

Transport Access Program 3 Killara Station

Statement of Heritage Impact

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Transport Access Program 3: Killara Station

Client: Transport for New South Wales

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Executive summary

Transport for NSW (Transport for NSW) has proposed the upgrade of Killara Station (the Proposal). The Proposal forms part of the Transport Access Program, a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure across NSW.

Transport for NSW has developed accessibility upgrade plans and undertook options development and assessment for Killara Station. Two options were developed to address deficiencies at the station to meet its accessibility obligations in an efficient and cost-effective manner.

The preferred option (Option 1) has since been refined and is subject to an environmental impact assessment. As part of the Review of Environmental Factors (REF), AECOM has been commissioned by Transport for NSW to undertake a Statement of Heritage Impact assessment for the construction and operation of the Proposal.

Killara Station is located approximately 14 kilometres north of Central Station, within the Ku-ring-gai Council local government area and is listed on the Transport Asset Holding Entity (TAHE) Section 170 Heritage and Conservation Register.

The key features of the Proposal considered in this assessment include:

- the installation of three new lifts and lift landings connecting to the existing footbridge to provide access to the station platform
- widening of the existing footbridge to accommodate the lifts
- platform works including regrading and providing new seating and canopies for the two existing boarding assistance zones
- provision of two kiss and ride bays on Culworth Avenue (including one to be accessible), footpath upgrades and other new access path modifications. The existing station building toilets would also be upgraded with provision of a new unisex ambulant toilet and a new family accessible toilet.

In summary, the potential heritage impacts of the Proposal are as follows:

Impact Type	Impact
Major negative impacts (substantially affects fabric or values of state significance)	None.
Moderate negative impacts (irreversible loss of fabric or values of local significance; minor impacts on State significance)	The construction of the new lift to access the footbridge at the southern (Werona Avenue) side of the station would have a moderate negative impact to significant heritage fabric. The widening of the footbridge and associated canopy would have a moderate negative impact to significant heritage fabric. The modification of the two boarding assistance zones to provide seating, wheelchair spaces and canopies on the platform would have a low to moderate negative impact to the aesthetic significance associated with the station.
Minor negative impacts (reversible loss of local significance fabric or where mitigation retrieves some value of significance; loss of fabric not of significance but which supports or buffers local significance values)	The visual impact from the construction of the new lifts on either side of the footbridge is assessed as minor and can be mitigated to minimise the visual impact.

Impact Type	Impact
Negligible or no impacts (does not affect heritage values either negatively or positively)	<p>The reconfiguration of the existing toilets into the new ambulant toilet, and creation of a family accessible toilet is considered to have a neutral heritage impact. The existing two doors in the northern elevation were constructed c.1993 and are therefore not original fabric. The internal works would be contained within the existing toilets, which were also upgraded in 1993. All current fixtures and fittings, including tiles, are non-original.</p> <p>The regrading of the station platform surface and installation of the Tactile Ground Surface Indicators would have a negligible impact to the heritage significance associated with the station.</p>
Minor positive impacts (enhances access to, understanding or conservation of fabric or values of local significance)	None.
Major positive impacts (enhances access to, understanding or conservation of fabric or values of state significance)	The Proposal would improve safety and accessibility and the station would be enhanced following its reconfiguration. The construction of the new lift structures would enable access to and appreciation of the station by a wider demographic.

Mitigation measures and recommendations to minimise impacts to the heritage listed Killara Station Group are as follows.

Recommendation 1 – Heritage advice

A heritage architect must be engaged to provide ongoing heritage and conservation advice throughout the detailed design process. In addition to ongoing heritage advice, the nominated heritage architect shall:

- confirm and document options analysis around impacts to significant elements and design mitigation to avoid or reduce adverse impacts
- ensure that the final design adheres to the relevant policies, including but not limited to the *Heritage Platforms Conservation Management Strategy*, *Railway Footbridges Heritage Conservation Strategy*, *Canopies and Shelters: Design Guide for Heritage Stations* and the *Station Access Heritage Conservation Guide*
- provide input to detailed development and supervise works to significant fabric within the scope of works, including works to the handrails, balustrades and newel posts of the footbridge, connection of widened footbridge elements, and all original fabric of the station building, the platform and in the vicinity of the garden.

The nominated heritage architect may be required to update this assessment when impacts are defined during the detailed design phase and record the above additional analysis in an updated report.

Recommendation 2 – Consultation with Sydney Trains Heritage

It is recommended that Transport for NSW continue to consult with Sydney Trains Heritage throughout the design process to address preliminary feedback on subjects including the form and materials of the lift, landscaping and works associated with new and existing services.

Recommendation 3 – Heritage landscape plan

To offset anticipated impacts to the heritage gardens it is recommended that during the detailed design phase of the Proposal a landscape plan would be provided either by, or with the input of, a qualified heritage landscape specialist. This plan would include mitigation measures for any necessary tree removal and species for replanting that are appropriate to the heritage landscape. New landscaping must complement the existing landscaping. New gardens should be horticulturally and stylistically sympathetic to the period of the station gardens (i.e. early twentieth-century rockery garden). The use of similar materials such as stone and brick is encouraged, as is the use of a variety of plant species to avoid monocultural plantings along Werona Avenue.

Appropriate treatment of the landscape will facilitate interpretation of the station gardens as a socially significant asset to the local community.

Recommendation 4 – Lifts and footbridge

The following recommendations are made in relation to the platform lifts and associated walkway construction:

- detailed design would further investigate options to minimise impacts to the railway garden
- the original fabric of the footbridge, in particular the star newels at the bottom of the stairs on both sides of the footbridge and platform, hand rails and balustrades should be investigated to be retained
- re-use of the original balustrade on the footbridge at the areas of the footbridge widening is recommended. Where supplementary balustrades and handrails are required, these would be designed to be compatible with the retained elements in terms of form, placement and materiality
- detailed design would minimise the impact to the brickwork associated with the platform, including the edge coping walls.

Recommendation 5 – Station building upgrade

The following recommendations are made with relation to the station building reconfiguration:

- care would be taken when undertaking all demolition works so as not to damage significant fabric
- new services, outlets, wall units and brackets (etc.) would be located internally in areas already modified and/or consolidated in one location. Existing openings in ceilings are the preferred location for the installation of new services. New services and fittings would use existing fixing points or be located at mortar joints. These works would be undertaken in accordance with the Sydney Trains technical notes, *Installation of New Electrical and Data Services at Heritage Sites (2017)* and *Fixing Methods at Heritage Sites*
- new services would be installed as per Recommendation 10 below
- impacts to the detailed architraves around the current toilet entry door and transom window would be minimised
- new interior tiling would consider the Sydney Trains *Draft – NSW Heritage Station Passenger Tile Finishes (2020)*.

Recommendation 6 – Boarding assistance zones

The height of the eaves associated with the two new boarding assistance zone canopies would match, as close as possible, the height of the eaves associated with the existing station building. The heights would match to create a continuity between the existing station building and the two new structures.

The proposed canopies should aim to reduce impact to significant fabric and the visual impact of the Proposal through recessive materials and sympathetic design.

Recommendation 7 – Station platform upgrade

The following recommendation is made with regard to works that would be undertaken on, and to, the current platform. This includes the regrading and resurfacing of the platform surface.

- re-grading of the station platform would not cover any existing wall vents that have been installed along the lower course of the brickwork to the station building. If cast iron gratings are removed, these would be stored for future reuse.

Recommendation – Interpretation

A heritage interpretation plan must be prepared and implemented for the station in accordance with NSW Heritage Office (former) publication *Interpreting Heritage Places and Items and the Sydney Trains Heritage Interpretation Guideline*. The Proposal is considered a medium/major project in terms of evaluating interpretation options and therefore a nominal score of 70 in accordance with the guidelines should be achieved.

The interpretation plan would investigate methods of reinstating the footbridge lighting as a primary interpretation element.

Recommendation 9 – Recording

Prior to any construction, a photographic recording would be undertaken of the station, including (but not limited to) the station building, platform, footbridge and garden. This recording would be undertaken in accordance with the Heritage Council of NSW publication, *Photographic Recording of Heritage Items using Film or Digital Capture* (Heritage Council of NSW, 2006).

Recommendation 10 – Installation of services

All ancillary works (CCTV, PA, communications, air-conditioning etc) would be undertaken in accordance with the relevant Sydney Trains heritage guidelines. Alternative solutions must be explored where any impacts to significant fabric are identified. Works would proceed with the principle of avoiding fixing new services to the façade of the exterior building and would be contained/ concealed in new development areas. A complete services plan is to be reviewed and assessed by a qualified heritage architect identifying alternative solutions, and submitted to the Associate Director Environmental Impact Assessment (AEDIA) (or delegate) for endorsement prior to works commencing.

Recommendation 11 – Heritage induction

A heritage induction would be provided to all on-site staff and contractors involved in the Proposal. The induction would clearly describe the heritage constraints of the site.

Recommendation 12 – Unexpected finds and stop work procedure

The Construction Environmental Management Plan (CEMP) for the Proposal would include stop work procedures in accordance with Transport for NSW's *Unexpected Heritage Finds Guideline* (Transport for NSW, 2019) to manage activities in the unlikely event that intact archaeological relics or deposits are encountered.

1.0 Introduction

1.1 Background

Transport for New South Wales (Transport for NSW) is proposing to upgrade Killara Station (the Proposal). The Proposal forms part of the Transport Access Program, a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure across NSW.

Options for improving access to Killara Station were developed following preparation of a scoping report and a series of workshops with Transport for NSW and the project design team. Two options were developed to address deficiencies at Killara Station and to meet the accessibility obligations in an efficient and cost-effective manner, while being easy to maintain. These options are discussed in detail in Section 6.1. Through the multi criteria analysis process, the preferred option (Option 1) was selected, further refined and is subject to environmental impact assessment. As part of the Review of Environmental Factors (REF), AECOM has been commissioned by Transport for NSW to undertake a Statement of Heritage Impact (SoHI) assessment of the construction and operation of the Proposal.

1.2 Site identification

Killara Station is located approximately 14 kilometres north of Central Station, within the Ku-ring-gai Council local government area (LGA). The station is located on the T1 North Shore line and services local trains (Figure 1-1).

The Proposal encompasses Killara Station, which is listed on the Transport Asset Holding Entity (TAHE) Section 170 Heritage and Conservation Register (Figure 1-2).

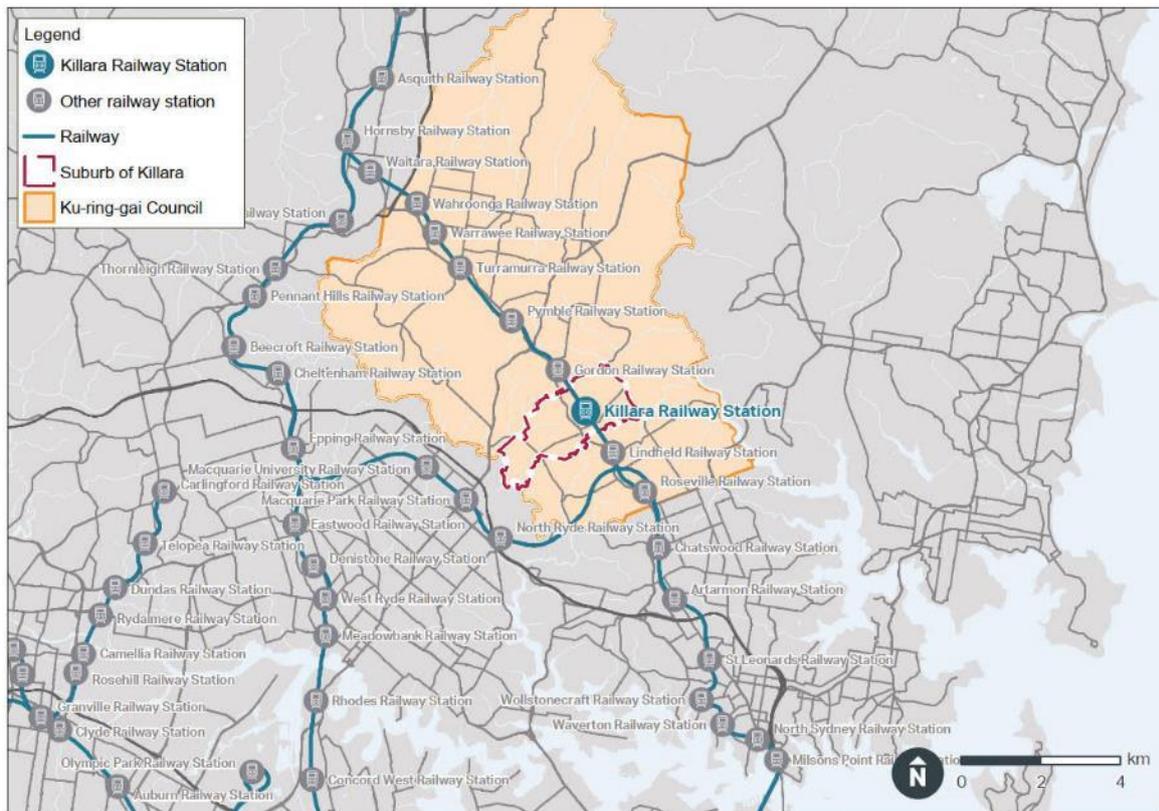


Figure 1-1 Killara Station location context



Figure 1-2 Killara Railway Station Group s170 Heritage Curtilage Plan (NSW Heritage Division, 2009)

1.3 Killara Station upgrade

The proposed upgrade to Killara Station includes the installation of three new lifts and lift landings connecting to the existing footbridge to provide access to the station platform, widening of the existing footbridge to accommodate the lifts, platform works including regrading and providing new seating and canopies for the two existing boarding assistance zones, provision of kiss and ride bays on Culworth Avenue (with one to be accessible), footpath upgrades and other new access path modifications. The existing station building toilets would also be upgraded with provision of a new unisex ambulant toilet and a new family accessible toilet.

A full description of the Proposal is provided in Section 6.4.

1.4 Methodology

This heritage assessment has been undertaken in accordance with *Assessing Heritage Significance* (NSW Heritage Office, 2001) and *Statements of Heritage Impact* (NSW Heritage Office & Department of Urban Affairs & Planning, 2002). It includes:

- desktop searches of relevant heritage registers
- review of Proposal drawings and scoping design reports
- review of the following key documents:
 - heritage register listings for the station
 - historic plans for the station held by the Sydney Trains Plan Room
 - previous reports and other relevant documentation provided by Transport for NSW

- background research into the historical development of the station using the historic plans, historical photographs, newspapers and other primary and secondary historical sources as relevant and referenced in Section 3.0
- site inspection on 6 April 2021 by AECOM staff assessing the existing station (both internal and external) along with the existing character of the Proposal area and surrounding land uses. Note: all photographs within this report were taken during the site inspection unless otherwise stated.

1.5 Report limitations

The purpose of this report is to identify and assess historic heritage and archaeological potential that might be impacted by the Proposal. Predictions have been made within this report about the probability of subsurface archaeological materials occurring within the site, based on surface indications and environmental contexts. However, it is possible that materials may occur in areas without surface indications and in any environmental context. Should subsurface archaeological materials be uncovered during construction, these would be addressed in accordance with the *Unexpected Heritage Finds Guideline* (Transport for NSW, 2019).

This report is based on the scoping design and is subject to detailed design. It is noted that during detailed design, details of the Proposal may change or be refined. Further heritage assessment would be required to assess the potential additional impacts to the heritage value of Killara Station during detailed design as outlined in Section 8.0.

A summary of the statutory requirements regarding historical heritage is provided in Section 2.0. The summary is provided based on the experience of the authors with the heritage system in Australia and does not purport to be legal advice. It should be noted that legislation, regulations and guidelines change over time and users of the report should satisfy themselves that the statutory requirements have not changed since the report was written.

2.0 Statutory context

A number of planning and legislative documents govern how heritage is managed in NSW and Australia. The following section provides an overview of the requirements under each as they apply to the Proposal.

2.1 Commonwealth legislation

2.1.1 Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) defines 'environment' as both natural and cultural environments and therefore includes Aboriginal and non-Aboriginal historic cultural heritage items. Under the EPBC Act, protected heritage items are listed on the National Heritage List (NHL) (items of significance to the nation) or the Commonwealth Heritage List (CHL) (items belonging to the Commonwealth or its agencies). These two lists replaced the Register of the National Estate (RNE). The RNE has been suspended and is no longer a statutory list; however, it remains as an archive.

Under Part 9 of the EPBC Act, any action that is likely to have a significant impact on a matter of National Environmental Significance (known as a controlled action under the EPBC Act), may only progress with approval of the Commonwealth Minister for Agriculture, Water and the Environment. An action is defined as a project, development, undertaking, activity (or series of activities), or alteration. An action would also require approval if:

- it is undertaken on Commonwealth land and would have or is likely to have a significant impact on the environment on Commonwealth land
- it is undertaken by the Commonwealth and would have or is likely to have a significant impact.

Killara Station has not been identified on the NHL, CHL or RNE and therefore the Proposal would not require a referral under the EPBC Act with respect to heritage.

2.1.2 Disability Discrimination Act 1992

The Commonwealth *Disability Discrimination Act 1992* (DDA) aims to reduce discrimination against people with a disability. The DDA requires that people are given equal opportunity to access public transport and buildings, including those with heritage significance. The Proposal is being undertaken, in part, to comply with the requirements of the DDA.

2.2 State legislation

2.2.1 Environmental Planning and Assessment Act 1979

The NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) allows for the preparation of planning instruments to direct development within NSW. This includes Local Environmental Plans (LEP), which are administered by local government and contain provisions to guide land use and the process for development applications. LEPs usually include clauses requiring that heritage be considered during development applications and a schedule of identified heritage items be provided. The EP&A Act also allows for the gazettal of State Environmental Planning Policies (SEPP).

2.2.2 State Environmental Planning Policy (Infrastructure) 2007

SEPPs are environmental planning instruments which address planning issues within the State. SEPPs can make the Planning Minister the consent authority for the types of development they relate to. The *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP 2007) is of relevance to this Proposal.

Clause 14 of ISEPP 2007 applies to infrastructure developments carried out by, or on behalf of, a public authority, if the development is likely to impact a local heritage item or heritage conservation area (other than a heritage item that is also a State heritage item). Under ISEPP 2007, a public authority, or person/s acting on behalf of a public authority, must not carry out a development to which clause 14 applies, unless an assessment of the proposed impact has been prepared and forwarded to

the local government of the area for comment. Comments received within 21 days must be taken into consideration.

2.2.3 Heritage Act 1977

The NSW *Heritage Act 1977* (as amended) was enacted to conserve the environmental heritage of NSW. Under Section 32, places, buildings, works, relics, movable objects or precincts of heritage significance are protected by means of either Interim Heritage Orders (IHO) or by listing on the NSW State Heritage Register (SHR). Items that are assessed as having State heritage significance can be listed on the SHR by the Minister on the recommendation of the NSW Heritage Council. Killara Station is not listed on the SHR.

Under Section 170 of the *Heritage Act 1977*, NSW Government agencies are required to maintain a register of heritage assets. The register places obligations on the agencies, but not on non-government proponents, beyond their responsibility to assess the impact on surrounding heritage items.

The Killara Railway Station Group has been identified on the TAHE Section 170 Heritage and Conservation Register under the State Heritage Inventory (SHI) database (SHI # 4801066). Under Section 170A(1)(c) Sydney Trains must provide the Heritage Division with written notice prior to demolition of any place, building or work entered in its register.

Archaeological features and deposits are afforded statutory protection by the 'relics provision'. Section 4(1) of the *Heritage Act 1977* (as amended 2009) defines 'relic' as follows:

any deposit, artefact, object or material evidence that:

- (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and*
- (b) is of State or local heritage significance.*

The 'relics provision' requires that no archaeological relics be disturbed or destroyed without prior consent from the Heritage Council of NSW. Therefore, no ground disturbance works may proceed in areas identified as having archaeological potential without first obtaining an Excavation Permit pursuant to Section 140 of the *Heritage Act 1977*, or an Archaeological Exception under Section 139 of the *Heritage Act 1977*.

The Heritage Council must be notified of the discovery of a relic under Section 146 of the *Heritage Act 1977*.

2.3 Local government

Killara Station is located within Ku-ring-gai Council local government area. The relevant LEP applying to the site is Ku-ring-gai LEP 2015 and its application is outlined below.

2.3.1 Ku-ring-Gai Local Environmental Plan 2015

Part 5, Section 5.10 of the Ku-ring-gai LEP 2015 deals with heritage conservation within the area covered by this LEP. All heritage items listed in the LEP are included in Schedule 5. The Ku-ring-gai LEP 2015 states:

(1) The objectives of this clause are as follows:

- a. to conserve the environmental heritage of Ku-ring-gai,*
- b. to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,*
- c. to conserve archaeological sites,*
- d. to conserve Aboriginal objects and Aboriginal places of heritage significance.*

(2) Development consent is required for any of the following:

- a. demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):*

- i. a heritage item,*
 - ii. an Aboriginal object,*
 - iii. a building, work, relic or tree within a heritage conservation area,*
- b. altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,*
- c. disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,*
- d. disturbing or excavating an Aboriginal place of heritage significance,*
- e. erecting a building on land:*
 - i. on which a heritage item is located or that is within a heritage conservation area, or*
 - ii. on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,*
- f. subdividing land:*
 - i. on which a heritage item is located or that is within a heritage conservation area, or*
 - ii. on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.*

Killara Station is listed as an item of environmental heritage on Schedule 5 of the Ku-ring-gai Council LEP 2015 (Item I1106) and partially within the Springdale Heritage Conservation Area (C21).

2.4 Summary of statutory controls

Killara Station has been identified by Sydney Trains as holding local significance and is listed on the TAHE Section 170 Heritage and Conservation Register. The register search was extended to 100 metres from the curtilage of Killara Station to establish if there were surrounding registered items or conservation areas that may be affected by the Proposal. Table 2-1 summarises the heritage listings identified as a result of this search.

There are 11 local heritage items located within 100 metres of Killara Station. Most are dwellings or shops located to the immediate east and west of the station.

The southern portion of the station curtilage is within the Springdale Heritage Conservation Area. Two conservation areas are located within approximately 20 metres to the east (Lynwood Avenue Heritage Conservation Area – C23) and west (Marian Street Heritage Conservation Area – C24) of the station. All locally significant heritage items listed in Table 2-1 are within these heritage conservation areas. Table 2-2 sets out the features of the heritage conservation areas and Figure 2-1 shows the location of these heritage items and heritage conservation areas in relation to Killara Station.

Table 2-1 Summary of listed heritage items within and adjacent to the Proposal area

Heritage list	Items within the Proposal area	Level of significance	Items adjacent to the Proposal area	Level of significance	Distance to Proposal area
World Heritage List	Nil	n/a	Nil	n/a	n/a
National Heritage List	Nil	n/a	Nil	n/a	n/a
Commonwealth Heritage List	Nil	n/a	Nil	n/a	n/a
Register of the National Estate (non-statutory)	Nil	n/a	Nil	n/a	n/a
State Heritage Register	Nil	n/a	Nil	n/a	n/a
TAHE Section 170 Heritage and Conservation Register	Killara Railway Station Group (SHI #4801066)	Local	Nil	n/a	n/a
Ku-ring-gai LEP 2015	Killara Railway Station Group (I1106)	Local	Dorchester Flats 1 Marian St Killara (I320)	Local	46 metres south west
			Newsagent, chemist 11-15 Marian St Killara (I328)	Local	90 metres south west
			Dwelling House 6 Lorne St Killara (I302)	Local	90 metres west
			Lynwood Cottage 4 Lynwood Ave Killara (I308)	Local	75 metres north east
			"Lynwood" dwelling house 10 Lynwood Ave Killara (I310)	Local	100 metres north east
			"Morningside" dwelling house 1 Maples Ave Killara (I319)	Local	25 metres east
			Dwelling house 25A Werona Ave Killara (I408)	Local	20 metres east
			"Maple House" 25 Werona Ave Killara (I406)	Local	20 metres east
			Killara Post Office 23A Werona Avenue Killara (I407)	Local	20 metres east

Heritage list	Items within the Proposal area	Level of significance	Items adjacent to the Proposal area	Level of significance	Distance to Proposal area
			Dwelling House 5 Locksley St Killara (I298)	Local	80 metres east
			Dwelling House 7 Locksley St Killara (I299)	Local	95 metres east
	Springdale Heritage Conservation Area	Local	Lynwood Avenue Heritage Conservation Area (C23)	Local	20 metres east
			Marian Street Heritage Conservation Area (C24)	Local	20 metres west

Table 2-2 Heritage Conservation Areas

Heritage Conservation Area (HCA)	Features
Lynwood Avenue HCA (C23)	This area has aesthetic significance from the highly intact and cohesive late Nineteenth Century to early Twentieth Century Federation and Inter-War development
Marian Street HCA (C24)	Contains examples of single detached houses from the Federation, Interwar and Post war periods. The built context is enhanced by large garden settings, wide street proportions, street plantings and remnant and planted native trees, element synonymous with the Ku-ring-gai area and retains an emphasis on residential, recreational and cultural development
Springdale HCA (C21)	Medium to large lots with well-established gardens. The houses are almost exclusively detached residences, with architectural styles including Federation Queen Anne, Arts and Craft, Inter-war Old English, Spanish Mission, Mediterranean and Californian Bungalow. Many houses retain period landscape features including sweeping drives, borders of mixed shrubberies and planted out beds



Figure 2-1 Location of nearby heritage items and heritage conservation areas

3.0 Historical context

In order to appreciate the heritage significance of an item, it is important to understand the historical context in which it was constructed and the subsequent factors that have influenced its development.

A detailed analysis of Aboriginal cultural heritage is beyond the scope of this report; however, it is important to recognise the Darug and Guringai people who occupied and thrived in the Ku-ring-gai area prior to European occupation.

The following sections outline the development of Killara Station.

3.1 Early European settlement

The Hawkesbury River was known to Europeans from the onset of colonial history, when in 1788, Governor Phillip voyaged west, exploring its islands and riverbanks (Hornsby Shire, 2017). Over time, settlements grew along the river, attracted by the richness of available resources (Higginbotham, 1993).

Settlement was concentrated along the river sections before the search for more farming land led to surveyors being sent out to map greater areas between Sydney and the Hawkesbury areas. By 1816 Timber getters were sent to the Ku-ring-gai area to fill the need for supplies back at the main settlement areas in Sydney. By the 1829 the Great North Road from Parramatta to Wisemans Ferry has been constructed, and specific areas and allotments were granted along the road for agricultural purposes, predominately used for orchards.

One of the earliest non-Aboriginal visitors to the Killara area were timber getters. These were itinerant workers, who lived in temporary dwellings whilst working in a given area. The area was known for its large trees, with diameters of 1.2 to 2.2 metres. Bullock drays would carry the cut timber to the Lane Cove River, from where it would be floated to Sydney (Edwards, 1926:119).

The earliest land grants were made in the vicinity of Killara from the early 19th century. The land comprising Killara Station was part of two such land grants, the northern portion being a parcel of 80 acres granted to Edwin Booker in 1821 and the southern portion being part of a 160 acre grant to Jane McGillivray made in 1839 (Figure 3-1).

Both land grants covered both sides of the rail line and were occupied by the grantees. Booker sold his grant to J W Fish, a sea captain, in 1822. Fish's wife lived in a cottage near the modern-day railway bridge crossing of Powell Street, approximately 220 metres north of Killara Station (Edwards, 1926:114). The McGillivray Grant was made to John Dunmore Lang and Jane McGillivray's father, James Bradley, in trust for Jane McGillivray. She lived in a house called "Springdale" and much of the grant is now part of the Springdale Heritage Conservation Area. Jane McGillivray, an accomplished woman, operated a Ladies' College at Parramatta from the 1830s, until several family tragedies saw her move to her grant at Killara in 1856. She lived in a weatherboard cottage until her death in 1861 (Edwards, 1926:120).

The first subdivisions in the Killara area commenced in the 1890s, shortly after the announcement of the North Shore Line. The timing of these subdivisions is undoubtedly connected with the construction of the railway, and in particular the subdivision of the Springdale estate. Other large estates, such as The Maples were broken up into smaller, suburban residential lots (Figure 3-2). The railway station name of "Killara" was apparently suggested by historian, author and local alderman James Edwards, which in an unspecified Aboriginal language means "permanent" or "always there" (Architectural Projects Pty Ltd, 2010:69). This name was soon adopted as the suburb name.



Figure 3-1 Detail of map showing land grants around Killara Railway Station, c. 1926 (State Library of NSW, Item No. Z/M2 811.1441/1926/1)

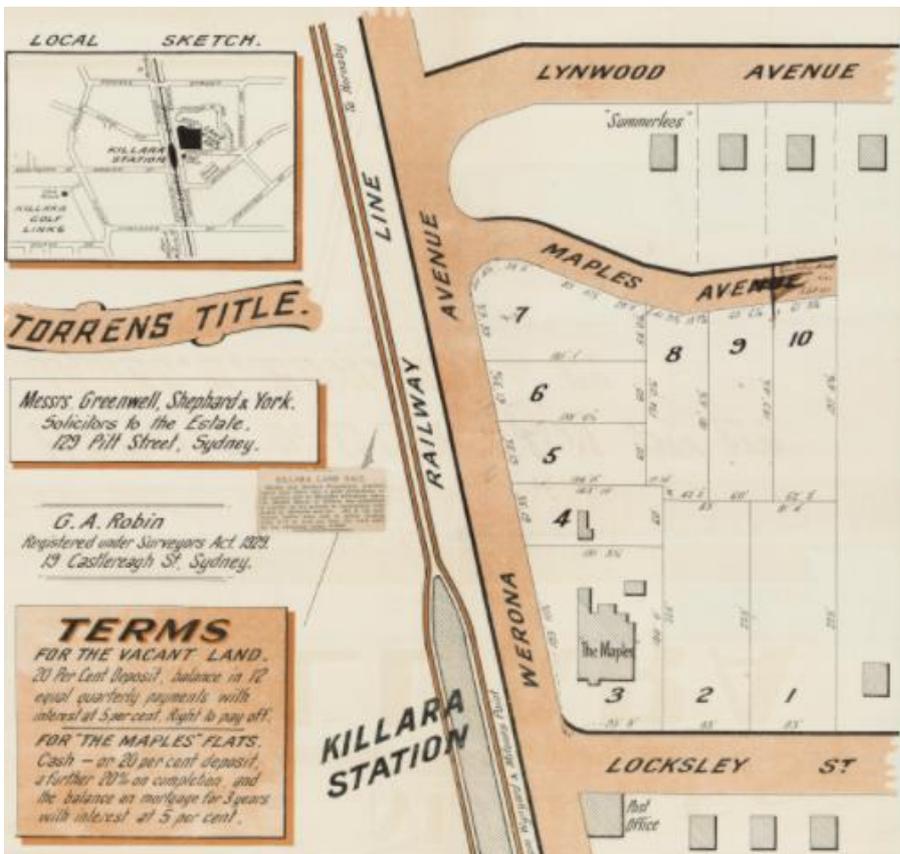


Figure 3-2 Detail of subdivision plan for "The Maples" estate, c. 1935 (State Library of NSW)

3.2 A ‘United Australia’: Railway Developments

The first railway in the Colony connected Sydney to Parramatta Junction in 1855. Following this, proposals for further lines were numerous, as the benefits of transporting goods from inland centres were immediately recognised by “landed interests” (RailCorp, 2009).

In the lead up to Federation, development focus shifted to uniting railways between the eastern colonies, and a continuous rail line was envisaged that would facilitate communication and transport from Charlestown, Queensland right through to Port Augusta, South Australia (Hornsby Shire, 2017). The Hawkesbury River formed a major challenge in this pursuit as its steep river banks necessitated the funding and construction of “the largest iron bridge in the southern hemisphere”, which would allow the railway to continue uninterrupted (Davison, 1978) (The Australian Town and Country, 1889).

3.2.1 Sydney to the Hawkesbury River then Killara

With plans for the railway bridge already set in motion, railway lines in the north and south were extended towards Hornsby and then further to the Hawkesbury River, and camps were established along the routes to house railway construction workers (NSW Heritage Division, 2009). A station to present day Hornsby was not opened until September 1886. The creation of the line out to Hornsby became the focal point for construction of the line further to the north toward and eventually crossing, the Hawkesbury River. Branch lines were then added from Hornsby back towards the south to connect with the then single-track North Shore line. As these lines were constructed, the surrounding areas to the stations began to transform and become populated with both industries and suburban transformation.

3.2.2 Development of Killara

Killara Station was not conceived until the early 1890s, when land for subdivisions to the south of Hornsby were called for. The original Killara Station (c.1899) consisted of a single platform that was converted to an island platform following duplication. Both platforms appear to have been constructed, however a paling fence was erected to separate them (Figure 3-3, Figure 3-4).

Duplication of the North Shore line between Hornsby and Lindfield allowed for the construction of a standard island platform between the two tracks. Duplication resulted in the existing track becoming the up main and the new line to be placed on the western side to become the new down track. A footbridge was constructed to link Werona Avenue and Culworth Avenue (Figure 3-5)

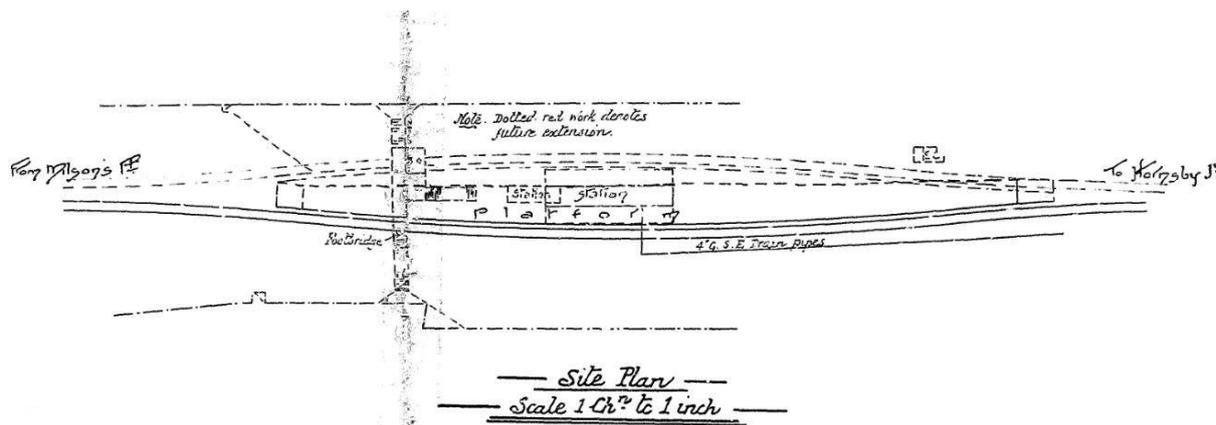


Figure 3-3 Station layout, c. 1906 (Sydney Trains Virtual Plan Room)



Figure 3-4 Killara Railway Station prior to duplication, looking south. Note paling fence at left (State Library of Victoria)



Figure 3-5 Killara Railway Station following duplication and construction of footbridge, c.1910 (National Library of Australia)

Once constructed in 1910, the station consisted of the brick island platform, brick standard station building and the footbridge (Figure 3-6). The original station building was a typical A8 design, that included a booking office building at one end, a waiting room and ladies rest room in the centre, and separate waiting room and men's restroom at the other end (Figure 3-7).

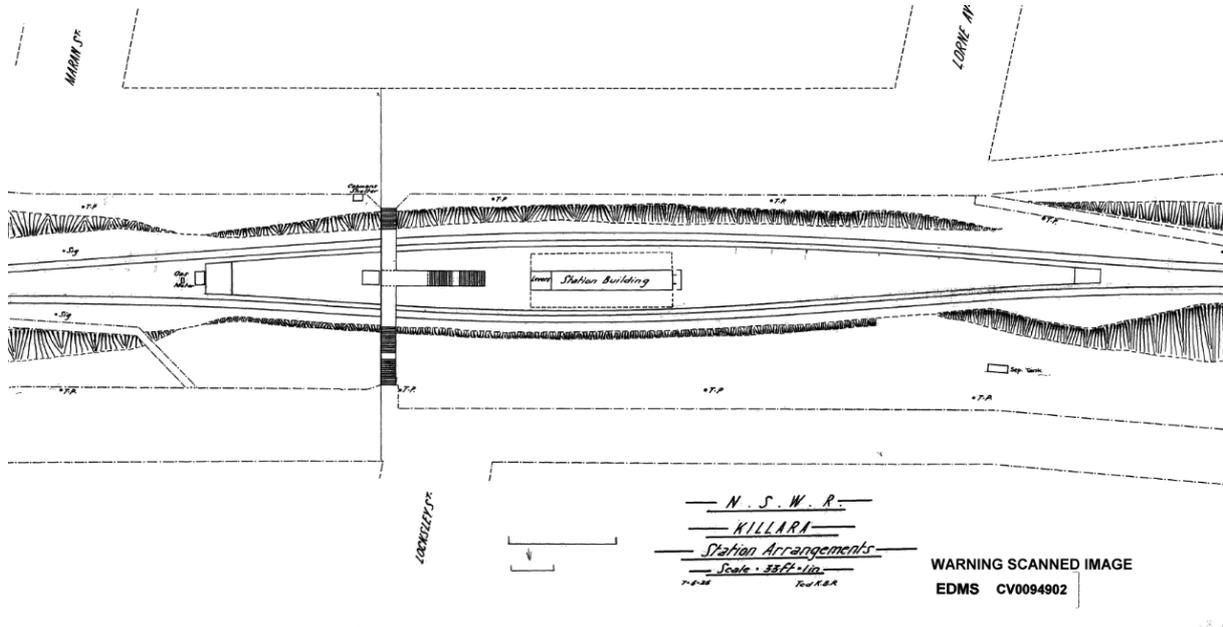


Figure 3-6 Killara Station layout, 1925 (Sydney Trains Virtual Plan Room)

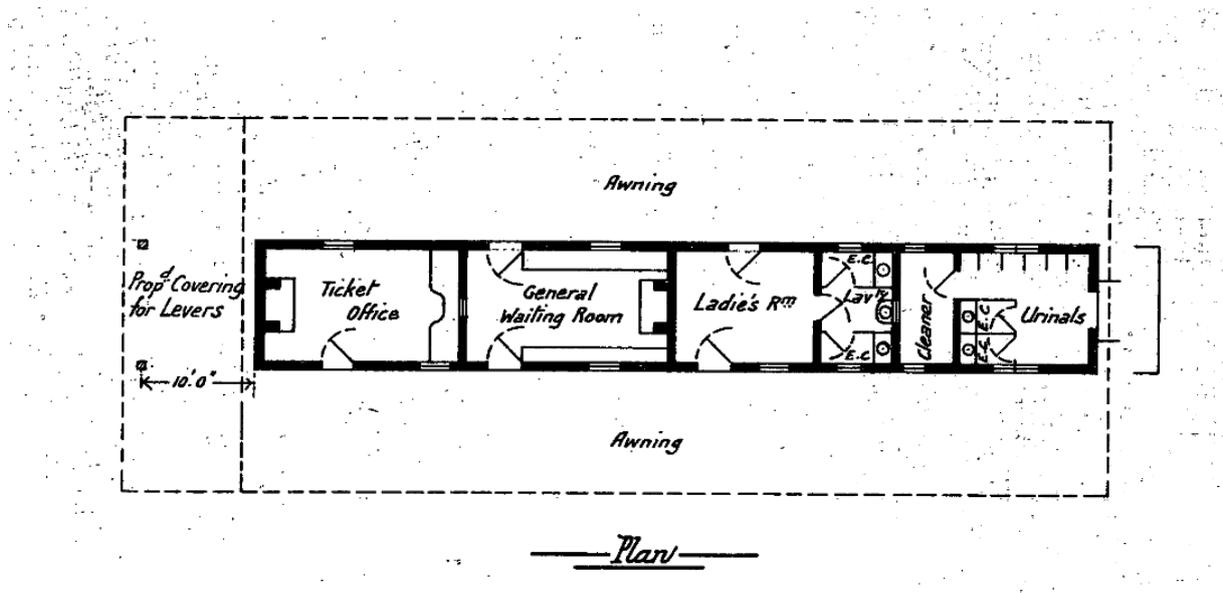


Figure 3-7 Plan of Killara Station building as constructed and completed in 1909 (Sydney Trains Virtual Plan Room)

3.2.2.1 Station garden

In an effort to beautify railway stations, in the late 19th century, station masters were encouraged by the Railway and Transport Institute to plant gardens in and around railway stations. In 1899 a Railway and Tramway Horticultural Society was formed, to encourage skills in horticulture among rail staff (Buckley (ed.), 2017:14).

In 1905, the local progress association provided a garden to Killara Station, measuring approximately 120 metres by 13 metres adjacent to and parallel with the rail corridor on Culworth Street. A newspaper article at the time noted that at the time of donation the garden had been:

...thoroughly trenched, worked and planted with ornamental trees and shrubs obtained from government departments or supplied by private donors. One of the latter gave five dozen picked rose trees, in addition to a quantity of camelias, azaleas and hibiscus. Creepers will before long trail over the stone wall that borders the bed. Residents are taking great interest in the undertaking, and some of them have sent their gardeners to work in the area. Expert skill,

therefore, as well as energy, has been brought to bear, and there is every prospect of a successful result (Daily Telegraph, 1905:6).

Two years later, it was reported that the garden at Killara Station was flourishing, particularly with roses. Commendation was given to the station master, who “took a lively interest” in the garden (Daily Telegraph, 1907:11).

In November of that same year, Killara took first prize in the Railway Stations Garden competition for its area, awarded by the (Daily Telegraph, 1907:15), and again the following year (Sydney Morning Herald, 1908:10).

By the 1950s, the local council took over the maintenance of the railway gardens within its boundaries, including at Killara Station. The park superintendent for that council, Mr R D Bruce, was in charge having been a landscape gardener and formerly director of the State Gardens in Perth. Seedlings were grown at the council’s nursery at Gordon. Plants on the island platforms were still maintained by station staff (Sunday Herald, 1953:19).

Throughout the second half of the 20th century, the gardens continued to be maintained however the importance of railway gardens gradually declined (Figure 3-8 and Figure 3-9). Nevertheless, for many years the railway garden at Killara Station featured on the cover of railway timetables (Figure 3-10).



Figure 3-8 Killara Station, c 1960s (Australian Railway Historical Society)



Figure 3-9 Colour photograph of gardens, looking south, in 1964 (Australian Railway Historical Society)

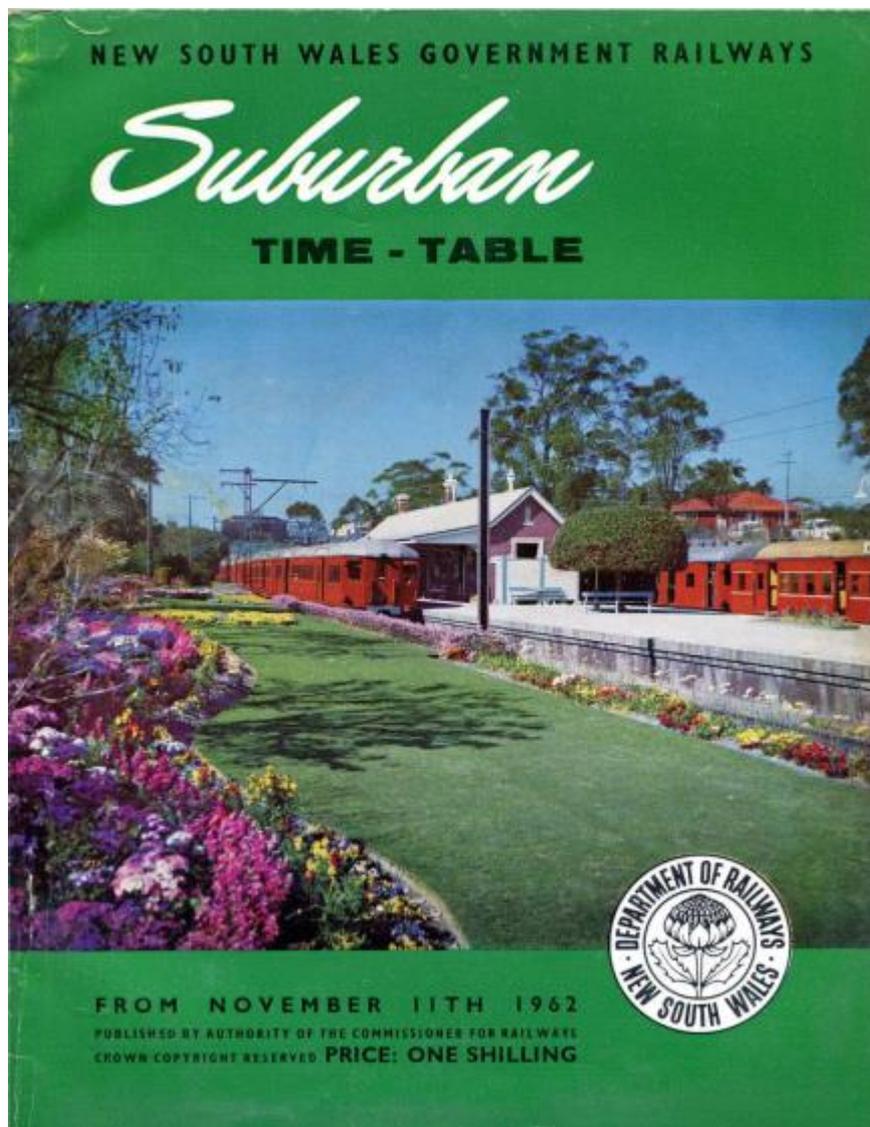


Figure 3-10 NSW Railways Suburban Timetable from November 1962 featuring Killara Railway Station gardens on its cover (National Library of Australia)

3.3 Literature review

There have been several recent heritage assessments undertaken for Killara Station for previous upgrade works. Each report recognises the historic and aesthetic heritage values of Killara Railway Station Group, and the high heritage significance of the gardens. In 2014, OCP Architects provided a Heritage Impact Report on Killara Station ahead of the proposed removal of hazardous materials at the station. These works were largely confined to the station building and included the removal of lead paint, asbestos cement sheeting, fluorescent light fittings and synthetic mineral fibres insulation. Overall, balanced against the safety aspects of the removal of hazardous materials, OCP concluded that those works had a neutral impact on the heritage significance of the station building.

AECOM provided preliminary heritage advice for works proposed for the station precinct and a commuter car park upgrade in 2015. There was a wide program of works proposed in 2015 that included the installation of accessibility compliant ramps and lifts; compliant access paths between each street, associated interchange facilities and the station; canopy coverage for the lifts and interchange facilities; provision for future canopies; Tactile Ground Surface Indicators to stairs, platforms, lifts and interchange facilities; an accessible ticket window, and a review of CCTV design. In acknowledging the Killara Railway Station Group's heritage significance and the particular significance of the gardens, AECOM recommended several guiding principles in the concept design for the works,

including the retention of original fabric of the station building where possible, the avoidance of impact to the gardens where possible, retention and/or modification of the original fabric of the footbridge rather than demolition, a shallow pitch to the footbridge roof to align with rooflines of the station building, a recessive colour palette to reduce any visual dominance and avoidance of new openings to the station buildings, with doors widened only where necessary.

In 2017, PTW Architects provided a SoHI as part of a Statement of Environmental Effects (SEE) for a package of upgrade works including repairs to the external face brick walls of the station building with an undercover waiting area added, repainting elements of the station building, new bathroom fittings and fixtures in the station building and potential reconstruction of the original roof profile and decorative gable end details removed in the 1980s. The SoHI found that the changes were acceptable from a heritage point of view. In addition to the station building works, general maintenance works to the garden was also proposed. PTW Architects recommended the retention of the garden layout, but that weed removal and top up mulch to be undertaken as per the Sydney Trains Garden Bed technical specification.

3.4 Development of Killara Station

Killara Station has been subject to a number of modifications since its opening in 1889. The original fabric and known upgrades are summarised in Table 3-1.

Table 3-1 Chronology of Killara Railway Station Group

Original 1989 station	
1889	Single line – Station building
1905	Garden commenced
1906	Single line – Brick station building constructed
1909 station	
1909	Island platform is built
1909	Duplication of the train line from Hornsby to North Sydney
1909	Type A8 station design used on the Northern Line
1910	Overhead footbridge constructed
1928	Electrification and installation of automatic signalling; signal frame removed; extension of awning
1976	Station building badly burned when station left unattended
1984-1993	Construction of footbridge kiosk
1993	Modifications to canopies and stairs
2014	HAZMAT removal/maintenance
2018	Station refresh
2019	Platform resurfacing

4.0 Physical evidence

This section provides a physical description of Killara Station to provide an understanding of the physical elements that contribute to the station's heritage significance. The descriptions are based on those contained in the SHI listing for Killara Railway Station Group.

4.1 Killara Station – major group elements

Killara Station has a single island platform, accessed by an overhead footbridge from Werona Avenue on the eastern side (Figure 4-1) and Culworth Avenue from the west (Figure 4-2). An ornamental garden is located on Werona Avenue adjacent to the steps of the footbridge and within the rail corridor (Figure 4-3 and Figure 4-4). This garden is within the curtilage of the Killara Railway Station Group.



Figure 4-1 Existing entrance to Killara Station from Werona Avenue (AECOM, 2021)



Figure 4-2 Existing entrance to Killara Station from Culworth Avenue (AECOM, 2021)



Figure 4-3 Part of the ornamental garden, looking north from the footbridge (AECOM, 2021)



Figure 4-4 Ornamental garden, looking south from the footbridge (AECOM, 2021)

The footbridge is uncovered and supported by original star-type metal newel posts at the base of each stair, with original metal balustrades and handrails (Figure 4-5 and Figure 4-6). The flooring, however, is modern poured concrete (Figure 4-8, Figure 4-8). Original Frodingham steel remains on the stairs, with modern Glengarnock steel on the upper deck (Figure 4-9 and Figure 4-10). A timber and metal-framed kiosk is cantilevered from the footbridge but appears to be of modern construction (c.1984-1993) and is no longer in use (Figure 4-8 and Figure 4-10).

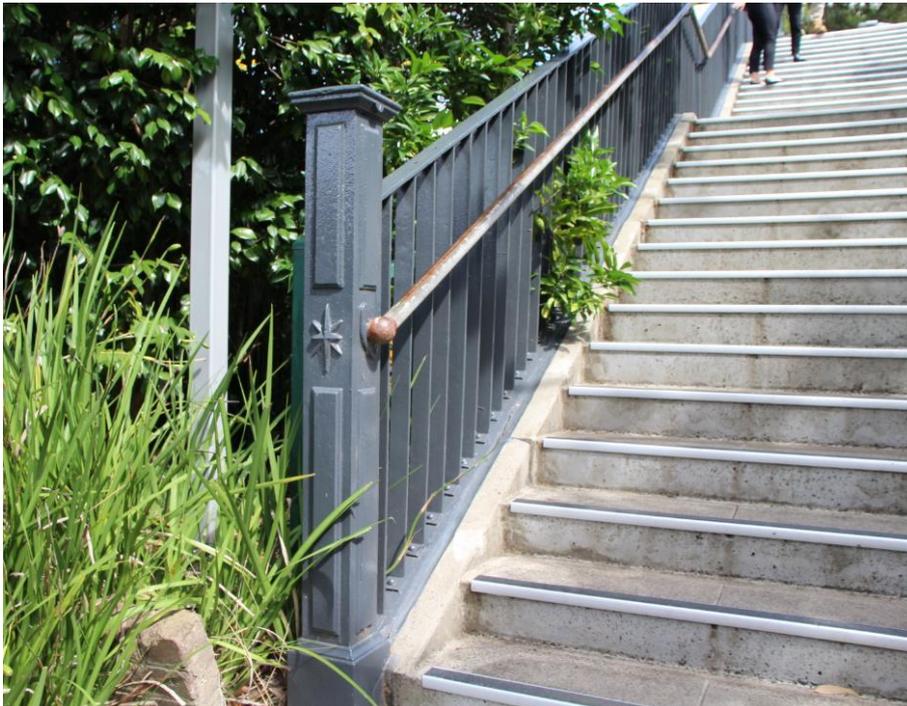


Figure 4-5 Original star patterned newel posts, balustrades and handrails at the Werona Avenue (eastern) access to footbridge. These are also present on the Culworth Avenue side of the footbridge (AECOM, 2021)



Figure 4-6 Stairs from footbridge to Werona Avenue. Note original tapered end of handrail (AECOM, 2021)

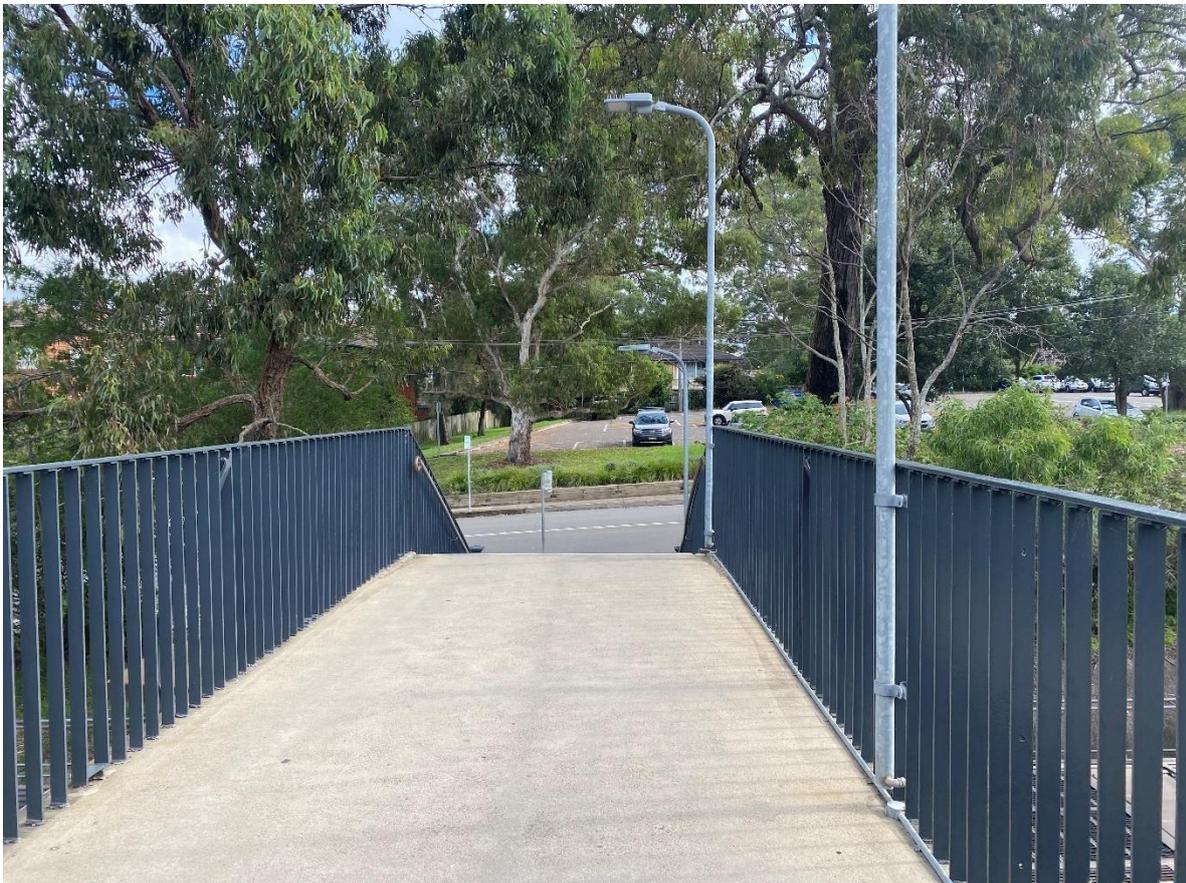


Figure 4-7 View towards commuter car park (construction compound area) on Culworth Avenue (AECOM, 2021)



Figure 4-8 Deck of footbridge, looking east. Cantilevered kiosk is at right (AECOM, 2021)



Figure 4-9 Footbridge, looking south toward Culworth Avenue from platform (AECOM, 2021)



Figure 4-10 Steel substructure of footbridge and cantilevered kiosk. Note modern steel substructure of the footbridge deck (at left) (AECOM, 2021)

The station consists of an island platform with a single brick station building (Figure 4-11). The platform itself is occupied by the station building and associated station platform furniture and lighting. Previous investigations indicate the location of gas chambers (since removed) beneath the modern platform surface, to the south of the footbridge. Some subsurface, remnant archaeological deposits may remain in that location, however these are unlikely to be disturbed by the proposed works.



Figure 4-11 Killara Station looking south, with “up” line (Platform 1) in foreground (AECOM, 2021)

The station building is of red face brick, tuck-pointed, with moulded render string course, architraves and sills (Figure 4-12). The roof has been extensively modified, with the original gable form being removed to create a gable of a much lower pitch that is a continuation of the awning. The roofing material is a modern steel profile (Figure 4-13). Curved, cast-iron, cantilevered brackets support the timber-framed awning (Figure 4-12). The building does not retain the original gable ends, bargeboards, valances or chimneys. The northern end of the building has been modified to include two doors for passenger toilets (Figure 4-14).



Figure 4-12 Station building on “down” line (Platform 2), looking north (AECOM, 2021)



Figure 4-13 Modified roofline of main station building and contemporary canopy addition in foreground, looking north from footbridge (AECOM, 2021)



Figure 4-14 Northern end of station building modified to include toilets (AECOM, 2021)

The interiors of the station building, whilst retaining most of its original plan, have been extensively modified (Figure 4-15, Figure 4-16). Walls are rendered and have no dado (lower part of a wall, between a dado rail/chair rail and the skirting board). Fireplaces have been infilled and ceilings replaced. Some original features remain, including original window joinery of double-hung sash windows with 16-pane coloured glass (Figure 4-17, Figure 4-18). A secret lockable safe remains in operation (similar examples are in operation at Denistone and Normanhurst) (Heritage NSW, 2009).

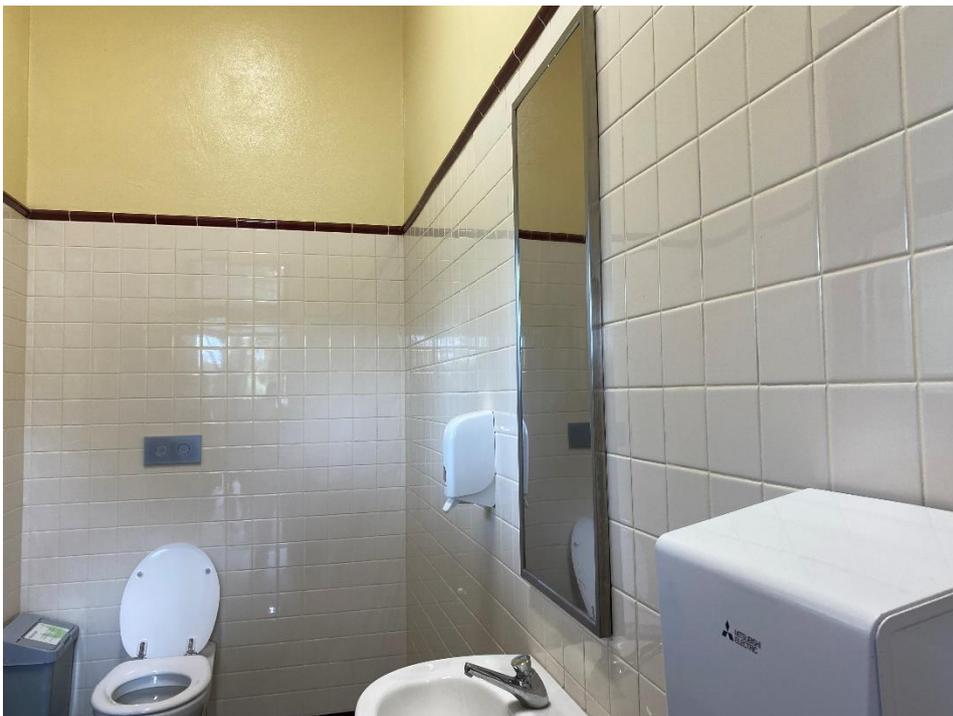


Figure 4-15 Internal layout of men's toilet, Killara Station (AECOM, 2021)



Figure 4-16 Internal layout of communications/store room, Killara Station, looking north (AECOM, 2021)



Figure 4-17 Western internal wall of communications/store room indicating original and updated features (AECOM, 2021)



Figure 4-18 Windows in station building (AECOM, 2021)

5.0 Significance assessment

5.1 Introduction

In order to understand how a development would impact on a heritage item, it is essential to understand why an item is significant. An assessment of significance is undertaken to explain why a particular item is important and to enable the appropriate site management and curtilage to be determined. Cultural significance is defined in *The Australia ICOMOS Charter for Places of Cultural Significance 2013* (ICOMOS (Australia), 2013) as meaning "aesthetic, historic, scientific, social or spiritual value for past, present or future generations" (Article 1.2). Cultural significance may be derived from a place's fabric, association with a person or event, or for its research potential. The significance of a place is not fixed for all time, and what is of significance to us now may change as similar items are located, more historical research is undertaken, and community tastes change.

The process of linking this assessment with an item's historical context has been developed through the NSW Heritage Management System and is outlined in the guideline *Assessing Heritage Significance* (NSW Heritage Office, 2001), part of the NSW Heritage Manual (Heritage Branch, Department of Planning). The *Assessing Heritage Significance* guidelines establish seven evaluation criteria (which reflect four categories of significance and whether a place is rare or representative) under which a place can be evaluated in the context of State or local historical themes. Similarly, a heritage item can be significant at a local level (i.e. to the people living in the vicinity of the site), at a State level (i.e. to all people living within NSW) or be significant to the country as a whole and be of National or Commonwealth significance.

In accordance with the guideline *Assessing Heritage Significance*, an item would be considered to be of State significance if it meets two or more criteria at a State level, or of local heritage significance if it meets one or more of the criteria outlined in Table 5-1. The Heritage Council requires the summation of the significance assessment into a succinct paragraph, known as a Statement of Significance. The Statement of Significance is the foundation for future management and impact assessment.

Table 5-1 Significance assessment criteria

Criterion	Inclusions/Exclusions
Criterion (a) – an item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area).	The site must show evidence of significant human activity or maintains or shows the continuity of historical process or activity. An item is excluded if it has been so altered that it can no longer provide evidence of association.
Criterion (b) – an item has strong or special association with the life or works 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).	The site must show evidence of significant human occupation. An item is excluded if it has been so altered that it can no longer provide evidence of association.
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).	An item can be excluded on the grounds that it has lost its design or technical integrity or its landmark qualities have been more than temporarily degraded.
Criterion (d) – an item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons.	This criterion does not cover importance for reasons of amenity or retention in preference to proposed alternative.

Criterion	Inclusions/Exclusions
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). Significance under this criterion must have the potential to yield new or further substantial information.	Under the guideline, an item can be excluded if the information would be irrelevant or only contains information available in other sources.
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).	An item is excluded if it is not rare or if it is numerous, but under threat. The item must demonstrate a process, custom or other human activity that is in danger of being lost, is the only example of its type or demonstrates designs or techniques of interest.
Criterion (g) – an item is important in demonstrating the principal characteristics of a class of NSW’s (or local area’s): <ul style="list-style-type: none"> cultural or natural places cultural or natural environments. 	An item is excluded under this criterion if it is a poor example or has lost the range of characteristics of a type.

5.2 Killara Railway Station Group

5.2.1 Section 170 register listings

Killara Railway Station Group has been assessed against the heritage criteria in the Section 170 Heritage and Conservation Register listing to determine the level of significance and related statutory protection as outlined in Table 5-2.

Table 5-2 Significance assessment – Killara Railway Station Group

Significance Criteria	Application of Criteria (Existing Assessment)
Historical significance SHR criteria (a)	<p><i>Killara Railway Station has historical significance at a local level. The station was a later addition to the North Shore line. It was opened in 1899 and is one of a number of stations that demonstrate the significant impact of the railway in facilitating settlement in the northern suburbs of Sydney. The garden, in association with the grouping of the station, footbridge and platform evokes a former era of travel and civic pride in railways that no longer exists.</i></p> <p><i>Killara Station has local significance in terms of its association with the formerly prestigious Railway Stations Gardens Competition. The gardens at Killara station have long been a key feature of the station and were featured on the cover of Sydney metropolitan railway timetables for many years.</i></p>

Significance Criteria	Application of Criteria (Existing Assessment)
Historical association significance SHR criteria (b)	<i>The item does not meet this criterion.</i>
Aesthetic significance SHR criteria (c)	<p><i>The garden is a largely intact typical railway/municipal ornamental garden, one of the most important railway station gardens in the region. It has significance due to its rich collection of historic exotic plantings and is held in high regard by the local community. The garden contributes strongly to the significance of the station group, providing a setting that evokes a past practice of station garden design. The station building has aesthetic qualities as an example of early twentieth century railway station design with fabric and details typical of this period and similar to other rail buildings of the late nineteenth and early twentieth century in Sydney and on the North Shore line in particular. The aesthetic significance of the station building has been compromised however, by major changes to the roof structure and later changes internally.</i></p> <p><i>The Killara Station precinct has aesthetic significance for its contribution to the characteristic nature of the North Shore line - one of homogenous station design and landscaping. With the former Killara Post Office and the treed setting, Killara Station contributes to a small but significant suburban heritage precinct.</i></p>
Social significance SHR criteria (d)	<i>Killara Station is considered to have social significance at a local level. Killara Station possesses a largely intact railway/municipal ornamental garden on its eastern side and is one of the most important railway station gardens within the metropolitan network. The garden is a strong source of pride in the local community and has a strong association with the once famous Railway Stations Garden Competition. The garden also featured on the cover of Sydney metropolitan railway timetables for many years. The location of the former Killara Post Office at the corner of Locksley St and Werona Ave opposite the garden reinforces the civic nature of this precinct.</i>
Technical/Research significance SHR criteria (e)	<i>The item does not meet this criterion.</i>
Rarity SHR criteria (f)	<i>Killara Station is considered to be rare at a local level. The station possesses a largely intact garden on its eastern side, which is one of the most impressive in the region with the exception of the Wahroonga Station garden. The civic pride which was once associated with the coming of the railways and the station as a major landscape and social element within the community is evident in the garden at Killara Station, one of very few on the metropolitan network to remain. The station contributes to the overall character of the Northern line (T1 North Line).</i>
Representativeness SHR criteria (g)	<p><i>Killara Station has representative significance at a local level. The garden represents the practice of railway station gardening that was once common throughout the network. It is an excellent example of its type due to its integrity and grouping with the original station building, platforms and footbridge.</i></p> <p><i>The footbridge was identified as an item of moderate heritage significance in the comparative analysis from the 2016 'Railway Footbridges Heritage Conservation Strategy' (NSW Government Architect's Office Heritage Group, 2016).</i></p>

Significance Criteria	Application of Criteria (Existing Assessment)
Integrity/Intactness	<i>Killara Station has a largely intact garden setting which adds greatly to the heritage significance of the place. The station building and footbridge, however, have undergone a number of changes that have resulted in a significant loss of both integrity and intactness. The removal of the original roof on the station building has had the most detrimental effect on the site and results in the station being a poor example of its type along the North Shore line.</i>

The existing Statement of Significance reads as follows:

Killara Railway Station Group has heritage significance at a local level. It is a typical suburban station with associated ornamental gardens, and one of the few stations in the region where there has been relatively little change to the appearance of the overall setting. It is one of a number of stations that demonstrate the significant impact of the railway in facilitating settlement in the northern suburbs of Sydney and is an important station on the first purely suburban line in NSW. The station has local significance in terms of its association with the formerly prestigious Railway Stations Gardens Competition. It is one of the most important and intact railway gardens in the region. The grouping of the station building, platform and footbridge in their landscape setting, contribute to the characteristic nature of the North Shore line, with its homogenous early twentieth century station designs and garden settings. The replacement of the original roof form of the station building with a poorly designed substitute structure detracts from the overall setting and significance.

This Statement of Significance was last updated 11 May 2009.

5.2.2 Discussion

The heritage significance associated with Killara Station relates to the station's historical, social and aesthetic significance, with particular reference to the garden on the Werona Avenue side of the station and its connection with the former Railway Stations Gardens Competition. Historically, the construction of the station allowed for the development of the surrounding area, both for industrial and residential purposes. That growth also led to the expansion of the railway line itself, leading to the duplication of the line in 1909 and construction of the new station.

The station platform and building are recognised as good examples of early twentieth century design, with the exterior of the station building still reflective of the original design. Areas of reduced integrity to the station and the station building relate to the internal modifications and to the replacement of the station building's roof and modification/simplification of its form.

In 2016 a heritage conservation strategy was undertaken for Sydney Trains' railway footbridges (Government Architect's Office, 2016). This strategy included an assessment of the heritage significance of these railway footbridges. The Killara Station footbridge was assessed as being of moderate significance due to the number of modifications to the steps and decking (Government Architect's Office, 2016:71). However, the star-type newel posts, original steel balustrades and handrails are the only original elements left of the 1910 footbridge, and given the extensive modifications to the footbridge, these few original elements are now of increased rarity. However, despite its loss of integrity and intactness, the footbridge is recognised for its contribution to the historical and aesthetic significance of this and other stations on the North Shore line (Government Architect's Office, 2016:143).

5.3 Grading of significant elements

As different elements of an item can have a different contribution to its heritage significance, it is sometimes useful to define which elements are of significance and which may detract from its significance. The NSW Heritage Division (NSW Heritage Office, 2001:11) use the grading criteria provided in Table 5-3. The grading of significant elements associated with Killara Station are outlined in Table 5-4.

Table 5-3 Grading of significance criteria (from NSW Heritage Office, 2001:11)

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

Table 5-4 Killara Station grading of fabric (Heritage NSW, 2009)

Grading	Element meeting criteria
Exceptional	Form and character of the station gardens and their interaction with the local suburban setting
High	General form and character of the station building noting the modified roof form is intrusive (see below)
Moderate	<ul style="list-style-type: none"> fabric of the footbridge within the rail corridor proximity and association with the Killara Post Office on Werona Avenue
Little	Nil
Intrusive	<ul style="list-style-type: none"> replacement roof on the station building cantilevered kiosk on footbridge

6.0 Proposal description and impacts

The following section provides a description of the Proposal and is followed by a detailed assessment of the potential impacts to identified heritage significance.

6.1 Options assessment

In 2015, options for improving access to Killara Station were developed following a series of workshops with Transport for NSW and the project design team.

In 2021, Option 1 was further refined giving consideration to accessibility, customer experience and minimising impacts to heritage elements including the heritage gardens and footbridge.

These options are outlined further in Section 6.2.

6.2 Alternative options considered

Option	Key features
2015 options	
Option 1	<ul style="list-style-type: none"> retention of a portion of the existing footbridge and platform stairs provision of a new lift to provide access from the existing footbridge to the platform, including removal of the existing kiosk to accommodate lift installation and lift landing provision of a new lift and stairs at Werona Avenue to provide access to the station footbridge from the east provision of new ramp and stairs at Culworth Avenue to provide access to the station footbridge from the west provision of canopy cover from the new lifts to the station building as well as existing footbridge reconfiguration of the existing station building to provide an ambulant staff toilet and family accessible toilet.
Option 2	<ul style="list-style-type: none"> demolition of the existing footbridge, ramps and stairs and construction of new footbridge north of the existing footbridge provision of a new lift and stairs at Werona Avenue to provide access to the station footbridge from the east provision of a new ramp and stairs at Culworth Avenue to provide access to the station footbridge from the west provision of a new lift to access the platform from the new footbridge provision of canopy cover from the new lifts to the existing station building as well as new footbridge reconfiguration of the existing station building to provide an ambulant staff toilet and family accessible toilet.

Option	Key features
2021 option	
Option 1b (preferred option)	<ul style="list-style-type: none"> • retention of the existing footbridge and platform stairs • provision of a new lift to provide access from the existing footbridge to the platform, including removal of the existing kiosk to accommodate lift installation and lift landing • provision of a new lift at Werona Avenue to provide access to the station footbridge from the east • provision of a new lift at Culworth Avenue to provide access to the station footbridge from the west • widening of the existing footbridge to accommodate the new lift landing areas • reconfiguration of the existing toilet facilities in the station building to provide a family accessible toilet and a unisex ambulant toilet • provision of seating and canopies at existing boarding assistance zones on the platform.

6.2.1 The 'do-nothing' option

Under a 'do-nothing' option, access to the platform would remain the same and there would be no changes to the way the station currently operates.

The NSW Government has identified the need for improving the accessibility of transport interchanges, train stations and commuter carparks across NSW as a priority under the Transport Access Program.

The 'do nothing' option was not considered a feasible alternative as it is inconsistent with NSW Government objectives and would not encourage the use of public transport or meet the needs of the Killara community.

6.2.2 Assessment of identified options

The options were quantitatively and qualitatively assessed against a range of criteria using Transport for NSW's multi criteria assessment (MCA) framework by Transport for NSW and key stakeholders.

Weightings were applied to each criterion to better evaluate each option against Transport for NSW's key objectives and drivers. Qualitative criteria that were used to evaluate the options included:

- accessibility
- infrastructure requirements
- facility operations and maintenance
- deliverability
- cost
- customer experience
- transport integration
- urban design and precinct planning
- environment, sustainability and heritage.

6.3 Justification for the preferred option

In 2015, Option 1 was identified to best meet the specific objectives of the Proposal (as outlined in Section 6.1) and the wider Transport Access Program. The MCA showed that Option 1 scored the highest in customer experience, urban built form and land use integration, engineering constraints, facility operation and maintenance, and heritage and environment categories.

Option 1 was also the preferred option for the retention of the heritage significance and character of the Killara Railway Station Group (AECOM, 2015). It was concluded in that assessment that the proposed alterations to the interior of the station building as described in Option 1 would not impact fabric of heritage significance, however, the following recommendations were made to ensure the external significance is not impacted by the Proposal:

- the door to the male toilet should be locked and/or bolted to prevent access, but should remain intact to preserve the symmetry of the northern elevation
- the window adjacent to the staff ambulatory toilet should have a privacy treatment applied to the interior of the glass, so as to maintain the appearance externally
- impact on all ornamental gardens should be minimised where possible.

Since the identification of Option 1 as the preferred option, ongoing design development and consultation has been undertaken to refine the scope of the Proposal and Option 1b was developed. In response an additional lift is proposed at the Culworth Avenue station entrance and the existing footbridge retained and widened to improve accessibility and customer experience. The revised layout retains the significant heritage footbridge, including stairs, and minimises impact on the heritage gardens.

6.4 The Proposal

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

The Proposal would include the following key features:

- construction of three new lifts to provide access to the station platforms and existing footbridge, including associated lift landings, canopies, throw screens and support structures
- widening of the existing footbridge to accommodate the new lift landing areas
- provision of seating, wheelchair spaces and canopies at existing boarding assistance zones on the platform
- provision of a new pedestrian crossing, a kiss and ride bay with two spaces (including one accessible space), two new accessible parking spaces and new bicycle hoops on Culworth Avenue
- upgrade of the existing shelter on Culworth Avenue to provide accessible seating and wheelchair waiting area
- upgrade of existing footpath along Culworth Avenue to provide an accessible pathway to the station entrance from the kiss and ride bay and accessible parking spaces
- regrading a section of the existing pedestrian footpath along Werona Avenue to provide a level access ramp to the existing bus stop
- relocation of existing bicycle hoops and provision of new bicycle hoops on Werona Avenue
- reconfiguration of the existing toilet facilities in the station building to provide a family accessible toilet and a unisex ambulant toilet
- ancillary work including platform regrading, minor station building modifications, station power supply upgrade, protection and relocation of services and utilities, new or reinstatement of Tactile Ground Surface Indicators where required, upgrades to stairs, handrails and fencing, new ticketing facilities including additional Opal card readers, improvement to station communication systems (including CCTV cameras) and wayfinding signage.

Figure 6-1 shows the general layout of key features for the Proposal.

Associated with the Proposal, the following works are outside the boundary of the station and therefore outside the heritage curtilage:

- new pedestrian crossing, kiss and ride bays, accessible parking spaces and bicycle hoops on Culworth Avenue
- upgrade of existing shelter on Culworth Avenue
- upgrade of existing footpath along Culworth Avenue
- regrading of existing pedestrian footpath along Werona Avenue
- provision of additional bicycle hoops on Werona Avenue.

Although outside the heritage curtilage, the s170 heritage inventory listing notes that any development in the vicinity of the station needs to consider the historical relationship between the station and its surrounding area (Heritage NSW, 2009). The proposed work outside the heritage curtilage is not expected to cause a direct impact to the station or its elements and therefore unlikely to result in an adverse visual impact to the station, either individually or collectively.

The impacts of the key features of the proposal are considered in Table 6-2 and Table 7-1.

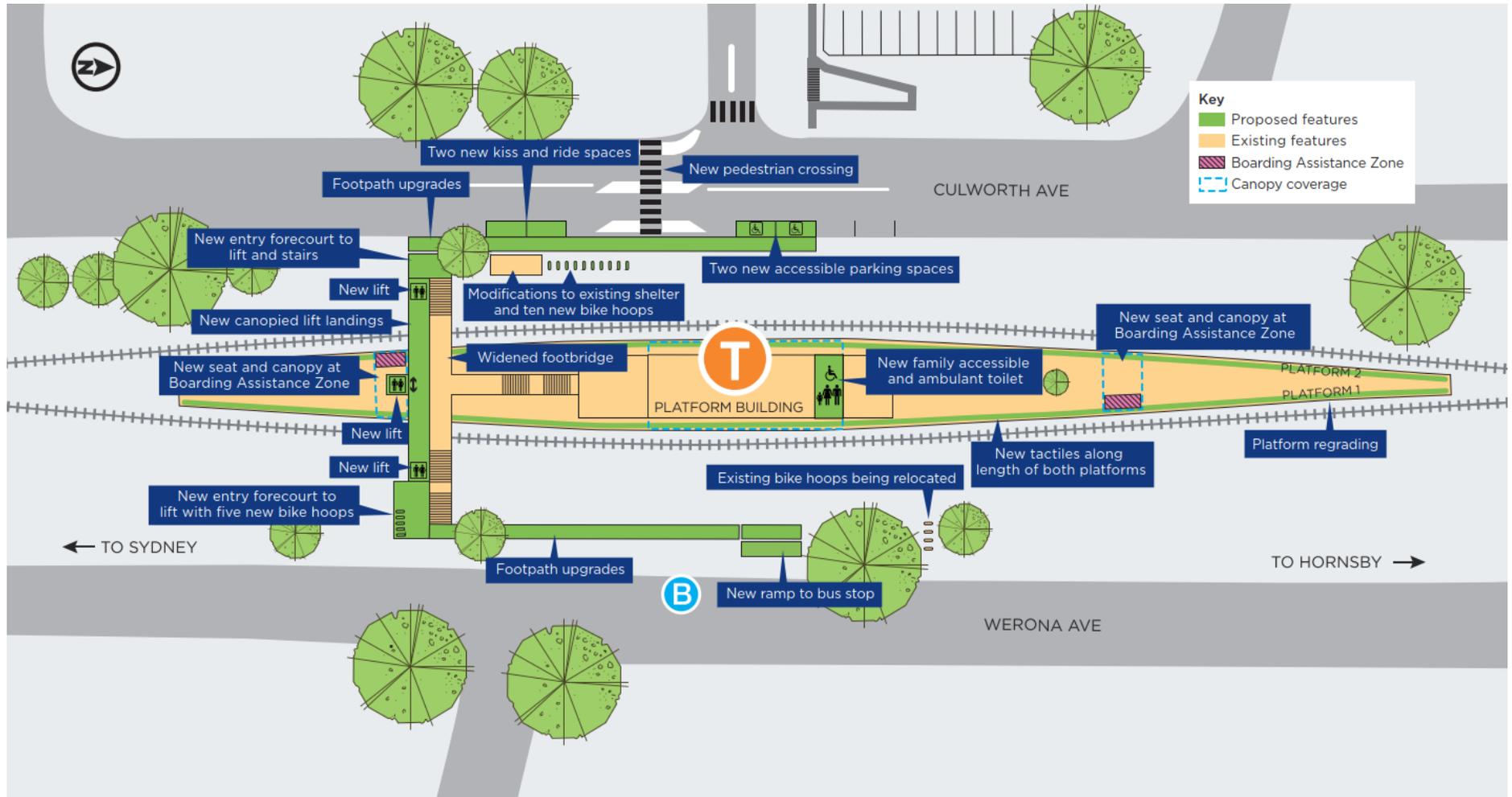


Figure 6-1 Key features of the Proposal (indicative only, subject to detailed design)

6.5 Proposal impacts

6.5.1 New lifts and footbridge widening

The Proposal includes the installation of three new lifts at the station. The first of the three lifts would be placed on the western end of the existing footbridge (Culworth Avenue side), accessed by a new entry forecourt. Another of the lifts is proposed to be in the approximate location of the existing footbridge kiosk which would be demolished (opposite the stairs leading from the footbridge to the station platform). The third lift would be placed on the eastern end of the existing footbridge (Werona Avenue side), also accessed by a new entry forecourt. The existing stairs to the footbridge would be retained (Figure 6-1). The pedestrian footpath on Werona Avenue leading to the new lift would be regraded and a new ramp would be installed to the existing bus stop.

The footbridge is proposed to be widened to accommodate the new lift landing areas on the southern side of the footbridge, and a canopy erected over the new, widened section of the footbridge.

6.5.2 Station building modifications

The Proposal includes demolition of existing toilets and upgrade to the interior of the station building's male and female toilets to create a family accessible toilet, and modification of the other toilet to create a unisex ambulant toilet. The Proposal would alter non-significant fabric as the male and female toilets have been recently upgraded. The toilet reconfiguration works are not expected to have a heritage impact (see Figure 6-2, Figure 6-3).

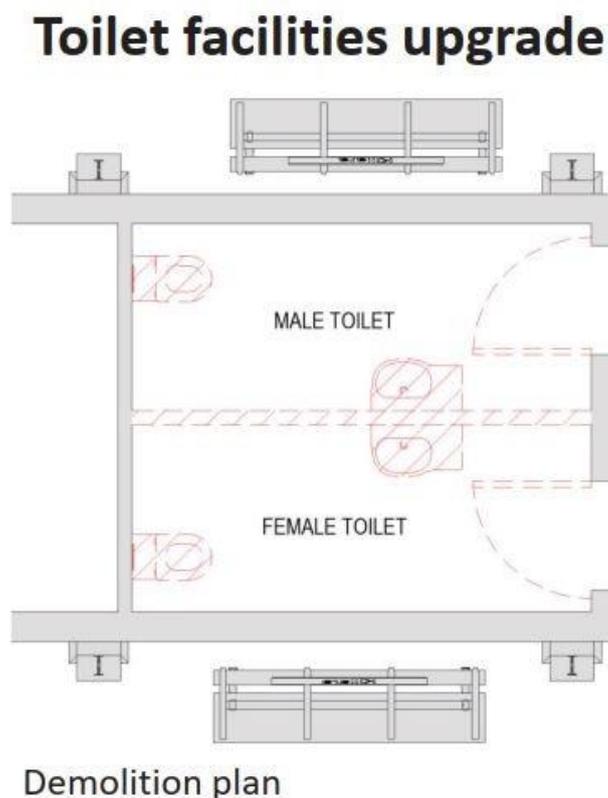
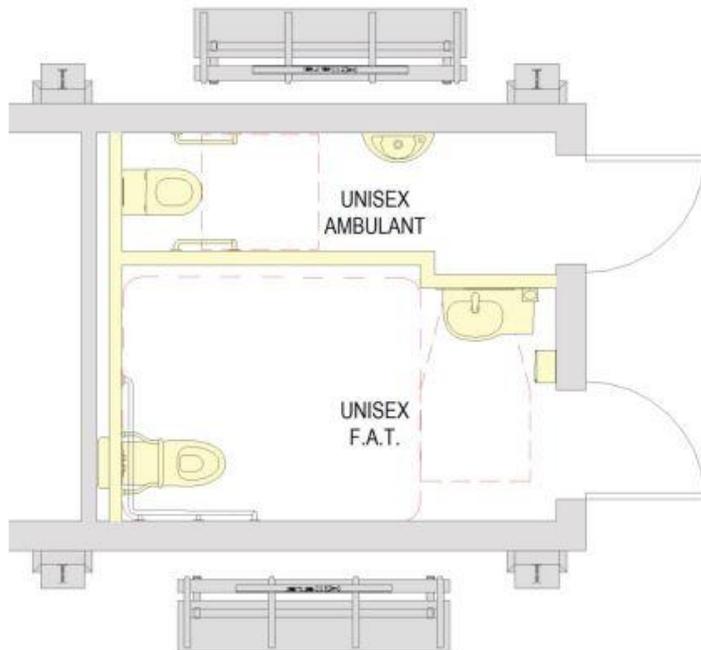


Figure 6-2 Existing layout and demolition plan for existing toilets (Aurecon, 2021, provided by Transport for NSW)



Proposed plan

Figure 6-3 Proposed layout of toilets (Aurecon, 2021, provided by Transport for NSW)

Minor work would also be required to convert the existing store room into a communications room, however this would not include structural works and therefore would have no heritage impact on the station building.

6.5.3 Upgrade to boarding assistance zones

New seating, wheelchair spaces and canopies would be provided at the two existing boarding assistance zones on the platform either side of the existing station building. Each structure consists of four engineered steel posts that support the outriggers for the canopy roof design. The roof of the canopies would be a metal cladding, with a parallel flange channel eave. The height of the eave from the finished platform surface would be approximately 2.8 metres. An example of what the boarding assistance zones would look at a similar station to Killara is provided in Figure 6-4.



Figure 6-4 Example of an artist impression of how the boarding assistance zones would look at a similar station to Killara

6.5.4 Station platform upgrade

The platform works would include:

- station power supply upgrade (Figure 6-5)
- protection and relocation of services and utilities
- new or reinstatement of Tactile Ground Surface Indicators where required
- upgrades to stairs, handrails and fencing. In relation to handrails, the original star-type newel posts, handrails and balustrades on the access stairs from Werona Avenue and Culworth Avenue will be retained and a supplementary compliant handrail provided
- new ticketing facilities including additional Opal card readers
- improvement to station communication systems (including CCTV cameras)
- wayfinding signage.



Figure 6-5 Location of transformer at the northern end of the garden; to be upgraded as part of the station power supply upgrade (AECOM, 2021)

6.5.5 Materials and finishes

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

Availability and constructability are also important criteria to ensure that materials are readily available and the structure can be built with ease and efficiently. Materials are also selected for their application based on their suitability for meeting design requirements.

Each of the upgraded or new facilities would be constructed from a range of different materials, with a different palette for each architectural element. Subject to detailed design, the Proposal would include the following:

- lift shafts – concrete lift shaft base and steel frame
- lift doors – stainless steel
- lift glass – clear
- lift roof and canopies – consistent or complimentary with the existing station roofing
- platform – asphalt
- footpath – concrete.

Material selection would be further developed and confirmed through detailed design to respond to the existing heritage context of the station. The design would be presented to the Transport for NSW Design Review Panel for comment before being accepted. An Urban Design Plan would also be prepared by the Contractor, prior to finalisation of detailed design for endorsement by Transport for NSW.

6.5.6 Visual impacts

A Landscape and Visual Impact Assessment (LVIA) was undertaken for the Proposal (AECOM, 2021). Five representative viewpoints were assessed in relation to the Proposal, with the overall ratings of impact outlined in Table 6-1.

Table 6-1 Viewpoints chosen to assess visual impacts (AECOM, 2021)

Viewpoint	Viewpoint rationale	Distance from the Proposal	Overall rating
Viewpoint 1: Culworth Avenue and Lorne Avenue	Assesses the view from the intersection of Culworth and Lorne Avenues with visual receptors including passers-by and local residents.	120 metres	Low (neutral)
Viewpoint 2: Culworth Avenue Council Car Park	Assesses the view from the pedestrian entry point of the council car park on Culworth Avenue with visual receptors including commuters and passers-by.	25 metres	Moderate to low (neutral)
Viewpoint 3: 18 Culworth Avenue	Assesses the view from the apartment block at 18 Culworth Avenue with visual receptors including passers-by and local residents.	35 metres	Moderate (neutral)
Viewpoint 4: Werona Avenue and Locksley Street	Assesses the view from the intersection of Werona Avenue and Locksley Street with visual receptors including passers-by and local residents. This viewpoint lies adjacent to two heritage items on Werona Avenue.	15 metres	Moderate (adverse)
Viewpoint 5: 25 Werona Avenue	Assesses the view from 25 Werona Avenue with visual receptors including passers-by and local residents.	50 metres	Moderate to low (neutral)

As noted in Table 6-1, only viewpoint 4 is assessed as having an adverse visual impact. The basis for this moderate - adverse rating relates to the impacts on the heritage character of the station, in particular the garden. These visual impacts are discussed further in Table 6-2 below.

6.6 Impacts to heritage significance

Potential impacts to the heritage significance of Killara Station as a result of the Proposal are summarised in Table 6-2.

Table 6-2 Assessment of impacts to heritage significance of the Killara Railway Station Group (Heritage NSW, 2009)

Criterion	Significance	Action
<p>Historical significance SHR criteria (a)</p>	<p>Killara Railway Station has historical significance as one of a number stations that demonstrate the significant impact of the railway in facilitating settlement in the northern suburbs of Sydney. The gardens at Killara Station also have a long been a key feature of the station and were featured on the cover of Sydney metropolitan railway timetables for many years.</p>	<p><i>New lifts and footbridge widening</i></p> <p>The addition of three new lifts is not expected to impact on the historical significance of the station. Its historicity relies on its importance in facilitating settlement on the northern suburbs of Sydney. The addition of lifts would not alter that importance.</p> <p>Similarly, the widening of the footbridge and canopy addition is also not expected to alter the historical significance of the station overall. The footbridge postdates the station platform by a year and allowed access to the station. The footbridge is considered to be of moderate historical significance; it would be of a higher grading but for the modification of its original fabric. The <i>Railway Footbridges Heritage Conservation Strategy</i> (NSW Government Architect, 2016:71) states the following regarding the Killara Station footbridge:</p> <p><i>Killara Station footbridge... is one of few such structures on the North Shore line that have not had an awning installed. Star type newel posts are located at the base of each stair. Original steel balustrades and handrails remain, although steps and decking are modern concrete poured on metal sheet construction.</i></p> <p>Most of the remaining original fabric would be retained, and the balustrading to be removed in the widening should be reinstated, thereby maintaining its historical significance. The canopy addition would be to the new section of the footbridge only, leaving the original section of the footbridge without a canopy/awning.</p> <p>The configuration of the station and its key elements that contribute to the station's historical significance (station building and gardens) would remain largely intact, however the installation of the lifts on the eastern (Werona Avenue) side occupy a small footprint within the existing garden. This garden is a rare example of a formal railway garden and as recommended during the concept design phase works within the garden should be avoided.</p>

Criterion	Significance	Action
		<p>Station building modifications</p> <p>The Proposal includes the reconfiguration of the existing male and female toilets to a family accessible toilet and a unisex ambulant toilet. Both existing toilets appear to have been upgraded in 1993, with all interior walls, floor, ceiling and door being upgraded. The internal fixings are also modern. Given the extensive remodelling of the toilets in 1993, it is unlikely that the reconfiguration of the internal areas would impact on historically significant fabric.</p> <p>Minor works are also proposed for the existing communications room, however none of these are structural and therefore will not impact on the station building's heritage significance.</p> <p>The proposed alterations to the station building would not have an impact on the historical significance of the station as the item would continue to act as a tangible link to the development of the railway network and to the surrounding area. The proposed modifications would still allow the contributory elements of the station building to be interpreted as the earliest and key phase of the historical development of the station.</p> <p>Boarding assistance zones</p> <p>The configuration of the station and its key elements that contribute to the station's historical significance would remain intact. The proposed works would have little or no impact to the historical significance of the station. The provision of seating, wheelchair spaces and canopies at the two existing boarding assistance zones would provide additional shelter, improve customer experience and enable the continued use of the station.</p> <p>Station platform upgrade</p> <p>Other ancillary works, including station power upgrade, platform regrading, Tactile Ground Surface Indicators, handrails, new ticketing facilities and CCTV upgrades would have a negligible impact to the station's historic heritage significance. In relation to the station power upgrade, a transformer at the northern end of the garden would be modified and connected with the power supply on the station platform. This connection would be made via horizontal directional drilling. Given its proximity to the garden and the garden's high heritage significance, it is recommended that no longitudinal galvanised service trough (GST) is to pass through heritage garden.</p>

Criterion	Significance	Action
<p>Aesthetic significance SHR criteria (c)</p>	<p>The garden is a largely intact typical railway/municipal ornamental garden, one of the most important railway station gardens in the region. It has significance due to its rich collection of historic exotic plantings and is held in high regard by the local community. The garden contributes strongly to the significance of the station group, providing a setting that evokes a past practice of station garden design. The railway station building has aesthetic qualities as an example of early 20th century railway station design with fabric and details typical of this period and similar to other rail buildings of the late 19th /early 20th century in Sydney and on the North Shore line in particular. The aesthetic significance of the station building has been compromised, however, by major changes to the roof structure and later changes internally. The Killara Station precinct has aesthetic significance for its contribution to the characteristic nature of the North Shore line – one of homogenous station design and landscaping. With the former Killara Post Office and treed setting, Killara</p>	<p><i>New lifts and footbridge widening</i></p> <p>The construction of the proposed lifts would have a moderate adverse impact on the aesthetic significance of the station. The placement of the two new lifts on either side of the footbridge would create new elevated elements that would be visible. The central lift from the footbridge to the station platform would have an adverse impact on the station platform, however it would be separated from the station building by the footbridge supports and platform access stairs.</p> <p>The design has minimised impacts to the overall character of the North Shore line as the exterior of the station building would not be impacted by the construction of this lift. Siting the lifts to the city side of the footbridge helps maintain the integrity of the historic station arrangement.</p> <p>As noted in the LCVIA, the eastern side of the station (Werona Avenue) has moderate visual sensitivity owing in part to the presence of heritage items, in particular the garden and to a lesser extent the two heritage items adjacent to the station (“The Maples” and the former Post Office). The proposed lifts are larger than other structures within the Killara Railway Station Group and therefore visually dominant.</p> <p>Materials and finishes proposed to be used for the upgrade works would continue the evolution use of materials for station upgrades. Originally constructed out of timber, the station evolved to be rebuilt using brick, the modern and acceptable building material of the time. Subsequent works from the 1940s through to the 1980s used similar design materials specific to the time, being brick and corrugated iron. Material selection would be further developed and confirmed through detailed design to respond to the existing heritage context of the station.</p> <p><i>Station building modifications</i></p> <p>The reconfiguration of the internal male and female toilets would not have an impact to the aesthetic significance associated with the station. Both toilets were recently renovated, and there are no original fixtures remaining in either toilet.</p>

Criterion	Significance	Action
	<p>railway station contributes to a small but significant heritage precinct.</p>	<p>Boarding assistance zones</p> <p>The construction of the canopies, seating and wheelchair spaces at the two existing boarding assistance zones would have a little adverse impact on the aesthetic significance of the station. The station is lower than the surrounding landscape and is screened from the adjacent streetscape by mature vegetation. The introduction of new canopies at the two existing boarding assist zones are located at a reasonable distance from the key elements of Killara Station, would not be connected to the station building and would easily be recognisable as a new structure. In addition, the boarding assist zone structures would be designed to be as lightweight and visually recessive as possible</p> <p>Station platform upgrade</p> <p>The ancillary works, including platform regrading, tactile surface ground indicators, handrails, new ticketing facilities and CCTV upgrades are not expected to have an impact to the station's aesthetic heritage significance.</p>
<p>Social significance SHR criteria (d)</p>	<p>Killara station is considered to have social significance at a local level. Killara railway station possesses a largely intact railway/municipal ornamental garden on its eastern side and is one of the most important railway station gardens within the metropolitan network. The garden is a strong source of pride in the local community and has a strong association with the once famous Railway Stations Garden Competition. The garden also</p>	<p>New lifts and footbridge widening</p> <p>The construction of lifts would provide equitable access to the platform, which would allow a wider range of the community to appreciate the heritage significance of the station. The installation of the new lifts would allow for the continued use of the station, and would retain the connection between the local community, the railway station and the wider rail network.</p> <p>Station building modifications</p> <p>The proposed removal of the current male and female toilet fittings and fixtures and reconfiguration to a family accessible toilet and unisex ambulant toilet are unlikely to have a negative adverse impact on the social significance associated with this station as the proposed alterations would make the toilets more user friendly. It is anticipated that the construction of the family accessible toilet would have a positive impact on the local community by providing essential amenities for equitable access.</p>

Criterion	Significance	Action
	<p>featured on the cover of Sydney metropolitan railway timetables for many years. The location of the former Killara Post Office at the corner of Locksley St and Werona Avenue opposite the garden reinforces the civic nature of this precinct.</p>	<p><i>Boarding assistance zones</i></p> <p>The provision of seating, wheelchair spaces and canopies at the two existing boarding assistance zones would provide additional shelter, improve customer experience and enable the continued use of the station. This would not have an impact to the social significance associated with the station.</p> <hr/> <p><i>Station platform upgrade</i></p> <p>The proposed ancillary works would have no impact on the social significance associated with the station.</p>

<p>Rarity SHR criteria (f)</p>	<p>Killara Station is considered to be rare at a local level. The station possesses a largely intact garden on its eastern side, which is one of the most impressive in the region with the exception of the Wahroonga Station garden. The civic pride which was once associated with the coming of the railways and the station as a major landscape and social element within the community is evident in the garden at Killara station, one of the very few on the metropolitan network to remain. The station contributes to the overall character of the Northern line.</p>	<p><i>New lifts and footbridge widening</i></p> <p>Overall, the construction of the lifts and widening of the footbridge would have a minor impact on the rarity of the garden. The lift on the southern (Werona Avenue) side of the footbridge is proposed to be placed within the garden area of the station, a rare example of a largely intact railway garden. As no images or plans of the gardens to the south of the footbridge have been located, the original layout of this section of the garden is uncertain, however the majority of formal elements of the garden, including all known photographs, are to the footbridge's north.</p> <p>It should also be noted that while the gardens are still well-cared for and maintained, they no longer have the same level of formality and complexity as displayed in the 1950s and 1960s (see Figure 6-6 and Figure 6-7), indicating that the layout and form of the gardens has changed throughout the years. Design elements such as garden bed edging and plants were altered over time and their provenance is uncertain.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="958 775 1473 1270">  </div> <div data-bbox="1507 775 2022 1270">  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div data-bbox="969 1286 1473 1337"> <p>Figure 6-6 Gardens from Footbridge, c. 1956 (Australian Railway Historical Society)</p> </div> <div data-bbox="1518 1286 2022 1359"> <p>Figure 6-7 Gardens from the footbridge, looking south undated (Australian Railway Historical Society)</p> </div> </div>
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Figure 6-8 Gardens from the footbridge, looking north (AECOM, 2021)



Figure 6-9 Gardens from the footbridge looking south (AECOM, 2021)

The Conservation Guide for Railway Gardens notes the following general principles for conservation of railway gardens (Office of Rail Heritage, 2012:8-9):

- maintain the existing significant aspects of the garden and the overall form and layout
- minimise new plantings and landscape elements
- do as much as necessary and as little as possible (ICOMOS Burra Charter, 2013)
- where most edging is extant and sound, this should be retained
- where edging is missing or unsound, the edging could be replaced with new materials to match the original style, materials, form, texture, surface characteristics, sizes, jointing and surface treatments
- before commencing construction works, photograph and document the existing gardens to ensure a dated record is available of what was there and what is being constructed.

The approximate location for the proposed lift at Werona Avenue is in an overgrown garden bed adjacent and to the south of the existing footbridge. This southern section of the garden is visually separate from the larger part of the garden by the footbridge and was not featured in photographs or promotional material. The section of the garden to the north of the footbridge was the section that has been more fully recorded.

		<p>While the lift installation would cause an adverse impact to the garden, this can be partially mitigated by the redesign of the garden. Given that the section of garden to the south of the footbridge is different in character to the section to the north of the footbridge (comprising only trees, no formal beds), the installation of the lift could represent an opportunity to redesign both sections of the garden as a whole.</p> <p>Station building modifications</p> <p>There are no rarity values attached to the toilets. The reconfiguration works are not expected to have an impact to the rarity values associated with the station.</p> <p>Boarding assistance zones</p> <p>The provision of canopies, seating and wheelchair spaces for the existing boarding assist zones would not have an impact to the rarity values associated with the station.</p> <p>Station platform upgrade</p> <p>The ancillary works, including station power upgrade, platform regrading, Tactile Ground Surface Indicators, handrails, new ticketing facilities and CCTV upgrades are not expected to have an impact to the station's rarity values.</p>
<p>Representativeness SHR criteria (g)</p>	<p>Killara Railway Station has representative significance at a local level. The garden represents the practice of railway station gardening that was once common throughout the network. It is an excellent example of its type due to its integrity and grouping with the original station building, platforms and footbridge. The footbridge has identified as an</p>	<p>New lifts and footbridge widening</p> <p>Overall, the construction of the lifts and widening of the footbridge is not expected to have an impact to the representativeness associated with the station. The installation of the southern (Werona Avenue side) lift to the south of the footbridge would be away from the principal garden beds and would have a minimal impact on the garden. The footbridge would also be retained in an altered form, with the existing original fabric – an important component of the moderate heritage significance grading in the <i>Railway Footbridges Conservation Management Strategy (2016)</i>, retained. The balustrading should be removed during the widening and reused on the widened footbridge, thereby maintaining the original fabric of the footbridge and therefore the grading of significance.</p>

	item of moderate heritage significance in the comparative analysis from the 2016 'Railway Footbridges Heritage Conservation Strategy'.	<p><i>Station building modifications</i></p> <p>Both the current male and female toilets have recently been refurbished, including with new internal fixtures. Internally there is no remaining original fabric associated with these toilets. As such, the internal refitting of both toilets as a family accessible toilet and unisex ambulant toilet would not have a negative impact to the significance under this criterion, as the works would be contained to areas that have already been modified.</p>
		<p><i>Boarding assistance zones</i></p> <p>The provision of canopies, seating and wheelchair spaces for the two existing boarding assist zones would not have a direct impact to the representative significance associated with Killara Station. These improvements would not have a physical impact to the station building or its other key elements. The provision of additional features at the existing structures would create a new visible structure; however, they would be easily recognisable as being modern, and would be reversible without impacting the significant fabric associated with the station.</p>
		<p><i>Station platform upgrade</i></p> <p>The ancillary works, including station power upgrade, platform regrading, Tactile Ground Surface Indicators, handrails, new ticketing facilities and CCTV upgrades are not expected to have an impact to the station's representativeness heritage significance.</p>

6.6.1 Summary of archaeological potential and impacts

The potential for the presence of archaeological relics in particular places is significantly affected by activities which may have caused ground disturbance. These processes include the physical development of the site and the activities that occurred there. The likelihood for the presence of these relics (i.e. their archaeological potential) is distinct from the archaeological/heritage significance of these remains, should any exist. For example, there may be 'low potential' for certain relics to survive, but if they do, they may be assessed as being of 'high significance'.

The archaeological potential at Killara Station is considered low. There are known subsurface features, such as:

- the previous out-of shed structure
- the original platform alignment on Platform 2
- some garden and landscape structures.

These items are described further below.

Out-of shed

An out-of shed was a small lock-up structure for the use of rail staff while the station master was not in attendance. These sheds could be used by train drivers to deliver goods and store them safely out of regular rail hours. They were usually small structures with a lockable door located near the ends of platforms (see Figure 6-10).

The out-of shed at Killara Station was located adjacent to and south of the existing footbridge, directly beneath the footbridge kiosk. It was constructed of weatherboard, with a metal roof and guttering.

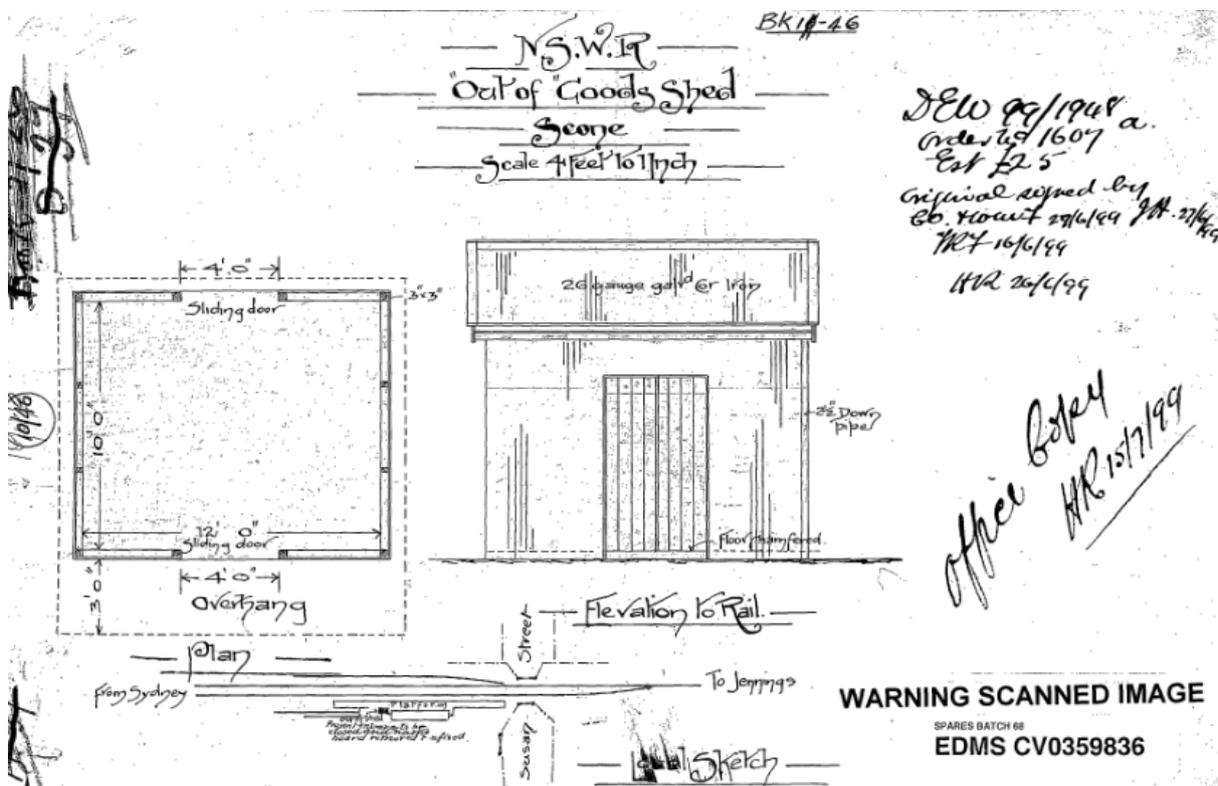


Figure 6-10 Example of dimensions of “Out-of” sheds, this example from Scone (Sydney Trains Virtual Plan Room)



Figure 6-11 Detail of Figure 3-5 showing “out-of” shed (red arrow), c.1910 (National Library of Australia)

According to a 1934 plan, the out-of shed was proposed to have been moved to allow for the construction of a new bookstall (Figure 6-12), however as photographs from the 1950s show a bookstall near the ticket office, it is unlikely that this bookstall was ever constructed. The date of the “out-of” shed’s demolition, however, is unclear.

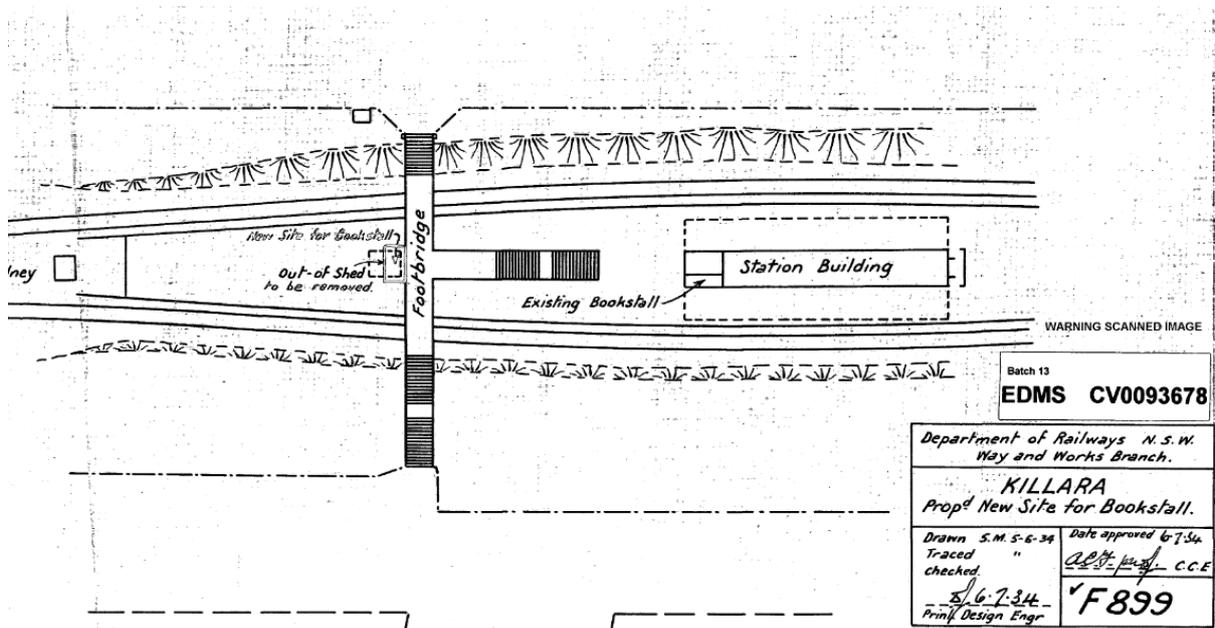


Figure 6-12 Plan for removal of out-of shed for a new bookstall, c. 1934 (Sydney Trains Virtual Plan Room)

Original platform alignment

As noted in Section 3.0, the original platform constructed in 1899 was a single platform that was designed to be converted to an island platform on duplication (Figure 6-13). The original platform included a paling fence along the length of the platform (see Figure 3-4).

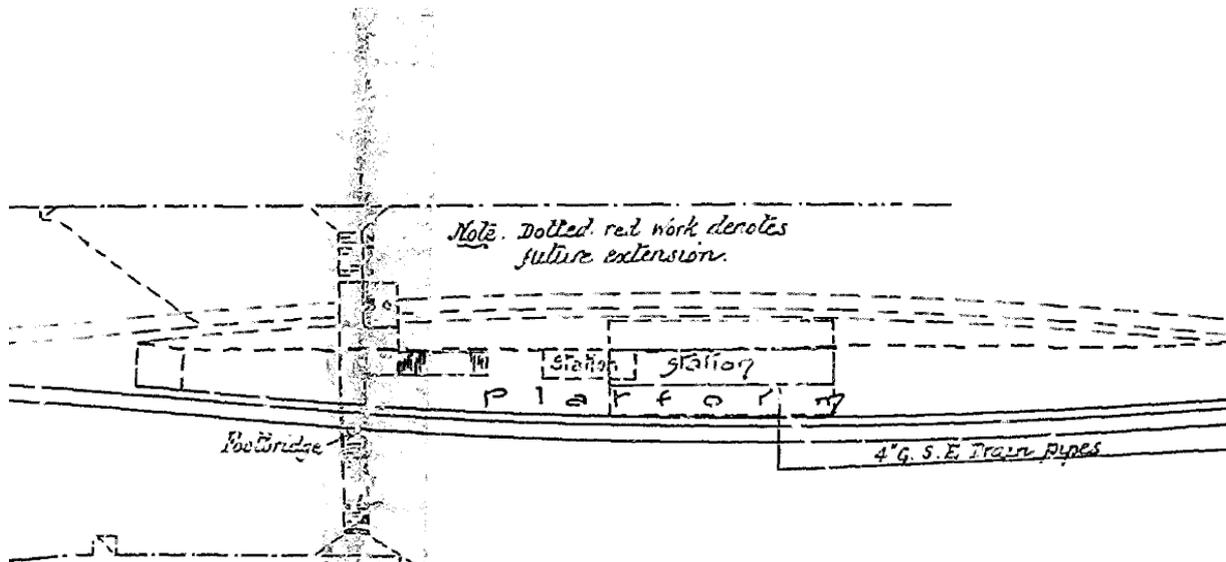


Figure 6-13 Detail of Figure 3-3 above, showing modification of 1899 platform for duplication, c. 1906 (Sydney Trains Virtual Plan Room)

Garden and landscaping structures

Historical photographs of the station show a number of plantings along the platform, as well as other landscaping elements such as lighting and seating as shown in Figure 6-14. While these elements contributed to the character of the station, their remains are likely to be ephemeral.



Figure 6-14 Killara Station looking south, undated (Australian Railway Historical Society NSW, Image 008774)

Works on the platform may uncover remains associated with the out-of shed, the original platform alignment and/or garden and landscape structures. However, as these remains are likely to be fragmentary and are unlikely to contribute further information regarding the shed, it is considered that these remains are not likely to be of archaeological significance. However, it is recommended that should these remains be encountered during works that the unexpected finds protocol be followed.

7.0 Statement of heritage impact

7.1 Introduction

The objective of a SoHI is to evaluate and explain how the proposed development, rehabilitation or land use change would affect the heritage value of the site and/or place. A SoHI should also address how the heritage value of the site/place can be conserved or maintained, or preferably enhanced by the Proposal.

This report has been prepared in accordance with the NSW Heritage Office & Department of Urban Affairs and Planning *NSW Heritage Manual* (1996) and NSW Heritage Office *Statements of Heritage Impact* (NSW Heritage Office & Department of Urban Affairs & Planning, 2002). The guidelines pose a series of questions as prompts to aid in the consideration of impacts based on the type of Proposal. The Proposal involves major additions to the station, being the proposed construction of the new lifts, widening of the footbridge, minor alterations to the station building toilets and platform regrading. The guideline suggests the following questions be used to direct discussion in relation to these two modification types:

Minor partial demolition (station building upgrade)

- is the demolition essential for the heritage item to function?
- are important features of the item affected by the demolition (e.g. fireplaces in buildings)?
- is the resolution to partially demolish sympathetic to the heritage significance of the item?
- if the partial demolition is a result of the condition of the fabric, is it certain that the fabric cannot be repaired?

Major additions (relating to the new lifts, footbridge widening and boarding assistance zone modifications)

- how is the impact of the addition on the heritage significance of the item to be minimised?
- can the additional area be located within an existing structure? If not, why not?
- would the additions visually dominate the heritage item?
- is the addition sited on any known, or potentially significant archaeological deposits? If so, have alternative positions for the additions been considered?
- are the additions sympathetic to the heritage item? In what way (e.g. form, proportions, design).

These questions are addressed below, based on the impacts to the heritage significance of the station, as outlined in Section 6.6.

7.2 Process questions

7.2.1 Minor partial demolition (relating to station building upgrade)

Is the demolition essential for the heritage item to function?

The reconfiguration of the existing male and female toilet is essential to provide DDA compliant facilities at the station. Both toilets were upgraded recently, and modifications to the internal layout are not expected to have an impact to the heritage significance associated with the station.

Are important features of the item affected by the demolition (e.g. fireplaces in buildings)?

There are no internal features associated with the current male and female toilets that are considered to be important. The current fixtures and fittings were installed recently and are all modern. Important original features such as windows would not be impacted.

Re-grading of the platform surface is not considered to impact on any important features.

Is the resolution to partially demolish sympathetic to the heritage significance of the item?

The proposed reconfiguration of the existing male and female toilets into a family accessible toilet and ambulant and staff toilet respectively, would be contained within the existing toilets. Both toilets were upgraded recently, with all current fixtures and fittings being modern and not original. As such, these works are considered to be undertaken sympathetically as they would be contained in areas already modified.

If the partial demolition is a result of the condition of the fabric, is it certain that the fabric cannot be repaired?

The demolition is not as a result of the condition of the fabric but to provide accessibility compliant facilities.

7.2.2 Major additions (relating to the new lifts, platform widening and boarding assistance zone modifications)**How is the impact of the addition on the heritage significance of the item to be minimised? Are the additions sympathetic to the heritage item? In what way?**

The impact has been minimised through design. It is proposed that the lift shafts would be added to the existing footbridge entry and a central lift linking the footbridge and station platform approximately in the location of the existing footbridge kiosk. The placement of the lift shaft on the southern side (Werona Avenue) of the footbridge also minimises impact to the garden, the bulk of which is on the northern side of the footbridge.

The original fabric (i.e. newel posts, balustrades and handrails) on the existing original stairs from Werona Avenue and Culworth Avenue would be retained, however a compliant handrail would be added. This handrail would not be affixed to the existing structure, thereby eliminating impact.

The widening of the footbridge to accommodate the lifts minimises impact to the footbridge overall by retaining most of its significant original fabric, i.e. the handrails, balustrades and star-motif newel posts. As noted in Table 5-2, the deck and stair treads of the footbridge were modified during earlier works. The retention and re-use of the balustrade for the widened portion of the footbridge is recommended.

The proposed widened section of the footbridge would include a canopy, providing a covered corridor from the new lifts to and from Werona Avenue and Culworth Avenue and the platform. The canopy would be designed to be visually recessive, however the addition of the canopy would add bulk to the footbridge and therefore have a moderately negative visual impact on view corridors to and from the station. However, the extent of the visual impact of the canopy would depend on the materials/finishes and final design. A qualified heritage architect would be consulted during the detailed design phase to minimise any visual impact and consider the selection of appropriate materials.

The modification of two boarding assistance zones to provide seating, wheelchair spaces and canopies have been designed to be as visually recessive as possible. The location of the two structures would be either side of the existing station building and would not have a direct impact to any fabric associated with it. Also, the design has been minimised to include no internal walls or other elements that would obscure the view to the station building from on the platform. The eave and roof design would be flat, resulting in the design being as minimal as possible. Additional recommendations would be added for the height of the boarding assistance zone canopies to match, as close as possible, the height of the eaves associated with the station building.

The Proposal would contribute to demonstrating the capacity for this small railway station to evolve based on changing expectations and requirements of rail passengers. The proposed works can be considered as the next stage in the pattern of human use and adaptation. The station's historical purpose – to facilitate the movement of people – would continue into the future.



Figure 7-1 Photomontage of the new lift on Werona Avenue (AECOM, 2021)

Can the additional area be located within an existing structure? If not, why not?

The current access to the station is via a footbridge linking the station with both Werona Avenue and Culworth Avenue. The additional area consists of lift shafts, which cannot be located within the footprint of the existing footbridge.

The locations of the existing boarding assistance zones would not change. Canopy coverage will be maximised to provide shelter and not impede onto the track.

Will the additions visually dominate the heritage item? Are the additions sympathetic to the heritage item? In what way (e.g. form, proportions, design)?

The Proposal may result in the heritage item being somewhat visually dominated, although the extent of visual domination is dependent on detailed design. According to the LCVIA, the installation of the new lifts on Werona Avenue and Culworth Avenue would have a moderately adverse impact on the heritage character of the station owing to its size and scale, but would be ameliorated by the surrounding vegetation.

Is the addition sited on any known, or potentially significant archaeological deposits? If so, have alternative positions for the additions been considered?

There are no areas of significant archaeological potential that have been identified within the proposed construction area. As noted in Sections 4.1 and 6.6.1 above, there is the potential for subsurface remains relating to the out-of shed, the original platform alignment and garden and landscaping elements. These are not expected to have archaeological significance, however any archaeological remains discovered during construction works should follow the procedures set out in the Transport for NSW Unexpected Heritage Finds Guideline.

7.3 Statement of heritage impact

The potential impacts to the Killara Railway Station Group have been assessed against the criteria outlined in the NSW Heritage Division guidelines (NSW Heritage Office & Department of Urban Affairs & Planning, 2002). The impacts of the Proposal have been graded against the significance of the site as outlined in Table 7-1.

Table 7-1 Summary of the nature of the direct and indirect impacts

Impact Type	Impact
Major negative impacts (substantially affects fabric or values of state significance)	None.
Moderate negative impacts (irreversible loss of fabric or values of local significance; minor impacts on State significance)	<p>The construction of the new lift to access the footbridge at the southern (Werona Avenue) side of the station would have a moderate negative impact to significant heritage fabric.</p> <p>The widening of the footbridge and associated canopy would have a moderate negative impact to significant heritage fabric.</p> <p>The modification of the two boarding assistance zones to provide seating, wheelchair spaces and canopies on the platform would have a low to moderate negative impact to the aesthetic significance associated with the station.</p>
Minor negative impacts (reversible loss of local significance fabric or where mitigation retrieves some value of significance; loss of fabric not of significance but which supports or buffers local significance values)	The visual impact from the construction of the new lifts on either side of the footbridge is assessed as minor and can be mitigated to minimise the visual impact.
Negligible or no impacts (does not affect heritage values either negatively or positively)	<p>The reconfiguration of the existing toilets into the new ambulant toilet, and creation of a family accessible toilet is considered to have a neutral heritage impact. The existing two doors in the northern elevation were constructed c.1993 and are therefore not original fabric. The internal works would be contained within the existing toilets, which were also upgraded in 1993. All current fixtures and fittings, including tiles, are non-original.</p> <p>The regrading of the station platform surface and installation of the Tactile Ground Surface Indicators would have a negligible impact to the heritage significance associated with the station.</p>
Minor positive impacts (enhances access to, understanding or conservation of fabric or values of local significance)	None.
Major positive impacts (enhances access to, understanding or conservation of fabric or values of state significance)	The Proposal would improve safety and accessibility and the station would be enhanced following its reconfiguration. The construction of the new lift structures would enable access to and appreciation of the station by a wider demographic.

8.0 Recommendations

The following mitigation measures are recommended to minimise impacts to the heritage listed Killara Railway Station Group.

Recommendation 1 – Heritage advice

A heritage architect must be engaged to provide ongoing heritage and conservation advice throughout the detailed design process. In addition to ongoing heritage advice, the nominated heritage architect shall:

- confirm and document options analysis around impacts to significant elements and design mitigation to avoid or reduce adverse impacts
- ensure that the final design adheres to the relevant policies, including but not limited to the *Heritage Platforms Conservation Management Strategy*, *Railway Footbridges Heritage Conservation Strategy*, *Canopies and Shelters: Design Guide for Heritage Stations* and the *Station Access Heritage Conservation Guide*
- provide input to detailed development and supervise works to significant fabric within the scope of works, including works to the handrails, balustrades and newel posts of the footbridge, connection of widened footbridge elements, and all original fabric of the station building, the platform and in the vicinity of the garden.

The nominated heritage architect may be required to update this assessment when impacts are defined during the detailed design phase and record the above additional analysis in an updated report.

Recommendation 2 – Consultation with Sydney Trains Heritage

It is recommended that Transport for NSW continue to consult with Sydney Trains Heritage throughout the design process to address preliminary feedback on subjects including the form and materials of the lift, landscaping and works associated with new and existing services.

Recommendation 3 – Heritage landscape plan

To offset anticipated impacts to the heritage gardens it is recommended that during the detailed design phase of the Proposal a landscape plan would be provided either by, or with the input of, a qualified heritage landscape specialist. This plan would include mitigation measures for any necessary tree removal and species for replanting that are appropriate to the heritage landscape. New landscaping must complement the existing landscaping. New gardens should be horticulturally and stylistically sympathetic to the period of the station gardens (i.e. early twentieth-century rockery garden). The use of similar materials such as stone and brick is encouraged, as is the use of a variety of plant species to avoid monocultural plantings along Werona Avenue.

Appropriate treatment of the landscape will facilitate interpretation of the station gardens as a socially significant asset to the local community.

Recommendation 4 – Lifts and footbridge

The following recommendations are made in relation to the platform lifts and associated walkway construction:

- detailed design would further investigate options to minimise impacts to the railway garden
- the original fabric of the footbridge, in particular the star newels at the bottom of the stairs on both sides of the footbridge and platform, hand rails and balustrades should be investigated to be retained
- re-use of the original balustrade on the footbridge at the areas of the footbridge widening is recommended. Where supplementary balustrades and handrails are required, these would be

designed to be compatible with the retained elements in terms of form, placement and materiality

- detailed design would minimise the impact to the brickwork associated with the platform, including the edge coping walls.

Recommendation 5 – Station building upgrade

The following recommendations are made with relation to the station building reconfiguration:

- care would be taken when undertaking all demolition works so as not to damage significant fabric
- new services, outlets, wall units and brackets (etc.) would be located internally in areas already modified and/or consolidated in one location. Existing openings in ceilings are the preferred location for the installation of new services. New services and fittings would use existing fixing points or be located at mortar joints. These works would be undertaken in accordance with the Sydney Trains technical notes, *Installation of New Electrical and Data Services at Heritage Sites (2017)* and *Fixing Methods at Heritage Sites*
- new services would be installed as per Recommendation 10 below
- impacts to the detailed architraves around the current toilet entry door and transom window would be minimised
- new interior tiling would consider the Sydney Trains *Draft – NSW Heritage Station Passenger Tile Finishes (2020)*.

Recommendation 6 – Boarding assistance zones

The height of the eaves associated with the two new boarding assistance zone canopies would match, as close as possible, the height of the eaves associated with the existing station building. The heights would match to create a continuity between the existing station building and the two new structures. The proposed canopies should aim to reduce impact to significant fabric and the visual impact of the Proposal through recessive materials and sympathetic design.

Recommendation 7 – Station platform upgrade

The following recommendation is made with regard to works that would be undertaken on, and to, the current platform. This includes the regrading and resurfacing of the platform surface.

- re-grading of the station platform would not cover any existing wall vents that have been installed along the lower course of the brickwork to the station building. If cast iron gratings are removed, these would be stored for future reuse.

Recommendation 8 – Interpretation

A heritage interpretation plan must be prepared and implemented for the station in accordance with NSW Heritage Office (former) publication *Interpreting Heritage Places and Items and the Sydney Trains Heritage Interpretation Guideline*. The Proposal is considered a medium/major project in terms of evaluating interpretation options and therefore a nominal score of 70 in accordance with the guidelines should be achieved.

The interpretation plan would investigate methods of reinstating the footbridge lighting as a primary interpretation element.

Recommendation 9 – Recording

Prior to any construction, a photographic recording would be undertaken of the station, including (but not limited to) the station building, platform, footbridge and garden. This recording would be undertaken in accordance with the Heritage Council of NSW publication, *Photographic Recording of Heritage Items using Film or Digital Capture* (Heritage Council of NSW, 2006).

Recommendation 10 – Installation of services

All ancillary works (CCTV, PA, communications, air-conditioning etc) would be undertaken in accordance with the relevant Sydney Trains heritage guidelines. Alternative solutions must be explored where any impacts to significant fabric are identified. Works would proceed with the principle of avoiding fixing new services to the façade of the exterior building and would be contained/ concealed in new development areas. A complete services plan is to be reviewed and assessed by a qualified heritage architect identifying alternative solutions, and submitted to the Associate Director Environmental Impact Assessment (AEDIA) (or delegate) for endorsement prior to works commencing.

Recommendation 11 – Heritage induction

A heritage induction would be provided to all on-site staff and contractors involved in the Proposal. The induction would clearly describe the heritage constraints of the site.

Recommendation 12 – Unexpected finds and stop work procedure

The Construction Environmental Management Plan (CEMP) for the Proposal would include stop work procedures in accordance with Transport for NSW's *Unexpected Heritage Finds Guideline* (Transport for NSW, 2019) to manage activities in the unlikely event that intact archaeological relics or deposits are encountered.

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