METRON T2M Canterbury **Station Design & Precinct Plan**

01 March 2021

Document: SMCSWSWM-MTM-WCR-UD-REP-141000



METRON is a joint venture of Arcadis and Mott MacDonald, with principal sub-consultant DesignInc



Sydney Metro Southwest Metro Design Services (SMDS)

Principal sub-consultant





Approval Record

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Approved by	Director	Ian Armstrong	26 February 2021

Amendment Record

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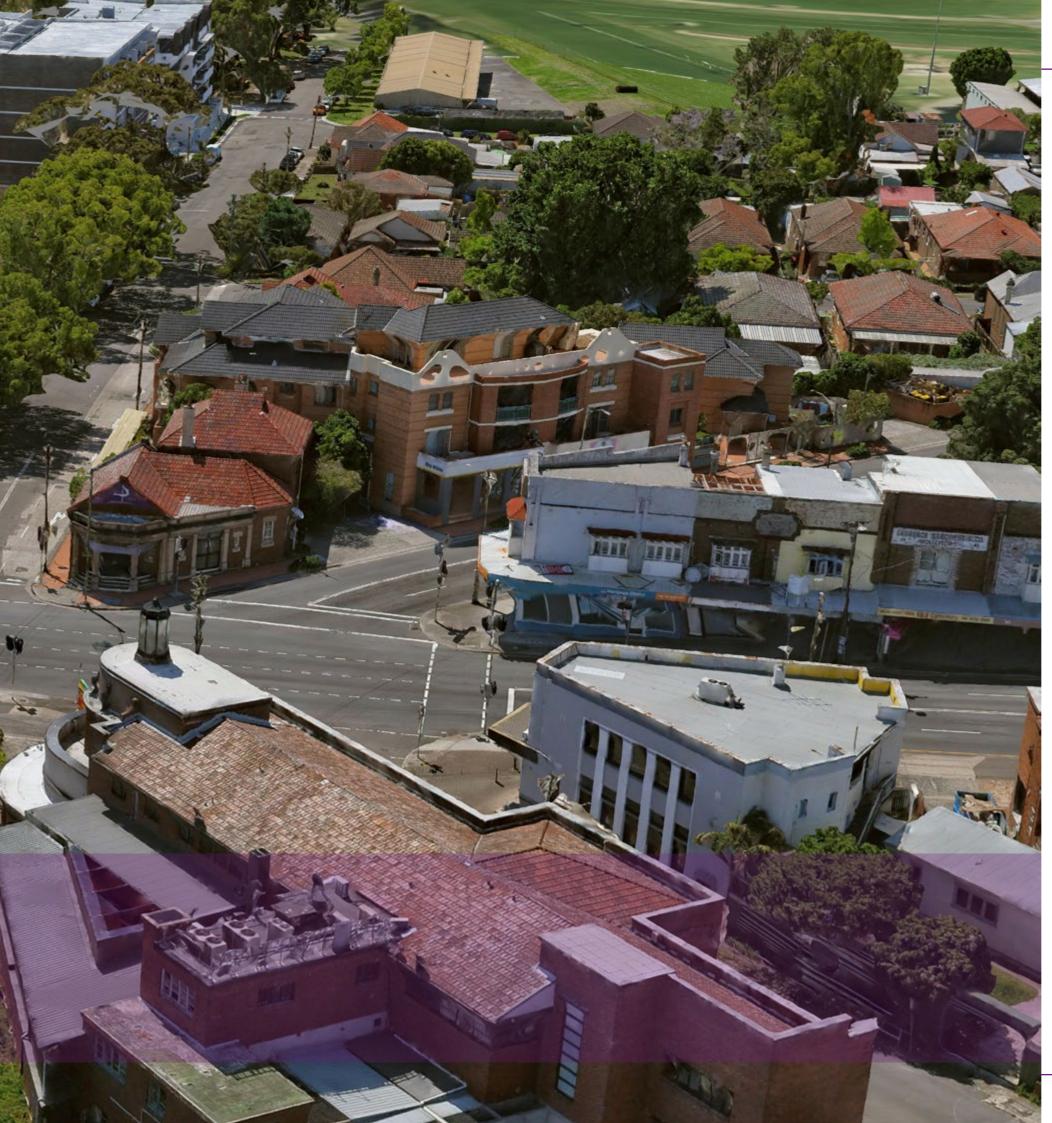
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1.0 Introduction1.1 Project description

1.1.1 Overview

Sydney Metro is Australia's biggest public transport project. In 2024, Sydney will have 31 metro railway stations and a 66km standalone metro railway system, revolutionising the way Australia's biggest city travels. Sydney's first metro line, the Metro North West, opened on 26 May 2019. Services at the 13 metro stations operate every four minutes in the peak in each direction on Australia's first driverless railway.



1.1.2 Sydney Metro Network

There are four core components:

Sydney Metro Northwest

This project is now complete and passenger services commenced in May 2019 between Tallawong Station in Rouse Hill and Chatswood, with a metro train every four minutes in the peak. The project was delivered on time and \$1 billion under budget.

Sydney Metro City & Southwest

Sydney Metro City & Southwest project includes a new 30km metro line extending metro rail from the end of Metro Northwest at Chatswood, under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the ultimate capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest will deliver new metro stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new underground metro platforms at Central Station. In addition it will upgrade and convert all 11 stations between Sydenham and Bankstown to metro standards.

In 2024, customers will benefit from a new fully-air conditioned Sydney Metro train every four minutes in the peak in each direction with lifts, level platforms and platform screen doors for safety, accessibility and increased security.

Sydney Metro West

Sydney Metro West is a new underground railway connecting Greater Parramatta and the Sydney CBD. This once-in-a-century infrastructure investment will transform Sydney for generations to come, doubling rail capacity between these two areas, linking new communities to rail services and supporting employment growth and housing supply between the two CBDs.

Sydney Metro West stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and the Sydney CBD. Further planning is underway to determine the locations of the Pyrmont and Sydney CBD stations.

Greater Western Sydney

Metro rail will also service Greater Western Sydney and the new Western Sydney International (Nancy Bird Walton) Airport. The new railway line will become the transport spine for the Western Parkland City's growth for generations to come, connecting communities and travellers with the rest of Sydney's public transport system with a fast, safe and easy metro service. The Australian and NSW governments are partners in the delivery of this new railway.

Additional information can be obtained from the Sydney Metro website at www.sydneymetro.info.

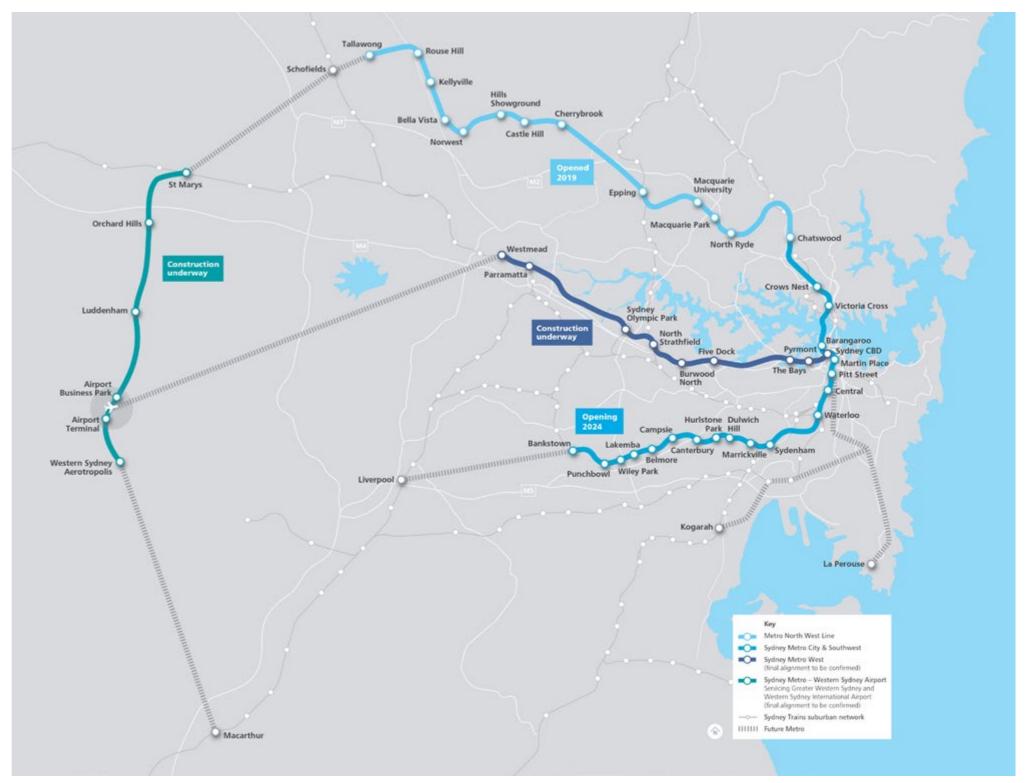


Figure 1.1 Sydney Metro route map

1.2 Purpose and scope

1.2.1 Purpose of the Station Design and Precinct Plans

This report is the Station Design and Precinct Plan (SDPP) for the Southwest Metro upgrade of Canterbury Station. Preparation of the SDPP is a requirement of Condition E56 of the Sydenham to Bankstown Planning Approval SSI 8256, under Section 5.19 of the Environmental Planning and Assessment Act 1979.

The purpose of the SDPP under the Planning Approval is twofold: to inform the final design of the Critical State Significant Infrastructure (CSSI); and to demonstrate that the design gives effect to the commitments made in the Environmental Impact Statement (as modified by the Submissions and Preferred Infrastructure Report, and the Submissions Report).

This SDPP illustrates and describes the urban, landscape and architectural design for the Project. It is not a substitute for the Detailed Design documentation, but a supplementary report that shows how the permanent works, as a whole, are integrated with the surrounding Precinct context.

This is one of ten SDPPs prepared for:

- Marrickville Station
- Dulwich Hill Station
- Hurlstone Park Station
- Canterbury Station
- Campsie Station
- Belmore Station
- Lakemba Station
- Wiley Park Station
- Punchbowl Station
- Bankstown Station.

1.2.2 Project design objectives

This SDPP references and supports the Southwest Metro design objectives, which are:

- i) designing the base station infrastructure to support the Sydney Metro City & Southwest service from Marrickville to Banktown.
- ii) providing an easy customer experience:
- a) customer experience and needs are the starting point for all aspects of planning and design;
- b) spaces, products, services and systems reflect customer needs, motivations and behaviour and meet the needs of all customers and journey types;
- c) the stations, must be intuitive with simple, uncluttered spaces that ensure a safe experience for a diverse range of customers; and
- d) customers are an integral part of the design process through Customer Centered Design.
- iii) providing a fully integrated transport system design that:
 - a) achieves clear and legible connections and integration of existing transport modes and services:
 - b) improves the accessibility and connectivity between transport modes within and across the Station Precincts;
- c) provides equitable and universal accessibility within each station;
- d) is a social and cultural asset; and
- e) supports Sydney Metro City & Southwest operations;
- iv) being responsive to distinct local character of existing contexts and communities; and
- v) designing an enduring and sustainable legacy for Sydney where heritage is integral to the identity of the places.

1.2.3 Scope of the Station Design and Precinct Plan

This SDPP presents integrated urban, landscape and architectural design outcomes for the Project works within the Canterbury station precinct, being:

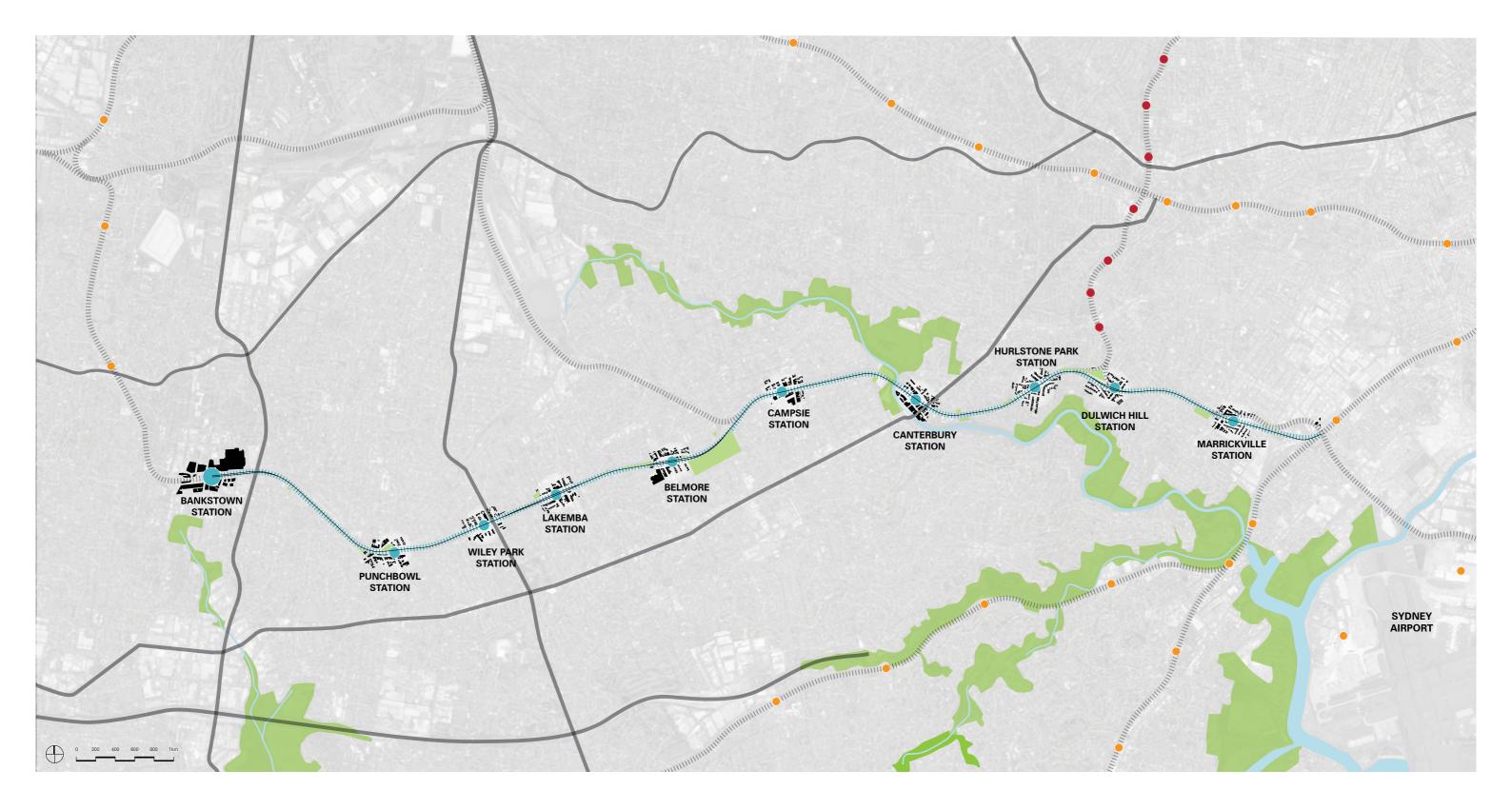
- Scope of station work
- Platform re-levelling, installation of mechanical gap fillers to remove the gap between train and platform, edge screens and platform screen doors
- Remove and replace stairs and provide new lift
- New artwork screens within the station
- Remove / replace fencing

Scope of precinct works

- New vertical protection screens to Canterbury Road overbridge
- Safeguard for a future entry at the western end of the platform
- Remove existing station and footpath canopies
- Provide errant vehicle protection
- Upgrade forecourt plaza and entry from Canterbury Road
- Provide new bike parking hoops
- Restore existing bus shelter
- Provide an accessible station entry
- security fence
- New metro services building



- Refurbish and re-use overhead booking office and platform buildings
- Provide new Kiss and Ride shelter including new street lighting
- Site levelling, draining and retaining walls for station services building zone and



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1.2.4 Canterbury Station Precinct

Canterbury is 10.5km southwest of the Sydney CBD within the City of Canterbury Bankstown Council Local Government Area, with its southern edge defined by the Cooks River. The suburb is bounded by Earlwood to the south, Hurlstone Park to the east, Campsie to the west and Ashbury to the north.

The study area for this SDPP is the Canterbury station precinct, defined in Condition E57 as "an area within 200 metres radius of a station, or beyond for the purposes of connecting pedestrian and cycle paths from stations to existing or planned future pedestrian and cycle paths". The precinct includes part of the Charles Street redevelopment area (the future town centre), remnant traditional retail strip, surrounding residential streets, and touches on the park and open space network along the Cooks River. Canterbury Racecourse is just outside the precinct.

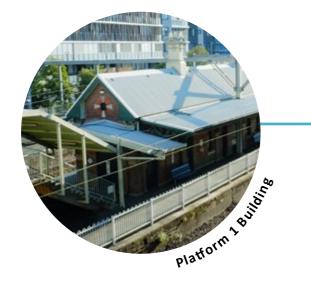






Figure 1.3 Canterbury Station Precinct





1.3 Strategic context

1.3.1 Background documents

Policies and plans that set the broad strategic direction for the region are:

- Greater Sydney Region Plan (Greater Sydney Commission), 2018
- Eastern District Plan (GSC), 2018
- The suite of Government Architect NSW (GANSW) documents that promotes design excellence through place outcomes as well as stronger design-led and integrative processes is:
- » Better Placed, 2017
- » Good Urban Design, 2018, draft
- » Greener Places, 2017, draft
- » Sydney Green Grid Central District, 2017.

1.3.2 Foundation documents (Project-wide)

Relevant plans, policies and guidelines that frame the Project urban and landscape design for all Station Precincts are:

- Sydenham to Bankstown Submissions and Preferred Infrastructure Report (SPIR)
- Environmental Impact Statement (EIS), 2017. The EIS contains appendices that describe the context, existing conditions and urban interfaces of each station, and whose analysis and urban design principles have informed the development of the design as illustrated in this SDPP:
- » Sydenham to Bankstown Design Guidelines (Volume 1C, Appendix C)
- » Sydney Metro Southwest Urban Design and Place Making Paper (Volume 1C, Appendix H).
- Sydney Metro City & Southwest: Sydenham to Bankstown Line Heritage Interpretation Strategy (Artefact), 2020
- Walking and Cycling Strategy Sydenham to Bankstown (TfNSW), 2019, draft
- SDPP for Sydenham Station and Pit (approved 11 June 2019). The SDPP for Sydenham Station and Pit is relevant for continuity, as it adjoins this project. The following urban and landscape outcomes were considered and have influenced the design:
- » adaptive re-use of heritage buildings (refer Section 4.5)
- » generous, open plazas (refer Section 4.6); simple profile to canopies (refer Section 4.6.2)
- » open and transparent station environment (refer Section 4.6)
- » materials palette that, while not duplicating Northwest and Sydenham outcomes, responds to them and to the Council's requirements for the specific precinct (refer Section 4.12.3).

- Around the Tracks: urban design for heavy and light rail (TfNSW), 2016. This is a part of a wider suite of guidelines for the design of rail infrastructure and the precincts around them. It is a high-level document with a series of key urban design objectives and principles to drive integrated outcomes. All eight principles are relevant to, and have been reflected in the design principles and design response for this project:
 - » Draw on a comprehensive site and context analysis to inform the design direction
 - » Provide value-for-money design solutions that achieve high-quality low maintenance architectural and urban design outcomes that have longevity
 - » Provide connectivity and permeability for pedestrians
 - » Integrate the project with the surrounding area
 - » Maximise the amenity of the public domain
 - » Protect and enhance heritage features and significant trees
 - » Maximise positive view opportunities
 - » Design an efficient and functional transport solution which enhances and contributes to local amenity and prosperity.

1.3.3 Historical (non-statutory) documents

Prior to the current project, a number of urban design and related documents were produced including urban and landscape design direction relevant to the Sydenham to Bankstown corridor and its context. While not prescriptive, they provided a helpful layer of information for the urban design approach. Key documents reviewed were:

- Chatswood to Sydenham Design Guidelines, 2017
- Sydney Metro Northwest urban design and corridor landscape plan, 2016
- Sydney Metro Northwest pedestrian-cycle network & facilities strategy, 2015
- 'Fine Grain Public Domain and Station Integration Studies' and Station Precinct Plans (2016) that informed the Sydenham to Bankstown Urban Renewal Corridor Strategy (NSW DPE), revised 2017.

1.3.4 Council plans and initiatives

Canterbury is a local centre for Canterbury-Bankstown Council. Council has developed a Local Strategic Planning Statement (LSPS) for the Local Government Area (LGA), Connective City 2036, which was exhibited in 2019 and whose high level objectives are a consideration for the SDPP.

Section 3.2.6 below describes the following master plans and related documents in more detail, including where and how the Project interfaces with them:

- Canterbury Road Review, July 2017 taking forward recommendations from:
- » Re-imagining Canterbury Corridor, 2016.

Approval requirements 1.4

1.4.1 Conditions of Approval

The SDPP has been prepared in accordance with the requirements of Schedule 1, Application no. SS1 8256, under Section 5.19 of the Environmental Planning & Assessment Act 1979. It is one component of a suite of reports and notifications required to be provided to the Planning Secretary under the terms of the approval.

1.4.2 EIS, Submissions Report, and Preferred Infrastructure **Report Compliance**

The EIS (EIS Volume 1C Appendix C) required that:

"The design of Sydney Metro City and Southwest will draw on the landscapes and heritage, the cultural history and the communities of the Bankstown Line, revealing and enhancing the qualities of these places, making new connections between communities and contributing to the regeneration of town centres".

This generated three design themes: re-discover, re-connect, re-generate. Albeit the project scope is reduced from the EIS, the intent of the design themes remains relevant to the principles developed for each precinct.

1.4.3 Scope of Works and Technical Criteria (SWTC)

The SWTC forms the design requirements for the Southwest Metro Design Services. The scope is divided into Metro Station Works and Metro Corridor Works.

The design scope for Metro Stations includes the station and the surrounding station precinct and public domain. The SDPP illustrates both the architectural design for the station buildings, and the landscape design for plazas, streetscapes and street furniture within scope.

1.4.4 Structure of the SDPP to address the Conditions

The SDPP has been formatted to address the Urban Design Conditions (Conditions E56-63).



Part 1: Introduction

this section includes the background to the Project including the strategic context and the Conditions of Approval



Part 2: Design Principles

this section includes Sydney Metro objectives and related corridor-wide principles, referencing the SSI 7400 (Chatswood to Sydenham) outcomes



Part 3: Context and Form

this section includes the station and precinct analysis, covering the strategic context, and the built, natural and community context. It includes constraints, opportunities both for the Project and beyond, the design response (in scope) and where the Project safeguards future aspirations



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Part 4: Design

this section communicates the holistic design approach for the station and precinct, including the interface with the surrounding public domain, movement and access network and landscape and built form setting

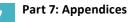
Part 5: Transport and Access

this section references the key outcomes from the walking and cycling strategy, and how the strategy relates to the project design



Part 6: Consultation

 this section summarises the outcomes of the process, including design response to feedback from stakeholders and the Design Review Panel



1.4.5 Compliance with the Conditions of Approval

The table below references where and how in the SDPP the applicable Condition of Approval is addressed.

Condition number	Requirement (paraphrased)
E14	A Heritage Interpretation Plan(s) must be prepared, consistent with the Heritage Interpretation Strategy which identifies heritage items to be used in the final design of the project. The plan(s) must identify how items will be interpreted and provide a timeframe for their implementation which must be no later than the commencement of Operation. Heritage interpretation in any station precinct must be identified in the relevant Station Design and Precinct Plan(s) required in Condition E56
E53	The Walking and Cycling Strategy must be prepared in consultation with relevant council(s), local bike user groups and relevant stakeholder(s). Identified opportunities and works, where relevant, must be integrated with the relevant Station Design and Precinct Plan(s).
E56	Station Design and Precinct Plans must be prepared to inform the final design of the CSSI and to give effect to the commitments made in the documents listed in Conditions A1 and A2. The Station Design and Precinct Plans do not apply to those elements, which for technical, engineering, or ecological requirements, or requirements as agreed by the Planning Secretary, do not allow for alternate design outcomes.
E57	SDPPs must be prepared by a suitably qualified and experienced person in consultation with the relevant council(s), the community and affected landowners for the area within 200m radius of a station or beyond for connecting pedestrian and cycle paths. The SDPPs must include:
E57(a)	Context and form
(i)	an analysis of the built, natural and community context and the urban design objectives, principles and standards for the CSSI
(ii)	the location of existing heritage items,



How condition is met: refer to relevant section of SDPP & page no.

Heritage Design Principles are set out in Section 2.3.2. A Heritage Interpretation Plan for Canterbury Station that is consistent with the Heritage Interpretation Strategy has been developed by a suitably qualified heritage specialist. Heritage interpretation is identified in this document (Refer Section 4.5.3) and is referenced within the Heritage Interpretation Plan for Canterbury Station

A Walking and Cycling Strategy has been prepared for the project. Opportunities and actions from the Strategy that are relevant to the station precinct are described in Section 5.2 of the SDPP

Section 5.2 includes a table that references these initiatives against the design response in this Project, and how they are integrated. Section 4.9 Connectivity and Access also summarises key actions

This document.

This SDPP was prepared by a team comprising urban, architectural and graphic designers. The project Urban Design Project Lead, and the primary SDPP author, both have over 20 years' experience

Figure 1.3, Section 1.2.4 shows the 200m radius of the station precinct. All analysis diagrams include the 200m radius

Regular fortnightly consultation with the City of Canterbury Bankstown Council has informed the development of the design and this SDPP for Canterbury Station and Precinct. Refer Section 6.1

Public exhibition of the Canterbury SDPP was conducted in June and July 2020. A summary of the consultation process, submissions and the Project's responses are summarised in Section 6.2

Refer Section 3.0 Context and Form.

Section 1.3 sets out the strategic context including documents that set the direction and standards for the urban design

Section 2.0 sets out objectives and principles for the CSSI, incorporating design objectives carried through from the EIS

Section 3.3 contains context analysis, covering built form and heritage, landscape and open space, access and connectivity and public domain spatial character

Section 3.4 describes the constraints and opportunities arising from the context analysis

Heritage items are described in Section 3.3.4 and mapped in Figure 3.2 Built form, landuse and heritage.

Condition number	Requirement (paraphrased)	How condition is met: refer to relevant section of SDPP & page no.	Conditio number
(iii)	the location and type of existing vegetation	Existing street trees and important streetscapes are mapped diagrammatically in Figure 3.4 Landscape, topography and views	(iv)
		Further details of significant vegetation is provided in Section 4.11	
(iv)	detailed consideration of integration and continuity with urban design and landscape outcomes for SSI 7400, taking into account the approved station design and precinct plans for that project	SS1 7400 (Chatswood to Sydenham) design principles were considered, as were the Sydenham Station and Pit SDPP outcomes (refer Section 1.3.2)	(v)
E57(b)	Design	Section 4.0 of this document describes and illustrates key aspects of the station and precinct design.	(0)
(i)	the design of the CSSI elements including their form, materials and detail,	Refer Sections 4.3 – 4.13	E57(e)
(ii)	the design of the CSSI landform and earthworks	Significant earthworks are not required to deliver proposed design solution for Canterbury Station. Section 3.3.5.discusses topography and landform	
(iii)	visual screening requirements for the CSSI,	Refer Sections 4.3 – 4.15	E62
		Visual screening is detailed in the relevant section where it is required	
(iv)	developed visuals, cross sections and plans showing the proposed design outcome of the CSSI,	Section 4.0 Design includes illustrative material in plan, section and 3D form that shows the design outcomes	REMM LV3
(v)	consideration of opportunities for provision of public art within each station precinct,	Refer Section 4.13	
(vi)	consideration of the principles of Crime Prevention Through Environmental Design (CPTED)	Section 2.3.5 sets out the CPTED principles for the Project. Section 4.12.3 includes key issues from the CPTED assessment, the principles they related to, and how they are addressed in the design	
E57(c)	Landscaping	Section 4.11	
(i)	areas of vegetation to be retained and proposed planting and seeding details, including the use of local indigenous species for revegetation activities,	Refer Section 4.11.1 - 4.11.3	
(ii)	details of strategies to rehabilitate, regenerate or revegetate disturbed areas and successfully establish and maintain the resulting new landscape;	Section 4.11.5	
E57(d)	Transport and Access	Section 5.0.	
(i)	design measures to maximise the amenity of public spaces, permeability around entrances to stations and integration with other transport modes,	Section 5.1 summarises the design measures also described in Section 4.9 Connectivity and access	
(ii)	measures to safeguard a new pedestrian crossing of the rail corridor to the west of Foord Avenue and east of Melford Street in Hurlstone Park,	This requirement is not relevant to the Canterbury Station Design and Precinct Plan. This requirement is addressed in the Hurlstone Park Station Design and Precinct Plan	
(iii)	integrate with relevant initiatives identified in the Sydney Metro Sydenham to Bankstown Walking and Cycling Strategy,	Refer Section 5.2	

Condition number	Requirement (paraphrased)
(iv)	detailed consideration of measures to allow for the removal and/ or relocation of existing ancillary infrastructure (such as fencing, substations and signalling boxes) and any structures that may be made redundant by the CSSI that may inhibit or detrimentally impact the provision of open space, pedestrian and cyclist pathways along the rail corridor or new access points into the stations in the future,
(v)	detailed consideration of design measures to ensure the location of infrastructure does not preclude future enhancements and upgrades to existing parks and public open spaces adjoining the rail corridor
E57(e)	Evidence of consultation with the community, the relevant council(s) in the preparation of the Station Design and Precinct Plans and how feedback has been addressed before seeking review by the Design Review Panel, where required.
E62	In addition to the requirements of Condition E57, the Station Design and Precinct Plan for Canterbury Station must include a concept design for and safeguard a future station entrance in the vicinity of Charles Street to the west of the station.
REMM LV3	Sydney Metro would prepare Station Design and Precinct Plans for each station. The plans would aim to ensure that the stations and facilities are sympathetic and complement local character, and are integrated with future plans for development. The plans would consider the following:
	 urban design context
	 sustainable design and maintenance
	 community safety, amenity and privacy, including 'safer by design' principles where relevant
	 opportunities for public art
	 landscaping and design opportunities to mitigate the visual impacts of rail infrastructure and operation facilities
	 incorporation of salvaged historic and artistic elements on the project design
	 details of where and how recommendations from the Design Review Panel have been considered in the plan.
	Documents to be considered by the plans include, but are not limited to:
	 Inner West Council's Dulwich Hill Station Precinct public domain master plan
	- Outcomes of the master plan for Bankstown Station.
	The plans would be prepared and implemented in consultation with the Department of Planning, Industry and Environment (DPIE), Inner West and City of Canterbury Bankstown Councils.

How condition is met: refer to relevant section of SDPP & page no.

There has been investigations to rationalise and remove residual assets as required in order to safeguard future use, public space and connections. Section 4.9 describes these connections and sections 3.5 and 4.10.1 summarise safeguarded measures

No infrastructure whose location would preclude future enhancements or upgrades to existing parts and public open spaces has been identified within the Canterbury Station precinct

Public exhibition of the Canterbury SDPP was conducted in June and July 2020. A summary of the consultation process, submissions and the Project's responses are summarised in Section 6.2 and 6.3

Refer Section 4.9.4

Noted, covered under Conditions of Approval above

1.4.6 Design process

The design for the project has developed through an iterative and collaborative process. It stepped through from over-arching objectives and design principles, to context analysis, to the developing design. Consultation with City of Canterbury Bankstown Council has been a key part of the process and has informed the station design and future opportunities to be safeguarded.

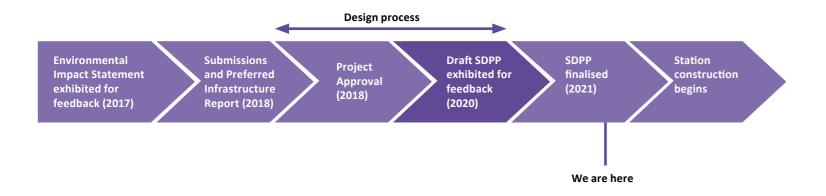
In summary, the steps involved were:

- 1. Project understanding
- » Build on Sydney Metro City and Southwest line-wide and specific project design objectives
- » Test and refine design principles, and share with project team
- » Establish the structure and draft outline for the SDPP (this document).
- 2. Context analysis
- » Review all EIS supporting documentation including specialist assessments and reports
- » Update analysis of strategic policy context, environmental and cultural context
- » Develop appreciation of key issues and precinct opportunities
- » Identify where the project can support precinct opportunities through the design.

3. Design

- » Cross-disciplinary workshops and discussions to integrate the work of all disciplines, from engineering through to human factors / customer centred design, heritage, landscape, architecture, and urban design
- » Regular consultation with Council for feedback on developing design
- » Design Review Panel's regular review.
- 4. Public exhibition
- » Exhibition of the draft SDPP for public comment
- » Progress the design based on feedback from the exhibition
- » Finalise SDPP. we are here

These design steps form a key part of the projects development and a summary of the entire process is provided below









2.0 Design principles2.1 Corridor character

Each station precinct is its own place, with its own geology, topography, history and culture. Each has a particular mix of heritage station buildings and later additions. Each is also woven into its immediate context – its precinct – and into the wider neighbourhood in its own way.

Two Aboriginal nations, the Eora and Dharug, were the original inhabitants of the area traversed by the project, broadly meeting at the Cooks River. The river – Goolay-yari (pelican) – was a place that brought people together as much as divided them, with its rich harvest of fish and shellfish. The Bediagal clan occupied land to the south; the Wangal to the west, and the Gadigal to the east.

Southwest Metro will run through a landscape that has been homogenised by urbanisation although there is a diversity in communities and the urban character of each suburb. The undulating topography and geology is still legible – particularly as the corridor literally cuts through the contours. Built development has overlaid the silt, sand and clay around Marrickville, sandstone at Dulwich Hill and Hurlstone Park, estuarine wetlands at Canterbury, the Turpentine/ Ironbark forests endemic to Campsie, Belmore and Lakemba, and the Iron Bark/ Melaleuca Scrub and Salt Pan Creek environs of Wiley Park and Punchbowl.

The T3 Bankstown Line is the main thread around which the developing suburbs grew and intertwined. The stories of successive waves of immigrants to Sydney are woven into the fabric of the urban form. While neighbourhoods have changed over time and will continue to change, metro stations will continue to serve as both destinations and departure points, connecting neighbourhoods and landscapes either side of the corridor.







Figure 2.1 The corridor in context

2.2 Urban design vision

The EIS requires that

"The urban design aspects would continue to be developed and refined during future design stages, taking into account considerations such as each station's place making role, future urban development opportunities, heritage, links to the surrounding town centres, and feedback from stakeholders and the community. To reflect local conditions and heritage values, heritage interpretation, public art, and landscaping would be incorporated into the design of each station, in accordance with the design guidelines, and based on consultation with local stakeholders." (EIS, Volume 1A, p. vi)

The urban design vision for the corridor as a whole, accordingly, is based on the design philosophy and themes set out in the EIS design guidelines. The vision is:

- Stations and their precincts are well known, well used, and well loved by local communities
- They are integral parts of the neighbourhood, fitting comfortably in the streetscape
- They contribute both to a sense of place and to an easy travel experience.

The supporting design themes are:



Re-discover

- The heritage fabric of the line design that responds to, reveals and repurposes heritage buildings and structures
- The diversity of centres and communities design that draws on and expresses culture and community.



Re-connect

- All transport modes at stations design for easy, accessible interchange and to prioritise walking and cycling
- Links into precincts design to maintain and enhance the legibility of stations and connections into the surrounding street and open space network.



Re-generate

- create and connect green areas.





- The public domain - design new and existing public spaces and their interfaces to enable town and village centre revitalisation

- Existing vegetation - build on landscape character to protect, enhance,

2.3 Urban design objectives and principles

2.3.1 Project design objectives

The urban design has been guided by the project design objectives and supporting principles and standards. The principles have been developed to reflect the current Project scope while maintaining continuity with the Sydney Metro City & Southwest Chatswood to Sydenham (SSI 7400) Design Guidelines and the Sydenham Station Design and Precinct Plan.

The over-arching objectives are:

OBJECTIVE: Ensuring an easy customer experience.

PRINCIPLE: Sydney Metro places the customer first. Stations are welcoming and intuitive with simple, uncluttered spaces that ensure a comfortable, enjoyable and safe experience for a diverse range of customers.

Design outcomes sought:

- A safe, comfortable and pleasant journey to the station, between modes and on trains
- Clear wayfinding a 'self-explaining' environment
- Public spaces, local connections and station environments with good amenity.

OBJECTIVE:

Providing a fully integrated transport system design.

PRINCIPLE: Sydney Metro is a transit-oriented project that prioritises clear and legible connections with other public and active transport modes within the wider metropolitan travel network that intersect with it.

Design outcomes sought:

- Station legibility within the precinct
- Seamless interchange between modes light rail, bicycle, pedestrians, buses
- Pedestrian priority
- Clarity of wayfinding, timetable and modal information
- Connections to walking, cycling and open space networks.

OBJECTIVE:

Delivering an enduring and sustainable legacy for Sydney where heritage is integral to the identity of the places.

PRINCIPLE: Heritage structures are a valued and positive legacy of rail's contribution to a growing city. Retaining and integrating them with the station design underlines their value now and for future generations.

Design outcomes sought:

- Heritage buildings are retained, refreshed and re-purposed, while new structures are complementary and contemporary in design.

OBJECTIVE:

Being responsive to distinct local character of existing contexts and communities.

PRINCIPLE: Sydney Metro's identity is stronger for the unique local character of the centres and communities through which it passes. It is supported by public domain and architectural design that is consciously integrated with the existing urban fabric.

Design outcomes sought:

- Place-making values embedded in precinct design: acknowledge and respond to local history, culture and form for public spaces, urban elements, landscape and public art
- Station architecture that contributes positively to the identity of Sydney Metro
- Positive connections into existing and proposed open space and active transport networks.

2.3.2 Heritage principles

2.3.3 Public domain principles

2.3.4 Sustainability principles



OBJECTIVE:

Delivering an enduring and sustainable legacy for Sydney where heritage is integral to the identity of the places.

PRINCIPLE: Heritage structures are a valued and positive legacy of rail's contribution to a growing city. Retaining and integrating them with the station design underlines their value now and for future generations.

Design outcomes sought:

- Heritage built fabric is retained, re-used and adapted
- Contemporary elements are complementary and responsive to heritage scale, form and materials
- Existing heritage vistas and views within and around the station are maintained and enhanced
- New architecture elements are sensitively integrated and sympathetic in scale
- New services are rationalised, consolidated and concealed as far as possible.



OBJECTIVE:

Being responsive to distinct local character of existing contexts and communities.

PRINCIPLE: Station forecourts and plazas extend the public domain to contribute to their shared use and enjoyment by Metro users and the community.

Design outcomes sought:

- Plazas that are active and lively; that encourage pedestrian activity and form a place to stay and stop rather than just a space to walk through
- Station forecourts that extend seamlessly from adjacent public footpaths and 'read' as fully accessible public spaces
- Street furniture, lighting and paving palettes that achieve consistency across the corridor while also matching into Councils' desired public domain character
- Interpretive signage to describe the cultural, historical, natural and built characteristics of the environment – helping to tell the story of the area
- Where large retaining walls are unavoidable, they are designed and detailed to be visually interesting for pedestrians and cyclists, including referencing cultural narratives in places of significance.

PRINCIPLE: Urban, landscape and architectural design follow best practice guidelines and are assessed under performance based sustainable design tools

Design outcomes sought:

- the design direction
- outcomes that have longevity



OBJECTIVE:

Delivering an enduring and sustainable legacy for Sydney where heritage is integral to the identity of the places.

- Draw on a comprehensive site and context analysis to inform
- Provide value-for-money design solutions that achieve high
 - quality low maintenance architectural and urban design
- Provide connectivity and permeability for pedestrians
- Integrate the project with the surrounding area
- Maximise the amenity of the public domain
- Protect and enhance heritage features and significant trees
- Maximise positive view opportunities
- Design an efficient and functional transport solution which
 - enhances and contributes to local amenity and prosperity.



2.3.5 CPTED principles

2.3.6 Architectural design principles



OBJECTIVE:

Providing a fully integrated transport system design.

PRINCIPLE: Movement networks are legible: people can easily see where they are going, with clear and direct lines of sight and minimal spaces for concealment

Design outcomes sought:

- New connections (including pedestrian overbridges) tie into and support existing and future desire line
- Landscape planting that softens the corridor while still enabling passive surveillance and good forward sightlines for pedestrians
- A signage strategy that provides directional details including time and distance to ensure clarity of route for path users.



OBJECTIVE: Ensuring an easy customer experience.

PRINCIPLE: Stations and their approaches are designed to increase activity and opportunities for casual surveillance

Design outcomes sought:

- Visual connections between the public domain and station concourse, stairs and platforms
- Multiple paths of travel through plazas, for movement choice and the ability to exit paths and walkways with long paths of travel
- Landscape planting that deters vandalism of potentially targeted areas through creating physical and visual barriers to restrict access
- Lighting that enables the use of such parts of the shared path network that are required after dark and that discourages the use of areas that are not intended to be used; and that provides a consistent level of illumination so as to avoid the creation of pools of light or dark that can create potential areas of isolation or entrapment
- Design of retaining walls and fences edging public spaces, shared paths and cycleways to minimise their size and their apparent scale.



PRINCIPLE: Architectural design is well integrated with the existing urban fabric, sensitive to existing materials and sympathetic in scale

Design outcomes sought:

- Retention of the station as a local landmark, including views to the concourse and platforms
- are maintained
- minimal additional columns

- heights of roof to different spaces and structures.

OBJECTIVE:

Being responsive to distinct local character of existing contexts and communities.

- Cross-corridor views and locating views to the surrounding areas
- Stair canopy design is low in height and with minimal overhangs - Stair and lift structures are lightweight, 'skeletal' and open, with
- New interventions are sympathetic to the geometry and scale of heritage buildings and structures
- Vertical protection screens do not dominate the streetscape
- The scale of roofscapes is broken down with different sizes and

2.3.7 Landscape planting principles



OBJECTIVE:

Delivering an enduring and sustainable legacy for Sydney [where heritage is integral to the identity of the places].

PRINCIPLE: Landscape design and species selection reinforce the local landscape and streetscape character



- Existing vegetation is protected and retained where possible.
 Where not possible, identify areas for replacement and new planting that prioritise pedestrian amenity (eg. walking and cycling connectivity, public plazas)
- Planting design that retains or frames views to heritage and character buildings
- Use of naturally occurring indigenous species, or species that have a connection to the local community and environment
- Embankments are less than 2:1 slope to enable planting
- Environmentally responsive and integrated design and maintenance, for example: protecting adjacent waterways from potential stormwater run off, grading pavements to drain to garden beds, Water Sensitive Urban Design, and robust and lowmaintenance species selection.



OBJECTIVE:

Being responsive to distinct local character of existing contexts and communities.

PRINCIPLE: Landscape design and species selection reinforce the local landscape and streetscape character

Design outcomes sought:

- Use of naturally occurring indigenous species, or species that have a connection to the local community and environment
- Tree species consistent with Councils' planting palette / preferred species
- Integrated soft and hard landscape that draws on the underlying geology and remnant vegetation communities.







3.0 Context and form3.1 Historical context

3.1.1 Pre-European landscape

The original inhabitants of the area were the Bediagal clan of the Eora nation. Early exploration of the Cooks River valley in 1770 preceded the colonisation of Sydney although it was not until 1789 that officers of the First Fleet negotiated the river as far as present-day Canterbury, when they noted the low and marshy aspect of the countryside and observed Aboriginal people fishing on the river.

The wetlands associated with the Cooks River and Gumbramorra Swamp would have been reliable fresh water and food sources and observations of Aboriginal people living on the Cooks River made early after the British arrival in Australia indicate the importance of these riverine and estuarine environments for Aboriginal people. The Hawkesbury Sandstone around the Cooks River would have provided Aboriginal people with shelter and the surrounding environment would have provided ample materials for tools and other material culture.

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3.1.2 European settlement and land use

The first grant of land in Canterbury was in May 1793 to the Reverend Richard Johnson, of 100 acres of land about a mile from the Cooks River. The land had a number of ponds providing fresh water. By 1800, orchards, vineyards and various crops were beginning to be grown in the district, although it was 1840 before the first bridges were built across the river. The Australian Sugar Company established its sugar mill adjacent to the river in 1841 and other industries followed suit. Horse racing began in the area in 1871 at the Canterbury Racecourse, just west of the station.

By the turn of the twentieth century the population was a little over 4,000 but following the opening of the Belmore Branch Line in 1895, and especially after WWI, suburban development flourished. By 1933 the population had grown to 79,000. The Cooks River marks the southern boundary of the Canterbury Station precinct. Late 19th century industries were located along its banks, using it for access and for disposal of waste. This resulted in formalising parts of the river bank with hard edges, in the process reducing areas that formerly supported estuarine flora and fauna. The legacy of these land uses remains in the coarse grain of current high density residential development around Charles Street. The street pattern north of the station radiates out from it, revealing the importance of the rail line for the suburb's growth.

3.1.3 The station

Canterbury Station was constructed on the first section of the Bankstown Line (originally called the Belmore Branch Line) between 1894 and 1895, to relieve congestion on the Main South Line, and to encourage the suburban development and agricultural development of the area. The platforms and platform buildings date from 1895, while the booking office and signal box are later additions from 1915 when the existing rail overbridge was constructed. The signal box is on the eastern side of the overbridge, its relationship with the station diminished by the barrier of Canterbury Road.

Part drawn from Technical Paper 3, Non-Aboriginal Heritage Impact Assessment, and the Design and Place Making Paper, both from the EIS



Part drawn from Heritage Interpretation Plan; Canterbury, Artefact

3.2 Strategic context

3.2.1 Urban Renewal Strategy

The NSW Department of Planning, Industry and Environment (DPIE) developed a 20-year Urban Renewal Corridor Strategy for the Sydenham to Bankstown Corridor to guide future development and infrastructure delivery. The first draft was published in October 2015, followed by a revised Strategy exhibited between June and September 2017 that responded to identified constraints and feedback from public submissions, community workshops, meetings and technical studies.

In July 2018, DPIE identified a revised approach for the Sydenham to Bankstown Urban Renewal Corridor Strategy. DPIE will develop the principle based, high level strategy for the corridor in collaboration with Councils. Councils will then undertake a review of their local environmental plan in accordance with this framework. Sydney Metro would work with the DPIE and local councils, as key stakeholders, once a program for the development of this strategy has been provided.

3.2.2 Eastern City District Plan and South District Plan

The Sydenham to Bankstown Urban Renewal Area is identified in the Eastern City District Plan and the South District Plan (2018) for transit-oriented development. Planning priorities relevant to the Project include "Creating and renewing great places and local centres, respecting the area's heritage" and "increasing urban tree canopy cover and delivering Green Grid connections and high quality open space".

3.2.3 The Green Grid

Sydney Green Grid – Central District, 2017, is a Government Architect NSW-led program to increase open space, biodiversity and connectivity corridors and connect town centres, public transport hubs and major residential areas across Greater Sydney.

Opportunities for the SDPP:

 Provide enhanced tree cover / urban canopy by using the Project tree offset to strengthen street tree planting within 500m of the station.

3.2.4 Walking and Cycling Strategy

In accordance with Condition E53 of the Conditions of Approval for the construction and operation of the Sydney Metro between Marrickville and Bankstown, a Walking and Cycling Strategy for Sydenham to Bankstown has been prepared. This SDPP includes analysis of the existing walking and cycling environment, opportunities and design responses that are consistent with the intent of the draft Strategy.

Opportunities for the SDPP:

- Improve connectivity for pedestrians and cyclists through the precinct and around the station
- Provide clear, accessible connections between the station and transport interchange areas.

3.2.5 Canterbury-Bankstown Local Strategic Planning Statement

City of Canterbury-Bankstown Council has exhibited its draft Local Strategic Planning Statement, Connective City 2036 (September 2019), which outlines the council's priorities and actions that will shape the city up to 2036. Described as "a consolidated vision for Canterbury-Bankstown that guides growth and balances what makes a city complete". It includes revised strategic targets that build upon 'CBCity2028' and will set the tone for future planning around land use, key infrastructure, housing and growth, and ecology and recreation.



Council has identified the Sydney Metro Southwest project as being a catalyst for driving change and growth in larger centres, while in smaller neighbourhoods increased access to public transport will reinvigorate established main streets. The hierarchy of centres is:

- City centre Bankstown
- Town Centre Campsie
- Local Centre Canterbury, Belmore, Lakemba
- Village centres Punchbowl, Wiley Park
- Small village centre Hurlstone Park.

Canterbury, as a local centre, is located at the metro station and will provide fast and efficient access across Sydney. It is suitable for a greater mix of housing and urban services, with commercial renewal around the station.

Kev findings:

- Under the '5 City Directions', the Local Strategic Planning Statement notes the importance of protecting established traditional main streets
- Canterbury Racecourse and Cooks River Parklands will be restored for ecology, water management and informal recreation.
- Commercial renewal and some residential growth is identified at Canterbury

Implications for the SDPP:

- Protection and enhancement of existing heritage fabric and the traditional main street character is a key consideration for the project
- - Capitalise on walking and cycling connectivity adjacent to the station, and the potential to 'green' the cycle and shared paths, to connect the Metro station into the greater green web network
 - Facilitate connections to the Cooks River
 - Optimise planting of trees along both for user amenity and urban canopy.

3.2.6 Re-imagining Canterbury Corridor

Re-imagining Canterbury Corridor is an urban design study exhibited by Canterbury-Bankstown Council in 2017 that provides advice on built form, land use, open space and other urban design solutions to help create a new vision for the corridor. It supersedes the Canterbury Road Master Plan, 2010 (draft) that was produced for (then) Canterbury Council.

Re-imagining Canterbury Corridor includes analysis of (then) growth targets, the existing street and pedestrian network, open space provision and shortfalls, and amenity and capacity constraints of the road environment. The aim is to enhance the public domain guality and level of service within centres and localities. The study notes that Canterbury Road is "a degraded and congested environment that is hostile to urban living", with no street trees, very poor pedestrian amenity and narrow footpaths with limited crossings. Ideally, transformation would create a green urban boulevard that is part of Sydney's Green Grid.

The Canterbury Road corridor bisects the Canterbury Station precinct and is the station's 'front door'. The study classifies and 're-casts' Canterbury Road either as 'centres and localities' or as 'the corridor between centres'. The Canterbury Station precinct (including the area around Charles Street) is not classified as a centre. The vision plan for Canterbury Road through the precinct is illustrated as a "green main street" (pp. 63 and 67), whose dominant condition will be:

- Retain existing kerb lines
- Underground existing power lines
- Set back buildings to add street trees

Opportunities for the SDPP:

- Safeguard for street tree planting as part of the Canterbury Road / Charles Street signalisation and streetscape upgrade
- Retain existing large urban trees where they provide 'borrowed landscape' to soften the Canterbury Road corridor
- Safeguard opportunities for pedestrian and cycle connections alongside and across the rail corridor, and the ability to provide landscape / tree planting for amenity to the shared path network.

- Integrate future walking and cycling connectivity with the station precinct

- Public dedication by re-developed sites to widen Canterbury Road
- Plant large urban trees in the verge and setbacks.

Built, natural and community context 3.3

3.3.1 Community profile

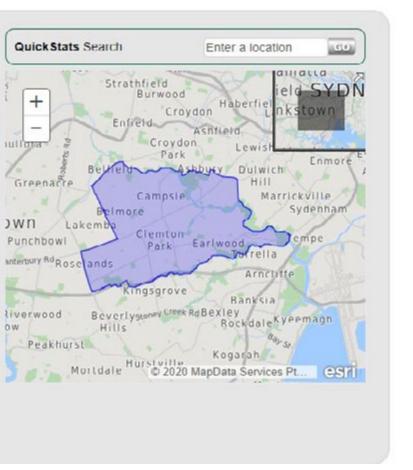
Key findings from the Australian Bureau of Statistics' 2016 census show that Canterbury has:

- A median age of 37, with 17.5% of the population under 15 and 15% aged 65 or over
- 53.9% of people born overseas significantly higher than the national average of 34.5%. Of people born overseas, the top countries of origin (in order) are China, Greece, Lebanon, Vietnam and Nepal
- Almost two-thirds of the population (66.3%) speak a language other than English at home
- A median weekly household income of \$1,413, lower than the national average
- Flats or apartments account for 34.5% of the dwelling stock, higher than the NSW average of 19.9%; and renting accounts for 36.5% of tenure
- 57.8% of people who were employed full time, 30.4% employed part-time and 6.9% unemployed
- A spread of occupations consistent with the national average, with professional at 20.9% and then relatively even distribution (between 10.3% and 14.5%) across clerical, administrative, technical and trades, managers and labourers, and community and personal service workers
- A higher proportion of people working in cafes and restaurants than other industries, and higher than the national average.

2016 Census QuickStats

Can	terbury	
Code SEC	010015 (SED)	
Search f	or a Community Profile	
0	People	88,009
P	Male	49.5%
-	Female	50.5%
	Median age	37
6	Families	23,349
18)	Average children per family	
-	for families with children	1.8
	for all families	0.8
	All private dwellings	32.829
(no)	Average people per household	2.9
-	Median weekly household income	\$1,413
	Median monthly mortgage repayments	\$2,167
	Median weekly rent	\$400
	Average motor vehicles per dwelling	1.6



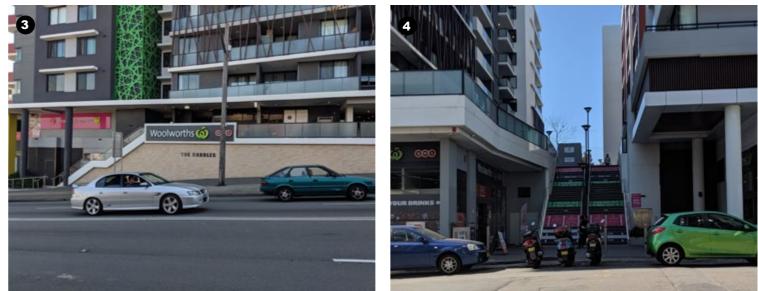


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3.3.2 The station in its precinct

The rail corridor divides the former and emerging Canterbury centres. Along the station's east edge, the Canterbury Road overbridge creates something of a gap in the urban fabric. The station is sandwiched between a traditional commercial strip to the north, and the new Charles Street development area to the south. Canterbury Road is heavily trafficked and there are extended clearways that detract from the pedestrian experience both on approach and at the station entry on the overbridge. The concourse building is a small, low element in the streetscape, with little to relieve or buffer the road environment, whilst the Cooks River with its open space and walking and cycling paths within 200 metres of the station is not legible due to the topography and precinct built form.







Refer Figure 3.1 Urban spatial qualities, for references to the images above.

Sydney Metro Southwest Metro Design Services (SMDS)

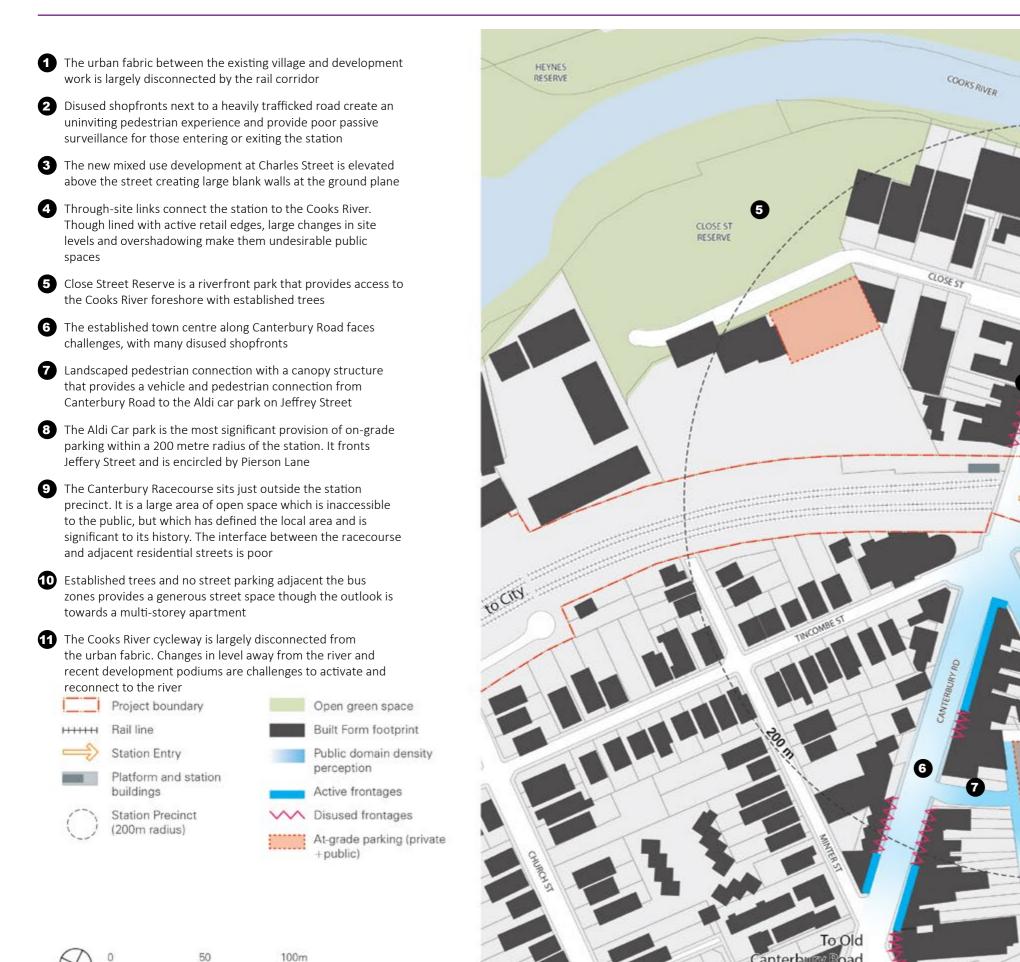


Figure 3.1 Urban spatial qualities

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3.3.3 Urban form

Canterbury is developing rapidly as a high density residential area. The suburb has seen recent (and continuing) extensive, large scale, high density housing development that is beginning to define a new town centre focussed on Canterbury Plaza Shopping Centre. Charles Street forms a new spine that connects to Canterbury Road, to the Cooks River and also via a through-site link to the station concourse. The strip to the north, which extends a considerable distance along Canterbury Road and would once have been a vibrant commercial hub, is now in mixed condition with a number of vacancies and is dominated by heavy traffic. It no longer functions as a retail strip but instead has newer development (for example Aldi) set behind and accessed from side streets or lanes. To the south, the former grouping of industrial and service uses between the rail corridor and the river has changed dramatically in scale and use. Close to the station are two fine buildings that are locally listed heritage items: the former Post Office, and the inter-war Canterbury Hotel, both in red brick.

While most development is focussed around Charles Street, the likely future development of Canterbury Park racecourse will further extend and transform the urban form and scale. To the north-east, the suburb remains low scale, with traditional, finegrained suburban character and predominantly brick fabric. The current station building, entry and associated awnings are small and low on the street; while still relating to the scale and form of the traditional strip retail, they are significantly out of scale with the adjacent higher (10 storeys +) and denser residential development behind them.

3.3.4 Heritage

Canterbury Station was opened on 1 February 1895 and the Canterbury Railway Station Group (buildings, structures, context, platform building, overhead booking office, signal box, platform, footbridge, overbridge, canopies) is listed on the State Heritage Register, the local heritage register (Canterbury LEP 2012) and the Railcorp Section 170 register. The 1895 Platform 1 is particularly fine, with polychromatic brickwork, decorative dentil coursing, ornate awning brackets and carved bargeboards.







Refer Figure 3.2 Precinct built form, landuse and heritage, for references to the images above.

Sydney Metro Southwest Metro Design Services (SMDS)

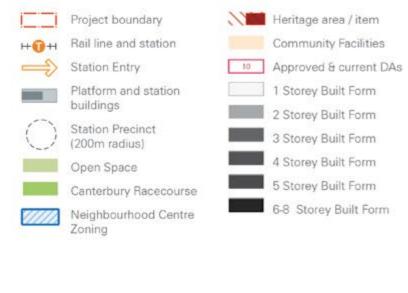


- 1 Small heritage station platform buildings are in good condition but not visible from outside the station due to the enclosed station entry and rail overbridge. The heritage concourse building has been built around with landscape elements, reducing its prominence on the street and affecting legibility
- 2 The Canterbury Club Hotel is a 2-storey inter-war brick hotel that takes advantage of its prominent corner location. It is a landmark building which is clearly visible from the station
- **3** Opposite the Canterbury Hotel is the former Canterbury Post Office which acts as another landmark for the area and marker for the station entry
- 4 The original retail core / town centre along Canterbury Road is in decline. Many shop fronts are disused, which disrupts the pedestrian experience

5 Canterbury Bowls Club is in a state of disrepair

- 6 A Development Application for a 16-23 storey development at Close Street was approved in 2017, but has not progressed since. This would drastically change the density and height of built form along the Cooks River foreshore
- Recent development of between 6-12 storeys has created a new high density scale as a prominent backdrop to the station buildings. New active edges have been created both fronting Canterbury Road and within the development site links which connect back to the station

8 Typical residential urban fabric to the north and north-east of the station remains low scale, with traditional, fine-grained suburban character and predominantly brick fabric



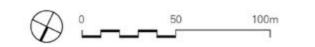




Figure 3.2 Precinct built form, landuse and heritage



3.3.5 Landscape, vegetation and topography

Canterbury Road slopes down towards the Cooks River, providing some long vistas towards the river and open space from the upper areas. Closer to the station the new, tall buildings of the Charles Street centre dominate the outlook from the station platforms. There are no street trees on Canterbury Road itself; mature trees on Broughton Street provide some relief from the otherwise 'hard' character, as do open views east and west from the rail overbridge. Awnings on Canterbury Road, north of the station, provide some weather protection and give a human scale and sense of containment to the footpath although vehicle noise and vibration impacts are still considerable; but this consistent form breaks down at the station.



Refer Figure 3.4 Precinct landscape, topography and views, for references to the images above.

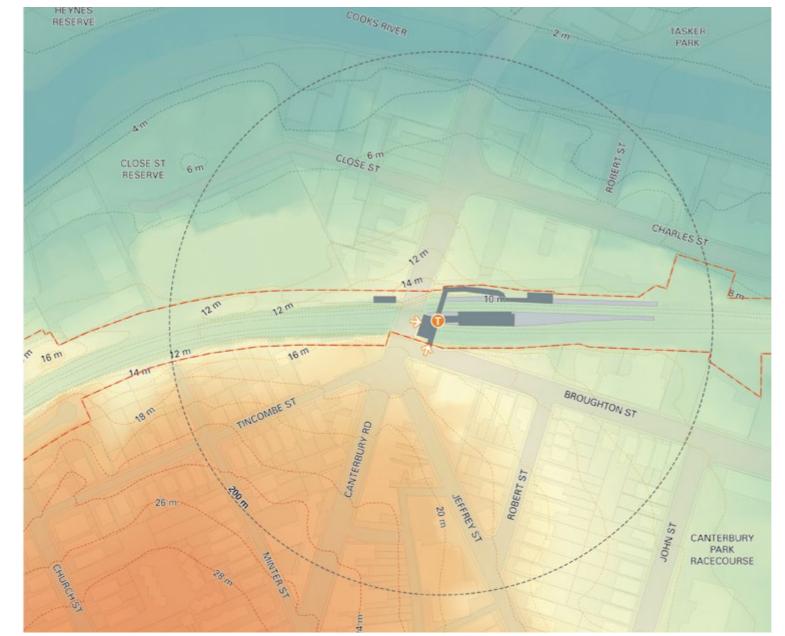


Figure 3.3 Change in topography across the Canterbury station precinct



----- 2m Contours Elevation (1m DEM)

Sydney Metro Southwest Metro Design Services (SMDS)







- 1 Views eastward and westward along the corridor from the station platform and the station overbridge
- 2 Views towards the station and the viaduct over the Cooks River from Canterbury Road traveling south. Views are due to the change in topography which slopes down towards the river
- 3 Significant sandstone cuttings run along the rail corridor. These are visible from the overbridge at Canterbury Road and from within the rail corridor
- 4 Close Street Reserve is a riverfront park that provides access to the Cooks River foreshore. It contains an off-leash area for dogs, and an informal green space with established trees that provide shade. The Cooks River cycleway runs through it. Access to the park is via remnant industrial lands along Close Street which has a narrow footpath

5 The Cooks River cycleway creates a significant landscape link along the Cooks River foreshore, connecting Settlers Park in Ryde through to Botany Bay at Kyeemagh. Locally, the connection provides pedestrian access to the river foreshore and is well shaded by established trees though is prone to flooding

6 The Canterbury Racecourse sits just outside the station precinct. It is a large area of open space which is inaccessible to the public, but which has defined the local area and is significant to its history. The interface between the racecourse and adjacent residential street is poor

Project boundary

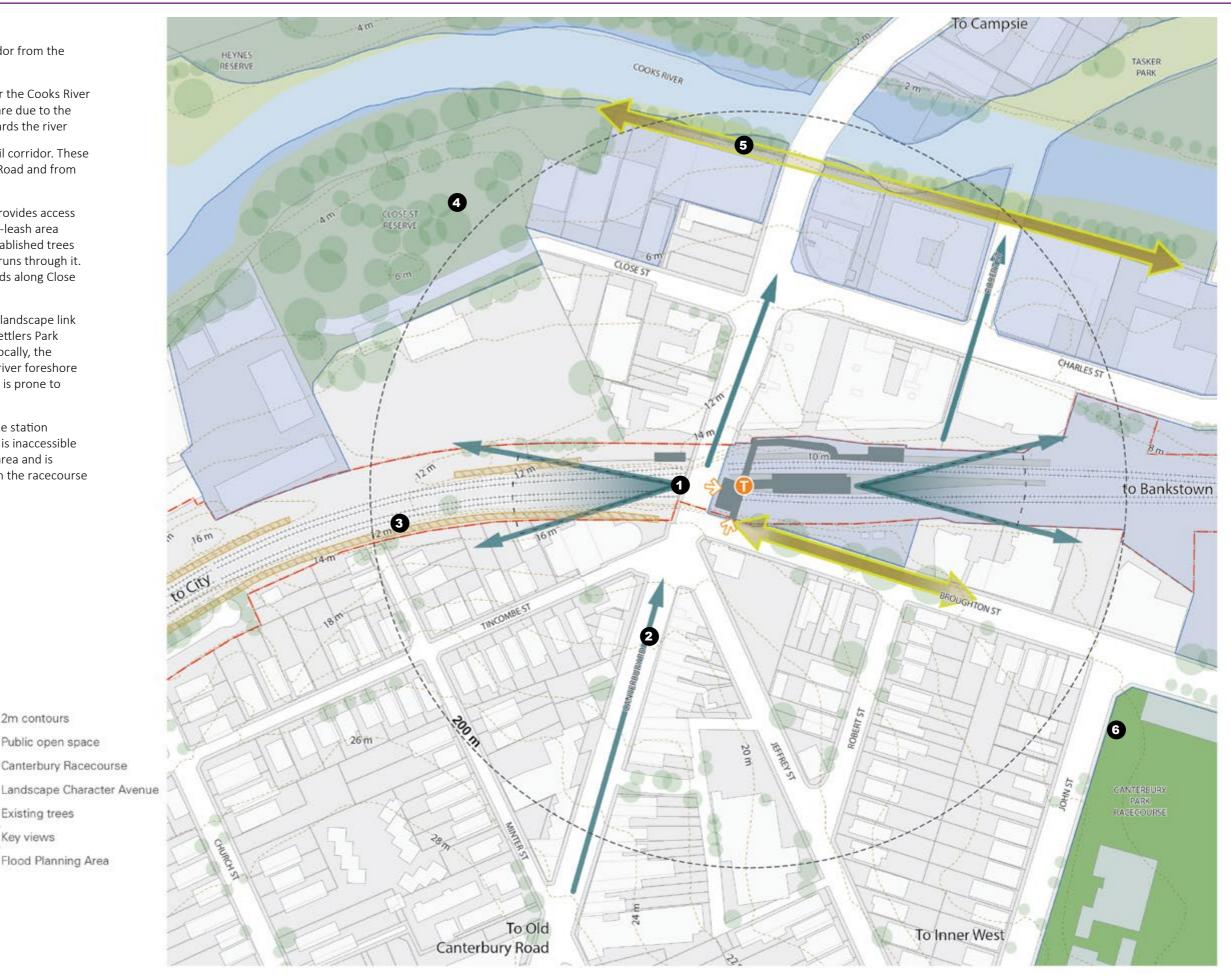
Station Entry

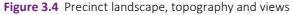
Rail line and station

Sandstone outcrop

Platform & station buildings

Station Precinct (200m R)





100m

2m contours

Existing trees

Key views Flood Planning Area

Public open space



3.3.6 Transport and access

Canterbury Road and is a significant barrier to east-west movement due to heavy traffic and limited crossing points. Together with extended clearways this creates an unpleasant pedestrian environment on the principal north-south spine of the precinct. Around the station there is little respite from the road noise and vibration. Access into the station is currently constrained by the poor quality and narrow width of the footpaths, and the levels of the concourse in relation to the footpaths. There is currently no accessible path of travel.

A planned signalised crossing between Charles and Close Streets (by Council) and associated streetscape upgrade including street tree planting will assist in enabling pedestrians to access the town centre and station, and also help to signal the emerging town centre and the station precinct.

The local context for transport and access will change as a result of the Project:

- The existing station entrance will be retained and upgraded
- Two new lifts will be provided
- The existing stairs will be removed and replaced
- The existing bus stops on Broughton Street will be retained and upgraded
- The existing accessible parking space will be retained on the southern side of Broughton Street
- New taxi zone and kiss and ride zones will be located on the southern side of Broughton Street
- New bike parking will be provided on Canterbury Road and on Broughton Street.







Refer Figure 3.5 Precinct access and connectivity, for references to the images above

Sydney Metro Southwest Metro Design Services (SMDS)





- While there are two station entries, access into the station is currently constrained by the quality and narrow width of the footpaths, and the levels of the concourse in relation to the footpaths. There is currently no accessible path of travel
- 2 The intersection at Canterbury Road directly north of the station is the busiest within the station precinct as it is the junction of four roads. It contains five signalised pedestrian crossings which greatly impacts the walkability of the precinct
- 3 Canterbury Road is a heavily trafficked primary connection that creates a barrier to pedestrian movement and creates an unpleasant pedestrian experience due to vibration and noise
- Through-site links connect the station to the Cooks River through the Charles Street development. These links are lined with active retail edges, but are largely insular and feel as though they serve residents of the development instead of the community as a whole
- **5** Access to Close Street Reserve is via remnant industrial lands along Close Street which has a narrow, uninviting footpath
- 6 The Cooks River cycleway creates a significant landscape link along the Cooks River foreshore, connecting Settlers Park in Ryde through to Botany Bay at Kyeemagh. Locally, the connection provides pedestrian access to the river foreshore and is well shaded by established trees. However, it is not visible from the station
- The intersection at Canterbury Road and Charles Street is fairly busy with vehicular movement, however a signalised pedestrian crossing at this location has been designed and is to be implemented by Council. This will create a connection between the eastern and western portions of the station precinct immediately adjacent the foreshore
- **8** Jeffrey Street is a secondary connections which links the station to Bankstown and the Inner West via local bus routes

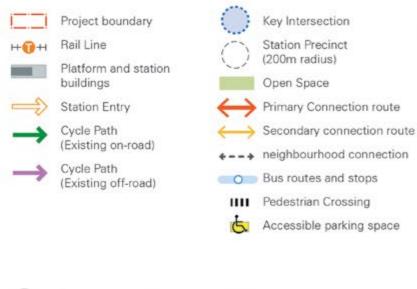




Figure 3.5 Precinct access and connectivity

100m





3.4 Issues and opportunities

Analysis of the built, natural and community context has highlighted both constraints, and opportunities to enhance the station and its precinct character, amenity and connectivity. This section of the SDPP summarises the key findings from the precinct analysis studies where the project has the greatest potential to influence the wider context.

As many of the issues and opportunities extend beyond the scope of the project, there is a distinction between what is delivered as part of the project ('opportunities delivered') and what are opportunities safeguarded by the project ('opportunities safeguarded'). The table in Section 3.5 (to be read in conjunction with Figure 3.7 Issues and Opportunities) below therefore shows the relationship between opportunities, the project response (within its scope) and those items which are safeguarded for future actions.



Figure 3.6 Canterbury Foodies and Farmers Market - source: Canterburyfoodiesmarket Facebook



Figure 3.7 Issues and opportunities. Refer 4.0 Design response, for references to the image above.



3.5 Design response

	#	Key issue / opportunity	Opportunities delivered by the project	Opportunities safe
Public Domain	0	Footpaths surrounding the station are narrow and unpleasant for pedestrians	 Existing brick planters, bus shelters, part canopies and bike racks are removed. New bus shelters and bike racks are installed to offer increased footpath space. A refreshed plaza allows additional circulation space. A new balustrade and handrail is installed along Canterbury Road 	
	0	The pedestrian laneway south of the station is not very well activated and is in a poor state of repair adjacent the corridor	 The existing planter bed and bike racks are removed and replaced with additional open plaza space, better opening the laneway for pedestrian movement 	
	3	Bicycle parks on Canterbury Road on the stations south are located within a garden bed and are unusable	 The garden bed is adjusted and provided with increased planting Paved open space is increased to allow better pedestrian movement New bicycle parks are added 	
	4	Public domain south of the rail corridor is disconnected from the village centre	 A decluttered and improved footpath along Canterbury Road provides an accessible route to the station 	 Additional station ent
	5	There is a lack of urban and public open space within the station precinct	 A decluttered and upgraded plaza space to the corner of Canterbury Road and Broughton Street provides a place to rest, wait and gather 	 Future station entry h Street
ss	6	The station entry offers poor legibility and difficult access. Canterbury Road is the only access point for the station, at the eastern end of the platforms, limiting the pedestrian catchment	 A reconfigured and enhanced entrance opens up the station to Canterbury Road and Broughton Street. A decluttered and refreshed entry plaza provides easy and equitable access from both streets. 	 Safeguard land west of entry
and acces	0	There are a lack of bicycle parking within the precinct	 8 new bicycle hoops to Broughton Street replace the existing bicycle locker 6 new bicycle hoops close to the station entry on Canterbury Road to replace the existing single bicycle rack 	
Connectivity and	8	Broughton Street is dominated by a large outdated bus shelter and does not provide suitable interchange access options	 New bus shelters replace existing to both sides of Broughton Street Taxi spaces and Kiss and Ride points are added to Broughton Street A shelter serving Taxi and Kiss and Ride 	
S	9	A walking and cycling route is identified for Broughton Street	 Additional bicycle hoops along Broughton Street Upgraded station entrance on Broughton Street approach 	
Built and landscape character	0	The station entry has poor wayfinding due to the accrual of many disparate awning and built elements.	 Redundant awnings and roof structure are removed opening the station entry and enhancing the character of the original building Planters and low brick walls are removed allowing a new open plaza to the station entry Accessible enty from both Canterbury Road and Broughton Street 	
Built ar ch	1	Protection and enhanced appreciation of heritage fabric	 Retention, refresh and re-use of the station platform building as a recognisable part of the local character 	

Refer Fig 3.7 and Fig 3.8 for location details

feguarded by the project

ntry west of the station near Charles Street

y has the ability to increase public open space near Charles

t of the station near Charles Street for future new station



Figure 3.8 Safeguarding the future. Refer 3.5 Design response, for references to the image above.









Sydney Metro is committed to "easy, safe and reliable turn-up-and-go services, active and attractive precincts and places, and delivering these customer-centric outcomes in a socially, financially and environmentally responsible way". The Project design supports this commitment with a holistic approach that responds to the station context as well as to the

The new metro stations will provide renovated and modernised concourse and platform environments, and an upgraded public domain at station entries. Each station design aims to contribute positively to the wider precinct by achieving a sensitive fit with existing and future precinct planning, and to the community and heritage aspects of each place. For all stations, retention and re-use of heritage buildings is key. At Canterbury, the heritage platform buildings are adaptively re-used for Metro functions. The overhead concourse building is redesigned with a larger, more visible and accessible entry; and solid fences along Canterbury Road that obscure views between the street and the station are removed. The approach is to apply a 'light touch' to the existing concourse and precinct, aiming to strengthen the role of the station while still respecting its current human scale. The design enables universal access between the concourse and platforms.

The designs have been developed in partnership with the station design team to minimise impacts on existing railway assets and Sydney Trains operations by maximising off-site fabrication and assembly and by reusing existing assets, such as the station platform buildings, overhead wiring structures and road bridges.

4.2 Station precinct design

4.2.1 Station legibility

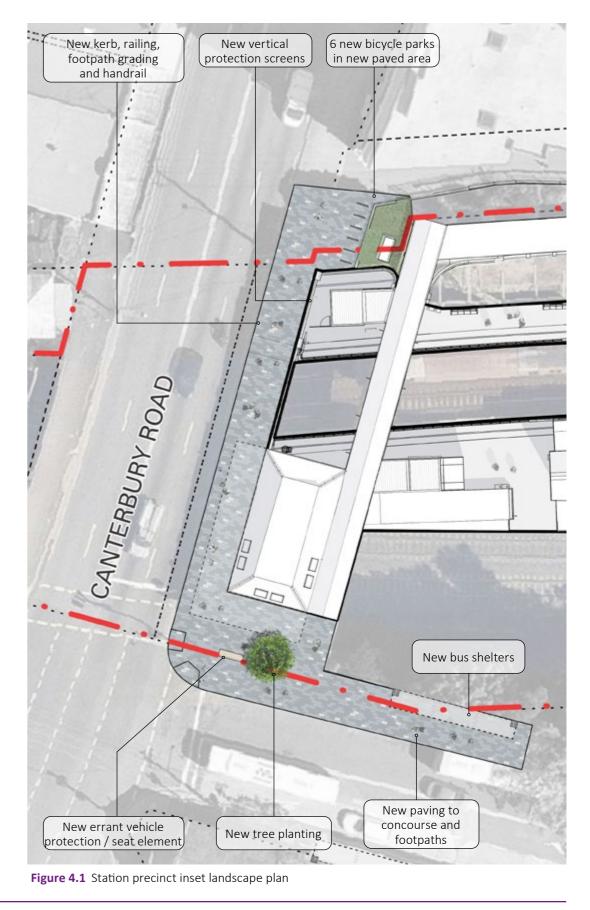
The Canterbury station concourse upgrade is modest, focussing on improved accessibility, amenity, and physical and visual connection between the station and the public street. In doing so, with the opening up the corner of Canterbury Road and Broughton Street, it provides a more open, inviting station entry that will serve all modes. The streetscapes of both the main street and Broughton Street will be improved and thereby contribute to a stronger sense of place. Future development, with connections to the new residential neighbourhoods, is not precluded. Significant mature street trees will be retained and enhanced on Broughton Street.

4.2.2 Urban character

The precinct has seen rapid change from predominantly industrial to high density residential, focussed around the new Canterbury centre between the station and the Cooks River. The urban character remains somewhat mixed: the traditional main street retail strip north of the station has declined; there are pockets of active uses; and the new development along Canterbury Road is characterised by blank walls at street level. Within the station, the two heritage platform buildings make an important contribution to the area character. The station upgrade is place-sensitive in retaining the heritage fabric while revitalising the concourse building with modest interventions. The station is designed to be legible as a Metro station when viewed from the surrounding precinct.

4.2.3 Built form and scale

The existing single storey concourse building is small and low. Its scale contrasts with the much higher (up to ten storeys) development on the south side of the rail corridor. However, it retains a scale relationship with the heritage former Post Office on the corner of Canterbury Road and Broughton Street. The design makes minimal interventions to the built form on the street, focussing on internal changes. It includes 'peeling back' part of the existing concourse roof to create a more open, legible and accessible entry. The design maintains an appropriate scale relationship with the station group: the roof, and the stair canopies, are simple, low and planar. Additional building footprint on the platforms is minimised by using space under the new stairs and re-using the existing platform building. Consistent with the over-arching design strategy of minimal intrusion and maximum 'fit' with the existing precinct character, new elements are streamlined and refined rather than bold or heroic.



4.3 Station precinct plan

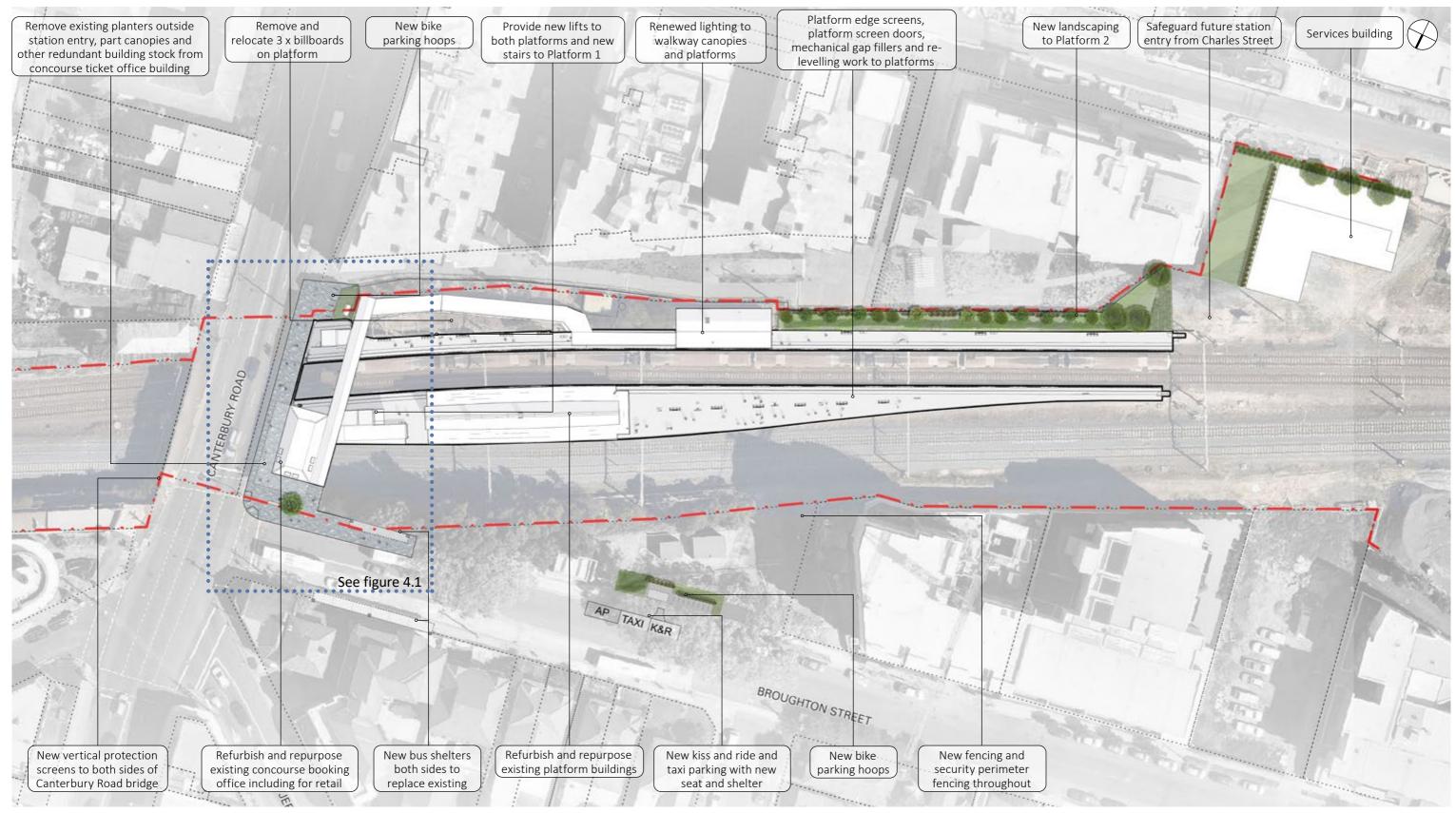


Figure 4.2 Station precinct plan



Station precinct scope 4.4

4.4.1 General

The design requirements listed within the both the Scope of Works and Technical Criteria Overview (SWTC) and the Services Brief provide the general and technical requirements for the project. These requirements are understood in coordination with the Sydney Southwest Metro and Project objectives. There are two separate components, metro station works and metro corridor works. Metro corridor works are located outside of the station precinct. The focus of this SDPP is the metro station works, which for Canterbury include:

Station rooms and buildings – refresh:

- Upgrade station for Disability Discrimination Act 1992 (DDA) compliant access including accessible toilets
- Various works to repurpose existing rooms for their intended future use
- Installation of air conditioning, power, water and other services to suit the room repurposing
- General refresh, repairs, alterations and additions to station buildings
- Improve relationship of station entry with Canterbury Road and Broughton Street through renewed station entry incorporating demolition of some structure and new plaza

Platforms – including:

- To raise platform edges and provide platform drainage and emergency egress ramps from platforms to rail corridor (as required)
- Provision for installation of Platform Edge Screens, Platform Screen Doors and Mechanical Gap Fillers.

Demolition:

- Some removal of internal fit out and other minor demolition works.
- Removal of part canopy to Canterbury Road footpath
- Removal garden bed planters and brick walls from the station entry along Broughton Street
- Removal of the garden bed and existing bicycle parking from Canterbury Road and the laneway south of the station
- Removal of existing stair and canopy to platform 1
- Removal of part footpath adjacent station entry along Canterbury Road
- Removal of part heritage brick platform walls to accomodate new surfaces and platform screen doors

Lifts and stairs:

- Installation of new lifts to both platforms 1 and 2
- New stairs to platform 1

Station services and systems - including:

- Combined Services Route throughout the station precinct and to the chainage extents in the rail corridor
- Provisioning of conduits, space and services for Platform Screen Doors, Mechanical Gap Fillers, Building Management Control Systems, Configuration Control Submission, CCTV, Passenger Information Display System, Help Points, PA, ticketing equipment and as required for the Interface Contractors.

Canopies and shelters:

New canopy to platform 1 stairs

Signage and wayfinding:

- Design for current wayfinding requirements.
- Design for heritage interpretation media

Public Art:

Design for public art installation at concourse building

Ticketing:

 Provision of conduit, power, cabling, mounting, and other supporting infrastructure for the installation of ticketing equipment.

Station precinct / public domain:

- Replace and regrade the footpath surround the station entry along Canterbury Road
- Incorporate safeguarding and future proofing for a future station entry from Charles Street
- Provide errant vehicle protection to the station entry on the corner of Canterbury Road and Broughton Street
- Install 6 new bicycle hoops south of the station entry to the new plaza space
- Install 6 new bicycle hoops along Broughton Street
- New bus shelters to both sides of Broughton Street
- New taxi and Kiss and Ride parking with associated shelter to Broughton Street
- New lighting along Broughton Street
- Remove three platform billboards and provide landscape planting.

Earthworks and landscaping - including:

Fencing and screens – including:

- New glass screens to concourse bridges
- Balustrade to Canterbury Road footpath Bridge works:

Metro Services Building works

- Earthworks to create suitable working level sites for the Metro Services Building - Planting area to the embankment behind platform 2

- New compliant security fencing and boundary gates to the rail corridor

- Addition of vertical protection (anti-throw) screens to bridges.

 Various works to repair, refresh and update bridges including the addition or upgrade of throw screens, railings and the provision of errant vehicle mitigation

- Removal and reconstruction of brick parapet walls to allow upgrade of bridge structure New footpath surface to Canterbury Road adjacent the station entry

 Site preparation, local and main services routes and pad mounts for new services buildings for power and signalling equipment in the rail corridor.

- New services buildings including associated loading/parking and ancillary functions.



Figure 4.3 Station precinct scope



4.5 Heritage

4.5.1 Heritage platform buildings and platform walls

Canterbury Station was opened on 1 February 1895. The Station Group (platform buildings, footbridge and associated stairs) is listed on the local heritage register (Canterbury LEP 2012) and the Railcorp Section 170 register.

The heritage buildings on both Platforms 1 and 2 are retained and adapted to accommodate Sydney Metro equipment and operations facilities, such as communication rooms, station control rooms, station amenities. The buildings will be externally refurbished, with brickwork repointed and damaged windows and doors repaired and restored. Unsightly security screens will be removed from the windows. These works will ensure that the buildings are fit for their re-purposed proposed usage.

Other minor re-fresh works to the platform level buildings include the painting of external walls, window frames, doors, door frames, soffit linings, fascia boards and all exposed steel or timber structures. The upgrade works to the existing 1915 concourse, along with the new stairs, lifts and associated canopy structures, respectfully interface with the heritage nature of the station group. New built elements seek to complement the old, with a subtle, simple and contemporary detailing and finish consistent with heritage principles at section 2.3.2.

Some brickwork from the platforms will be removed to accomodate platform resurfacing and platform screen doors. To retain as much of the heritage brick platform walls as possible when the platforms are resurfaced, a precast concrete 'T' section will sit above them.

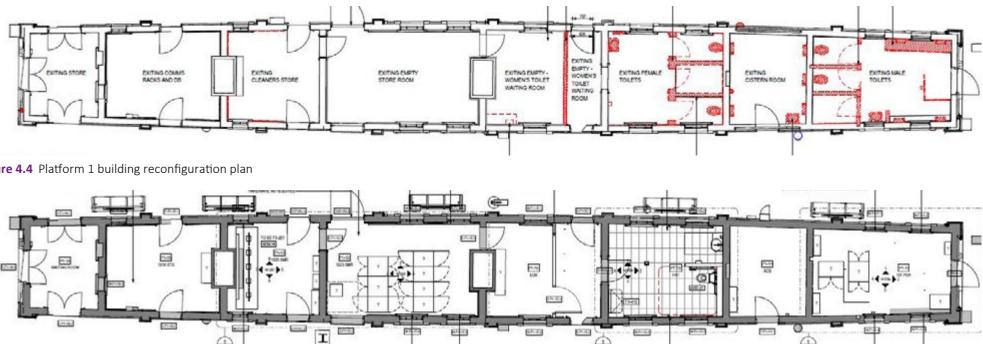


Figure 4.4 Platform 1 building reconfiguration plan

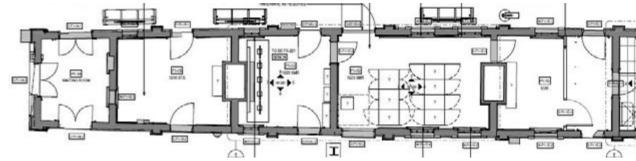
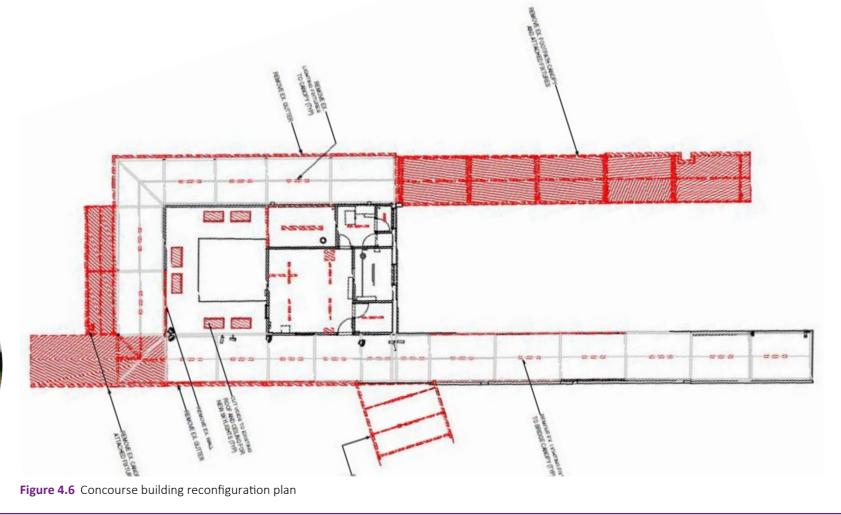


Figure 4.5 Platform 1 building proposed plan







4.5.2 Heritage concourse elements

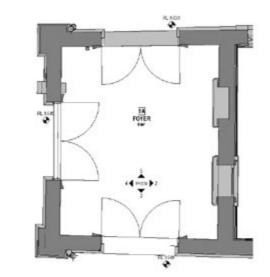
The original timber clad concourse building was demolished and replaced in the 1980's. The Canterbury Road overbridge dates from 1917 and features steel girders with jack arched concrete and brick deck. The brick parapet walls will largely be dismantled to allow necessary remediation to the bridge structure then cleaned and rebuilt in place.

4.5.3 Heritage Interpretation Plan

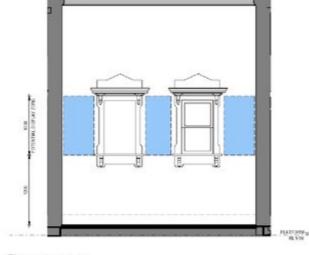
In accordance with Condition of Approval E14, a Heritage Interpretation Plan for Canterbury Station has been developed by a suitably qualified heritage professional. The Heritage Interpretation Plan is informed by an over-arching project wide Heritage Interpretation Strategy, heritage impact assessments and management strategies.

Consistent with the development stage of the Heritage Interpretation Plan, interpretive devices have been selected as being appropriate to transmit messages about the cultural heritage of the site. A common suite of devices that utilise similar materials are proposed at each station. Content and devices are adjusted to best address the different needs and interests of the relevant audiences while locally salvaged material will be considered where it is practical. The final design for interpretive elements, including words and image selection will be detailed upon completion of subsequent stages of the Heritage Interpretation Plans

At Canterbury Station, the restoration of the former entrance foyer to the Platform 1 building promotes the incorporation of interpretive media. Panels are proposed within the space that would be accessible throughout the day directly from the platform.







2 NT. ELE 2 - ROOM 1A



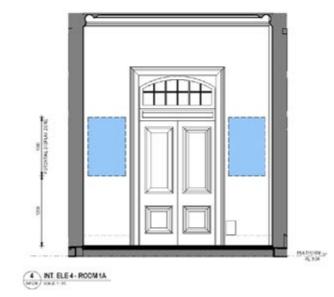
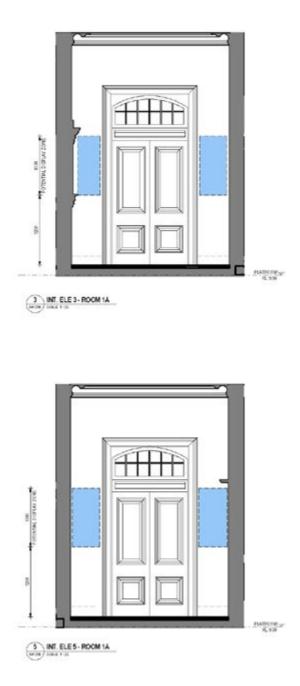


Figure 4.7 View from outside existing waiting room and available areas for interpretive media installation





Overhead concourse 4.6

4.6.1 Entry and internal spaces

The existing station concourse building is being upgraded to create an improved entry. The existing roofline and general spatial configuration of the building will not change. New glazing to both east and west sides, and the removal of part of the roof structure, will bring much-needed natural light to the internal space. Upgrade works are generally superficial, modernising the building with new finishes and materials. Internally, the main concourse will be generally refreshed. This includes re-cladding the south wall of the booking office, and repainting columns, fascia, soffit, window frames, doors and door frames. Timber-look battens will be incorporated into the ceiling and new tiles across the floor. New signage and ticketing facilities will be provided.

As a result of the minor building interventions, the station's visual and scale relationship with the precinct will not change.

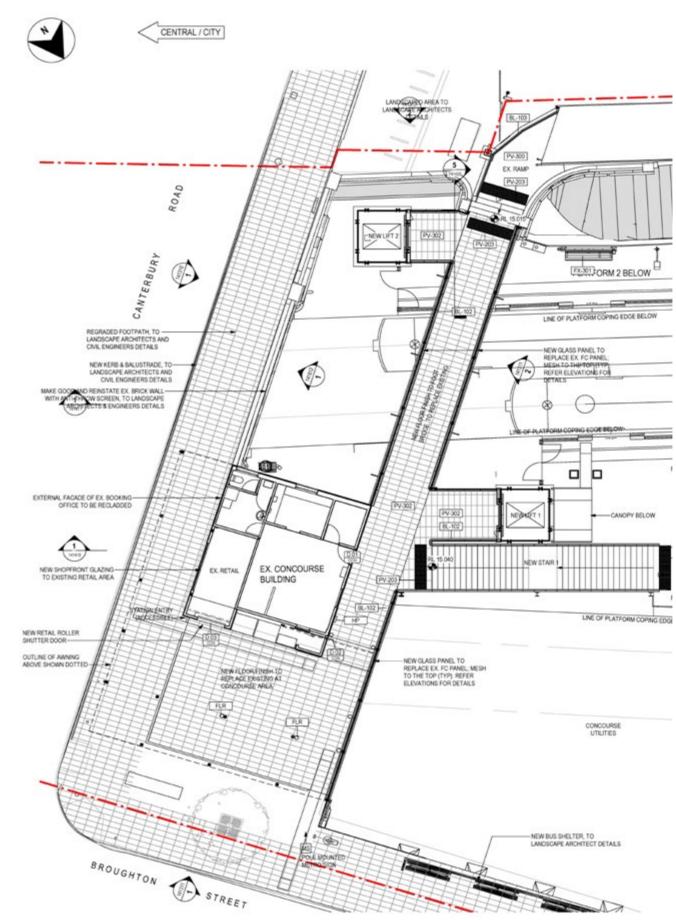
4.6.2 Roof and canopies

Part of the concourse roof will be peeled away to create a more open station entry. The underside of the existing canopy over the pedestrian bridge between the platforms will be treated with timber-style battens to soften their appearance and unify them with the ceiling of the concourse building proper.

The new stair canopies are designed to be simple and light, in keeping with the overall design intent of minimal intrusion on the existing station character. The stair canopies follow the line of the stairs, in one plane and without large overhangs. They are transparent to maintain views to the sky and towards the heritage platform buildings, and contribute to a sense of openness, passive surveillance and perception of safety and security.



Figure 4.8 New stair, stair canopy and lift in context of heritage roof forms



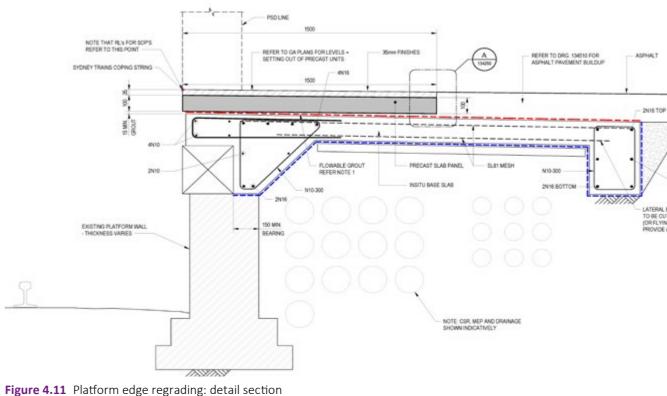


4.7 Platform

The entire station platform will be resurfaced and the coping edge raised for Disability Standards for Accessible Public transport (DSAPT) compliance. To retain as much of the heritage brick platform walls as possible, a precast concrete 'T' section will sit above them. The new concrete coping element provides a cable recess for the future provision of platform screen doors (PSDs), along with cast-in rebates for mechanical gap fillers. The entire coping edge will be finished in concrete, to a width of 1500mm, and will facilitate the temporary provision of the yellow line and tactile ground surface indicators (TGSIs) while Sydney Trains remains in operation. Upon transfer to Sydney Metro, the yellow lines and TGSIs are removed, the PSDs and mechanical gap fillers installed, and the result will be a strong visual expression of Sydney Metro's line-wide identity.



Figure 4.10 Upgraded platform





/>>>//>>> 2 ADDITIONAL N18

LATERAL BARS OF SL81 MESH TO BE OUT AS NECESSARY [DR FLYING LAPS USED] TO PROVIDE ANCHORAGE

4.8 Lifts and stairs

4.8.1 Lifts

Two new lifts will be provided, both consistent with the style and detailing of lifts across Southhwest Metro. The palette is steel and glass, with new steel structure kept minimal for a streamlined effect and to reduce visual impact on the heritage platform buildings. The geometry is orthogonal and robust. New steel structure is proposed to be coloured a charcoal grey. Lift glazing will offer clear views to and from the lift car across the station precinct. The lift overrun will incorporate powder-coated metal louvre panels for ventilation to the lift motor.

The lift to Platform 2 will connect to the existing pedestrian bridge and the platform access ramp.

4.8.2 Stairs

The Platform 1 access stair is relocated toward the north side of the platform, and extends past the proposed glazed lift, which is located centrally to the platform. Customers arriving at the base of the stair are directed east, past the existing heritage platform building, and toward the city bound platform.

4.8.3 Under-stair spaces

The spaces created under the new stairs on the island platforms will be used to house Metro services. They will be finished in a contemporary brick pattern, appropriately coloured and textured to complement the heritage platform buildings.

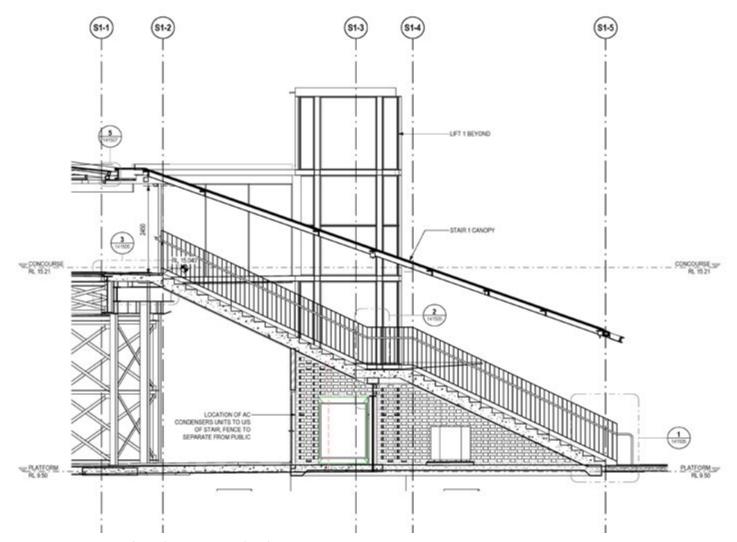


Figure 4.13 Section through new stair and understair service zone



Figure 4.12 Lifts, stairs and canopies in context of the station

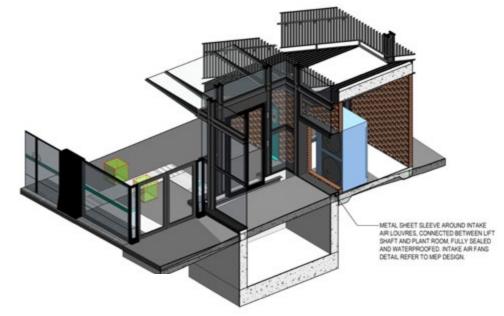


Figure 4.14 Relationship of lift with understair service zone

Connectivity and access 4.9

The connection from the kerbside facilities (including existing accessible parking and proposed kiss and ride and taxi zone) on Broughton Street will be improved and levels challenged to ensure a relatively even grade up to the station entry. The Kiss and Ride will also incorporate a new shelter and seat, and upgrade to the lighting. New bicycle parking is proposed alongside the Kiss and Ride shelter.

Pedestrian and cycle movement 4.9.1

The station supports one existing access point from Broughton Street at the corner of Canterbury Road, providing safe, convenient and direct pedestrian routes. The footpath will be regraded to create an accessible path of travel between the station entry and the bus stops and accessible parking on Broughton Street. The upgrade of the footpaths on the southern side of Broughton Street and around the corner of Canterbury Road will improve pedestrian movement and safety.

The project does not impact the existing cycle network, which includes an off-road shared path along the rail corridor east of Canterbury Road, and along the edge of the Cooks River. The station access route on Broughton Street is supported with the relocation of bike parking in this location. A pedestrian and cycling connection (when complete) is proposed to continue west along Broughton Street. The station upgrade does not preclude the formalisation of the connection and is consistent with the Interchange Access Plan principle for Canterbury that bicycles will be able to move through the station to board Sydney Metro services.

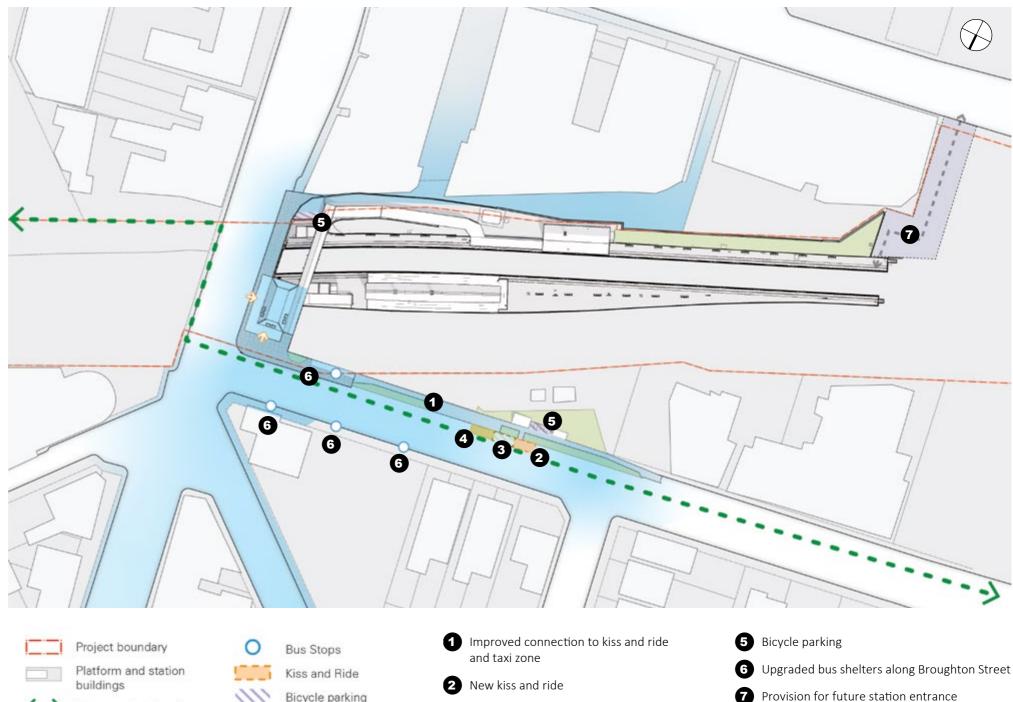
4.9.2 Bicycle parking

Two sets of bike hoops each will be provided, 8 on Broughton Street and 6 on the corner of Canterbury Road near the station entry.

4.9.3 Interchange facilities

The design provides for:

- Access to new and upgraded bus shelters on Broughton Street
- A kiss and ride space on Broughton Street (south side)
- A new taxi space on Broughton Street (south side)
- An accessible parking space on Broughton Street (south side).



- 3 New taxi zone
- 4 New accessible parking

Figure 4.15 Connectivity and access

Future pedestrian /

Public domain

cycling connectivity

Future connectivity

Taxi

Park and Ride

Accessibile parking space

 $\langle \cdot \cdot \rangle$



- **7** Provision for future station entrance

4.9.4 Future station entrance

A concept design has been prepared for a future station entry that connects Charles Street, west of the station to the western end of Platform 2. A number of options were explored for the entry arrangement with the developed option responding to; available land to secure a through block link, existing development, the Canterbury services building precinct and large changes in height / landform. The concept was developed to satisfy the requirements of CoA E62.

The station entry design incorporates lift and stair access, a new gate line and required services with a level covered concourse area that connects directly to platform 2. Movement to platform 1 would then be along the platform to the main station concourse. This would reduce the travel distance and time to access the station for patrons travelling from south-west of the station

While out of current scope, the concept design shows that a future connection is achievable to Charles Street. In the current design, the land has been safeguarded so that works will not preclude an entry in the future.

Refer **7** on Figure 4.15 for location in relation to existing concourse and street network.

Figure 4.16 Future station entry – indicative arrangement

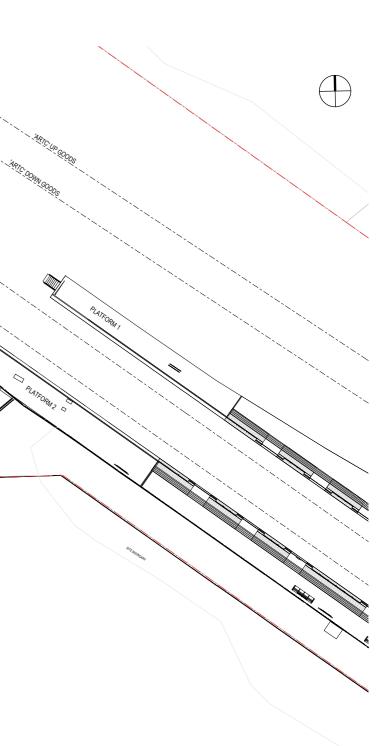
Figure 4.17 Future station entry – indicative alignment

EXISTING HIGH-RISE RESIDENTIAL BUILDING

PAID CONCOURSE

۱X

UNPAID CONCOURSE



4.10 Public domain

4.10.1 Station entry

Canterbury Station will have a stronger relationship to the street. Removal of built elements that currently impede access will improve and greatly increase the amount of pedestrian movement to the station consistent with established public domain principles (section 2.3.3). The covered station entry is open to a refreshed plaza space that has direct access from both Canterbury Road and Broughton Street. Extending and opening up the entry on Broughton Street will give the station more presence and will enliven the public domain around the station. The design includes removing high brick planters currently edging the concourse building on Broughton Street. Both visual and physical connections will be improved, as views between the street and concourse are opened up, and the entry is made accessible across more of the façade. A low height seating element will be installed that also acts as errant vehicle protection.

4.10.2 Precinct streetscapes

Canterbury Road alongside the station (west side of the overbridge) will be improved by the removal of fencing and canopies in poor condition, opening views to the station. Views to the station, and opening up the existing refurbished retail space, will provide more activation to the concourse and street level. On Broughton Street, upgrades include new bus shelters, landscape treatment, paving, bike parking and lighting. The improved station entry is integrated with planting, seating and errant vehicle deterrent measures, to keep the pavement open and uncluttered.



Figure 4.18 Existing station entry, Broughton Street



Figure 4.19 Proposed station entry, Broughton Street



4.11 Landscape design

4.11.1 Landscape strategy

The landscape approach is to maximise the accessible open space while improving its quality with the retention of the existing mature tree canopy where possible, consistent with line-wide landscape principles established at section 2.3.7. The improvement of connections within the precinct is a key strategy as several quality open spaces border the precinct close to the Cooks River.

With the creation of additional open spaces at both corners of the station and Canterbury Road the prescence of the station within the precinct is significantly improved. Open space is safeguarded along Broughton Street where it is noted a future cross corridor and platform connection would be possible.

Given the urban quality within the station precinct opportunities for landscaping at the station are limited. A strip of planting will form a vegetated swale to an area between platform 2 and the parallel laneway. This will continue towards the new services building where future low level planting will visually reduce the scale of the building. Low level planting is proposed on Broughton Street bordering the new bicycle parking and existing bin store.

A single tree will sit at the edge of the new plaza and station entry At Broughton Street. Planting is not possible within the new plaza space due to the constraints of the narrow footpaths and structural loading of the overbridge. Broughton Street features a row of established *Camphor laurel's* which provide a significant tree canopy and improve the character of the precinct. Seating in the plaza and here, beneath the existing trees provides pleasant places to sit, wait and relax.

A new services building that accommodates critical equipment for rail operations will be located at the end of the laneway, fronting Charles Street (refer section 4.15) and there will be opportunities to include planting and vegetation as part of its construction. Screen planting is being investigated to supplement existing planting along Charles Street and reduce any visual impacts associated with the new building.

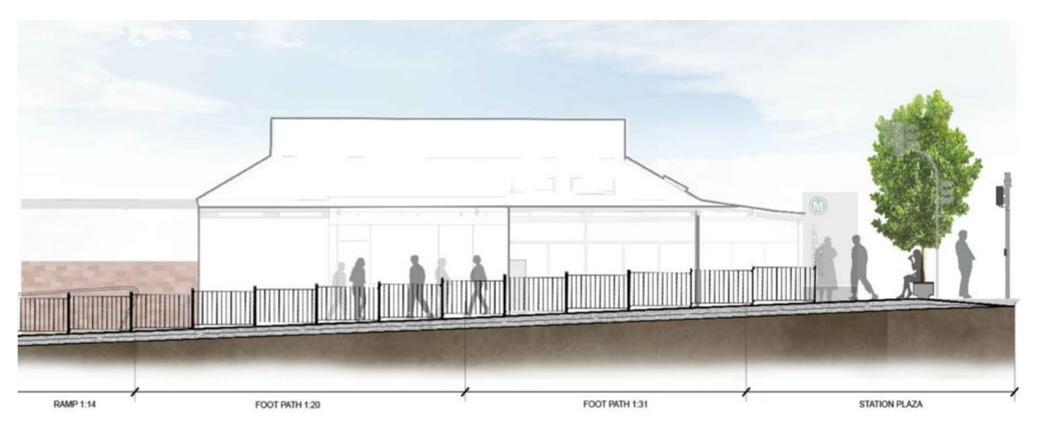


Figure 4.20 Canterbury Road elevation with new plaza planting

4.11.2 Species selection

Typically low level, tube stock planting is chosen due to the impacts of roots on underground servcies. At the rear of platform 2, the planting comprises native grass species and small shrubs to encourage biodiversity and meet the requirements of the City of Canterbury Bankstown Council Guidelines. A vegetated swale is planted out with grass species that can tolerate wet feet and will grow adequately in those conditions.

The plant species have been selected by a qualified landscape architect and have been guided by Council guidelines. Plants have been chosen to suit the local soil, drainage and microclimate for the specified area. The plant species have been selected to be of low maintenance and have drought tolerant capabilities following establishment.

Plants will be planted in either single species mass planting arrangements or structured groupings of plant species that are consistent in height and character. Understorey plants will be setback from planter bed edges so that plants when established do not spill out onto pedestrian paths or roads. Plants will be selected so that they do not include fruits, spikes or seeds that will cause a hazard to pedestrians or cyclists in the locations that they are planted. Understorey planting has been selected to generally have a maximum height lower than 1m in areas that require clear sightlines across the plazas to meet CPTED guidelines.

A single Tristaniopsis laurina is at the station plaza, forming the ideal species to integrate with existing trees and be suitable for the ground conditions and siting adjacent to a public plaza.

	Botanical Name	Common Name	Pot Size	Spacing	Indigenous?
TREES	Tristaniopsis laurina	Watergum	400L	as shown	Y
S	Callistemon 'Endeavour'	Endeavour Bottlebrush	140mm	4/m²	Y
SHRUBS	Rhaphiolepis 'Snow Maiden'	Indian Hawthorn	140mm	4/m²	Y
S	Westringia 'Grey Box'	Coastal Rosemary	140mm	4/m²	Y
SS	Dianella 'Little Jess'	Blue Flax Lily	140mm	6/m²	Y
GRASSES & OUND COVERS	Lomandra multiflora	Many-flowered Mat Rush	140mm	6/m²	Y
GRASSES & DUND COVI	Lomandra 'Tanika'	Mat Rush	140mm	6/m²	Y
GR/	Themeda triandra	Kangaroo Grass	140mm	6/m²	Y
GR	Liriope 'Just Right'	Turf Lily	140mm	6/m²	
TED	Carex appressa	Tall Sedge	Tubestock	6/m²	Y
VEGETATED SWALE	Finicia nodosa	Knobby Club Rush	Tubestock	6/m²	Y
VEG	Juncus usitatus	Common Rush	Tubestock	6/m²	Y





Tristaniopsis laurina Watergum



Carex appressa Tall Sedge



Dianella 'Little Jess' Blue Flax Lily



Lomandra multiflora Many-flowered mat rush

Lomandra 'Tanika' Mat Rush



Themeda triandra Kangaroo Grass



Liriope 'Just Right'

Turf Lily







Endeavour Bottlebrush



Westringia 'Grey Box' Coastal Rosemary





Finicia nodosa Knobby Club Rush



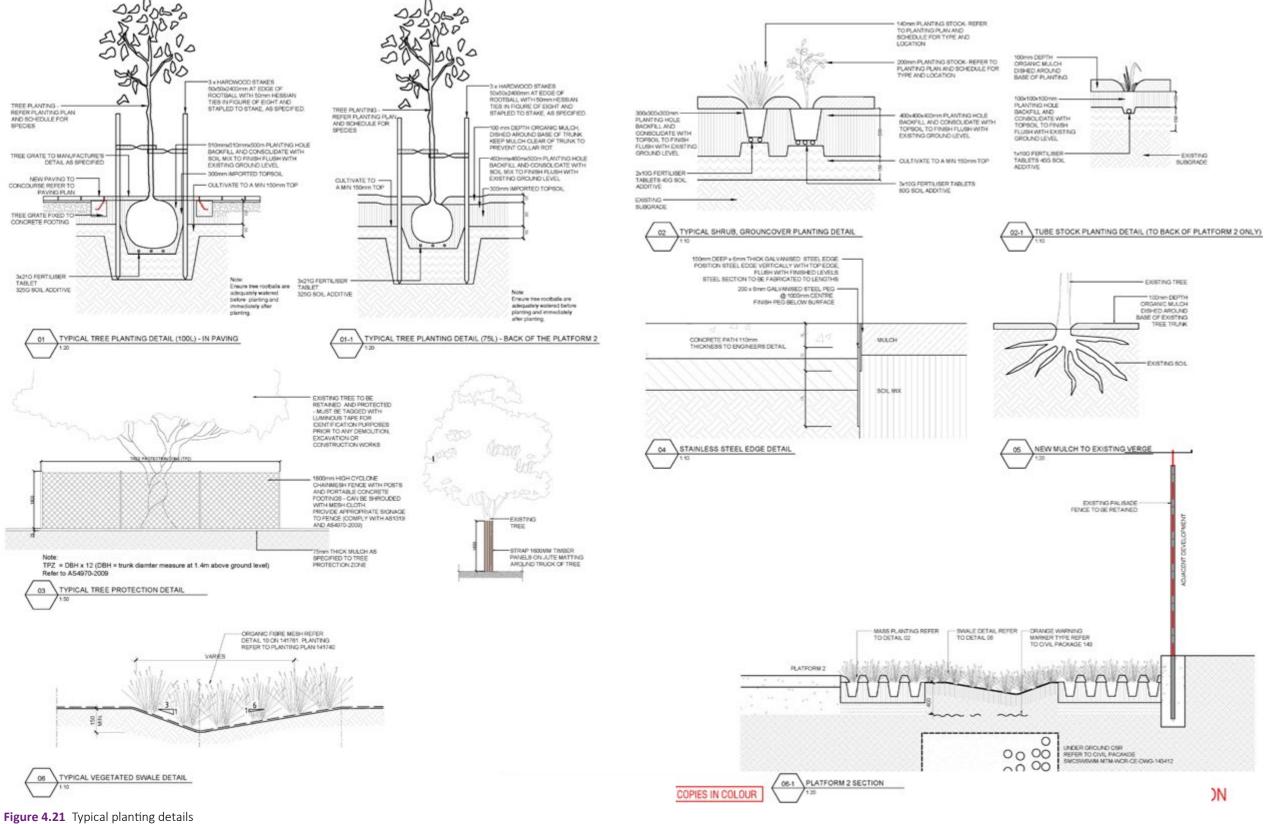
Rhaphiolepis 'Snow Maiden' Indian Hawthorn



Juncus usitatus Common Rush



4.11.3 Typical planting details



4.11.4 Water Sensitive Urban Design (WSUD)

At Canterbury Station at the back of platform 2 a vegetated swale is incorporated into the landscape instead of a pit and pipe system. Water from the platform also falls to the back of platform and into the landscape edge, taking full advantage of passive irrigation.

4.11.5 Landscape maintenance and monitoring

A landscape management plan has been developed for the project which details the strategy and procedures to be undertaken with regards to the successful establishment and on-going maintenance of new vegetation. It also specifies procedures for the regeneration of disturbed vegetation.

The landscape has been designed to ensure low water use species have been planted to optimise long-term maintenance. Irrigation will be provided where passive irrigation cannot be achieved. Regular monitoring and maintenance should be undertaken to ensure plants are maintained to their highest quality. Other regular practices shall be carried out to ensure optimum plant condition by the site operator – these include but are not limited to:

- Watering generally ensure that planting is receiving sufficient water to ensure a vigorous growth,
- weed and pest control by eradicating all weeds and pests from the planted area during the specified maintenance period,
- monitoring all plants for pest and diseases on a monthly basis,
- fertilizing as appropriate,
- replacement of plants to those damaged, diseased or dead, replace any stolen plant to ensure and maintain plant densities for the duration of the maintenance period,
- re-mulch as necessary to maintain the mulch depth specified for the duration of the maintenance period,
- remove any rubbish from the planted areas,
- pruning of vegetation as required to ensure planting is kept clear of footpaths, operations of rail line, and Crime Prevention Through Environmental Design (CPTED) surveillance.

Areas outside the limits of the works which are disturbed as part of the construction will be restored and re-vegetated. These practices include:

- Areas around compounds, material storage, access roads, fencing, services, drainage and infrastructure will be recorded upon establishment of the site,
- detailed records will be made of the existing conditions,
- identified trees and areas of significant vegetation shall be protected with temporary fencing,
- unnecessary disturbance of vegetation will be minimised,
- areas of vegetation that are disturbed during the works will be recorded and rehabilitated. This includes the retention of natural grades and drainage paths, reintroduction of grasses and planting.

All areas that are restored will be recorded with details of how areas were treated and how areas were revegetated, including soil preparation and vegetation used. These areas will then form part of the on-going requirement of maintenance and monitoring.

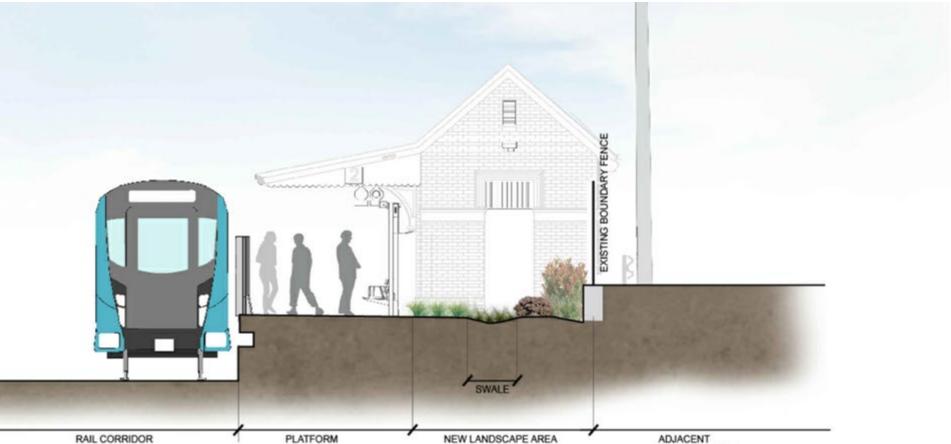


Figure 4.22 Section through platform 2 planting and swale



ADJACENT DEVELOPMENT



4.12 Hardscape elements

4.12.1 Paving and street furniture selection

The public domain palette has been developed to respond to Council's requirements and preferred urban elements, and to maintain some continuity with the look and feel of Sydney Metro where possible, using or modifying the existing Metro palette. Maintainability was a key consideration for Council (and for Sydney Metro) and has guided the selection of a suite of robust elements.

Lighting: the lighting strategy is to highlight the features of the public space. Discreet under-canopy lighting will be used throughout with feature lighting used to identify landscape features such as concealed LED lights to the perimeter of bench seating

Furniture elements: Custom bench seating is proposed in the plaza which combines a function with errant vehicle protection. This overlapping use allows a single item providing essential open space.

Paving: the paving strategy is in line with the creation of a public plaza that blurs the distinction between outside (footpath) and inside (concourse), by using the same material for both. A three-tone mix of local granites is used and highlighted by feature paving in similar tones and contrasting finishes. Pavers on the concourse bridge are supported on a 'Versi-jack' system of pedestals to keep them level with the adjacent surfaces.

Fencing: Existing railings to Canterbury Road are removed and replaced with railings that allow the footpath regrading. A handrail is also provided to accommodate accessible movement. New flatbar fencing replaces existing hoop top pool style fencing to platform 2 ramps. New corridor security fencing is provided throughout the rail corridor as required.

					SHE-1,			"Wellington She
ITEM	IMAGE	DESCRIPTION	DIMENSIONS (mm)	FINISH	2, 3	Shelter		Evo Shelter (KnR Refer Landscape specifications
САРЕ								specifications
Paving (Concourse)		Adelaide Black 600x400 - Exfoliated finish	Varies refer to left	Exfoliated Finish				
		Adelaide Black 400x400 - Exfoliated Finish		TG-1	TG-1 Tactile Indicators		Warning indicate	
		Sesame Grey Triangle - Exfoliated Finish						
Tree grate		Tree Grate	1200x1200	1200 Stainless Steel with Anti-slip coating TG-2				
					TG-2	Tactile Indicators		Directional indic
I FURNITURE								
Drinking		"CIVIQ Aquafil FlexiFountain		Stainless steel				
tountain		Urinking fountain & bottle refill station"		Council branding to the back panels. Graphic provided by City of Canterbury Bankstown council	LP-1	Pedestrian Pole top Luminaire - Broughton Street		The lighting show accordance with Pedestrian area Performance an (e.g. lighting leve depending on th and the circums
	CAPE Paving (Concourse) Tree grate IFURNITURE	Paving (Concourse) Image: Concourse Tree grate Image: Concourse Tree grate Image: Concourse Image: Concourse Image: Concourse Drinking Image: Concourse	CAPE Paving (Concourse) Adelaide Black 600x400 - Exfoliated finish Adelaide Black 400x400 - Exfoliated Finish Sesame Grey Triangle - Exfoliated Finish Tree grate Image: Concourse of the set o	TEM IMAGE DESCRIPTION (mm) CAPE Adelaide Black 600x400 - Exfoliated finish Varies refer to left finish Paving (Concourse) Image: Concourse finish Adelaide Black 400x400 - Exfoliated finish Varies refer to left finish Tree grate Image: Concourse finish Sesame Grey Triangle - Exfoliated Finish 1200x1200 Tree grate Image: Concourse finish Tree Grate 1200x1200	TEM IMAGE DESCRIPTION (mm) FINISH CAPE Paving (Concourse) Adelaide Black 600x400 - Exfoliated finish Varies refer to left Exfoliated Finish Adelaide Black 400x400 - Exfoliated Finish Adelaide Black 400x400 - Exfoliated Finish Varies refer to left Exfoliated Finish Tree grate Image: Concourse of the text of the text of the text of the text of text	ITEM IMAGE DESCRIPTION DIMENSIONS (mm) FINISH 2,3 CAPE Paving (Concourse) Adelaide Black 600x400 - Exfoliated finish Varies refer to left Exfoliated Finish TG-1 Paving (Concourse) Adelaide Black 400x400 - Exfoliated Finish Varies refer to left Exfoliated Finish TG-1 Tree grate Tree Grate 1200x1200 Stainless Steel with Anti-slip coating TG-2 INUNITURE "CIVIQ Aquafil FlexiFountain Drinking fountain & bottle refill station" Stainless steel Council branding to the back panels. Graphic provided by City of Canterbury IP-1	ITEM IMAGE DESCRIPTION DIMENSIONS (mm) FINISH CAPE Paving (Concourse) Adelaide Black 600x400 - Exfoliated finish Varies refer to left Exfoliated Finish Adelaide Black 400x400 - Exfoliated Finish Madelaide Black 400x400 - Exfoliated Finish Varies refer to left Exfoliated Finish Tree grate Image: Concourse of the text of	ITEM IMAGE DESCRIPTION DIMENSIONS (mm) FINISH CAPE Adelaide Black 600x400 - Exfoliated finish (Concourse) Varies refer to left. Sesame Grey Triangle - Exfoliated Finish Sesame Grey Triangle - Exfoliated Finish Tree grate Varies refer to left. Finish Sesame Grey Triangle - Exfoliated Finish Tree Grate Varies refer to left. I 200x1200 Stainless Steel with Anti-slip coating IFURNITURE If Course in the finish fountain Tree Grate 1200x1200 Stainless Steel with Anti-slip coating IFURNITURE If CVIQ Aquafil FlexiFountain fountain Stainless steel Council branding to the back panels. Graphic provided by City of Canterbury Backtown council Stainless steel Council branding to the back panels. Graphic provided by City of Canterbury Backtown council IP-1 Pedestrian Pole top Luminaire - Broughton

CODE ITEM

BOL-1 Bollard

BIN-2 Bins

BR-1

Bicycle Racks

(North Pde

only)

Pedestrian

fence

FEN-1

IMAGE

Sydney Metro Southwest Metro Design Services (SMDS)

DESCRIPTION	DIMENSIONS (mm)	FINISH
Pedestrian fence type 1 to RMS standards	1.2m high	Black
OmniStop Ultra	Length1450mm	Powedercoat white
Fixed Insitu - Concealed fixing Location: Cnr Canterbury Rd and Timbcombe St	Diameter 150mm	
EM224 120L Stainless steel + Hood	620L x6 20W x 1093H	Stainless Steel - Finish 2B
Semi Hoop - BTS03	45Lx120Wx850H	Stainless Steel 316 No.4 Finish (brushed)
"Wellington Shelter (Bus) Evo Shelter (KnR) Refer Landscape documentation for full specifications	Varies	Powdercoat matt black
Warning indicators		Approval of colour to be obtained from Landscape Architect prior to installation.
		Colour test - Stainless steel, black, brass - Do not use Yellow or Blue
Directional indicators		Approval of colour to be obtained from Landscape Architect prior to installation.
		Colour test - Stainless steel, black, brass - Do not use Yellow or Blue
The lighting should be designed in accordance with AS/NZS 1158.3.1:2005, Pedestrian area (Category P) lighting— Performance and design requirements (e.g. lighting level P2 or higher depending on the jurisdiction, location and the circumstances)		"WE-EF VFL520 LED Marine-grade, die-cast aluminium alloy"

4.12.2 Bridge Vertical Protection and OHW Safety Screens

General - corridor wide

Vertical screens will be provided at cross corridor overbridges. They are required to prevent objects being passed through or thrown onto live equipment or the corridor below.

The urban design strategy is to:

- preserve views at station overbridges where possible
- respect and highlight existing heritage structure and
- optimise the amenity of the adjacent footpath space for pedestrians
- achieve consistency with the architectural treatment at adjacent stations
- design the screens to transition from full height to match adjacent height barriers or fences.

The screens have been designed to balance the varying conditions at each station while also working together as a family of elements that contributes to the corridor-wide identity of Southwest Metro.

There are four types of screens:

Type 1:

- Located at or close by station overbridges, where there are existing brick (typically heritage listed) parapet walls
- Steel posts fixed to the outside face of the existing bridge structure. The posts do not fix to heritage elements and will feature a taper towards the top that reduces visual bulk and excessive material use
- The profile is vertical for two metres above the footpath, and then cranked inwards to an overall height of three metres
- Woven stainless steel mesh between the posts and above the existing wall to an overall height of three metres high.

Type 2:

- Located at or close by station overbridges, where there is no existing parapet
- Steel posts fixed to the outside face of the existing bridge structure. The posts do not fix to heritage elements and will feature a taper towards the top that reduces visual bulk and excessive material use
- The profile is vertical to the overall height of three metres
- A continuous handrail to the length of the overbridge screen
- Full height, laminated safety glass between posts with an anti-graffiti film layer.

Types 3A and 3B:

- Located outside station precincts. Type 3A are new screens, Type 3B are modified existing screens
- Clear perspex panels to 1.8 metres high, attached to stainless steel woven wire mesh screens to the full height of three metres
- The profile is vertical to the overall height of three metres.

Types 4A and 4B:

- These types are for pedestrian-only bridges. Type 4A occurs at or near stations while Type 4B is outside station precincts
- Type 4A has a wire mesh screen with services integrated
- Type 4B has a fully enclosed wire mesh vertical protection screen with clear perspex panels fixed to the screen to a height of 1.8 metres.

Canterbury Station

Vertical screens are required to both sides of the Canterbury Road bridge. Existing brick parapets will be removed and re-instated after structural upgrades are performed on the bridge. As brick parapets are found to both sides of the bridge, Type 1 screens are proposed.

- City side: The city side screen will sit upon a new structural frame behind the brick parapet wall. This frame will not be visible from Canterbury Road however both it and the screen will extend the full length of the bridge and will tie into a new security fence at 2400mm height at either end
- Country side: The country side screen will run from the southern side of the station entry building to the perpendicular corner at the pedestrian laneway. From here, an isolation panel turns the corner and transitions into a new security fence at 2400mm height.

4.12.3 CPTED (Crime Prevention Through Environmental Design)

Places that feel safe and well connected encourage walking and cycling including to public transport, while real and perceived crime risks can deter people from using certain facilities, taking particular routes or being in various locations. For Sydney Metro, CPTED is of particular importance with regard to how the project interfaces with the public realm and the movement of pedestrians and cyclists to and through the project corridor.

Targeted principles (see section 2.3.5) were developed early in the design process that address three CPTED strategies (natural access control, natural surveillance and territorial reinforcement), to inform and guide the urban, landscape and architectural design. The design provides for passive surveillance, and clear and legible paths of travel, to contribute to a perception of safety and security in a well designed, well cared for public domain. As the design developed, a CPTED assessment was also undertaken to help refine any outstanding issues.

The assessment noted the following considerations:

CPTED assessment issue

Station entries

Maximise surveillance and m clear sightlines at station ent points

Bike parking

Maximise natural surveillance nearby buildings to bike hoo landscape. Appropriate light required. Ensure bike hoops not act as a climbing aid. Cor installing fencing or vertical protection screen above exist masonry wall

Vegetation

Consider maintenance of exive vegetation to maximise natu surveillance of platform area particular under the booking behind the lift and beneath t

Lighting

Ensure lighting is in accordar with RSS 001 lighting perform requirements for booking of platforms and platform build

Platform buildings

Target hardening of platform buildings required to protect including alarm, CCTV and se signage

The second secon

Figure 4.23 Typical Type 1 vertical protection screens



	CPTED principle/s	How the design addresses the issue
maintain htry	Natural surveillance	Removal of brick planters and step, removal of grade change to provide a level open concourse with excellent passive surveliance
ce from ops / ting s do onsider isting	Natural surveillance Territorial reinforcement Lighting	Low level planting surrounding Bike area, Pedestrian scale lighting, Views from road to Bike Hoops maintained
kisting ural as, in g office, the stairs	Landscaping Image and maintenance	Plant species are low maintenance and do not obstruct sightlines
ince rmance ffice,, dings	Lighting	Pedestrian scale lighting along Broughton Street. Lighting is in accordance with performance requirements
n ct assets security	Physical security / target hardening	Considered in and integrated with architectural design

4.13 Public art

Public art is planned to be integrated into the station design in the form of architectural glass panels at station entries and on concourses. A uniform series of locations and materials have been selected for the ten Southwest Metro stations between Marrickville and Bankstown, to provide a cohesive framework for diverse artworks for this section of Sydney Metro. The art sites are visible from the surrounding public domain.

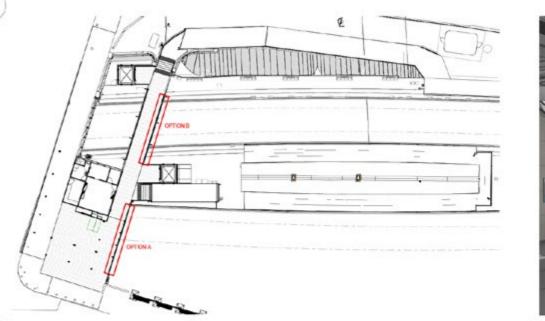
At Canterbury, a limited invitation was extended to Aboriginal artists and will produce artwork that will also relate to the heritage interpretation. Artists have been selected through a competitive process involving a public expression of interest and competitions with expert panels selecting the artists and artworks. Successful artists are developing artworks that will be realised as a transparent artwork, embedded in glass panels at the stations. The works respond to stories and themes from the nearby local communities and neighbourhoods.

The public art program aims to:

- Align with Transport for NSW's commitments to improving customer experience and delivering successful places
- Promote inclusivity, community involvement, public pride and ownership of Sydney Metro stations and precincts
- Provide a welcoming, destinational and impressive presence within stations and opportunities for the arts sector to contribute to the Sydney Metro network
- Commission diverse public art of high quality by a culturally diverse range of artists
- Create a best practice in permanent Australian transit art, and high-quality artworks.

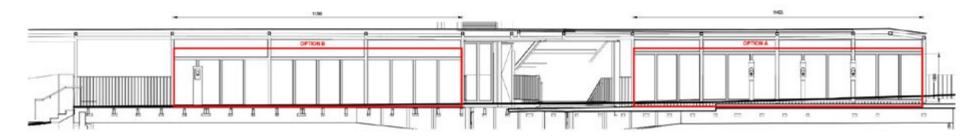


Figure 4.24 Example of glazed artwork screens at Canberra Lightrail. Art by Hannah Quinlivan



1 PUBLIC ART - PROPOSED LOCATION

*



9 PUBLIC ART - INTERNAL ELEVATION

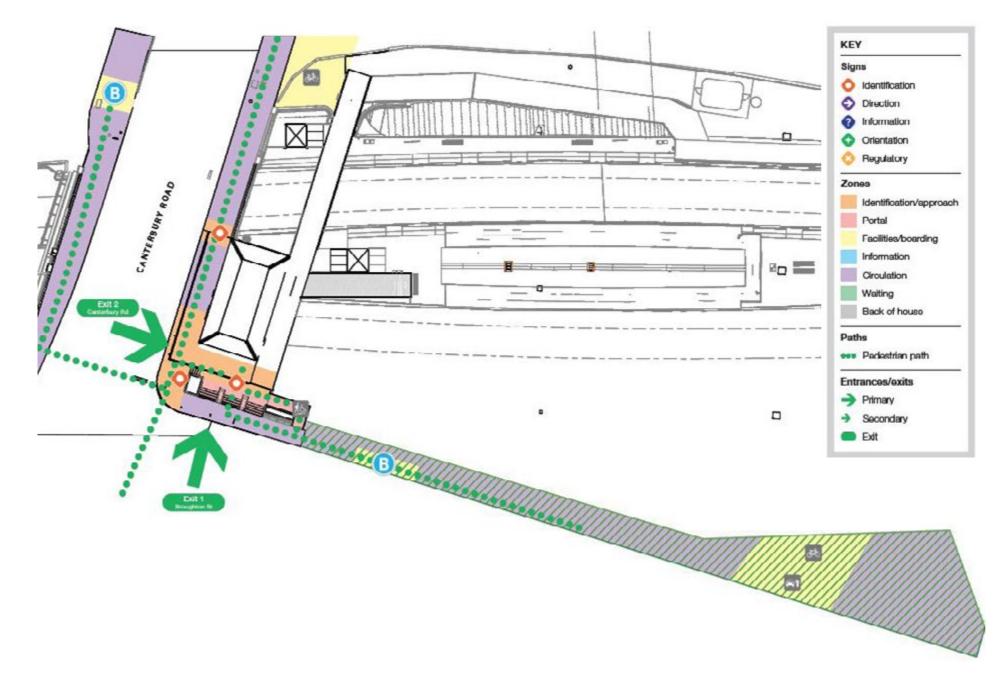
Figure 4.25 Identified public art location at Canterbury Station



4.14 Metro-wide design

4.14.1 Wayfinding and signage

The upgrade of the overhead concourse will provide a clear point of entry to the station. Changes to directional signage, both internally and externally at the station, will support this arrangement.



4.14.2 Common materials and finishes

A finishes and materials schedule has been prepared for concourse buildings, establishing a consistent palette of materials, colours and textures that reinforce a line-wide Sydney Metro identity. The application of the palette varies subtly from station to station, to respond and contribute to the local character.

- of safety with casual surveillance:
- concourses)
- » Glazed roof panels to stair canopies » Glazed lifts.
- Framing that minimises the bulk and appearance of new structures, to maintain the relative importance of existing heritage and character buildings and elements

- platform level below
- New platform buildings (under stairs) that reflect the brick history of the station platform buildings and platform walls; that have a solid, 'grounded' character reflective of being in cut, below the surface
 - services.

the local area.

New elements including lifts and canopies are contemporary and subtle. The use of slender steel elements and glass screens aligns with the strategy to preserve existing character while providing a unifying architectural response at Metro stations.

Figure 4.26 Wayfinding strategy: zone and flow diagram



The rationale for common materials and finishes across the whole alignment is:

- Glazing for outlook, views towards platform heritage buildings, and an enhanced sense
- » Glass screens to balustrades within the station (on overhead bridges / elevated

- » Slender steel framing to screens, balustrades, lifts and canopies
- » Steelwork painted in a dark recessive colour.
- Roofs that soften and 'warm' the concourse environment
- » Battens underneath selected roofs to provide a clean soffit and conceal services.
- Cladding to new or refreshed concourse buildings that is hardy, durable, and
- discourages graffiti; and that is distinctively lighter in appearance than the buildings at

» Rimex metal cladding panels with a textured pattern.

- » Brick, laid in stretcher bond and / or patterned for ventilation where enclosing

At Canterbury, the existing character is enhanced through the removal of redundant elements from the concourse and integration of the new plaza with the surrounding streetscape through common materials that unify spaces. Hardscape elements are common to stations within the City of Canterbury Bankstown Local Government Area and

4.15 Services building

New services buildings are required at each station to house critical equipment such as signaling and telecom essential for Metro operations.

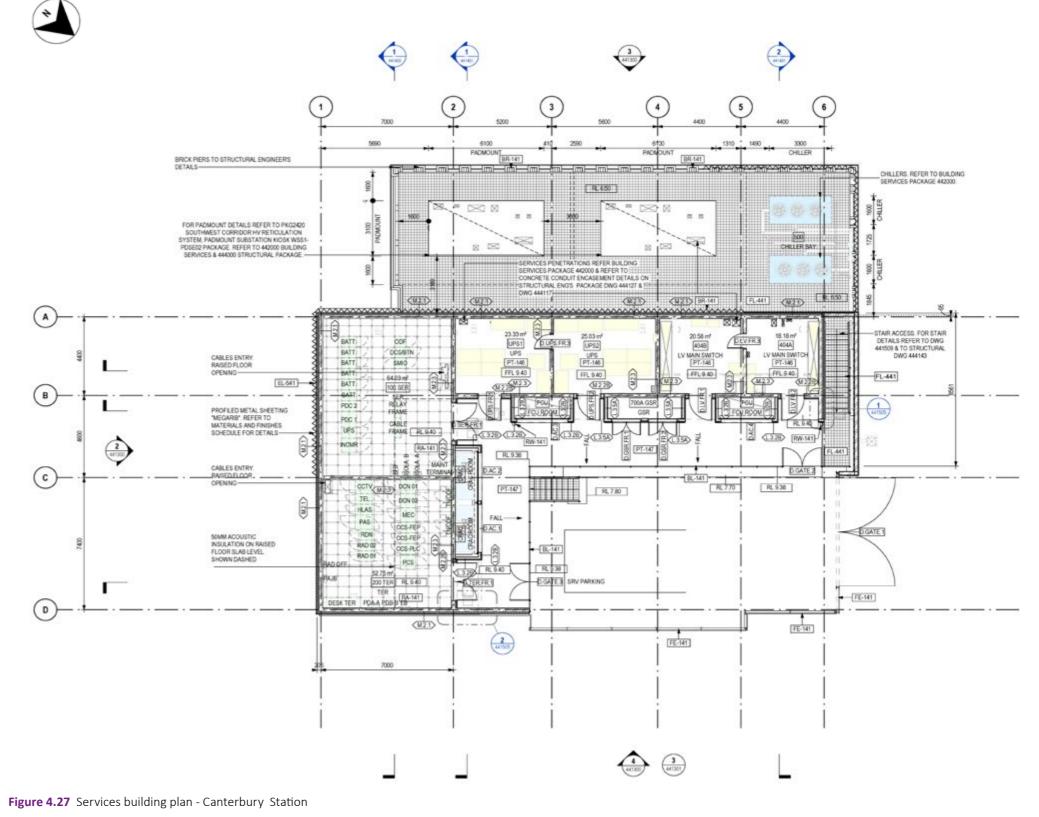
Services buildings perform similar functions at each location but will vary in size depending on specific requirements and the appropriate siting of the building. In addition to the functional building requirements there are requirements for vehicle access, parking and pad mount services. The strategy of development for the services buildings is to provide a consistent approach and visual experience across the line that is adjusted to suit the visual impact each building will have on the local public domain.

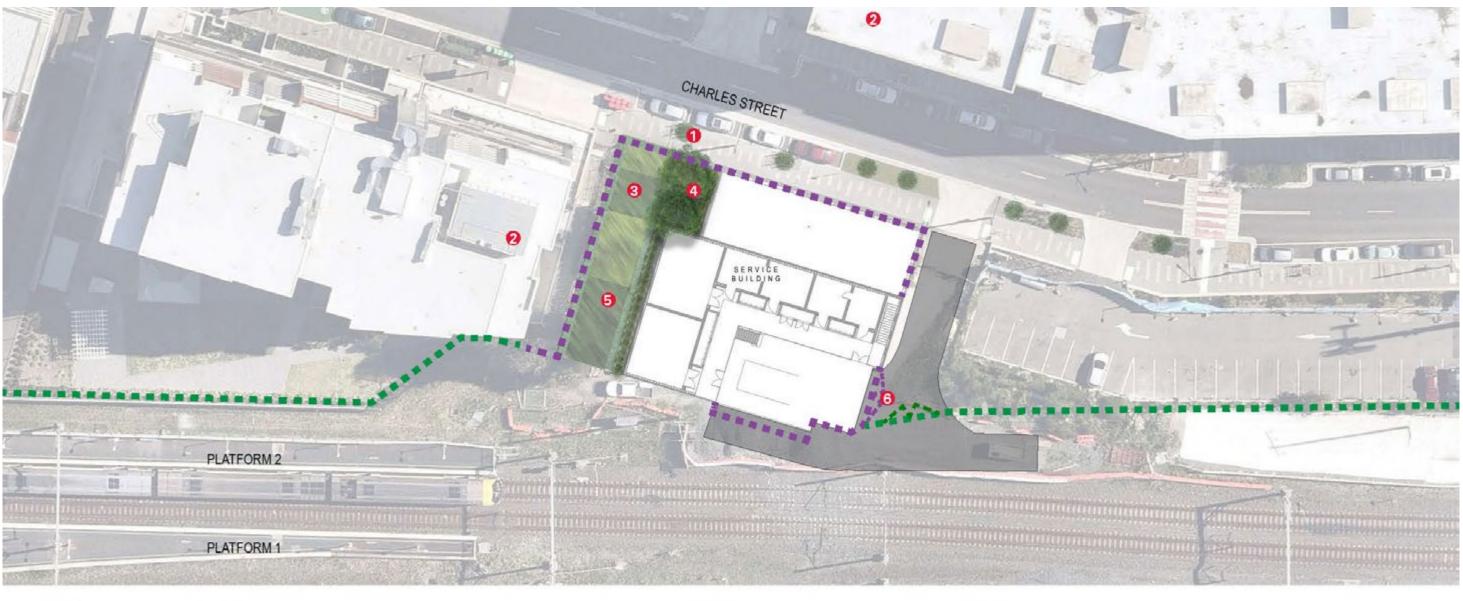
The line wide principles for the services buildings are;

- Functional and efficient building layouts applicable to multiple sites
- Simple, durable and timeless expression
- Tailored precinct arrangement driven by current and future constraints
- Considerations of cost and constructability

The form and massing of the services building at Lakemba responds to its site context and topography, which has a significant level change from the track to the rear of the site down to Charles Street. The building is located to the track side of the site, which pushes the main bulk of the building away from the street frontage, with the lower screened compound area to the street providing a stepping form and expression of the individual elements. The use of varied materials to the facade treatment with a brick plinth and combination of two different metal cladding profiles, help to further break up the perceived bulk and scale of the building whilst unifying the composition of built elements.

Sydney Metro will keep local stakeholders updated on the design and construction of the services building.





TREE

GRASSES



Eucalyptus exima 'Nana'



Callistemon citrinus Endeavour



Themeda triandra



Lomandra longifolia 'Tanika'



"Little Jess"



Lomandra longifolia "hystrix"

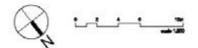
LEGEND Service Building security fence Corridor security fence . .

NOTES

- Existing street trees
- 2 Existing residential building
- 8 Future station entry
- 4 Feature trees
- G Mass planting grasses/ groundcovers
- 6 Entry into service building

Figure 4.28 Services building site plan - Canterbury Station





Transport and Access





5.0 Transport and Access

This part of the document provides additional detail on the transport and access considerations and design responses shown in the Station Design and Precinct Plan and described in Section 4.8 above. It also shows how the SDPP and the Walking and Cycling Strategy for Bankstown have been integrated.

Transport and access design measures 5.1

5.1.1 Maximising the amenity of public spaces

Public space that the Project can influence at Canterbury is the footpath along Canterbury Road and Broughton Street immediately outside the station. The design contributes to the amenity of these spaces by:

- into the station
- with the street.

Maximising permeability around entrances to stations 5.1.2

The heritage concourse building is retained on the rail overbridge. Its small, almost domestic form and scale mean that the existing entrance is low and narrow. The design maximises permeability around the station entry by:

Maximising integration with other transport modes 5.1.3

Integration with other transport modes is maximised through:

- Providing additional bicycle parking
- Providing access to existing taxi pick up and set down area on Broughton Street
- Providing access to kiss and ride zone on Broughton Street
- Providing access to one accessible parking space on Broughton Street.



- Removing fencing against the footpath that is in poor condition and obscures views

- Integrating new seating, planting and paving within the station entry and concourse

- Opening up the whole corner of Broughton Street and Canterbury Road along the northern facade, creating a new, generous entry which doubles as a small public plaza

- Regrading the levels so the footpath and concourse are seamless

- Re-orienting the entry towards Broughton Street where the interchange access facilities are located and where the station entry is therefore highly visible.

- Providing for easy transfer to bus stops on Broughton Street



5.2 Integration with the Walking and Cycling Strategy

In accordance with Condition E53 of the Conditions of Approval, a Walking and Cycling Strategy has been prepared. In accordance with CoA E57(d)(iii) the relevant initiatives from the Walking and Cycling Strategy in the Canterbury Station precinct have been integrated below.

The Walking and Cycling Strategy identifies a number of corridors and locations that present opportunities for improved pedestrian and cycle accessibility in a one kilometre radius around the rail station. It covers local pedestrian routes, circulation patterns and desire lines; land use and the level of activity around the station; relationships to other transport networks and modes; and the proximity of local access roads and routes

The Walking and Cycling Strategy identifies works to be delivered by Sydney Metro associated with east-west pedestrian and cyclist facilities as required under Condition E53 of the Conditions of Approval. The Strategy also identifies a number of complementary infrastructure options that could be delivered by others as part of other projects or considered for further investigation. The table below shows the opportunities and infrastructure upgrades that are located within the Station Precinct.

Walking and Cycling Strategy item description					SDPP description	
Identified gap / opportunity	Proposed infrastructure upgrade (refer Figures 5.1 & 5.2)		In scope: delivered by Metro	Safeguarded for the future	SDPP design response	Section of SDPP
Narrow footpaths with insufficient space for pedestrian	CTB-1	Footpath widening - north side of Canterbury Road between Broughton Street and Jeffrey Street			Footpath outside station along Canterbury Road is regraded and improved for accessibility with new railings and handrail. Removal of canopy and garden beds increases width	3.5
Per CTB-1	CTB-23	Shared path designation on western footpath of Canterbury Road leading up to station	_		Council have commenced construction works on the western footpath from Charles Street to the station entry along Canterbury Road	N/A
Multi-stage crossing for pedestrians with significant delays	CTB-2	Investigate modifying intersection phasing and cycle times to shorten pedestrian waiting times	-		Safeguarded as future opportunity	3.5
Narrow path with obstructions which limits cycle access	CTB-3	Upgrade to shared path within the rail corridor between Canterbury Road to Hutton Street	_		Replacement of bus shelters and removal of brick garden planter beds increases footpath width	N/A
Per CTB-3	CTB-26	On-road shoulder lane along Broughton Street	_		Safeguarded as future opportunity	3.5
Per CTB-3	CTB-27	Investigate route options to address the pinch point on the timber path next to the heritage listed Signal Box building on Canterbury Road to ensure adequate east-west bicycle link	-		Under investigation as part of proposed active transport corridor	3.5



Canterbury-Pedestrian Infrastructure Upgrades (Station Level) For Further Investigation - Changed Pedestrian Environment - Shared Path In Corridor - Footpath Widening



Canterbury-Cycling Infrastructure Upgrades (Station Level) For Further Investigation - On-road Mixed - Off-road Shared Path (Footpath) ---- On-road Shoulder Lane ---- Off-road Shared Path (Other) - Shared Path In Corridor

Figure 5.2 Canterbury Walking and Cycling Strategy proposed cycling infrastructure upgrades

Naking and Cycling Strategy () Issue: A

Figure 5.1 Canterbury Walking and Cycling Strategy proposed pedestrian infrastructure upgrades

W148650 (* 13/02/2020 🏯 Mistax Systematic to Bankatown Walking and Cycling Strategy J Ioswe A

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6. Consultation

6.0 Consultation

6.1 City of Canterbury Bankstown (CoCB)

Regular meetings have taken place with CoCB. Comments have been minuted and addressed in the detailed design which forms Section 4 of this SDPP. Council then provided feedback on the 40% and 70% design, for which a consultation register was prepared and the items discussed at the regular meetings.

Council representatives attended regular Design Review Panel meetings (refer Section 6.3).

While CoCB did not provide a formal submission on the draft exhibited SDPP, they have provided feedback on the station design as part of formal stakeholder consultation throughout the design development process.



6.2 Community consultation

Consultation during the design development process has included public exhibition of the draft Canterbury SDPP, and consultation with City of Canterbury Bankstown Council.

The Canterbury Station design has also been enhanced by proposed improvements to the wayfinding strategy, urban precinct and connectivity to transport interchange that will improve navigation and customer experience.

Community consultation has been carried out by means of public exhibition to seek feedback on the first draft of the Canterbury SDPP. The Canterbury draft SDPP was on exhibition from Monday 29 June 2020 to Friday 24 July 2020 allowing several weeks for submission of feedback. The consultation included notification to residents and businesses within a 200 metres radius of the station, the Canterbury Chamber of Commerce and City of Canterbury Bankstown Council. The exhibition of the SDPP was also was advertised on the Sydney Metro website;

https://www.sydneymetro.info/station/canterbury-station

Five submissions were received from members of the public and one submission received from the local Member for Canterbury.

6.2.1 Community feedback

Of the public submissions, two specifically congratulated the project on the design, singling out the station entry and retention of heritage. The key issues raised included:

- Future station entry

METRON T2M

AN EFFECTIV

- Weather protection
- Heritage

A summary of the public submissions and the Project's response is summarised in Appendix Α.

6.3 Design Review Panel

Sydney Metro has a Design Review Panel (DRP) that aims for design excellence across all Sydney Metro projects. The Sydney Metro DRP is chaired by the Government Architect and members include eminent architects, designers and heritage specialists. The Sydney Metro DRP has been heavily involved in reviewing the Southwest Metro (SWM) project since inception.

While the SDPP for Canterbury is not required to be reviewed by the Sydney Metro DRP, the design team has presented the Project design to the DRP on a number of occasions and incorporated review comments into the SDPP in accordance with Condition REMM LV3.

Councils are active participants in the DRP. The panel request views, comments, and clarification from Council representatives in regard to design elements. Comments from Council and the panel that relate to the Project design and those relevant to the Canterbury SDPP have been captured, minuted, and are summarised below.

18 June 2019

- The DRP supported the 'less is more' approach to design and recommended an integrated design approach to the surrounding context
- Design development to demonstrate an integrated approach that achieves appropriate scale and response to local character through: Canopy design, coordination with adjoining properties and public space, safeguarding future connections and place opportunities.
- Identify appropriate benchmarks to guide the design of services buildings
- The landscape strategy should be presented to the Panel as an illustrative masterplan.

16 July 2019

- The Panel requested a strong vision and strategy diagram capturing strengths and weaknesses, local topography, simplification of the analysis diagrams and inclusion of sections.
- Consider strategies to build on the strengths of each place and to address weaknesses.
- Review the potential for landscaping to unify and deliver broader benefits to each place.

In response, the SDPP analysis section was updated and strengthened, covering the recommendations from the Panel.

20 August 2019

- The design team are to ensure the next presentation includes integrated presentations that demonstrate appropriate response to context.
- SDPPs should be clear on responsibility and funding for works in the precinct.
- Sydney Metro to update the Panel on the design for services buildings and the strategy to ensure a holistic design approach with the emerging station designs.

17 December 2019

- The panel requested graphic improvements in the SDPP
- The Panel requests that the heritage interpretation strategy be included in more detail in the report, as required by the conditions of consent.

- alternatives also be explored.
- considered for longevity.

18 February 2020

- standardised approach.

- The Panel recommends the aluminium screen proposed for installation behind heritage windows is prototyped and presented to the Panel, and that other

 The Panel recommends exploring ways of integrating the proposed works of heritage buildings into the heritage interpretation strategy.

The Panel recommends that the materiality of external information panels be

- The panel requested further information on the detail quality across the stations - The Panel requests a presentation on the SWM wide heritage interpretation strategy to contextualise solutions presented including signage within the public precinct, heritage building works and overlaps with integrated art.

- The Panel support the proposal of integrating art into glazing panels which allows a

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7. Appendices

7.0 Appendices



7.1 Appendix A: Community feedback & project response

Submission number	Submission date	Community submission	Issue	Design response
1	30/06/2020	Here is my feedback regarding the upgraded train station as a Canterbury resident.	Weather protectionMore toiletsMore rubbish bins	1. The existing canopy is to be retained.
		1. There should be more shelter stretched along both platforms. There is always not sufficient shelter during summer or when it rains, this causes everyone to group under		 The existing male toilets in the Platform The project will improve proximity to b
		2. More toilets on both platforms. Currently, the toilets are only lcoated on platform 1 and they are locked most of the time		
		3. More bins along both platforms. There would be a lower chance of littering if there are more bins available along both platforms.		
2	3/07/2020	I would like to express my comment to the new design of the Caterbury station.	 Additional station entry on Charles Street Connecting footbridge to platform 1 from Charles Street 	A secondary entrance at Charles Street h
		Additional station entrance facing the Charles Street is really good improvement for the passenger satisfaction, however, it should also connect to platform 1 via footbridge, it will save time for those passengers taking train to city.		to deliver an additional entrance at Charl
3	7/07/2020	1. Will your project provide roof canopy on station concourse and platforms?	 Access to toilets Fencing to prevent passenger entry onto freight train (ARTC) tracks Bus stop relocation for provision of additional access parking Improving footpaths to reduce steps on pathway between Cooks River overbridge Charles Street entrance 	1. The existing canopy is to be retained.
		2. Will your project provide step-free entrance to the station concourse?		 A step-free, Disability Discrimination of the works. This will be achieved thro and station concourse.
		3. Will your project replace steps with ramp to connect pedestrian bridge to ramp connecting with platform 2?		
		4. Will your project maintain or move the location of the access toilet and where would it be moved to?		3. The existing ramp will be retained, how
		5. Will your project provide extended fencing to prevent passengers stepping off island platform onto path of		provided through two new platform lifts 4. The existing male toilets in the Platform
		freight trains?		5. Steel flat bar fencing will be installed a
		6. Will your project relocate bus stops from Broughton Street to Canterbury Road to provide additional access parking?		6. Bus stops will remain in the current loo
		7. Will your project improve the footpaths and reduce steps on the pathway between bridge over Cooks River connecting soccer field and Aquatic Centre, to Canterbury station along Charles and Broughton streets?		provided. The existing accessible parking 7. The pathway is not in Sydney Metro's s
		8. If your project involves obtaining parking spaces in Mitre 10, will your project reinstate the Charles street entrance into your scope?		walking and cycling path along the east-v 8. Charles Street parking is not within Rai
		9. Will your project provide a second passenger concourse and a series of zebra crossings over roads including Broughton Street to provide more direct travel between Aldi supermarket and Canterbury station?	 Reuse and recycling of materials 	Street entrance has been safeguarded in 9. A secondary concourse and additional
		10. Will your project reuse and recycle materials removed from the project site?	 Additional pedestrian bridge over Cooks River 	scope.
		11. Will your project liaise with Canterbury Racecourse and Canterbury Bankstown Council to provide an additional pedestrian bridge over Cooks River to connect Canterbury Racecourse with Frederick Street,	 More information on Platform 2 lift location 	10. The project will reuse and recycle ma bricks from the Canterbury Road overbri
		Campsie?	- Direct entrance from Canterbury	11. An additional pedestrian bridge over
		12. Can you provide more information of the location of the lift for platform 2?	Road to Platform 2 ramp	12. The proposed lift to Platform 2 will be
		13. If it is defined that the lift on platform 2 close to steps connecting to ramp is not safe, is it possible for your project to create another station entrance from platform 2 ramp landing direct to Canterbury Road?		13. This option was investigated, howeve enough space to accommodate a new er
		14. If a direct entrance between ramp landing on platform 2 to Canterbury Road was permitted, what items on Canterbury Road in that path would need to be remove or relocated?		14. As per planning conditions, a seconda The implementation of the secondary en
		15. If a direct entrance between ramp landing on platform 2 to Canterbury Road was permitted, what would be the cost of having such an entrance and what would be the benefit of reducing from 2 to 1 lift?		15. As per planning conditions, a second The implementation of the secondary en

d. A new canopy will be constructed over the new stairs to platform 1 form 1 building will be converted into a Family Accessible Toilet. to bins at each station, given the 6 car platform length.

et has been safegaurded. It is not in the current scope for Sydney Metro harles Street that connects to platform 1 via footbridge.

d. A new canopy will be constructed over the new stairs to platform 1.

n Act (DDA) compliant entrance to the concourse will be created as part ough removing the existing stairs and regrading the existing footpath

however it will have new finishes. Accessible entry to both platforms are fts that will provide DDA access.

form 1 building will be converted into a Family Accessible Toilet

d along the platform edge on Platform 0 facing the freight line.

location. New bus shelters on both sides to Broughton Street will be ing will be retained on Broughton Street.

's scope. However design investigations are ongoing to improve the st-west alignment from Sydenham to Bankstown.

RailCorp's ownership and is out of Sydney Metro's scope. The Charles I in the current design.

nal zebra crossings across Broughton Street is out of Sydney Metro's

materials wherever feasible, such as the reuse of salvaged heritage bridge parapets.

er Cooks River is out of Sydney Metro's scope.

be located at the southeast corner of the station.

ever DDA access can not be achieved at this location as there is not entry.

ndary entrance from Charles Street has been safeguarded in the design. entrance will be determined at a future stage.

ndary entrance from Charles Street has been safeguarded in the design. entrance will be determined at a future stage.

Submission number	Submission date	Community submission	Issue	Design response
4	7/07/2020	 There are few suggestion I believe would be helpful as I live in the area and commute a lot from Canterbury Station: 1. I would suggest all canopies build with transparent material so that it could attract more lights in, especially the entry of the station (the roof attached with the main building, it is very dark even in the sunny day, feel not welcoming. 2. I believe one more entrance to the station should be added (pic attached), it will be easier for the people to walk to station from Charles street as many people lives there 3. For both pedestrian-only bridges and outside station precincts bridges of the bridge vertical protection, please go for something transparent like glass so that it make the bridge more welcoming. If not, at least go for Type 2: Located at or close by station overbridges, where there is no existing parapet Steel posts fixed to the outside face of the existing bridge structure. The posts do not fix to heritage elements and will feature a taper towards the top that reduces visual bulk and excessive material use The profile is vertical to the overall height of three metres A continuous handrail to the length of the overbridge screen Full height, laminated safety glass between posts with an anti-graffiti film layer. I hate steel metal mesh, not only it looks ugly, it also make the station looks cheap 4. It would be great if more covering were added, so that we don't have to walk under the rain in rush. 	 Using transparent materials for canopies /pedestrian bridges for natural lighting Additional station entry from Charles Street Design of bridges Weather protection 	 The new canopy of the platform 1 will be concourse building/ As per project planning conditions, a sec design. The implementation of the seconda All the pedestrian-only bridges within the reason. The existing canopy is to be retained. A reason of the secondary is to be retained. A reason of the secondary is to be retained of the secondary is to be retained.
5	7/08/2020	 Overall I support the proposal and the much needed upgrade of Canterbury Train Station. 1. I am in strong support of a future station entrance from Charles Street. Whilst I would not use this (as I head north along Canterbury Road) a lot of commuters would benefit from this entry. 2. Whilst the Document does not discuss the ramp on Platform 2, the ramp feels very steep and creates pedestrian pinch points at its entrance and at the right angles along the ramp. I am unsure if the ramp is in accordance with disability standards. I am in support of the removal of the ramp to Platform 2 and the replacement with stairs and a lift for Platform 2. As a minimum the station works should include reconstruction of the ramp to ensure disability compliance and prevent pedestrian pinch points. 3. I am encouraged by what appears to be a high quality paved surface finish at the station entrance and approach on Broughton Street (shown on Figure 4.9 Station concourse and entry plan). The Adelaide Black paving will look nice in this location. I hope it remains and is not replaced with concrete or asphalt. 4. Figure 4.11 Platform edge regrading: detail section is not very clear but it appears to show Adelaide Black Paving only for 1.5m and then asphalt elsewhere. I strongly support the entire width and length of the platform being Adelaide Black paving typical of other completed Metro Stations and I do not support asphalt surfacing. 5. I notice that the extent of the public domain upgrade is not well defined. I support extending the public domain upgrade on the south side of Broughton Street to beyond the kiss and ride/taxi parking as well as on the north side of Broughton Street he new bus shelters will be and that TfNSW coordinates in collaboration with Canterbury Bankstown Council upgrades along Canterbury Road towards Charles St and Jeffrey St. 	 Support for future station entrance from Charles Street Platform 2 ramp accessibility and removal, replacement or reconstruction Support for paved surface finish at station entrance and approach on Broughton Street Support for paved surface finish and opposition to asphalt surfacing Extention of area of public domain upgrades. 	 Feedback has been acknowledged. Accessible entry to Platform 2 is provider Feedback is acknowledged. Feedback is acknowledged. Extension of the public domain area and
Member for Canterbury		General comment across Hurlstone Park, Belmore and Canterbury draft SDPPs: - I welcome Sydney Metro's commitment to preserve the heritage of these three Stations. - I welcome accessibility improvements and installation of new lifts 1. I do not believe the number of bicycle hoops and bicycle storage facilities proposed for any of these Stations are adequate to meet the goal of promoting greater use of active transport modes Continues following page	 Inadequate number of bike parking/ storage facilities Western station entrance should be delivered now New entrance should be built for direct access from the Charles Street precinct to Canterbury Station More proactive consultation during design process 	1. Sydney Metro is providing 28 bike parkin corner and 8 (16 parking spaces) hoops alo to provide bike parking any closer to the st Station meets the requirements of the reco and cycling strategy for the project which h and forecasted demands in 2036.



Il be glazed to attract more light with new skylight to the entrance

secondary entrance from Charles Street has been safeguarded in the ondary entrance will be determined at a future stage.

the station will be predominantly glass for safety and visibility

A new canopy will be constructed over the new stairs to platform 1.

ided via the lift.

and upgrades are out of Sydney Metro's scope.

rking spaces in total with 6 hoops (12 parking spaces) on the southern along Broughton Street. There are no other locations or opportunities e station entry. This proposed bike parking number at Canterbury recommended minimum bike parking numbers outlined in the walking ch have been prepared in accordance with Condition Approval E53

Submission number	Submission date	Community submission	Issue	Design response
		 Section 6 of each document indicates very little active consultation has been undertaken with residents and other stakeholders in these communities. It is vital that the designs of the stations and their surrounding precincts reflect the input of local residents, businesses, community groups, people with disability, seniors and Canterbury Bankstown Council. I urge Sydney Metro to undertake more proactive consultation by holding more conversations with the community to inform this design process. Specific comment for Canterbury draft SDPP (see pdf submission for full detail): The western station entrance set-out on page 46 of the draft SDPP should be delivered now. The new western entrance should also include an overpass which would provide access to Platform 1 via new lifts and stairs. 		2. Community consultation was held by w feedback as part of the design developme distributed to properties within a 200 me members in Canterbury subscribed to Syd the Sydney Metro website. Regular meetin during design development. A summary o responses are summarised in Section 6 of 3. & 4. The secondary entry at Charles Str building adjacent to the site.
		 4. An entrance should be created to provide direct access from the Charles Street precinct to Canterbury Station. I have marked this proposal with a red arrow in the image (see pdf submission). A direct entrance to the Charles Street precinct would allow some pedestrians to avoid the noise and congestion on Canterbury Road, while also providing a more intuitive way to enter and exit the Station relative to the surrounding built form. I believe the additional entrances that I have outlined about should be built in addition to renewing the existing entrance to Canterbury Station on Canterbury Road and Broughton Street, as the SDPP already 		

way of public exhibition on first draft of the Canterbury SDPP to seek ment process. A flyer advertising the draft SDPP public exhibition was netre radius surrounding the station, an e-mail sent to community Sydney Metro e-news and the draft SDPP was made available on etings were also held with City of Canterbury Bankstown Council y of the consultation process, submissions received and the Project's of the SDPP.

Street has been safeguarded in the design of the station services

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