 was closed, eventually becoming offices, and the other platform buildings were demolished and replaced with a new brick platform building. The goods yard was gradually phased out, closing completely shortly after the Second World War (OEH 2019a).

In 1954, an eastern wing was added to the former 1885 station building (Sheedy 1995, 10).

Plate 3.13: View of Petersham Station showing subway entrance from Trafalgar Street c.1920. Source: NLA (P860/133)

Plate 3.14: Platform building and island platform plans December 1925. Source: TfNSW.



4 DESCRIPTION AND PHYSICAL EVIDENCE

A site inspection was conducted on 5 August 2019 by RPS Senior Heritage Consultants Sarah van der Linde and Georgia Wright. It included an inspection of all proposed areas of work including station entrances at Trafalgar and Terminus Streets, station platform and platform building (interior and exterior). The signal box and former station building (interior) were not inspected as they would not be impacted by the Proposal. The following is based on what was visually evident during the site inspection.

4.1 Landscape setting and features

4.1.1 Terminus Street

Terminus Street runs along the northern boundary of Petersham Station and contains the main historic entrance to the station. The western end of Terminus Street sees the entrance to the brick pedestrian subway, which connects Terminus Street with Trafalgar Street. The 1885 Victorian Italianate former platform building stands between the pedestrian subway and the station entrance. A brick perimeter wall runs east from the 1885 platform building, dividing the station and tracks from the street. The adjacent residential area is characterised by nineteenth Century villas and houses on wide leafy streets (Plate 4.1). Opposite from the station entrance is the Victorian era White Cockatoo Hotel (Plate 4.2).

Plate 4.1: View west, Terminus Street showing adjacent 19th Century residential neighbourhood (RPS 2019)

Plate 4.2: View south west, Terminus Street showing station entrance and White Cockatoo Hotel (RPS 2019)

4.1.2 Trafalgar Street

Trafalgar Street is a thoroughfare for road traffic through Petersham and runs along the southern boundary of Petersham Station. It contains the main modern entrance to the station, which is situated at the T-intersection of Trafalgar and Regent Streets, directly in front of a pedestrian crossing (Plate 4.3). Bus stops servicing the station are located on either side of the pedestrian crossing. The western end of Trafalgar Street contains an entrance to the brick pedestrian subway running north to Terminus Street and the rail yard. The railway line is partitioned from the street by a modern wire perimeter wall (Plate 4.4). The adjacent residential area is characterised by a mixture of Victorian semi-detached terraces, late Art Deco apartment buildings and modern apartment complexes (currently under construction).

Plate 4.3: View east, Trafalgar Street entrance (RPS 2019)

Plate 4.4: View north west, Trafalgar Street entrance (RPS 2019)

4.1.3 Petersham Station

Petersham Station comprises a group of relatively intact historic buildings and structures set within the historic precinct of Petersham. The station runs between, and parallel to, Trafalgar and Terminus Streets. To the east is a Victorian cast iron footbridge linking Trafalgar and Terminus Streets to the platforms via stairs (Plate 4.5). The island platform contains Platforms 1 (up) and 2 (down), serviced by the 1926 brick platform building fitted with modern railways amenities (Plate 4.6). The former 1927 fibre cement signal box sits south west of Platform 2 (Plate 4.7). A disused platform runs along Terminus Street and contains the elaborate Victorian Italianate, 'First Class' former station building (Plate 4.8). A derelict toilet block, remnant of a former island platform, stands between the two existing platforms (Plate 4.9). The brick pedestrian subway running along the western extent of the station no longer connects to the platforms and serves as a thoroughfare between Terminus and Trafalgar Streets (Plate 4.10). Further west of the pedestrian subway lies the current rail yard and associated modern buildings. The main shopping strip of Petersham runs perpendicular to the south western end of the station complex, connecting the station to the wider community. The surrounding landscape is characterised by Victorian and Art Deco residential and commercial buildings interspersed with modern infrastructure and amenities.

Plate 4.5: View west, Platform 2 showing footbridge (RPS 2019)

Plate 4.6: View south west, Platform 1 showing platform building (RPS 2019)

Plate 4.7: View west, Platform 2 showing signal box (RPS 2019)

Plate 4.8: View north west, showing former station building (RPS 2019)

Plate 4.9: View south east, showing footbridge and derelict toilet block (RPS 2019)

Plate 4.10: view north east, Trafalgar Street subway entrance (RPS 2019)

4.2 Petersham Station – major group elements

This section discusses elements which may be impacted by the Proposal outlined in Chapter 6.

4.2.1 Terminus Street

Along Terminus Street lies a decommissioned platform containing the former station building. Erected in 1885, the former station building was designed by George Cowdery and is the largest and most elaborate nineteenth century station building constructed for the suburban Sydney rail system. It can be accessed from both the platform and Terminus Street. Of elaborate Italianate style, it is the only 'First Class' station building known to have been built in nineteenth century Sydney. The building was closed for public use in 1926 and is currently used as an office (Plate 4.8).

The platform has been narrowed since its decommissioning and is accessed from the station entrance on Terminus Street (Plate 4.11). A brick perimeter wall, constructed from English bond brickwork, runs from the platform to the former station building and continues east along Terminus Street for about 100 metres (Plate 4.12). The wall decreases in height as it travels east. To ensure safety to the railway, modern security grilles have been fitted to the upper wall, extending its height (Plate 4.13). The station entrance is set within the perimeter wall and comprises a single sandstone staircase updated with modern safety treads and handrails that leads to the footbridge (Plate 4.14).

Plate 4.11: View south, Terminus Street entrance (RPS 2019)

Plate 4.12: View south west, Terminus Street showing former station building (RPS 2019)

Plate 4.13: View south east, Terminus Street showing brick perimeter wall (RPS 2019)

Plate 4.14: Detail, Terminus Street entrance stairs showing modern additions to original sandstone (RPS 2019)

4.2.2 Trafalgar Street

The station entrance on Trafalgar Street comprises a set of wooden stairs, fitted with modern safety treads, leading directly onto the footbridge (Plate 4.15). A wire perimeter wall runs along the length of the station, with brick 'wing' walls (added in the 1926 station upgrade) either side of the station's entrance (Plate 4.16). The current rail and siding yard sit at the western end of the station and is accessed from Trafalgar Street.

Plate 4.15: View north, Trafalgar Street entrance showing footbridge steps and brick 'wing' walls (RPS 2019)

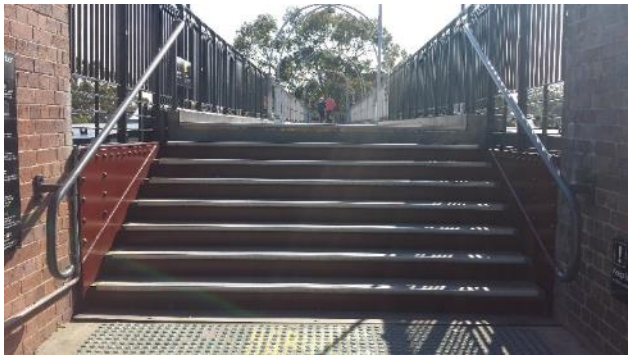


Plate 4.16: View north west, Trafalgar Street entrance showing modern wire perimeter fence (RPS 2019)

4.2.3 Platform 1 (up) and Platform 2 (down)

Platform 1 (up) and Platform 2 (down) form an island platform with asphalt surface and original brick facing. Two iron support columns for the above footbridge stand on Platform 1, with a third iron column on the platform. The original iron lamp poles exist with modern alterations (Plate 4.17 and Plate 4.18). Modern rail and passenger infrastructure has been added to the platforms where necessary (Plate 4.19).

Plate 4.17: View east, Platform 2 showing footbridge (RPS 2019)

Plate 4.18: Detail, three iron support columns (RPS 2019)

Plate 4.19: View west, Platform 2 showing modern station infrastructure (RPS 2019)

4.2.4 Platform building

4.2.4.1 Exterior

Constructed in 1926, the platform building is located on the island platform formed by Platform 1 and Platform 2. The building (Plate 4.20, Plate 4.21 and Plate 4.22) is a rectangular face brick building with gable roof and sloped cantilevered awnings. The face brick stretcher bond exterior has been painted and all original chimneys have been removed. The building is seven bays in length, each of which is defined by brick piers and coinciding awning supports. The cantilever awning is fixed on its original standard double bowed steel brackets supported on decorative cement cornices. It has a decorative timber fascia and vertical timber boards forming valances at each end. Both the main and awning roof are of corrugated steel. The original sash windows have brick sills and arched brick heads. The door on the western façade to the male toilets is a later addition (Plate 4.20). The original entrance to the male toilets was an opening concealed by a free standing screen. The window on the eastern façade to service the booking office is a modern alteration, as is the bricking up the former north and south facing sliding doors to create the current booking office. Modern additions to the building's exterior include its eastern canopy, security grilles to doors and windows and modern rail-related services and fixtures (Plate 4.23 and Plate 4.24).

Plate 4.20: View south east, platform building west façade (RPS 2019)

Plate 4.21: View east, platform 2 showing platform building south façade (RPS 2019)

Plate 4.22: View east, Platform 1 showing platform building north facade (RPS 2019)

Plate 4.23: Female toilet door (north façade), showing security grill (RPS 2019)

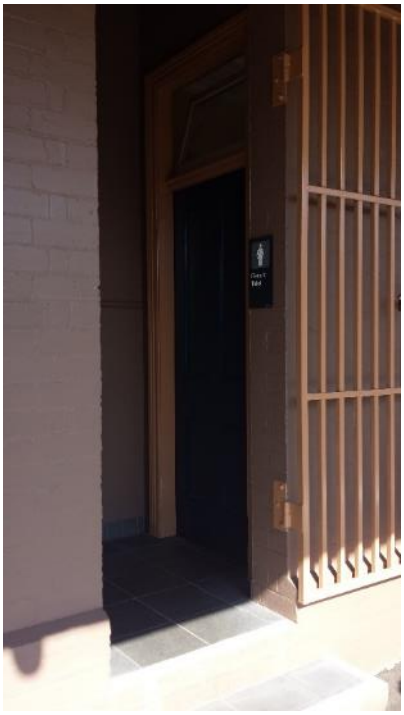


Plate 4.24: Store room door (north façade) (RPS 2019)

4.2.4.2 Interior

The building's interior has been modified to suit the modern needs of a station. The booking office and associated functions were relocated into this building when the subway was closed in the late 1980s. Floors are covered in vinyl and may conceal original timber floorboards in the former waiting room and office. Internal doors have been broken through to create a flow through the building and modern staff amenities added. The original bench seating in the former waiting room has been removed to allow for a staff kitchen (Plate 4.27 and Plate 4.29).

Original features remaining include mini corrugated metal ceilings and pressed metal ceiling roses, along with moulded bead details to walls, cornices and architraves (Plate 4.25 and Plate 4.26). The original bench and cupboard remain in the storeroom, which houses movable heritage items (Plate 4.27). Both male and female toiles are relatively intact. They retain their original layout and features with only minor alterations to the flooring and fixtures (Plate 4.30 to Plate 4.35). A comparison of the floorplan from its 1925 design to today is shown in Plate 4.36 and Plate 4.37.

Plate 4.25: Ticket office with original ceilings (RPS 2019)

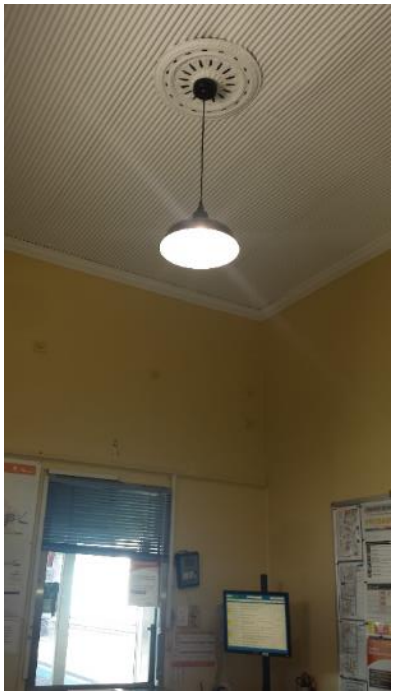


Plate 4.26: Station Manager's office (RPS 2019)

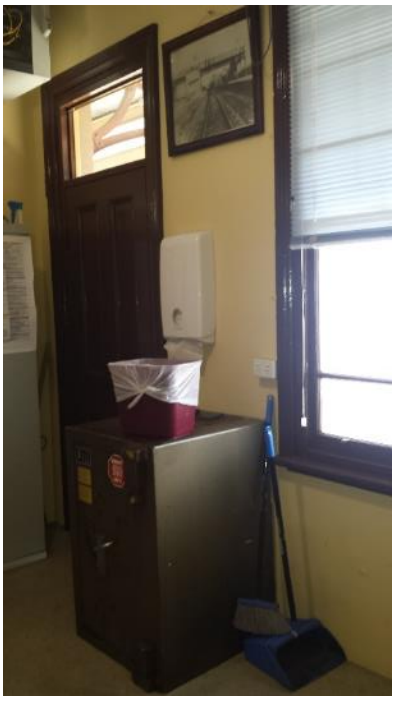


Plate 4.27: Store room, showing cupboard containing moveable heritage (RPS 2019)

Plate 4.28: Staff room, showing existing CCTV rack, north and south egress doors and modern internal door to staff toilet (RPS 2019)

Plate 4.29: Staff room, showing modern kitchen (RPS 2019)

Plate 4.30: Male toilets, existing cubicles (RPS 2019)

Plate 4.31: Male toilets (RPS 2019)

Plate 4.32: Male toiles, existing urinal (RPS 2019)

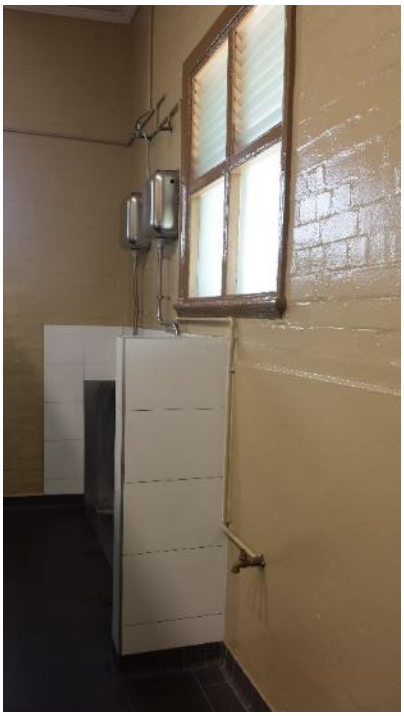


Plate 4.33: Male toilets, existing hand basin (RPS 2019)

Plate 4.34: Female toilets, existing cubicles (RPS 2019)

Plate 4.35: Female toilets (RPS 2019)

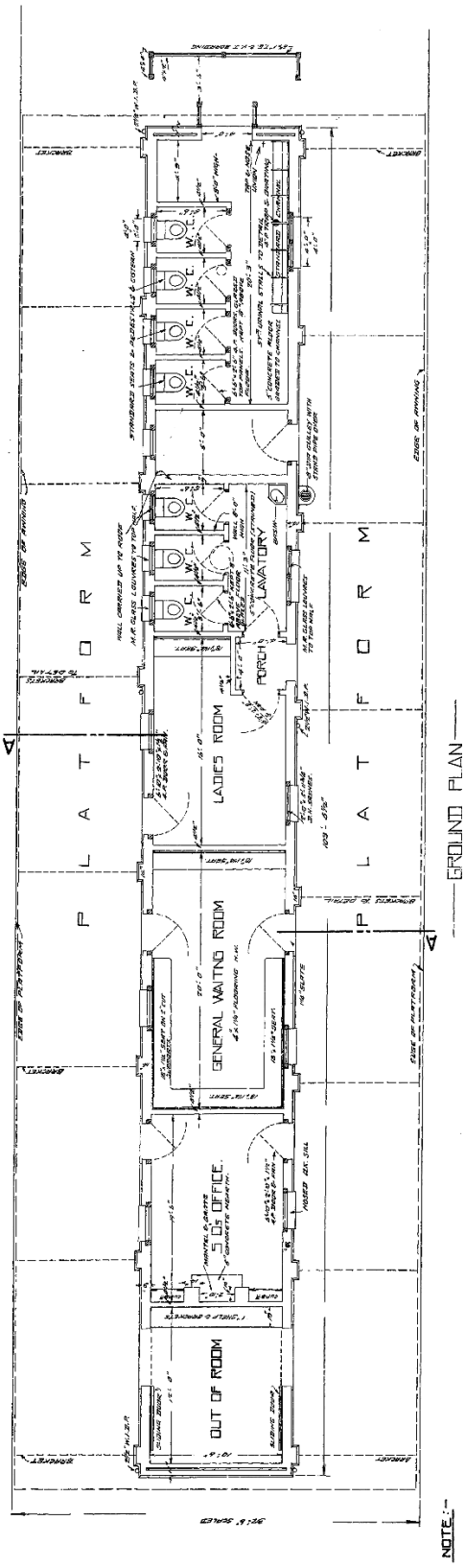


Plate 4.36: Platform building floor plan c.1925. Source: TfNSW

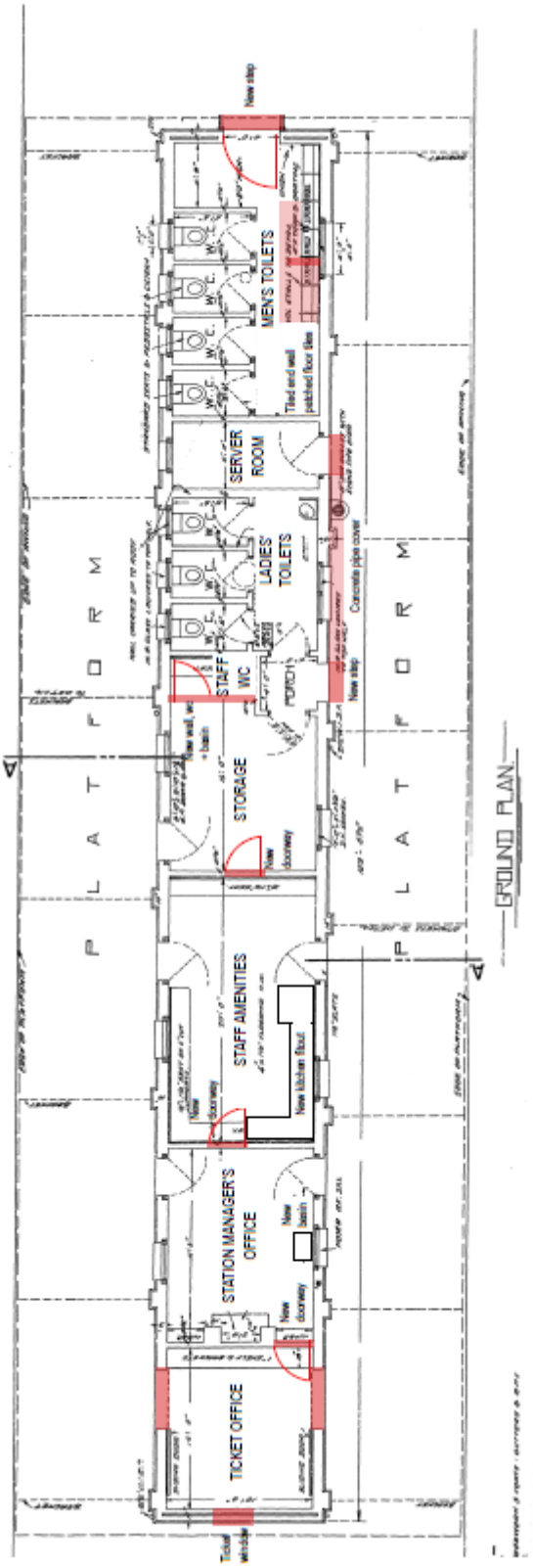


Plate 4.37: Platform building floor plan showing modern alterations. Source: TfNSW

4.2.4.3 Movable Heritage

A number of movable heritage items are located within the Petersham Railway Station group. Not all items listed on the SHR were identified during the site inspection. However, additional items were identified. These items are listed in Table 4.1.

Table 4.1: Movable heritage items at Petersham Station

Item	Listed on moveable heritage register?	Location	Photo
Safe	Yes	Manager's Office	
Honours Board	Yes	Manager's Office	
Photographs	Yes	Manager's Office	

Item	Listed on moveable heritage register?	Location	Photo
Lamps and point clips	No	Store room cupboard	
NSWGR Sink	Yes	Garage of Terminus Street building	Not inspected – located within 1885 Terminus Street building and not accessible at time of site visit

4.2.5 Footbridge

The footbridge was designed by George Cowdery and constructed in or soon after 1883. It comprises a linear gangway connecting Trafalgar and Terminus Streets with four sets of stairs leading down to the platforms and streets (Plate 4.38). Stair 1 (Plate 4.42) is at the Trafalgar Street entrance up to the footbridge, Stair 2 (Plate 4.43) runs between the footbridge and the platform, Stair 3 (Plate 4.44) between the footbridge and decommissioned platform, and Stair 4 (Plate 4.45) connects Stair 3 and the decommissioned platform to the street at the Terminus Street entrance. The structure rests on original brick piers, cast iron columns, arches and steel trestles. The stairs and deck have decorative railing and crossed light arches (Plate 4.40 and Plate 4.41). It was extended in 1926 at its southern end, with brick 'wing' walls added either side forming the Trafalgar Street entrance. Refurbished in 1992, the footbridge has a concrete deck, wooden stairs with modern safety treads, and painted steel handrails and balustrades. Some sections of balustrade were replaced during the refurbishment, however original sections remain. The decorative riveted metal lattice work to its underside is original (Plate 4.39). The original light arches remain with modern light fixtures attached.

Plate 4.38: View east, footbridge from Platform 1 (RPS 2019)

Plate 4.39: View west, footbridge showing riveted metal lattice work and iron support columns behind Stair 2 (RPS 2019)

Plate 4.40: View south, footbridge deck (RPS 2019)

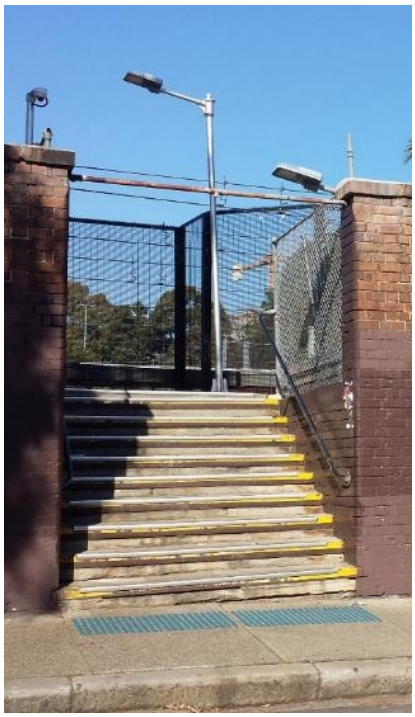
Plate 4.41: View north east, footbridge railing detail, Terminus Street end (RPS 2019)

Plate 4.42: View south, Stair 1 1926 extension of footbridge at Trafalgar Street entrance (RPS 2019)

Plate 4.43: View east, Stair 2 (RPS 2019)

Plate 4.44: View east, Stair 3 (RPS 2019)

Plate 4.45: View south, Stair 4 Terminus Street entrance (RPS 2019)



4.3 Assessment of archaeological potential

Petersham Station complex is assessed to be of low archaeological potential. It is unlikely that evidence of demolished structures exists within the proposed work areas, including former buildings and infrastructure on the island platform, which has been resurfaced with asphalt. There is no below ground infrastructure identified in the plans for the station, indicating low potential for such infrastructure to be identified.

The subway booking office and platform stairs have been bricked in and evidence of this infrastructure would not provide further information about the significance of the station. Further, the demolished platforms and former male toilet block are outside of the areas of work relating to the Proposal.

5 ASSESSMENT OF SIGNIFICANCE

In NSW, significance is assessed against the NSW Heritage Council criteria for assessing cultural and/or natural significance:

- criterion (a): An item is important in the course, or pattern, of NSW's cultural or natural history (of the cultural or natural history of the local area)
- criterion (b): An item has strong or special association with the life or work of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area)
- criterion (c): An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area)
- criterion (d): An item has strong or special association with a community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons
- criterion (e): An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area)
- criterion (f): An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area)
- criterion (g): An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments (or a class of the local area's cultural or natural places or cultural or natural environments).

The Act also distinguishes between items of local and State significance:

- items of local significance demonstrate historical, cultural, social, archaeological, architectural, natural or aesthetic value of significance to an area
- items of State significance are of significance to the State in relation to the historical, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

5.1 Statement of significance

The SHR statement of significance for Petersham Railway Station group is:

> *Petersham Railway Station has State significance as the station with its group of largely intact, original structures dating from the 1880s establishment of the station through to the 1891 quadruplication and the 1927 sextuplication of the line, is able to demonstrate the growth and expansion of the railways in the late nineteenth and early twentieth century. The building serves to mark the alignment of the first railway in NSW, that being the 1855 Sydney to Parramatta line.*
>
> *The 1880s former station building is the largest and most elaborate nineteenth century station building constructed for the Sydney suburban rail system and is the only major 'First Class' station building known to have been built in Sydney in the nineteenth century and is therefore unique in the history of the NSW Government Railways. It is a fine example of a late Victorian Italianate station dating from 1885, and although compromised by later alterations and additions is substantially intact and capable of restoration. The building is unusual and of significance by being reached from the street by a grand stair in the classical manner and having a landscaped forecourt to a suburban street and forms a major part of an important historic railway precinct including the bridge and signal box and is a significant landmark in this part of Petersham, which retains much of its nineteenth century-built street character. The station is one of a select number of similar buildings designed by the office of the Engineer for the Existing Lines Branch, George Cowdery, with the 1883 iron pedestrian bridge and steps also designed by Cowdery.*

The footbridge was identified as an item of exceptional heritage significance in the 2016 'Railway Footbridges Heritage Conservation Strategy'. Although the footbridge has been altered in terms of the recasting of the centre stairs and deck and installation of new handrails and balustrades, the footbridge has a number of 1880s elements including brick piers, cast iron columns, arches, steel trestles, timber stair treads and latticework to the deck support. Overall the bridge retains its aesthetic quality and integrity (OEH 2019a)

5.2 Assessment of significance

The assessment of significance according to criteria in the SHR listing for the Petersham Railway Station Group is presented in Table 5.1.

Table 5.1: Assessment of significance as per SHR listing (OEH 2019a)

Criteria	Description
a)	*Petersham Railway Station has State significance as the station with its group of largely intact, original structures dating from the 1880s establishment of the station through to the 1891 quadruplication and the 1927 sextuplication of the line, is able to demonstrate the growth and expansion of the railways in the late 19th and early 20th century. The extant 19th and 20th century platforms, buildings, footbridge, subway and signal box are collectively able to demonstrate important historical phases of suburban railway development.*
b)	*Petersham Railway Station is significant for its association with Engineer-in-Chief George Cowdery under whose direction the extant 1880s former station building and footbridge were designed, the design and detailing of the station building and footbridge being more elaborate than most station design used elsewhere*
c)	*Petersham Railway Station has State aesthetic significance with its 1880s 'first class station building' which displays complicated roof forms, large symmetrical plan and awnings supported on cast iron columns. The building has a prominent presence to both Terminus Street and as viewed from the island platform and footbridge. The 1920s 'initial island' platform building is significant with its design showing linear form, gable roof and integrated awnings. The 1880s footbridge with stairs leading down the platforms and streets has been altered considerably in terms of the recasting of the concentre stairs and deck and installation of new handrails and balustrades. However the footbridge has a number of 1880s elements namely brick piers, cast iron columns, arches, steel trestles and latticework to the deck and overall retains is aesthetic quality.* *The signal box which dates from 1927 has technical significance as it contains all its signalling equipment demonstrating signalling technology of this era.*
d)	*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 history.*
e)	*Petersham Railway Station has low archaeological research potential. Any potential remaining evidence which pertains to the 1891 men's toilet block under the footbridge and the booking office and stairs in the subway is not considered significant as it is not likely to provide information not available at other railway sites.*
f)	*Petersham Railway Station has rarity in terms of its 'first class station building' and the footbridge, with the station building being the only 'first class station building' in the Sydney area and the footbridge being the second oldest surviving footbridge in NSW and a unique example within the suburban network.*
g)	*The building on platform 1/2 which has been altered internally but it retains a high level of integrity to its exterior and is representative of a common form of standard platform building design. With seven bays the building is one of the larger examples of its type and is therefore an excellent representation of this type. The signal box at Petersham Railway Station has characteristic features of this type of signal box namely its elevated brickwork base, timber framed, fibre cement clad operating level structure and Dutch gable roof and has a high level of integrity as its original signalling equipment has been retained and it still has original fibre cement slate roof tiles, making it an excellent example.*

5.2.1 Integrity and intactness

The SHR statement of integrity and intactness for Petersham Railway Station Group (OEH 2019a) is:

> *Despite the moderate integrity of the island platform buildings and the limited integrity of the subway, overall the Petersham Station Group is assessed as having a high level of integrity based on the condition and intactness of the Terminus Street former station building, the footbridge and the signal box.*
>
> *FORMER STATION BUILDING (Terminus Street)*
> *The exterior of this building is largely intact and has been subject to extensive restoration in recent years. The offices which occupy the 1954 extension and a small section of the original 1885 building are not considered significant. While this extension to the west has little merit, it does not detract from the integrity of the main building. Likewise, infill sections are poorly executed but do not have a major impact on the integrity of the 1885 building. The interior contains many architectural features, both original and reproductions, which contribute to the significance and integrity of the building as a whole.*
>
> *PLATFORM BUILDING (Platform 1/2)*
> *While the exterior is mainly intact, the interior has been modified to meet ever-changing operational requirements. This, coupled with the fact that there a more intact examples of this type of platform building elsewhere, has reduced the integrity of this particular building.*
>
> *SIGNAL BOX*
> *The signal box is mostly intact with all its signalling equipment, original fibre cement slate tiles and weatherboard walls.*
>
> *FOOTBRIDGE*
> *This structure is largely intact and has been subject to extensive restoration in recent years. Modern services such as lighting and CCTV have been installed yet they do not detract from the integrity of the bridge.*
>
> *PEDESTRIAN SUBWAY*
> *There is not much evidence of the existing form or extent of the original subway, but it appears to be of low integrity.*

5.2.2 Themes

The following themes in Table 5.2 are identified on the SHR and Section 170 Heritage and Conservation Register for Petersham Railway Station Group.

Table 5.2: Historic themes for Petersham Railway Station Group (OEH 2019a)

Australian theme	New South Wales theme	Local theme
3. Economy – Developing local, regional and national economies	*Transport – Activities associated with the moving of people and goods from one place to another, and systems for the provisions of such movements*	*Building and maintaining the public railway system*
3. Economy – Developing local, regional and national economies	*Communication – Activities relating to the creation and conveyance of information*	*Signalling and safe working*
3. Economy – Developing local, regional and national economies	*Transport – Activities associated with the moving of people and goods from one place to another, and systems for the provision of such movements*	*Making railway journeys*
4. Settlement – Building settlements, towns and cities	*Towns, suburbs and villages-Activities associated with creating, planning and managing urban functions, landscapes and*	*Impacts of railways on urban form*

Australian theme	New South Wales theme	Local theme
	lifestyles in towns, suburbs and villages	
8. Culture – Developing cultural institutions and ways of life	*Creative endeavour – Activities associated with the production and performance of literary, artistic, architectural and other imaginative, interpretive or inventive works and/or associated with the production and expression of cultural phenomena and/or environments that have inspired such creative activities.*	*Evolution of design in railway engineering and architecture*

6 THE PROPOSAL

The following describes the Proposal and summarises key design parameters and construction methodology. The description of the Proposal is based on a concept design and is subject to detailed design.

6.1 The Proposal

As described in Section 1.3, the Proposal involves an upgrade of Petersham Station as part of the Transport Access Program which would improve accessibility and amenity for customers.

Figure 6.1 shows the general layout of key elements of the Proposal. Figure 6.2 shows the proposed changes to the platform building.

6.1.1 Scope of works

New lifts to existing footbridge

Construction and installation of two lifts connecting to the existing footbridge. This would include:

- installation of a narrow through lift (Lift 1) on the station platform
- installation of a narrow through-lift (Lift 2) at the northern entrance (Terminus Street)
- lift landings with canopies for weather protection at the waiting areas
- drainage, electrical and communications services installation for the lifts.

Retention of the existing footbridge with minor modifications which would include:

- minor extension of the footbridge toward the southern entrance (Trafalgar Street) requiring demolition of the existing stairway and brick pillars to accommodate the new stairs and ramp
- upgrade works including removal of a portion of the existing footbridge balustrade, replacement of stair treads and handrails, etc.

Station entrances and interchange facilities

Modifications to the northern entrance (Terminus Street) would include:

- new accessible station entrance at the lift area which would include demolition of a portion of the existing brick wall and widening of the existing footpath
- replacement of the existing lower stairs (Stair 4), balustrade and handrail that provides access from street level to the existing footbridge stairs
- one new accessible parking space on Terminus Street including line marking, signage, new kerb ramp and kerb adjustments
- formalised kiss and ride area with capacity for two cars on Terminus Street including line marking, signage, new kerb ramp and kerb adjustments
- provision of eight new bicycle hoops
- new landscaping, feature lighting, seating and decorative paving at the station entrance.

Modifications to the southern entrance (Trafalgar Street) would include:

- new compliant ramp and stairs from the southern entrance on Trafalgar Street to the existing footbridge with a balustrade and handrail
- widening of the station entrance forecourt to the existing retaining wall for a new paved landing
- new feature lighting and decorative paving at the station entrance.

Platform and platform building works

Reconfiguration of the platform building would include:

- provision of a new family accessible toilet through the construction of a new internal wall within the existing male toilets and removal of one male cubicle
- provision of a new door to the proposed family accessible toilet which would require lowering of the threshold and addition of an accessible door
- conversion of one female cubicle and one male cubicle into ambulant toilets
- lowering of concrete floor to provide level access for the family accessible toilet
- new glazed cantilever canopy at family accessible toilet entrance
- construction of a new switchboard room which would require existing internal wall modifications, and works to provide the required fire resistance
- creating a dedicated Station Services Equipment Room (SSER) through relocation of station communications and electrical equipment to the existing store room
- repositioning of one basin from the store room to the staff room with a new partition wall and ceiling

Platform works would include:

- provision of a wheelchair turning space and waiting space with canopy at the base of the platform lift
- localised platform regrading to allow for accessible paths of travel
- new boarding assistance zone.

Ancillary works

- replacement or adjustments to existing fencing and safety screens
- installation of wayfinding signage and other signage to identify accessible features
- adjustment to seating, rubbish bins, lighting and other facilities
- improvement to station security and communication systems, including CCTV upgrade, PA system upgrades, additional opal card readers and new hearing induction loops
- new or reinstatement of Tactile Ground Surface Indicators (TGSIs) for the platform, stairways and ramp
- protection or relocation of services and utilities
- Installation of heritage interpretation and public art.

Figure 6.1: Proposed plan

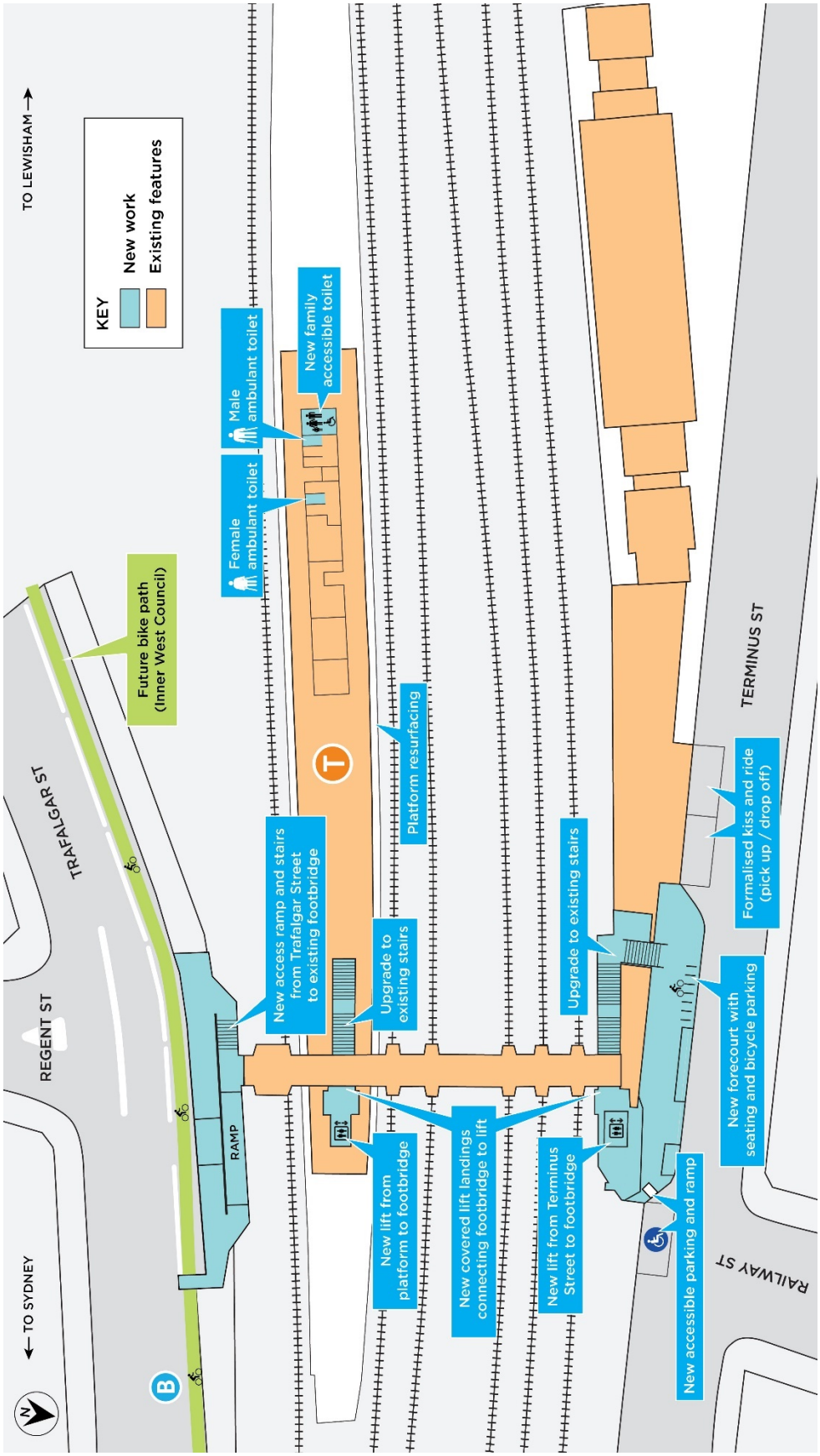


Figure 6.2: Proposed platform building plan

6.1.2 Materials and finishes

Materials and finishes for the Proposal have been selected based on the criteria of durability, low maintenance and cost effectiveness, to accord with heritage requirements, to minimise visual impacts, and to be aesthetically pleasing. Consideration has also been given to lifecycle impacts. The lifecycle impacts of a material are calculated by looking at the environmental impacts of materials from the point of extraction, through to transportation, use, operation and end of life.

Subject to detailed design, the Proposal would include the following:

- lower lift shaft – brick cladding
- upper lift shaft – steel frame with glazed screening
- lift waiting canopies – metal sheet roofing with fibre cement panels
- lift safety screens – glazed screening
- station entrance – engineered stone paving with reclaimed brick banding
- canopy at family accessible toilet entrance– glass or other transparent material (materials and finishes to be finalised)
- door at family accessible toilet – heritage style solid core timber panelled door and frame
- access ramp at Trafalgar Street – concrete base and concrete wall with steel hand rails
- access stairs at Trafalgar Street – concrete base and concrete wall with steel hand rails and non-slip tread
- access stairs at Terminus Street – concrete base, folded sheet metal balustrade with steel hand rails and non-slip tread.

The design has been submitted to TfNSW's Urban Design and Sustainability Review Panel at various stages for comment before being accepted by TfNSW. An Urban Design Plan (UDP) and Public Domain Plan (PDP) have also been prepared.

Indicative renders of the Proposal are shown in Figure 6.3 to Figure 6.4.

Figure 6.3: Proposed Trafalgar Street entrance design. Source: RPS

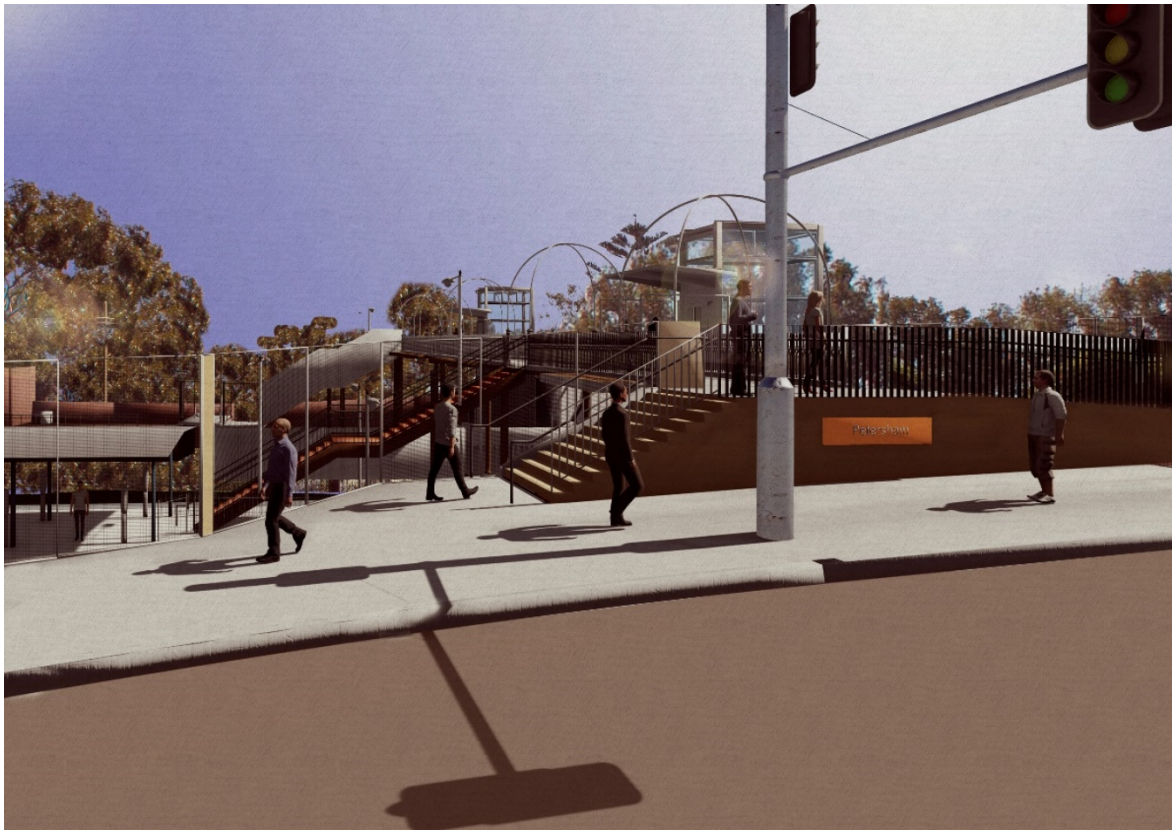
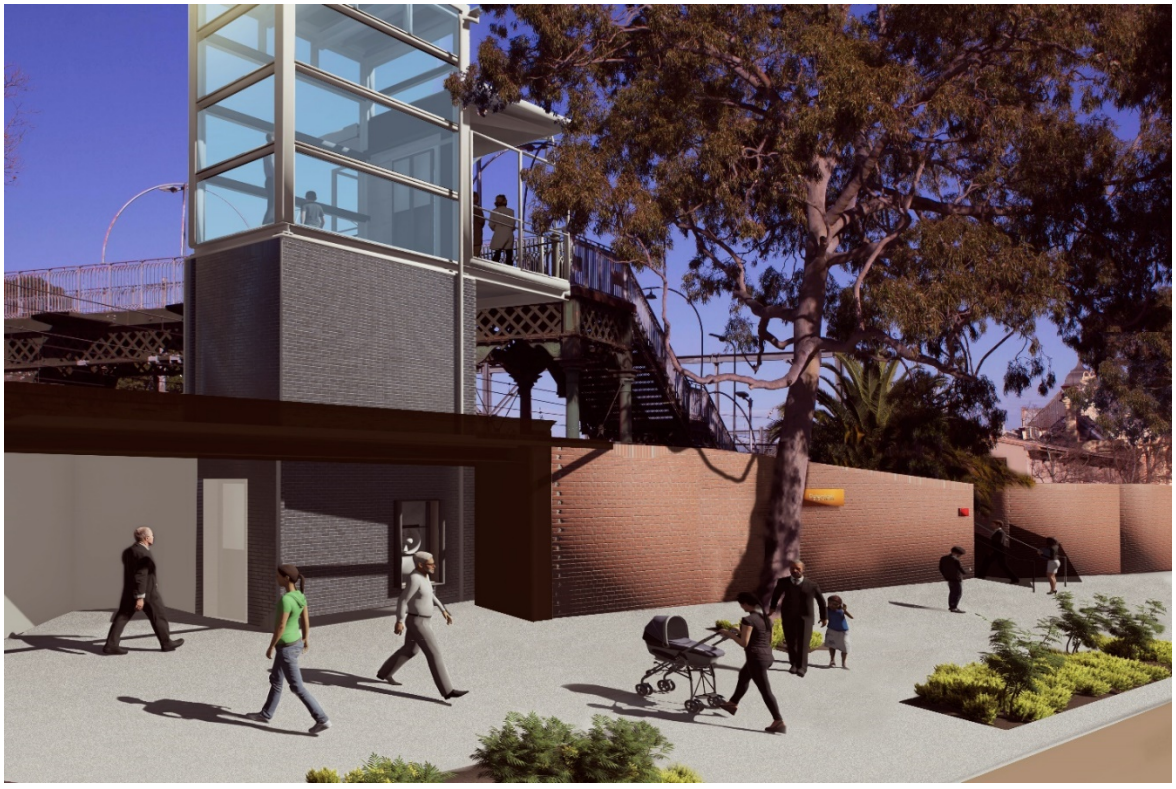


Figure 6.4: Proposed Terminus Street entrance design. Source: RPS



6.2 Design development

6.2.1 Engineering and environmental constraints

There are a number of constraints which have influenced the design development of the Proposal.

Existing structures: the accessibility, placement and integrity of existing structures has been considered during the development of the design – these structures included the existing platform, footbridge, pedestrian subway at the western end of the station, footpaths, stairs, platform building, overhead wiring and associated support structures, seating, light poles, street car parking, and pedestrian crossing on Trafalgar Street.

Sydney Trains' requirements: modifications for existing structures and new structures within the rail corridor must be designed and constructed with consideration of train impact loads, structural clearances to the track, and safe working provisions.

Heritage: Petersham Station is listed on the NSW State Heritage Register (SHR 01223), the RailCorp (Sydney Trains) Section 170 Heritage and Conservation Register (4801094) and Schedule 5 of the *Marrickville Local Environmental Plan 2011* (I226).

Vegetation: Petersham Station is located within a highly urban environment, there are however several mature street trees located along Terminus Street. The new station entrance on Terminus Street to the footbridge has been designed to minimise vegetation removal and provide new landscaped areas for low lying shrubs and ground covers.

Construction access: Construction access will require traffic control in the adjacent streets and use of a large mobile crane would be required to lift construction materials and equipment to the station from these roadways on specified days.

Public access: Maintaining pedestrian access to the station and to the pedestrian subway during construction.

Future patronage: The Proposal has been designed to accommodate the forecast Sydney Trains patronage growth (an increase of 15 per cent to 2036) and changing travel patterns.

6.3 Construction activities

6.3.1 Work methodology

Subject to approval, construction is expected to commence in early 2020 and take around 18 months to complete. The construction methodology would be further developed during by the nominated Construction Contractor in consultation with TfNSW.

The proposed construction activities for the Proposal are identified in Table 6.1. This staging is indicative and is based on the current concept design and may change once the detailed design methodology is finalised.

Table 6.1: Indicative construction staging for key activities

Stage	Activities
Site establishment and enabling works	• establish site compound/s (erect fencing, tree protection zones, site offices, amenities and plant/material storage areas etc.) • remove vegetation and grassed area to allow for construction of new lift and entrances • relocate or upgrade services / utilities where required • install safety barriers and hoarding around the nominated work zones on the platform

Lifts	• demolish a portion of the existing brick wall on Terminus Street • remove the existing historical column on the station platform (to be reinstated following the construction works) • construct lift foundations • install lift shafts and upper lift landing • install protection screens and external finishes • install lift shaft services, lift cars and fit out lift cars • install lighting / CCTV / PA services to lift landings
Footbridge, stairs and ramp	• demolish brick pillars and replace the stairs, balustrade and handrail from ground level to the existing footbridge staircase on Terminus Street • construct ramp and stairs on Trafalgar Street to the existing footbridge • demolish existing stairs (where necessary) and extension of footbridge at Trafalgar Street • refurbish and modify the existing footbridge including balustrade removal
Station entrances and interchange works	• remove existing pavement at entrances and repave • widen existing footpath on Terminus Street • undertake landscaping works • install feature lighting, seating, and decorative paving at the station entrance
Platform and station building works	• construct combined services route for power /communications to new switch boardroom • building works and services / fit out for new family accessible toilet, ambulant toilets and staffroom basin • 'make good' existing platform building following removal of communications equipment / racks • re-grade/resurface platform • platform finishing works (line marking etc.)
Site demobilisation	• civil/lighting works for interchange areas (as required) • cutover / commission digital PA / hearing induction loops / TGSI • test and commission CCTV cameras / station systems installation • test and commission new lifts / open to public • finishing works including landscaping, fencing and bin relocation • site demobilisation.

6.3.2 Earthworks

Excavations and earthworks would generally be required for the following:

- construction of the lift shafts
- construction of upgraded footpath areas at the station entrances and kerb realignment works
- construction of the pedestrian ramp and stairs to the existing footbridge
- localised platform regrading / resurfacing work

- other minor civil works, including footings and foundations for structures, drainage / stormwater works, and trenching activities for service adjustments and relocations and drainage upgrade works.

It is estimated that about 500 tonnes of excavated material would be generated from the above activities. Excavated material would be re-used on site where possible or disposed of in accordance with relevant legislative requirements.

6.3.3 Source and quantity of materials

The source and quantity of materials would be determined during the detailed design phase of the Proposal and would consider the requirements of ISCA 1.2. Materials would be sourced from local suppliers where practicable. Reuse of existing and recycled materials would be undertaken where practicable.

6.3.4 Ancillary facilities

Temporary construction compounds would be required to accommodate a site office, amenities, laydown and storage area for materials. A number of areas for the construction compound and staging areas have been proposed on both the northern and southern sides of the rail corridor (Figure 6.5). These areas nominated for the compound are on land owned by Sydney Trains or Council. The main construction compound would be required to accommodate a site office, amenities, laydown and storage area for construction plant and equipment and materials.

Other work areas would be established during the course of the construction period and would be staged to minimise inconvenience to the customers and adjacent public areas. All established work areas would include suitable demarcation hoarding or fencing.

The impact of the proposed construction compounds is assessed in this SOHI.

Figure 6.5: Proposed temporary construction compounds

LOCATION:	PETERSHAM, NSW
PURPOSE:	HERITAGE
Technician:	Veronica.Norman
Date:	8/10/2019
Path:	N:\Projects\Conics_Sydney\PR136951 - TAP3\3 Cultural Heritage REF\3. Petersham\GIS\Fig6.5_compounds.mxd
VERSION (PLAN BY):	
DATUM:	GDA94
PROJECTION:	MGA Zone 56
Data Sources:	RPS Land and Property 2015

CLIENT: TFNSW
JOB REF: 138951-3

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
Level 13, 255 Pitt Street Sydney, 2001
T: 02 8270 8300 www.rpsgroup.com.au

MAKING COMPLEX EASY

7 IMPACT ASSESSMENT

This chapter assesses the impact of the Proposal on Petersham Station. The level of impact is assessed in accordance with the definitions in Table 7.1.

Table 7.1: Defining level of impact

Level of impact	Description
Major adverse	The Proposal would have a severe, long term and irreversible impact on the item. This includes partial or complete demolition of the item or additions in the vicinity of the item that would impact the visual setting of the item.
Moderate adverse	The Proposal would have an adverse impact on the item. This includes removal of an important aspect of the setting or temporary removal of significant elements or fabric. This impact could be reduced through appropriate mitigation measures.
Minor adverse	The Proposal would have a minor adverse impact on the item. This may be the result of the action affecting only a minor element or part of the setting. This impact may be temporary or reversible.
Neutral	The Proposal would not have an impact on the significance of the item or a significant element.

7.1 Design development

Design development included:

7.1.1 Concept design options 2015

Three design options were prepared for the concept design development. A multi-criteria analysis (MCA) was adopted to assess these options with key stakeholders. The key criteria that formed the MCA included:

- customer experience
- heritage and environment
- accessibility
- urban design and land use integration
- modal integration
- engineering and constructability
- facility operations and maintenance.

This methodology addressed the strengths and weakness of each option and provided objectivity in the selection of the preferred option. All options included improved amenities such as a new family accessible toilet in the platform building, a new canopy between the footbridge and platform building, and new forecourt areas, accessible parking, kiss and ride spaces and bicycle parking at both station entrances.

- Option 1 featured two new lifts connecting the existing footbridge to Terminus Street station entrance and the station platform, with a new ramp at the Trafalgar Street entrance
- Option 2 included the key features of Option 1 with a new canopy structure over the footbridge and stairs

- Option 3 included the repurposing of the existing Petersham Railway subway in the west with a new underground connection onto the western platform end with a new platform canopy

- 'Do-nothing' option - which was not considered a feasible alternative as it would not meet the requirements of the DDA and DSAPT.

Through the MCA process Option 3 performed the worst as it would not provide equitable access given that the primary entry to the station is via the existing footbridge. Additionally, this option had considerable constructability issues and impact to the existing services (gantry and overhead wiring structures) resulting in prolonged construction duration and significant project and operational cost.

Following the MCA, an assessment of a modified Option 2 (Option 2B) was prepared to maintain canopies that reduced visual impact on the lattice trusses and balustrades of the footbridge.

The preferred option was presented to the Heritage Division of Department of Premier and Cabinet and was well received without any major concerns.

7.1.2 Design development 2018

In 2018, the previous design options were reviewed with a particular focus on DSAPT and DDA compliance. A revised Concept Design Report and design drawings were prepared to identify opportunities and constraints regarding planning and land uses, heritage, ecology, building engineering, and traffic and transport aspects of the station precinct. The report identified a revised preferred Concept Design, which excluded the provision of canopies over the footbridge and stairs and retained the existing platform building canopy, resulting in minimal impact on the SHR curtilage.

The revised concept design was presented to the NSW Government Architects, Design Sustainability Review Panel (DSRP), which was well received without any major concerns.

Further, the concept design was reviewed by Sydney Trains Heritage and TfNSW-engaged independent heritage consultants Orwell & Peter Phillips. The key items raised are noted below and were provided as input into the 2019 detailed design development.

1	Reduce bulk of lift landing and support column for Terminus Street lift including any proposed protection/safety screens.	Orwell & Peter Phillips Sydney Trains Heritage
2	Reduce the height of overrun of the lift structure to reduce total height of the lift tower.	Orwell & Peter Phillips
3	New fabric – impact to sandstone stairs at Terminus Street and design changes proposed to green glazed bricks shown in preliminary design. Noting that the footbridge is undergoing repainting and will no longer be green.	Sydney Trains Heritage
4	Any modifications to footbridge balustrades should consider impact to original sections. If original sections need to be removed to make way for the connections to the lifts, opportunities to replace new sections with salvaged original sections should be investigated as part of the project.	Sydney Trains Heritage
5	Treatment of the existing platform column – can it remain in-situ? If it cannot be retained and protected during construction work, confirm that it can be reinstated in the same location.	Orwell & Peter Phillips Sydney Trains Heritage
6	Impacts to the platform building including proposal for the family accessible toilet and ambulant toilets to minimise impact to the heritage fabric.	Sydney Trains Heritage

7.1.3 Detailed design development 2019

Design development of the preferred Concept Design sought to further reduce impacts to heritage fabric and the heritage setting based on 2018 feedback summarised in Section 7.1.2. All comments noted have been incorporated as part of the detailed design development. For example, materials and finishes for the lift shaft have been selected with consideration for the heritage setting and landscape character (such as a visually recessive facade sympathetic to the heritage platform building, with glass for the upper lift shaft to reduce visual impact). Consideration has also been given to the proposed colour scheme planned for the repainting of the pedestrian footbridge by Sydney Trains. Informed by historic paint test analyses, paint work will be carried out under a rail-specific exemption of s.57(2) of the NSW Heritage Act.

Lift 1 and Lift 2 have also been repositioned to be aligned with each other across the rail corridor in order to achieve greater symmetry in design. Lift overrun height as well as the bulk and scale of the lift lobbies and the associated safety screens have also been reduced. Additionally, the proposed Lift 2 at Terminus Street has been relocated to behind the station wall to reduce the bulk of the lift landing and support column. These alterations reduce the visual impact of the Proposal.

The proposed family accessible toilet canopy providing weather protection is to be of cantilever design and constructed from light weight materials, so not to visually detract from the platform building or impact its heritage fabric. The detailed design options analysis and proposed option is described in Section 7.2.4.2.

It is noted that detailed design development is being undertaken in consideration of Inner West Council's proposed Regional Route 7 (RR7) bicycle path on Trafalgar Street.

The 2019 detailed design has been presented to the Heritage Division of the Department of Premier and Cabinet and the TfNSW DSRP receiving positive feedback.

7.2 Impact assessment

7.2.1 Landscape and setting

The Proposal includes a number of works that would directly impact the visual landscape and setting of the station and its surrounds. The modern lifts wells at the Terminus Street entrance and the platform would visually contrast the footbridge. The Terminus Street entrance would be updated and modernised, contrasting the surrounding streetscape of the Petersham North Heritage Conservation Area (PNHCA). While the Terminus Street work would extend beyond the SHR curtilage, work is not required within the PNHCA. The new entrance proposed at Trafalgar Street would be consistent with the current streetscape. Other upgrades proposed would include the addition of a canopy on the western end of the platform building.

Much of the proposed work would have a direct visual impact on the station setting. The Terminus Street entrance would have a direct visual impact on the streetscape of the PNCHA, which is rich in nineteenth century architecture. However, the choice of modern materials to separate new elements from old in a visually recessive way, and the minimisation of size and height of the lift wells, in conjunction with the thoughtful placement of the lifts, has mitigated this impact to some degree. Overall, there would be a **minor adverse** impact to the PNHCA.

7.2.2 Proposed lifts

Lift access to the footbridge and platform is required in order to meet DDA requirements to provide an accessible path of travel. The Proposal includes the construction and installation of two narrow through-lifts connecting to the existing footbridge; one on the platform (Lift 1) and one at the Terminus Street entrance (Lift 2). The proposed lifts would be situated to the east of the footbridge and connect to the footbridge via new short concrete landings. Lift 2 would sit behind the existing rail corridor brick wall. The footbridge entrance to the lift would align with the corresponding stairs. Lift 1 would sit opposite the existing stairs to the platform (Stair 2), with the lift doors relatively aligned with the stairs.

The installation of Lift 1 and Lift 2 would impact the footbridge through the removal of sections of railing to enable lift access. While some of the balustrade railing is not original fabric, Lift 1 and Lift 2 lobbies have been

proposed in a position which aligns with the balustrade posts to minimise impact to the footbridge. Additionally, it is planned to replace non-original balustrade fabric with any original fabric removed during works. Any remaining original fabric would be retained for future repair works. Further, in order to achieve minimal visual impact, the lift wells would be placed on the same alignment, with the lift doors aligned with the stairs opposite and the lift lobbies would use glazed screens. The remnant iron column located on the platform by Lift 1 would be removed during construction to avoid impact and reinstated in the same location after construction.

While the lift installation would have a direct impact to the footbridge, it would not require the removal of the significant fabric such as the riveted metal latticework to the underneath deck of the footbridge. The lift towers would be taller than the footbridge, however their height has been reduced by 500 millimetres in comparison to previously installed similar lifts for accessibility upgrades. This reduction is as low as practicable with consideration of maintenance safety.

Lift 2 on Terminus Street is proposed in close proximity to the operational up-main railway track which requires the structure to be designed for impact loading in accordance with the TfNSW Assets Standards Authority and Australian Standards. Consequently, a concrete structure to footbridge level is required to cater for this loading. This base concrete structure is proposed to be cladded with brickwork. The remainder of the lift shaft is proposed to be a steel structure with glazing and louvres for temperature control and ventilation. For aesthetical symmetry, Lift 1 on the platform is proposed to have the same finishes as Lift 2.

The overall design philosophy for works is based on separating the new elements from the old, minimising the bulk and scale as much as practicable, together with careful selection of materials and finishes. This, in conjunction with salvaging original fabric helps mitigates the impact of the Proposal to some degree. Overall there would be a **moderate adverse** impact to the footbridge, which is associated with the visual impact of the lift installation.

7.2.3 Station entrances and interchange facilities

7.2.3.1 Terminus Street

The Proposal includes modifications to the Terminus Street entrance to increase accessibility and safety. Installation of a lift (Lift 2) and upgrade of existing lower stairs (Stair 4) are required in order to meet DDA requirements. Further works to the entrance include a new accessible parking space and two formalised kiss and ride spaces, along with the provision of eight new bicycle hoops and associated footpath widening and landscaping. Lift 2 would sit behind the existing rail corridor brick perimeter wall. Entry to the lift would be via a new discrete entry through the existing brick perimeter wall. The existing sandstone stairs of Stair 4 at the Terminus Street entrance would be removed and replaced with DDA compliant stairs. The footpath would be widened to allow for installation of bicycle hoops and DDA access to the new lift. Landscaping on Terminus Street would include adjustments to road and kerb lines and the addition of plantings, seating and lighting.

The Terminus Street entrance modifications would impact the brick perimeter wall through the demolition of a small section of wall to create an entrance for the lift. To minimise the visual impact to the wall, a shallow, discrete lift entrance with canopy is planned in order to retain the character of the perimeter wall. Further impact to the brick perimeter wall would occur at the existing station entrance on Terminus Street through the removal and replacement of its existing sandstone steps, which are at the end of their lifespan and not able to be retained. New metal handrails and balustrade with steel entry wings that protrude from the existing perimeter wall would be added. These would be of folded metal to align with the design approach of a discernible and contemporary addition with a clear distinction between new and old fabric. The provision of accessible and kiss and ride spaces, along with bicycle hoops and landscaping would have minor visual impact on the brick perimeter wall.

The Terminus Street entrance modifications would have a direct impact on the fabric and visual appearance of the brick perimeter wall. The new stairs would protrude from the wall and a small section of wall would require demolition for provision of the lift entrance. However, the proposed new opening in the perimeter wall is minor compared to overall length of the wall and the discrete nature of the lift entrance and upgraded stairs would not detract from the overall character of the wall. The sandstone steps requiring removal would be reused in landscaping. Separating the new elements from the old, minimising the form, and careful choice and

reuse of materials has mitigated this impact to some degree. Overall there would be a **moderate adverse** impact to the brick perimeter wall.

7.2.3.2 Stair 3

The Proposal includes upgrades to Stair 3 of the footbridge, which connects to Stair 4 of the Terminus Street entrance. Upgrades to the stairs are required for compliance and includes the installation of new timber treads and metal hand rail. The existing safety protection screen would be retained.

The proposed Stair 3 upgrades would have a direct impact on the fabric and visual appearance of the footbridge. The proposed works relate only to existing modifications which would be replaced with similar fabric, retaining the footbridge's character and integrity and improving its appearance. Overall, there would be a **minor positive** impact to the footbridge.

7.2.3.3 Trafalgar Street

The Proposal includes modifications to the Trafalgar Street entrance to increase accessibility and safety. Installation of compliant ramp and stairs is necessary in order to meet DDA requirements. Further works to the entrance include widening of the station entrance forecourt and new feature lighting and decorative paving. New concrete stairs and a 1:14 grade ramp is proposed to connect the Trafalgar Street footpath to the heritage footbridge. Widening of the entrance forecourt to the existing retaining wall would improve presentation and safety of the narrow Trafalgar Street station entrance.

The Trafalgar Street entrance in significant because of its direct connection to the footbridge. The existing stairs and brick 'wing' walls, added in 1926, are of significance as they reflect the developmental phases of the station (Plate 4.15 and Plate 4.16).

The modification to the Trafalgar Street entrance would impact the entranceway through the demolition of the brick 'wing' walls and modification to the stairs of the footbridge. However, in order to minimise the loss of original fabric, the new ramp and stairs would run parallel to the street and the existing stairs would be retained in situ, where possible, underneath the landing of the new arrangement.

The Trafalgar Street entrance modifications would have a direct impact to the historic fabric and visual appearance of the existing station entrance. The brick 'wing' walls would need to be demolished. The existing stairs of the footbridge would also require demolition as necessary for the new stairs. However, retaining the existing stairs in situ underneath the new ramp, where possible, has mitigated this impact to some degree. The new ramp and stairs run parallel to the street due to limited space and would have a minor visual impact on the setting of the station entrance and footbridge. Further, the proposed forecourt widening, and landscaping are located outside the heritage curtilage and would have a minor visual impact on the station entrance as they are consistent with the existing streetscape. Overall there would be a **minor adverse** impact to the Trafalgar Street station entrance.

7.2.4 Platform building

The Proposal includes modifications to the platform building to increase accessibility and safety. The provision of a new family accessible toilet and the conversion of one female cubical and one male cubicle into ambulant toilets are necessary in order to meet DDA requirements. The provision of a new switchboard room and the relocation of station communications and electrical equipment are required to meet fire safety standards. Reposition of the hand basin from the Station Services Equipment Room (SSER) is a necessary consequence of these requirements.

The platform building is significant because it retains a high level of integrity to its exterior and is representative of a common form of standard platform building design. However, the interior has been modified to meet changing operational requirements. The impact to the station building is assessed in subsections 7.2.4.1 to 7.2.4.5 in relation to each aspect of the Proposal.

7.2.4.1 Family accessible toilet

Various options were explored for the location of the family accessible toilet within the existing platform building. In order to minimise impacts onto the heritage fabric, locating the family accessible toilet within the footprint of the existing toilets was the logical option due to the availability of existing services (drainage, plumbing and sewerage). Locating the family accessible toilet within the existing female toilet or at the eastern end of the male toilets would result in the requirement for a new opening to create an accessible door. If the door was to be located on the northern or southern sides of the building, it would result in users (particularly wheelchairs and prams) exiting the toilet towards the track and onto the path of travel of other commuters creating a safety issue.

Therefore, the family accessible toilet is proposed to be situated at the western end of the platform building within the existing male toilets. This would enable the existing external door to the male toilets at the western end of the building to be modified to provide a compliant entrance to the family accessible toilet.

Provision of a family accessible toilet would impact the platform building through the removal of existing urinal and demolition of existing toilet pan and associated fixtures in the present male toilets. New partition walls and DDA approved fittings and fixtures would be installed. Additionally, the floor in the family accessible toilet would need to be lowered to provide level access. Modifications to the existing western toilet entrance would also be required. The width of the existing door opening is sufficient for a compliant family accessible toilet, therefore significantly minimising the impact to the heritage brickwork. The threshold would require lowering, a replacement door to fit new taller opening would be installed and canopy would be erected on the adjacent platform area.

The provision of a family accessible toilet would have a direct impact on significant fabric and visual appearance of the platform building and platform. Internally, the current male toilets would be reduced in size, partially demolished and replaced with modern toilet facilities. The floor level would also be altered (lowered) in this section of the building. Externally, the western door would be replaced with a heritage style door and frame to fit the taller opening and meet DDA standards. A canopy would be installed to provide shelter to the family accessible toilet entrance (see 7.2.4.2).

The use of the existing toilet area with minimal impact to the exterior fabric of the platform building is considered appropriate to accommodate the height and floor level needed for a family accessible toilet. While the interior of the male toilets would be heavily altered, retaining three of the four original cubicles in the newly formed male toilet area has mitigated this to some degree, resulting in a **moderate adverse** impact to the platform building.

The impact of the proposed family accessible toilet canopy is assessed in Section 7.2.4.2 below.

7.2.4.2 Family accessible toilet canopy

During design development it was acknowledged that the design of the family accessible toilet canopy requires careful consideration in order to better respond to, and minimise, visual impact to the original station building facade. Initially, two design options were prepared for the canopy.

Option A consisted of canopy extension with a modern glass and steel structure to differentiate it from the original heritage built form (Figure 7.1). Option B consisted of canopy extension integrated to the original heritage built form (Figure 7.2).

Figure 7.1 Glass Canopy Option A

Figure 7.2 Extended Roof Line Canopy Option B

These canopy design options were reviewed by key stakeholders, including Sydney Trains Heritage and Orwell & Peter Phillips, and were deemed unsuitable due to the bulk and scale of the visual impact to the station building facade.

Therefore, three additional design options were developed with consideration to the Sydney Trains' *Canopies and Shelters Design Guide for Heritage Stations* (2016) as summarised below.

Option 1: Cantilevered low pitch glazed canopy

A classical solution to provide approximately 10sqm of cover outside the family accessible toilet. With a depth of 1.5m it employs a simple gable structure using the lightness of steel in the form of posts and outriggers to support secondary steel framing where glazing suites will be attached. The pitch has been kept low, to match the existing outer awning, and to help reduce visual bulk against the heritage façade. To complement the existing structure, the steel beam is fashioned to echo the distinctive curve in a contemporary way.

Figure 7.3: Cantilevered low pitch glazed canopy

Key features:

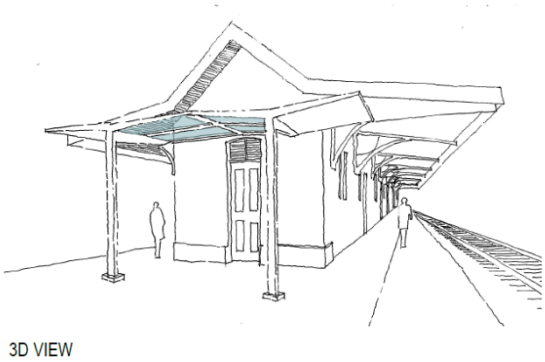
- 1.5 metre x 6.6 metre canopy which has a low pitch similar to the existing canopy of the main building
- supports are provided by 2 cantilevered outriggers on steel columns
- lazing is fully framed on all sided using Capral St Kilda suite or similar
- downpipes are fixed adjacent to columns
- low pedestal with exposed base plate
- powder coat finished to glazing suite.

Option 2: A lean to glazed canopy

A modification to the initially proposed Hazelbrook style canopy, this option achieves a lighter, more elegant structure. It is cantilevered from two posts set away from the building façade which take the main loads but would also be fixed to the building façade to ensure complete weather protection. For this application, the

canopy is articulated in a “butterfly” to conceal the box gutters, leaving the outer edges lighter and with clean fascia edges. The centre portion of the roof is glazed and the outer wing have a soffit lining.

Figure 7.4 A lean to glazed canopy



Key features:

- 1.5 metre x 6.6 metre canopy of partly glazed construction
- supports are provided by 2 cantilevered outriggers on steel columns
- prefinished opaque soffit with simple corrugated iron roof for the solid roof
- concealed box gutters with exposed downpipes adjacent to the columns
- powder coat finished to glazing suite
- low pedestal with exposed base plate.

Option 3: Pitch canopy (proposed option)

A traditional form that has a steeper pitch in the middle and lower pitches on the sides matching the existing canopy. It is cantilevered from two posts set close to the building façade. The position of the roof ventilation louvres results in the centre pitch being different to the existing building. It has an architectural language which speaks to the main roof with a contemporary expression in steel and glass. The main support is in the form of a pair of outriggers which are fashioned to match the distinctive existing curved awning supports.

Figure 7.5 Pitch Canopy

Key features:

- 1.5 metre x 6.6 metre canopy footprint of glass and solid construction
- supports are provided by 2 cantilevered outriggers on steel columns
- downpipes are adjacent to the columns
- low pedestal with exposed base plate
- powder coat finished to glazing suit.

Following review of these three options, it was agreed by the stakeholders, Sydney Trains Heritage and Orwell & Peter Phillips inclusive, that Option 3 (pitch canopy) is most closely aligned to the principles of the Sydney Trains’ *Canopies and Shelters Design Guide for Heritage Stations* (2016). The new roof matches the roof pitch of the station building and follows the architectural and structural principles of several successful design examples in the guidelines. It is noted that Option 3 will be further refined for truss structure, portal frame, section sizes, guttering, materials and foundations in order to best respond to the heritage building façade and minimise visual impact.

Installation of the proposed pitch canopy (option 3) on the western façade of the station building would directly impact the visual appearance of the station building. However, the proposed design coupled with the choice of materials and finishes would separate the addition from the station building and partially mitigate the visual impact of the addition. Further, the canopy would be self-supported by cantilevered outriggers affixed to the

platform. Installation would be undertaken in such a manner so as any potential impact to the fabric would be reversible, minimising harm to significant fabric. It is assessed that the family accessible toilet canopy would have a **moderate adverse** visual impact.

7.2.4.3 Ambulant toilets

The doors on one male cubicle and one female cubicle would be altered to become outward, rather than inward, swinging doors for compliance with DDA requirements. These alterations would have a direct impact on the fabric and visual appearance of the platform building's interior. The single female toilet that has been retained in its original form would not be impacted by these proposed alterations. A cubicle whose amenities have been modernised would be selected for conversion. This, coupled with retaining the original cubicle form and utilising the existing, original doors has significantly reduced the impact of these proposed alterations to be a **minor adverse** impact.

7.2.4.4 New switchboard room

The existing switchboard and storeroom would be divided into two to create a new switchboard room and entry to the male toilets. Internal wall modifications and installations are also necessary to provide the required fire resistance and install the electrical distribution board. The external door would be replaced with an outward swinging door and there would be the creation of two new doors for access to the switchboard room and male toilets.

The creation of a new switchboard room would directly impact the fabric of the platform building through the partial demolition of the shared wall with the male toilets in order to create a new door into the male toilets. Fire resistant modification would also impact the internal fabric of the storeroom and the installation of the electrical distribution board would require the removal of the original bench cupboard. While the interior of the building would be subject to moderate adverse impacts, the exterior or the platform building would not be impacted visually. Overall there would be a **moderate adverse** impact to the platform building.

7.2.4.5 Relocation of station communications

Existing station communications and electrical equipment would be moved to the existing SSER. The relocation of station communication to the existing SSER would directly impact the internal fabric and external visual appearance of the platform building. It would require the removal of one hand basin from the SSER, which would be moved into the current staff room. A new partition wall and ceiling would be built around the hand basin to create a small cleaner's store. Opaque black film would also be applied to the inside of the glass on the window of the SSER for privacy and security. However, the use of existing (already altered) infrastructure in the SSER, and the relocation of the hand basin to the already heavily modified staff room, has significantly reduced this impact. The impact associated with this work would be a **minor adverse**.

7.2.4.6 Air conditioning and mechanical ventilation

The Proposal also includes new air conditioning and mechanical ventilation to the platform building. A few options were considered for installation of the new air conditioning condensers. Locating the condensers beneath the stairs was discarded due to the distance from the proposed SSER, which would require larger units and additional trenching on the platform. Alternatively, positioning the condensers at the end of the platform building was considered however, due to the visual impact and additional trenching this option was not deemed preferable. Further, the units cannot be located on the platform along the building edge due to clear width requirements for accessible paths.

Consequently, the preferred design option is to install wall mounted air condensers as per the existing situation. One of the existing units would be replaced and one additional unit installed. The units would be situated under the pitched canopy roof line making them appear relatively concealed. The mechanical system would be in the roof space of the platform building with intake in ceilings and roof cowl exhaust.

The Proposal is consistent with the existing situation and it is assessed that the impact associated with this work would be **minor adverse**.

7.2.5 Platform

The Proposal includes the provision of wheelchair turning and waiting space with canopy at the base of the platform lift and a new boarding assistance zone. Localised platform regrading would also be undertaken to accommodate accessible paths of travel.

Platform 1 (up) and Platform 2 (down) form an island platform with asphalt surface and original brick facing. The platform is significant because despite being resurfaced, many of its historic features remain, including iron support columns for the above footbridge and original iron lamp/signage poles.

The platform regrading would directly impact the platform through grading and resurfacing around 65 per cent of the platform. The platform's existing asphalt surface would be excavated up to a depth of 150 millimetres prior to resurfacing. However, excavating only the modern asphalt surface and avoiding the platform's original brick facing during these works significantly reduces the impact to heritage features. Overall, there would be a **minor adverse** impact to the platform from grading and resurfacing activities.

It is understood that all platform works would be carried out in accordance with the Sydney Trains *Heritage Platforms Conservation Management Strategy* (2015).

7.2.5.1 Stair 2

The Proposal includes upgrades to Stair 2 of the footbridge, which connects to the platform. Upgrades to the stairs are required for compliance. New timber treads and metal hand rails would be installed.

The proposed Stair 2 upgrades would have a direct impact on the fabric and visual appearance of the footbridge. The impact however, would be limited to fabric associated with the 1992 upgrade of the footbridge including the stairs and painted steel hand rails. The riveted metal latticework to the underneath of the footbridge would not be affected. The materials and finishes proposed are consistent with the existing footbridge and improve its overall appearance. Overall, there would be a **minor positive** impact to the footbridge.

7.2.6 Ancillary work

The Proposal includes a number of ancillary works designed to improve safety, accessibility and infrastructure across the station. The exact location of all ancillary work is not yet confirmed. Infrastructure across the station should adhere to the Sydney Trains and NSW TrainLink *Station Component Guide* (2017) and the *Sydney Trains Conservation Guide: Railway Station Platform Furnishings* and aim to reduce impact to significant fabric.

7.2.6.1 Fencing and safety screens

The replacement or adjustment of existing fencing and safety screens would be undertaken to improve safety of the station area. These works would not impact significant fabric or the visual appearance of the station as they involve the upgrading of already existing modern infrastructure. Overall, they would have a **neutral** impact to the station area.

7.2.6.2 Signage

Petersham Station has already been upgraded with new wayfinding signage for consistency across the Sydney metropolitan rail network. As part of the Proposal, some additional wayfinding and other signage would need to be installed to capture the new accessible features of the station. The installation of new signage around the station would have a **minor adverse** impact on the heritage significance of the station complex.

7.2.6.3 Customer facilities

Adjustment to seating, rubbish bins, lighting and other facilities would be carried out along with the installation of new or reinstated Tactile Ground Surface Indicators (TGSIs) for the platform, stairways and ramp. These works would involve the removal and replacement of existing facilities, and where necessary the installation of new ones. In particular, seven existing modern bench seats around the platform building would be removed and one would be relocated to accommodate the assisted waiting areas. Investigations into the reinstatement of original-style footbridge lighting are also being considered.

The installation or upgrading of these customer facilities would have an indirect **minor positive** visual impact on the platform building as they would reduce the amount of modern facilities around the building and station complex, allowing a clear view of the significant fabric and heritage character of the station.

It is understood that these facilities will be adjusted and installed in accordance with the Office of Rail Heritage's *Conservation Guide: Railway Station Platform Furnishings* (2012).

7.2.6.4 Security

Improvements to station security and communication systems, including CCTV upgrade, PA system upgrades, additional opal card readers and new hearing induction loops would be made. Additionally, the protection or relocation of services and utilities would be undertaken.

Where new items would be installed, there would be a direct impact to the fabric and visual appearance of the station complex. However, upgrading existing security infrastructure would have no impact on the station as there would be no alterations to the historic fabric or visual appearance, and would offset the significance of this impact. Overall, there would be a **minor adverse** impact to the station complex.

It is understood that this infrastructure would be installed in accordance with the Sydney Trains *Heritage Technical Note: Installation of New Electrical and Data Services at Heritage Sites* (2017).

7.2.6.5 Heritage interpretation and public art

The Proposal allows for the installation of heritage interpretation and public art. Careful placement and design would reduce any impact to significant heritage. Installations that communicate the history of Petersham Station to the public and enables customers to engage with the significance of the station would further reduce any impacts to significant heritage. The impact of heritage interpretation and public art installations to the station complex would be **neutral** as no design plans or locations have be included in this assessment.

7.2.7 Materials and finishes

Materials and finishes for the Proposal have been selected based on the criteria of durability, low maintenance and cost effectiveness, to accord with heritage requirements, to minimise visual impacts, and to be aesthetically pleasing. Consideration has also been given to lifecycle impacts.

The materials and finishes proposed within the Proposal would have an indirect visual impact on the station complex. However, separating the new elements from the old and careful choice of materials has mitigated this impact to some degree. Overall, using the proposed materials and finishes would be a **minor adverse** impact to the station complex.

7.2.8 Ancillary facilities

The Proposal requires the use of temporary construction compounds to accommodate a site office and amenities, laydown and storage areas for materials and crane set up locations for works to be carried out. These areas within the SHR curtilage are generally restricted to areas of existing modern infrastructure, where the ground is asphalted. No excavation would be required in these areas prior to use and all areas would be reinstated to their current state upon completion of works. The impact of the temporary ancillary facilities within the SHR curtilage is assessed as being **neutral**.

7.3 Impact to archaeological potential

The Proposal includes ground disturbing works for the lifts at both Terminus Street and the platform up to 2300 millimetres. The platform would also be subject to grading up to 150 millimetres deep into the existing asphalt surface. Earthworks would also be required for construction of the footpaths and ramp, and any associated drainage works, however, these are located outside of the SHR curtilage.

Petersham Station complex has low archaeological potential. There is little evidence of former, demolished buildings and infrastructure within the proposed work areas, and the platform has been resurfaced with asphalt over the years. Therefore, the Proposal would not impact the archaeological potential of the station.

7.4 Summary

The impacts to the station would be as follows:

- installation of lifts – moderate adverse impact to the footbridge
- Terminus Street entrance modifications – moderate adverse impact to the brick perimeter wall
- Stair 3 upgrades – minor positive impact to the footbridge
- Trafalgar Street entrance modifications – minor adverse impact to the Trafalgar Street station entrance
- provision of a family accessible toilet – moderate adverse impact to the platform building and a minor adverse impact to the platform
- family accessible toilet canopy – moderate adverse visual impact
- ambulant toilets – minor adverse impact to the interior of the platform building
- new switchboard room – moderate adverse impact on the platform building
- relocation of station communication – minor adverse impact on the platform building
- air-conditioning and mechanical ventilation – minor adverse impact to platform building
- platform grading, relevelling and provision of wheelchair turning and wait areas – minor adverse impact to the platform
- Stair 2 upgrades – minor positive impact to the footbridge.
- fencing and safety screens – neutral impact on the station complex
- signage – minor adverse impact on the heritage character of the station
- customer facilities – minor positive visual impact on platform building
- security upgrades – minor adverse impact to the station
- air conditioning and mechanical ventilation – minor adverse impact to the platform building
- heritage interpretation and public art – neutral impact to the station
- materials and finishes – minor adverse impact to the station
- archaeological potential – neutral impact.

7.5 Statement of heritage impact

The Proposal would ensure that Petersham Station is accessible to all customers, and aims to respect or enhance the heritage significance of Petersham Station. The proposal would ensure the continued use of the station as an active railway station into the future whilst retaining the State significant heritage elements of the station.

The Proposal does not include substantial demolition or removal of significant fabric. Significant fabric directly impacted by the proposal includes:

- demolition of a small section of brick perimeter wall to accommodate lift access on Terminus Street
- removal of sandstone steps at Terminus Street entrance to meet DDA requirements
- sections of original balustrade railing which may require removal for the installation of the lifts
- one original toilet cubicle would be removed from the male toilets and part of the original male toilets would be remodelled to accommodate the family accessible toilet
- removal of original bench and cupboard in storeroom to accommodate new switchboard room.

The proposal mitigates these impacts, where possible, through the protection and reuse of significant fabric. The sandstone steps would be reused in landscaping, original balustrade sections would be used to replace non-original sections or retained for future repair works, and three of the existing four male toilet cubicles would remain in situ.

The proposal will impact significant views of the station and vistas from the adjacent PNCA, in relation to the station entrance on Terminus Street, the footbridge and the western façade of the platform building. The proposal mitigates these impacts through the use of modern materials to separate new elements from old in a visually recessive way, minimising bulk and form and thoughtful placement of modern elements.

Throughout design development, potential adverse impacts to the significance and fabric of the station have been avoided or minimised. There are no archaeological impacts associated with the Proposal. The Proposal includes the addition of new elements, alteration and removal of existing elements from the Petersham Station Railway Station Group. Direct impacts to components of the Petersham Railway Station Group range from moderate adverse to minor positive, while impacts to views and vistas range from moderate adverse to neutral.

8 RECOMMENDATIONS AND MITIGATION MEASURES

The following recommendations and mitigation measures have been compiled in accordance with the conclusions of this SOHI, the NSW *Heritage Act 1977* and in consideration of the following Sydney Trains polices and strategies:

- *Movable Heritage Management Strategy* (2015)
- *Movable Heritage Disposal Policy* (2016)
- *Heritage Technical Note: Installation of New Electrical and Data Services at Heritage Sites* (2017)
- *Heritage Platforms Conservation Management Strategy* (2015)
- *Railway Footbridges Heritage Conservation Strategy* (2016)
- *Station Component Guide* (2017)
- *Canopies and Shelters Design Guide for Heritage Stations* (2016)
- *Conservation Guide: Railway Station Platform Furnishings* (2012)
- *Station Component Guide* (2017)

8.1 Recommendations

Recommendation 1: Section 60 application

It is recommended that a Section 60 application is submitted to the Heritage Council of NSW. No works are to be undertaken prior to approval of the Section 60.

Recommendation 2: Heritage architect

A suitably qualified heritage architect is to be engaged in relation to further refinement of design and the delivery of the Proposal. The heritage architect is to be consulted throughout all stages of the Proposal to ensure compliance.

Recommendation 3: Family accessible toilet

Refinement of the truss structure, portal frame, section sizes, guttering, materials and foundations of the family accessible toilet canopy design should be developed in consultation with Sydney Trains and a suitably qualified heritage architect. The final design should be developed with consideration to the Sydney Trains *Canopies and Shelters Design Guide for Heritage Stations* (2016) with attention to the location of any attachments to significant fabric and construction methods. Impact to significant fabric and views and vistas should be minimised through recessive materials and sympathetic design.

All works associated with the proposed family accessible toilet are to be carried out under the direction of a suitably qualified heritage architect. Measures should be put in place to protect significant fabric from accidental impact during construction and installation of the canopy.

Recommendation 4: Protecting significant fabric

a. Any original sections of balustrade removed from the footbridge during lift installation are to be used to replace non-original sections. Any remaining original balustrade fabric is to be retained for future repair works. The salvage and re-use of balustrade must be undertaken in consultation with, and under supervision of, a suitably qualified heritage specialist.

b. The sandstone slabs removed from Stair 4 are to be re-used as paving in the proposed Terminus Street entrance or forecourt area on Trafalgar Street. The salvage and re-use of the sandstone must be undertaken in consultation with, and under supervision of, a suitably qualified heritage specialist.

c. The intact, unmodified female toilet cubicle must be identified and cordoned off in consultation with a suitably qualified heritage specialist prior to any works proceeding in the female toilets. A cubicle whose amenities have been modernised is to be selected for conversion and works supervised by a suitably qualified heritage specialist.

d. Protective measures, as guided by a suitably qualified heritage specialist, must be put in place to protect significant fabric on the platforms during regrading, trenching and construction. The platform surfaces should be reinstated on completion. The addition of tactile surfaces should to be limited to the minimum amount required to meet legislative requirements.

e. Protective measures must be put in place to protect significant fabric of the platform building. Care must be taken when installing fixtures and fittings to the exterior of the building.

The addition of components such as seating, lighting and signage should adhere to the Sydney Trains and NSW TrainLink *Station Component Guide* (2017) and be sympathetic to existing seating, lighting and signage across the station. Reinstatement of original-style footbridge lighting should also be considered.

Recommendation 5: Installation of electrical services

New electrical services should be installed in accordance with the Sydney Trains *Heritage Technical Note: Installation of New Electrical and Data Services at Heritage Sites* (2017). The exact locations of services are not yet confirmed. Installation of services should be planned in consultation with a heritage architect and aim to reduce impact to significant fabric and visual impact. Where possible services should be installed within established conduits to reduce cumulative impact to significant fabric.

Recommendation 6: Installation of customer facilities

The installation or upgrading of customer facilities should installed in accordance with the Office of Rail Heritage's *Conservation Guide: Railway Station Platform Furnishings* (2012). Investigations into the reinstatement of original-style footbridge lighting should be considered in consultation with a suitably qualified heritage architect and Sydney Trains Heritage. Installation of customer facilities should be planned in consultation with a suitable qualified heritage specialist and aim to reduce impact to significant fabric and visual impact.

Recommendation 7: Archival record

It is recommended that a photographic archival record of Petersham Station is prepared prior to, and at the completion of, construction, in accordance with the NSW Heritage Office (former) publication *How to prepare archival records of heritage items* and *Photographic Recording of Heritage Items using Film or Digital Capture*. The photographic archival record should document the condition of Petersham Station prior to, and after, the works, the internal configuration of the platform building and the setting (including the Terminus Street and Trafalgar Street entrances).

Copies of the archival record should be deposited with Heritage, DPC, Sydney Trains Heritage and the local library.

Recommendation 8: Heritage interpretation and public art installations

A heritage interpretation plan for the station is to be formulated and implemented in accordance with the NSW Heritage Office guideline *Interpreting Heritage Places and Items* (2005). The Sydney Trains Draft *Heritage Interpretation Guideline* (July 2018) should also be considered in consultation with Sydney Trains Heritage during preparation and implementation of the heritage interpretation plan.

Public art may be incorporated into the heritage interpretation plan or installed independently.

Any heritage interpretation and public art installations are to be developed and implemented in consultation with Sydney Trains and a suitably qualified heritage specialist. Installations should avoid impacting significant heritage fabric and significant views and vistas of the station complex. Colour schemes and styles should be either sympathetic to their heritage surrounding or a respectful contrast.

Heritage interpretation at the station should communicate the history of Petersham Station to the public and enable customers to engage with the significance of the station.

Recommendation 9: Moveable heritage

All moveable heritage impacted during the proposed works are to be handled in accordance with Sydney Trains' *Moveable Heritage Management Strategy* (2015-2017) and *Moveable Heritage Disposal Policy* (2016).

Recommendation 10: Unexpected archaeological resources

It is unlikely that any archaeological resources would be encountered during construction. However, if unexpected archaeological resources are encountered during construction the TfNSW *Unexpected Heritage Finds Guideline* (2016) must be implemented.

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